



## Faculty of Computer & Information Technology

### Department of Information Technology

### Program of Information Technology

### Course Specification of Systems Analysis and Design I

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad
			<b>Rector of Sana'a University</b> Prof. Dr. Qassim Mohammed Abbas



**Course No ( ..... )**

**2020/2021**

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad
			<b>Rector of Sana'a University</b> Prof. Dr. Qassim Mohammed Abbas



I. Course Identification and General Information:					
1	Course Title:	Systems Analysis and Design I			
2	Course Code & Number:				
3	Credit hours:	C.H			
		Th.	Seminar	Pr	Tr.
		2	-	2	-
4	Study level/ semester at which this course is offered:	3 <sup>rd</sup> Level -1 <sup>st</sup> Semester			
5	Pre –requisite (if any):	None			
6	Co –requisite (if any):	None			
7	Program (s) in which the course is offered:	IS, CS, IT			
8	Language of teaching the course:	English/Arabic			
9	Study System	Term based system			
10	Mode of delivery:	Full Time			
11	Location of teaching the course:	Faculty of Computer and Information Technology			

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



12	Prepared By:	Dr. Mansour N. Ali
13	Date of Approval	

II. Course Description:
<p>This course introduces students to the concepts and skills of system analysis and design. Topics covered include the systems analysis and design methods, feasibility analysis, fact-finding techniques for requirements discovery; modeling system requirements with use cases, data modeling and analysis, process modeling, object-oriented analysis and modeling using the UML, and the system proposal.</p>

III. Course Intended learning outcomes (CILOs) of the course (maximum 8CILOs)		Referenced PILOs (Onl write code number of referenced Program Intended learning outcomes)
a.1	Describe the concepts of information systems development, various systems development methods, and the role of the system analyst.	A1, A2, A3
a.2	Explain how systems projects get started, how to management IT projects, and how systems analysts conduct a preliminary investigation and feasibility study.	A1, A2, A3
b.1	Determine the requirements that will be used to design and develop the information system.	B1, B2, B3, B4

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



b.2	Construct the logical model that will support business operations and meet user needs.	B1, B2, B3, B4
c.1	Use data and process modeling techniques to show how the system transforms data into useful information.	C1, C2, C3
c.2	Use object-modeling techniques with UML to create a logical model.	C1, C2, C3
d.1	Effective communication with users, stakeholders, and project team during fact-finding and user requirements identification.	D2
d.2	Work in a team to analyze and design an information system	D1

**(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>a1-</b> Describe the concepts of information systems development, various systems development methods, and the role of the system analyst.	–Lecture and presentation –Dialogue and discussion. –Self and cooperative learning –Brainstorming. –Problem Solving.	– Quizzes – Homework Assessment – Midterm Exam – Final Exam
<b>a2-</b> Explain how systems projects get started, how to management IT projects, and		

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



how systems analysts conduct a preliminary investigation and feasibility study.	–Labs	
---	-------	--

**(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>b1-</b> Determine the requirements that will be used to design and develop the information system.	– Lecture and presentation – Dialogue and discussion	– Quizzes – Homework Assessment – Midterm Exam – Final Exam
<b>b2-</b> Construct the logical model that will support business operations and meet user needs.	– Self and cooperative learning – Brainstorming. – Problem Solving. – Labs	

**( C ) Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>C1-</b> Use data and process modeling techniques to show		

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



how the system transforms data into useful information.	– Lecture and presentation	– Practical Exam and performance observation.
<b>C2-</b> Use object-modeling techniques with UML to create a logical model.	– Discussion	– Midterm Exam
	– Self and cooperative learning.	– Final Exam
	– Brainstorming.	– Project Assessment
	– Problem Solving.	– Report Assessment
	– Labs	
	– Project	

**(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<b>d1-</b> Effective communication with users, stakeholders, and project team during fact-finding and user requirements identification.	–Discussion –Self and cooperative learning	– Performance observation. – Project and report assessment
<b>d2-</b> Work in a team to analyze and design an information system	– Project –Labs	

