	Hashemite University Prince Al-Hussein bin Abdullah II Faculty for Information Technology Department of Computer Information System	

Course Syllabus

Year: 2018-2019 **Semester: (1)**

Course No.	Course Title	Designation	Prerequisite	Co-requisite	Credit Hours Lectures /Lab.
151002470	System Analysis and Design	Required	151002240	-	3 / 0

Instructor Name	E-mail	Office No.	Office ext.	Office Hours
Dr. Subhieh El Salhi	subhieh@hu.edu.jo	227	-	8:00 – 9:00, 11:00-12:00 (Sun., Tue. & Thurs.) 8:00 – 9:30: (Mon. and Wed.)

Coordinator's Name:	Dr. Subhieh El Salhi

Course Description	This course is designed for second year undergraduate students to provide them with a methodical approach to develop computer information systems of different types such as transaction processing systems, decision support systems, knowledge management systems, learning management systems and database management systems. The approach includes systems planning, analysis, design, and implementation and emphases on the strategies and techniques of systems analysis and design for producing logical methodologies for dealing with complexity in the development of information systems. It addresses a wide range of topics starting from the role of the systems analyst, setting Information System (IS) project goals, developing work plans and methods to achieve those goals, measuring progress against a project plan, feasibility study of IS project, models of software development, determining system requirements (functional and non-functional requirements), structuring the requirements (process, logic and data) and ending with designing the database for the proposed project. A project is given to all students that should cover analysis and design phases of a business case; with emphasis on process modeling (DFDs) and data modeling (ER diagrams).

a) Textbook (s):
Modern Systems Analysis and Design, 7th ed., Jeffrey A. Hoffer, Joey F. George and Joseph S. Valacich, Prentice Hall, 2014.
b) Additional References:
1. Systems Analysis and Design in a Changing World, 5th ed, Satzinger, John W., Jackson, R.L., and Burd, S.D., Cengage Learning, 2008. 2. Systems Analysis and Design, 7/E, by Kendall &. Kendall, 2008 3. Systems Analysis and Design, Dennis, Wixom, Roth, 5th Edition, John Wiley & Son Inc., 2012.

Course Learning Outcomes CLOs
Knowledge and Understanding 1. **Demonstrate** a solid understanding of the system development environment along with the ability to select the most appropriate approach of SDLC for a given problem (project). **ABET (1)** 2. **Explain** the process of project identification and selection process and the different planning metrics associated then assess the feasibility of a selected project. **ABET (1)** 3. **Explain** different project requirements (such as process, logic and data) clearly. **ABET (1)** 4. **Define and use** the most appropriate system analysis and design technique (DFD's, use case… etc.) diagrams (ER and EER diagrams). **ABET (1, 2)**
Subject Specific Skills **5. Solve** a wide range of problems related to the system analysis and design. **ABET (1)**
Communication skills (personal and academic) 6. **Participate** effectively in a team of an in-course project. **ABET (5)** 7. **Plan and prepare** coherent and structured verbal technical reports in group and deliver oral presentations**. ABET (1, 2 , 3)**
Transferable Skills 8. **Employ** teamwork, self-management, communication, problem formulating, and decision making skills associated with the analysis and design of system software solutions. **ABET (1, 2)**
Addressed Student Learning Outcomes (SLOs)
1, 2, 3, and, **5**

Topic to be covered	No. of Weeks	Contact hours*
1. The System Development Environment	2	6
2. 1 Managing the information System Project	2	6
3. Identifying and Selecting System Development Projects	2	6
4. Initiating and Planning Systems Development Project	2	6
5. Determining System Requirements	1	3
6. Structuring System Requirements-Process and Logic	3	9
7. Structuring System Data Requirements	1	3
8. Designing Databases	2	6
Total	**15**	**45**

Assessment method	Grade	Comments
First Exam	25%	Covers Chapters 1,2,4 and 5
Second Exam	25%	Covers Chapters 5,6 and 7

project	10%	1. The first part: a document of a selected project that identifies the baseline of project plan, the feasibility study and the system requirements. 2. Final project presentations
Final Exam	40%	Covers all topics that were discussed during the semester
Total	100%	