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| **King Saud University**KSU_LOGO**College of Computer and Information Sciences****Department of Computer Science****CSC 304 – Ethical Issues in Computing & Research Methods (3-0-1) - Required Course** |
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| **Catalog description:** |
|  |  | *This course seeks to equip students with sufficient knowledge of Computer Ethics to enable them recognize the ethical nature of certain issues that arise in the Information and Communications Technology (ICT) workplace.* *The course studies the effect of the proliferation of computers in our world, the impact of computers in the social, economic, political, and other aspects of our life. It covers the moral and legal obligations of computer professionals and issues concerning security, privacy versus freedom of information, ethics and professionalism, intellectual property rights, research methods: collecting and analyzing data, critical evaluation of research, report writing, choosing and evaluating references, and presentation skills.*  |
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| **Prerequisite**:  |
|  |  | *CSC 111- Programming I* |
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| **Prerequisite** **to**: |
|  |  |  None |
| **Co-requisite** **to**: |
|  |  | None  |
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| **Texts**: |  |
|  |  | * *Joseph M. Kizza: "Ethical and social issues in Information Age" 3rd Edition Springer 2010.*
* *Giannis Stamatellos :Computer Ethics a global perspective” 2nd Edition Jones and Bartlett 2007.*
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| **Course Objectives:**  |
|  |  | *The objective of the course is to provide the students with main concepts of computer ethical issues and to introduce scientific research methods.*  |
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| **Course Outcomes:**  |
|  | 1. | *The students will be able to understand ethical, legal, security, and social issues and responsibilities.* |
|  | 2. | *The students will be able to communicate effectively with a range of audiences.* |
|  | 3. | *The students will be able to analyze the impact computing on individuals, organization and society.* |
|  | 4. | *The students will be able to recognize of the need for, and an ability to engage in, continuing professional development.* |
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| **Expected Performance Criteria:** |
|  |  | *The students are expected to complete a presentation and a term report. In addition they are expected to pass one midterm and one final written examinations on class material.* |
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| **Topics**: |
|  | 1. | *Software Engineering Code of ethics* |
|  | 2. | *Computer Crime* |
|  | 3. | *Intellectual Property* |
|  | 4. | *Computer Privacy* |
|  | 5. | *Research Methods* |
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| **Schedule:**  |
|  |  | *15 weeks of three 50-minutes lectures*  |
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| ***Relationship of Course to ABET Criteria:*** |
|  | **Criterion 2 - Program Educational Objectives:** |
|  |  | *This course enable the student to demonstrate professionalism and a sense of societal and ethical responsibility in all their endeavors. (PEO2).* |
|  | **Criterion 3 - Program Outcomes:**

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| 1. ***An ability to apply knowledge of computing and mathematics appropriate to the discipline;***
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| 1. ***An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;***
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| 1. ***An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;***
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| 1. ***An ability to function effectively on teams to accomplish a common goal;***
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| 1. ***An understanding of professional, ethical, legal, security, and social issues and responsibilities;***
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| Most topics of the course cover and address professional, ethical, and social responsibility. |
| 1. ***An ability to communicate effectively with a range of audiences;***
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|  Through presentations, discussions, and term report. |
| 1. ***An ability to analyze the local and global impact of computing on individuals, organizations and society;***
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| Through exercises and explanation of related topics such as public polices issues. |
| 1. ***Recognition of the need for, and an ability to engage in, continuing professional development;***
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| Through discussion of issues related to professional development topics such as life-long learning and distance learning that help students to become familiar with professional development. |
| 1. ***An ability to use current techniques, skills, and tools necessary for computing practices.***
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| 1. ***An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;***
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| 1. ***An ability to apply design and development principles in the construction of software systems of varying complexity.***
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|  | **Criterion 4 – Professional Componen**t: |
|  |  | *The course CSC 304 allows and helps students to demonstrate professionalism and a sense of societal and ethical responsibility in all their endeavors.* |
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|  | **Prepared by:** ***Dr. Hussein Al-Salman*** |
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|  | **Reviewed by:**  |
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|  | **Revised by:**  |
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|  | **Approved by:**  |