**IV. Course Content:**

**A – Theoretical Aspect:**

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	contact hours
1	Introduction to Systems Analysis and Design	a1,b1,b2,d1	<ul style="list-style-type: none"> <li>Introduction</li> <li>What Is Information Technology?</li> <li>Information System Components</li> <li>Business Today</li> <li>Modeling Business Operations</li> <li>Business Information Systems</li> <li>What Information Do Users Need?</li> <li>Systems Development Tools</li> <li>Systems Development Methods</li> <li>The Information Technology Department</li> <li>The Systems Analyst</li> <li>Trends in Information Technology</li> </ul>	2w	4

<b>Head of Department</b>	<b>Vise Dean for Quality Assurance</b>	<b>Dean of the Faculty</b>	<b>Dean of Academic Development center and Quality</b>
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas





2	Analyzing the Business Case	a1, a2,b1,d1	<ul style="list-style-type: none"> <li>What Is a Business Case?</li> <li>Information Systems Projects</li> <li>Evaluation of Systems Requirements</li> <li>Overview of Feasibility</li> <li>Evaluating Feasibility</li> <li>Setting Priorities</li> <li>Preliminary Investigation Overview</li> </ul>	2w	4
3	Managing Systems Projects	a2,b1,d1	<ul style="list-style-type: none"> <li>Overview of Project Management</li> <li>Creating a Work Breakdown Structure</li> <li>Identifying Task Patterns</li> <li>Calculating the Critical Path</li> <li>Project Monitoring and Control</li> <li>Reporting</li> <li>Project Management Examples</li> <li>Project Management Software</li> <li>Risk Management</li> </ul>	2w	4

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



			<ul style="list-style-type: none"> <li>Managing for Success</li> <li>The Bottom Line</li> </ul>		
4	Requirements Modeling	a1,b1,d1	<ul style="list-style-type: none"> <li>Systems Analysis Phase Overview</li> <li>Joint Application Development</li> <li>Rapid Application Development</li> <li>Agile Methods</li> <li>Modeling Tools and Techniques</li> <li>System Requirements Checklist</li> <li>Future Growth, Costs, and Benefits</li> <li>Fact-Finding</li> <li>Interviews</li> <li>Other Fact-Finding Techniques</li> <li>Documentation</li> <li>Information Management Software</li> <li>Preview of Logical Modeling</li> </ul>	2w	4
5	Data and Process Modeling	a1,b1,b2,c1,d1	<ul style="list-style-type: none"> <li>Overview of Data and Process Modeling Tools</li> <li>Data Flow Diagrams</li> <li>Creating a Set of DFDs</li> </ul>	2w	4

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



			<ul style="list-style-type: none"> <li>Guidelines for Drawing DFDs</li> <li>Data Dictionary</li> <li>Process Description Tools</li> <li>Logical versus Physical Models</li> </ul>		
6	Object Modeling	a1,b1,b2,c1,c2,d1	<ul style="list-style-type: none"> <li>Overview of Object-Oriented Analysis</li> <li>Relationships Among Objects and Classes</li> <li>Object Modeling with the Unified Modeling Language</li> <li>Organizing the Object Model</li> </ul>	2w	4
7	Project presentation and discussions	All		2w	4
Number of Weeks /and Units Per Semester				14w	28

### B - Practical Aspect: (if any)

Order	Tasks/ Experiments	Number of Weeks	contact hours	Learning Outcomes
-------	--------------------	-----------------	---------------	-------------------

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



1	System proposal	1w	2	a1,b1,b2,d1,d2
2	Using MS Visio for Business Process Modeling	1w	2	a1, b1,b2,d1,d2
3	Feasibility study and risks management	1w	2	a1,a2, b1,b2,d1,d2
4	Using MS Project for Project Resource Management	1w	2	a2, b1,b2,d1,d2
5	Requirements modeling ( FDD)& use case (MS Visio)	1w	2	a1, b1,d1,d2
6	Data and Process Modeling (DFD)	1w	2	a1,b1,b2,c1,d1,d2
7	Process Description Tools: Structured English, decision Tables	1w	2	a1,b1,b2,c1,d1,d2
8	UML	4w	8	a1,b1,b2,c1,c2, d1,d2
<b>Number of Weeks /and Units Per Semester</b>		<b>11</b>	<b>22</b>	<b>All</b>

