



**Jordan University of Science and Technology**  
**Faculty of Computer & Information Technology**  
**Computer Information Systems Department**

CIS385 Modelling & Simulation Of Business Cases

Summer Semester 2019-2020

**Course Catalog**

3 Credit Hours. This course teaches students the importance of modeling and simulation in all types of applications. In particular, the course teaches students how to modeling businesses from the four perspectives of: motivation, process, organization, and rules. The students will learn the business process modeling notation and will apply it on selected cases. Also, they will learn techniques for model simplifications such as element omission, selective revelation, and decomposition. The students will learn to avoid factors for bad modeling including bad names, weak descriptions, and ugly models. Finally, the students will learn how to use attributes to prepare the model for simulation and how to validate a model by analyzing simulation statistics.

**Text Book**

<b>Title</b>	Business Modeling: a Practical Guide to Realizing Business Value
<b>Author(s)</b>	David Bridgeland and Ron Zahavi
<b>Edition</b>	1st Edition
<b>Short Name</b>	Textbook
<b>Other Information</b>	

**Class Schedule & Room**

**Tentative List of Topics Covered**

<b>Weeks</b>	<b>Topic</b>	<b>References</b>
Weeks 1, 2	Why Business Modeling	<b>CH1</b> From <b>Textbook</b>
Weeks 3, 4	Modeling Fundamentals	<b>CH2</b> From <b>Textbook</b>
Weeks 5, 6	Business Motivation Models	<b>CH3</b> From <b>Textbook</b>
Weeks 7, 8	Business Organization Models	<b>CH4</b> From <b>Textbook</b>
Weeks 9, 10, 11	Business Process models	<b>CH5</b> From <b>Textbook</b>

Weeks 12, 13	Business Model Analysis	<b>CH10 From Textbook</b>
Weeks 14, 15	Business Simulation	<b>CH11 From Textbook</b>

<b>Mapping of Course Outcomes to Program Student Outcomes</b>	<b>Course Outcome Weight (Out of 100%)</b>	<b>Assessment method</b>
Be able to define and discuss the basic terms associated with business modeling, and to realize the business value of business modeling and simulation, and to understand the different types of business models as well as the characteristics of good and useful models [1SO3]	15%	
Be able to draw a Business Motivation Model given a narrative description of business [1SO3]	15%	
Be able to identify the elements of business process modeling notation (BPMN), and to use this notation to draw a Business Process Model given a narrative description of business [1SO2, 1SO3]	40%	
Be able to discuss and apply the different business process analysis techniques; such as Flow Analysis, Value-Added Analysis, and Root Cause Analysis [1SO2]	10%	
Be able to use a software to prepare a business process model for simulation, and to run the simulation and interpret its results [1SO3]	20%	

<b>Relationship to Program Student Outcomes (Out of 100%)</b>																
A	B	C	D	E	F	G	H	I	J	K	SO1	SO2	SO3	SO4	SO5	SO6
												30	70			

<b>Evaluation</b>	
<b>Assessment Tool</b>	<b>Weight</b>
1st Exam	20%
2nd Exam	20%
Quiz 1	5%
Quiz 2	5%
Quiz 3	5%
Quiz 4	5%
Final Exam	40%

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