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| المملكة العربية السعودية  وزارة التعليم العالي  **جامعة أم القرى**  الكلية الجامعية بالجموم – قسم الحاسب الآلي |  | Kingdom of Saudi Arabia  Ministry of Higher Education  **Umm Al-Qura University**  University College in Al-Jamoum  Computer Dept. |

Course Specification

1. **Course number and name: (**2316433-3**)** Human-Computer Interaction
2. **Credits and contact hours:** 3 Credits

(Lecture: 3/week – Practical Session: Non)

1. **Instructor’s or course coordinator’s name:** Dr. Hesham Amin
2. **Text books**
3. **Main Text book:** Alan J. Dix, Gregory D. Abowd, Russell Beale, Janet E. Finley, Human-Computer Interface, Prentice Hall, 3rd Edition, 2003.
4. **Reference:** I. Scott MacKenzie, Human-Computer Interaction: An Empirical Research Perspective, Morgan Kaufmann, 2013.
5. **Specific course information**
6. **brief description of the content of the course (Catalog Description):**

This course gives an introduction about human-computer interaction problems from both sides of human and computer understanding. In addition, students should learn several techniques for prototyping and evaluating multiple interface alternatives.

1. **prerequisites or co-requisites:** Multimedia Systems (2316316-3)
2. **indicate whether a required, elective, or selected elective course in the program:** required
3. **Specific goals for the course**

The student will be able to:

1. Know key concepts in designing usable products.
2. Evaluate the usability of a given computer-based solution.

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| *Course*  *Goals* | *Program Outcomes* | | | | | | | | | | |
| SOa | SOb | SOc | SOd | SOe | SOf | SOg | SOh | SOi | SOj | SOk |
| 1 |  |  | ✓ |  |  |  |  |  | ✓ |  |  |
| 2 |  |  | ✓ |  |  |  |  |  |  |  |  |

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| **Relationship of Course Goals to the Program Student Outcomes** | |
| **SOc** | An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs.   * *Students are required design and implement a software project to meet a specification.* |
| **SOi** | An ability to use current techniques, skills, and tools necessary for computing practices.   * *Projects use current computing and modeling/design tools.* |

1. **Brief list of topics to be covered**

* Background--the development and scope of HCI
* HCI relevant issues in human perception, memory and thinking processes
* Approaches to modeling HCI interactions
* Task analysis, grammars, state charts
* Dialogue styles, information presentation
* User involvement, iterative design, prototyping, HCI and software engineering
* Methodologies, formative and summative
* Performance and learnability