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



## V. Teaching strategies of the course:

- Lectures
- Discussion
- Brainstorming
- Problem solving
- Practical in computer (lab)
- Projects
- Self-learning
- Cooperative learning

## VI. Assignments:

No	Assignments	Aligned CILOs (symbols)	Week Due	Mark
1	Project	All	2 <sup>nd</sup> -12 <sup>th</sup>	10
2	Homework	a1, a2, b1, b2,d1	10 <sup>th</sup>	2,5

## VII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course
-----	-------------------	----------	------	--------------------------------	----------------

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



					Learning Outcomes
1	Homework /Projects	2 <sup>nd</sup> -12 <sup>th</sup>	12.5	12.5%	All
2	Quiz	4 <sup>th</sup>	2,5	2,5%	a1, a2, b1, b2
3	Midterm Exam	7 <sup>th</sup>	10	10%	a1, a2, b1, b2,c1,c2
4	Labs	2 <sup>nd</sup> -12 <sup>th</sup>	15	15%	All
5	Final Exam	16 <sup>th</sup>	60	60%	a1, a2, b1, b2,c1,c2

VIII. Learning Resources:	
<ul style="list-style-type: none"> <li>Written in the following order: ( Author - Year of publication – Title – Edition – Place of publication – Publisher).</li> </ul>	
1- Required Textbook(s) ( maximum two ).	
	1. Scott Tilley and Harry Rosenblatt, 2017, Systems Analysis and Design, Eleventh Edition, USA, Cengage Learning.
2- Essential References.	
	1- Kendall & Kendall, 2014, Systems Analysis and Design, 9 <sup>th</sup> edition, USA, Pearson.

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**  
Prof. Dr. Qassim Mohammed Abbas



	2- Alan Dennis, Barbara Haley Wixom, David Tegarden, Elaine Seeman, 2015, Systems analysis & design: an object-oriented approach with UML, Fifth edition, USA, Wiley.
<b>3- Electronic Materials and Web Sites etc.</b>	
	1- <a href="https://www.visual-paradigm.com/features/uml-tool/">https://www.visual-paradigm.com/features/uml-tool/</a> 2- <a href="https://www.omg.org/training/index.htm">https://www.omg.org/training/index.htm</a>

<b>VIII. Course Policies:</b>	
Unless otherwise stated, the normal course administration policies and rules of the Faculty of Computer and Information Technology apply. For the policy, see: ----- ----- The University Regulations on academic misconduct will be strictly enforced. Please refer to -----	
<b>1</b>	<b>Class Attendance:</b> A student should attend not less than 75 % of total hours of the subject; otherwise he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic
<b>2</b>	<b>Tardy:</b> For late in attending the class, the student will be initially notified. If he repeated lateness in attending class he will be considered as absent.
<b>3</b>	<b>Exam Attendance/Punctuality:</b> A student should attend the exam on time. He is Permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.
<b>4</b>	<b>Assignments &amp; Project</b> The assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time.

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



5	<b>Cheating:</b> For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.
6	<b>Plagiarism:</b> Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Council Affair of the university.
7	<b>Other policies:</b> <ul style="list-style-type: none"> <li>- Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room</li> <li>- Mobile phones are not allowed in class during the examination.</li> <li>- Lecture notes and assignments my given directly to students using soft or hard copy</li> </ul>

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad
<b>Rector of Sana'a University</b> Prof. Dr. Qassim Mohammed Abbas			





## Faculty of Computer & Information Technology

### Department of Information Technology

### Program of Information Technology

### Course syllabus of Systems Analysis and Design I

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad
			<b>Rector of Sana'a University</b> Prof. Dr. Qassim Mohammed Abbas



Course No ( ..... )

2020/2021

## Template for Course Plan (Syllabus)

I. - Information about Faculty Member Responsible for the Course:						
Name of Faculty Member	Dr. Mansour N. Ali	Office Hours				
Location & Telephone No.	775450055	SAT	SUN	MON	TUE	WED
E-mail	almarhoob@gmail.com					

