

Spring
2023/2024

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| Course name: | Information Systems for Industrial Engineering | | |
| Course code: | 0906505 | | |
| Credits hours | 3 | | |
| Contact hours/room: | Monday – Wednesday 17:00- 18:30 (Online) | | |
| Course instructor's name, E-mail, and phone: | Baha Al haj Hasan, Ph.D. | | |
| | b.alhajhasan@ju.edu.jo | | |
| | 22872 | | |
| Textbook: | <i>Introduction to Information Systems</i> , Patricia Wallace, (2018), 3 rd Edition, Pearson. | | |
| Other references: | Management Information Systems, Laudon, K. C., Laudon, J. P., (2018), 15 th Edition, Pearson | | |
| Course Description: | The course aims to equip students with the knowledge and skills needed to leverage information systems effectively in industrial engineering applications, fostering an understanding of the strategic role these systems play in enhancing productivity, efficiency, and decision-making within industrial organizations. | | |
| Providing Department: | Industrial Engineering | | |
| Prerequisite Course: | Production Planning and Control (0906421) | | |
| Course type | Mandatory | | |
| Assessment Methods: | Method | Weight % | Date |
| | First Exam | 30 | |
| | Second Exam | 30 | |
| | Final Exam | 40 | |
| Course Learning Outcomes: | # | After successful completion of this course, the student will be able to | SO |
| | CLO1 | Describe the role of information in organizations | 4 |
| | CLO2 | Apply data modeling techniques and diagrams to represent, document, communicate and analyze situations involving information | 4 |
| | CLO3 | Develop and execute SQL statements for processing a database | 7 |
| | CLO4 | Recognize, discuss, and describe database management systems and applications to engineering | 4 |
| | CLO5 | Describe the importance of MIS in organizations and society | 4,7 |

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| A brief list of topics | # of Weeks | Reading Material | Topic |
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| | Chapter 1 | Introduction to Information Systems |
| | Chapter 2 | Systems, Roles, and Development Methodologies |
| | Chapter 3 | Information Systems Organization and Strategy |
| | Chapter 4 | Business Processes and Information Systems |

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| | | Chapter 5 | Database Concepts and Design |
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| Important Notes: | <ul style="list-style-type: none"> • Class notes, in-class drills, and any handout you receive from the instructor are required as part of the course. • Do not hesitate to ask questions • The student is required to bring a notebook and take notes in classes. • Students are expected to attend every class session, and they are responsible for all material, announcements, schedule changes, etc., discussed in class. • Discuss the assignments (the ungraded assignments) with your classmates. • If the assignment is declared graded, students MUST work on it individually. • NO late assignment will be accepted. • Do not Cheat; direct copying of others' work will NOT be allowed or tolerated and will result in a grade reduction. If a student is found cheating in an exam or assignment, even signing the roll sheet for another student, he/she will be given an "F" for the course. There will be no exceptions. • All cases of academic dishonesty will be handled per university policies and regulations. JU policy requires the faculty member to assign a ZERO grade (F) if a student misses 15% of the classes that are not excused and 20% of the classes that are excused • Students are expected to be ready to take a quiz any time they have a class. There will be no make-up quizzes or home works. • Any student with disabilities who needs accommodations in this course is encouraged to speak with the instructor as soon as possible to make appropriate arrangements for these accommodations. | | |

| <i>The B.Sc. in Industrial Engineering program enables students to achieve, by the time of graduation, the following program learning outcome (SOs)</i> | | | |
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| 1 | An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics | 5 | An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives |
| 2 | An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors | 6 | An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions |
| 3 | An ability to communicate effectively with a range of audiences | 7 | An ability to acquire and apply new knowledge as needed, using appropriate learning strategies. |
| 4 | An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts | | |