



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Information Systems Innovation and new Technology
2	Course number	1902352
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	1902223
5	Program title	Computer Information Systems
6	Program code	2
7	Awarding institution	The University of Jordan
8	Faculty	King Abdullah II School for Information Technology
9	Department	Computer Information Systems
10	Level of course	Third year
11	Year of study and semester (s)	2016-2017, First semester
12	Final Qualification	BSc
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	1/9/2016
16	Required/ Elective	Required

16. Course Coordinator:

Office number: 221
office hours: 10-11 Sun., Tues., Thur.
phone number: 22619
email addresses: sawalha.majdi@ju.edu.jo

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

18. Course Description:

New IS technologies are being used to change how organizations operate, produce products and services, and communicate both internally and as well as with external partners. This course is to introduce students to new and innovative technologies and examine how these powerful systems have fundamentally reshaped modern organizations. Using online collaborative technologies that were developed in the context of social networking and online communities, corporations are reengineering both internal business processes and those related to customers, suppliers, and business partners. Developing innovative ways to communicate and collaborate can lead to new business opportunities, and new efficiencies. This course investigates the technologies, methods and practices of developing new innovations such as online communities, and how this knowledge and these skills are applied to reengineer business processes. For example, how products, services and information systems are developed, and how geographically disperse virtual teams collaborate.

19. Course aims and outcomes:**A- Aims:**

The aim of the course is to introduce students to new and innovative technologies and examine how these powerful systems have fundamentally reshaped modern organizations. This course investigates the technologies, methods and practices of developing new innovations such as online communities, and how this knowledge and these skills are applied to reengineer business processes.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will ...

OA-Knowledge and Understanding (students should)

- (OA1) have some understanding of new and innovative technologies.
- (OA2) have some understanding of methods and practices of developing new innovations.
- (OA3) have some understanding of the engineering of business processes.
- (OA4) have some understanding of online collaborative technologies (social networking, online communities and corporations).

OB-Intellectual skills-with ability to

- (OB1) Appreciate the subtleties related to methods and practices of developing new innovations.
- (OB2) Appreciate the subtleties related to information systems that reshaped modern organizations.
- (OB3) Decide the suitability of innovative methods for developing business plans.
- (OB4) Analyze and design an existing innovative information system.

OC- Practical Skills-With ability to

- (OC1) Implement a solution to a simple problem where innovative methods can be employed.
- (OC2) Write simple Python 3 programs that analyze and textual data from social networks.
- (OC3) Express knowledge of academic writing to develop an innovative information system.

OD-Transferable Skills-With ability to

- (OD1) Deploy communication skills.
- (OD2) Work effectively within a group to analyse, design and develop a proposal for innovative information system.
- (OD3) To work to tight deadlines
- (OD4) effectively present the final work in a demo.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Induction and Welcome -Definition of Innovation	1 and 2	Majdi Sawalha	OA1, OA2	Discussion	Wired for Innovation + Available Notes
Information Systems: From the Requirements to the Integrated Solution	3 and 4	Majdi Sawalha	OA1, OA2, OB1	Homeworks, Discussions, Exams	Ch1 + Available Notes
An Architecture-Centric Approach for Information System Architecture	5 and 6	Majdi Sawalha	OA3, OB3, OD2	Homeworks, Discussions, Exams	Ch2 + Available Notes

Modeling, Enactment and Evolution					
Patterns for Agent-Based Information Systems: A Case Study in Transport	7 and 8	Majdi Sawalha	OA3, OB1, OB2, OB3, OC1	Homeworks, Discussions, Exams	Ch3 + Available Notes
Globalization and Socio-Technical Aspects of Information Systems Development	9 and 10	Majdi Sawalha	OA4, OB4, OC1, OD1	Homeworks, Discussions, Exams	Ch5 + Available Notes
Mobile System Applied to Species Distribution Modelling	11	Majdi Sawalha	OA4, OB1, OB2, OB3, OB4	Homeworks, Discussions, Exams	Ch 6 + Available Notes
Writing Project's proposal	12 and 13	Majdi Sawalha	OB3, OC3, OD3, OD4	Homeworks, Discussions, Exams	Available Notes
Mining the Social Web: Twitter	14 and 15	Majdi Sawalha	OA4, OC3, OD3, OD4	Homeworks, Discussions, Exams	Ch1 (Book2) + Available Notes
Revision and Presentations	16	Majdi Sawalha	OD1, OD4	Presentations	

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Lectures, Homeworks, Discussions, working in groups, project proposals

22. Evaluation Methods and Course Requirements:

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

Homeworks, discussions, presentations, quiz, exams

23. Course Policies:

A- Attendance policies:

University Regulations

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

University Regulations

C- Health and safety procedures:

University Regulations

D- Honesty policy regarding cheating, plagiarism, misbehavior:

University Regulations

E- Grading policy:

Mid term exam 25%

Homeworks and quizzes: 10%

Programming or research Project: 15%

Final exam: 50%

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

Computer laboratories, data shows and whiteboards

24. Required equipment:

Computer laboratory, data show and white board

25. References:**A- Required book (s), assigned reading and audio-visuals:**

- 1- Christos Kalloniatis (Ed) (2012) "Innovative Information Systems Modelling Techniques", InTech, Croatia.
- 2- Matthew A. Russell (2014) "Mining the Social Web", 2nd Edition, O'REILLY.

B- Recommended books, materials, and media:

- 1- Brynjolfsson E (2010), Wired for innovation; The MIT Press, Cambridge, MA
- 2- Conway, S. and Steward, F. (2009) Managing and Shaping innovation; Oxford OUP.
- 3- Information Systems/Information Systems
https://en.wikiversity.org/wiki/Information_Systems/Information_Systems

26. Additional information:

1. Supplementary notes are made available of the e-learning (Moodle) system.
2. Students are encouraged to make use of JU library, E-LIBRARY:
access within the university: <http://e-library>
access from outside: <http://ezlibrary.ju.edu.jo/login>

Some important/relevant journals include:

- (1) International Journal of Transitions and Innovation Systems
- (2) International Journal of Innovative Information Systems and Technology Research

Name of Course Coordinator: Dr. Majdi Sawalha

Signature: ----- Date: 1/9/2016

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

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

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File