II. Course Identification and General Information:		
1	Course Title:	Systems Analysis and Design I
2	Course Code & Number:	
3	Credit hours:	C.H TOTAL

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

Rector of Sana'a University

Prof. Dr. Qassim Mohammed Abbas



		Th.	Seminar	Pr	Tr.	
		2	-	2	-	3
4	Study level/ semester at which this course is offered:	3 <sup>rd</sup> Level -1 <sup>st</sup> Semester				
5	Pre –requisite (if any):	None				
6	Co –requisite (if any):	None				
7	Program (s) in which the course is offered:	IS, CS, IT				
8	Language of teaching the course:	English/Arabic				
9	Study System	Term based system				
10	Mode of delivery:	Full Time				
11	Location of teaching the course:	Faculty of Computer and Information Technology				

### III. Course Description:

This course introduces students to the concepts and skills of system analysis and design. Topics covered include the systems analysis and design methods, feasibility analysis, fact-finding techniques for requirements discovery; modeling system requirements with use cases, data modeling and analysis, process modeling, object-oriented analysis and modeling using the UML, and the system proposal.

<b>Head of Department</b>	<b>Vise Dean for Quality Assurance</b>	<b>Dean of the Faculty</b>	<b>Dean of Academic Development center and Quality</b>
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



#### IV. Intended learning outcomes (ILOs) of the course:

- Brief summary of the knowledge or skill the course is intended to develop:
  - a1- Describe the concepts of information systems development, various systems development methods, and the role of the system analyst.
  - a2- Explain how systems projects get started, how to management IT projects, and how systems analysts conduct a preliminary investigation and feasibility study.
  - b1- Determine the requirements that will be used to design and develop the information system.
  - b2- Construct the logical model that will support business operations and meet user needs.
  - c1- Use data and process modeling techniques to show how the system transforms data into useful information.
  - c2- Use object-modeling techniques with UML to create a logical model.
  - d1- Effective communication with users, stakeholders, and project team during fact-finding and user requirements identification.
  - d2- Work in a team to analyze and design an information system.

#### V. Course Content:

- Distribution of Semester Weekly Plan of Course Topics/Items and Activities.

#### A – Theoretical Aspect:

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

#### Rector of Sana'a University

Prof. Dr. Qassim Mohammed Abbas



Order	Topics List	Week Due	Contact Hours
1	Introduction to Systems Analysis and Design	1 <sup>st</sup> , 2 <sup>nd</sup>	4
2	Analyzing the Business Case	3 <sup>rd</sup> -4 <sup>th</sup>	4
3	Managing Systems Projects	5 <sup>th</sup> -6 <sup>th</sup>	4
4	Midterm Exam	7 <sup>th</sup>	2
5	Requirements Modeling	8 <sup>th</sup> -9 <sup>th</sup>	4
6	Data and Process Modeling	10 <sup>th</sup> -11 <sup>th</sup>	4
7	Object Modeling	12 <sup>th</sup> -13 <sup>th</sup>	4
8	Project presentation and discussions	14 <sup>th</sup> -15 <sup>th</sup>	4
9	Final Exam	16 <sup>th</sup>	2
Number of Weeks /and Units Per Semester		16	32

**B – Practical Aspect: (if any)**

Order	Topics List	Week Due	Contact Hours
-------	-------------	----------	---------------

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



1	System proposal	2 <sup>nd</sup>	2
2	Using MS Visio for Business Process Modeling	3 <sup>rd</sup>	2
3	Feasibility study and risks management	4 <sup>th</sup>	2
4	Using MS Project for Project Resource Management	5 <sup>th</sup>	2
5	Requirements modeling ( FDD)& use case (MS Visio)	6 <sup>th</sup>	2
6	Data and Process Modeling (DFD)	7 <sup>th</sup>	2
7	Process Description Tools: Structured English, decision Tables	8 <sup>th</sup>	2
8	UML	9 <sup>th</sup> -12 <sup>th</sup>	8
<b>Number of Weeks /and Units Per Semester</b>		<b>11</b>	<b>22</b>

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



#### VI. Teaching strategies of the course:

- Lectures
- Discussion
- Brainstorming
- Problem solving
- Practical in computer (lab)
- Projects
- Self-learning
- Cooperative learning

#### VII. Assignments:

No	Assignments	Aligned CILOs (symbols)	Week Due	Mark
1	Project	All	2 <sup>nd</sup> -12 <sup>th</sup>	10
2	Homework	a1, a2, b1, b2,d1	10 <sup>th</sup>	2,5

#### VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
-----	-------------------	----------	------	--------------------------------

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



1	Homework /Projects	2 <sup>nd</sup> -12 <sup>th</sup>	12.5	12.5%
2	Quiz	4 <sup>th</sup>	2,5	2,5%
3	Midterm Exam	7 <sup>th</sup>	10	10%
4	Labs	2 <sup>nd</sup> -12 <sup>th</sup>	15	15%
5	Final Exam	16 <sup>th</sup>	60	60%

## IX. Learning Resources:

- Written in the following order: ( Author - Year of publication – Title – Edition – Place of publication – Publisher).

### 1- Required Textbook(s) ( maximum two ).

1. Scott Tilley and Harry Rosenblatt, 2017, Systems Analysis and Design, Eleventh Edition, USA, Cengage Learning.

### 2- Essential References.

- 1- Kendall & Kendall, 2014, Systems Analysis and Design, 9<sup>th</sup> edition, USA, Pearson.
- 2- Alan Dennis, Barbara Haley Wixom, David Tegarden, Elaine Seeman, 2015, Systems analysis & design: an object-oriented approach with UML, Fifth edition, USA, Wiley.

### 3- Electronic Materials and Web Sites etc.

- 1- <https://www.visual-paradigm.com/features/uml-tool/>
- 2- <https://www.omg.org/training/index.htm>

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

### Rector of Sana'a University

Prof. Dr. Qassim Mohammed Abbas





IX. Course Policies:	
Unless otherwise stated, the normal course administration policies and rules of the Faculty of Computer and Information Technology apply. For the policy, see: -----	
The University Regulations on academic misconduct will be strictly enforced. Please refer to -----	
1	<b>Class Attendance:</b> A student should attend not less than 75 % of total hours of the subject; otherwise he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic
2	<b>Tardy:</b> For late in attending the class, the student will be initially notified. If he repeated lateness in attending class he will be considered as absent.
3	<b>Exam Attendance/Punctuality:</b> A student should attend the exam on time. He is Permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.
4	<b>Assignments &amp; Project</b> The assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time.
5	<b>Cheating:</b> For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.
6	<b>Plagiarism:</b> Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Council Affair of the university.

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

**Rector of Sana'a University**

Prof. Dr. Qassim Mohammed Abbas



7	<b>Other policies:</b> <ul style="list-style-type: none"> <li>- Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room</li> <li>- Mobile phones are not allowed in class during the examination.</li> <li>- Lecture notes and assignments my given directly to students using soft or hard copy</li> </ul>
---	---

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad
<b>Rector of Sana'a University</b> Prof. Dr. Qassim Mohammed Abbas			



اللجنة الإشرافية			
م.	الاسم	الصفة	التوقيع
١	أ.م.د. عبد الماجد الخليدي	نائب عميد الكلية للشؤون الأكاديمية	
٢	أ.م.د. احمد مجاهد	نائب عميد مركز التطوير الأكاديمي وضمان الجودة	
٣	د. حسين الأشول	ممثل المركز في الكلية	
٤	أ.د. إبراهيم المطاع	نائب رئيس الجامعة للشؤون الأكاديمية	

Head of Department	Vise Dean for Quality Assurance	Dean of the Faculty	Dean of Academic Development center and Quality
Ibrahim A. Al-Balatah	Dr. Anwar Al-Shamiri	Dr. Nagi Al-Shibani	Assoc. Prof. Dr.Huda Al.Emad

Rector of Sana'a University

Prof. Dr. Qassim Mohammed Abbas