Module Description for Bologna System

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Computer Application In Business			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CSIT0107				
ECTS Credits	7				
SWL (hr/sem)					
Module Level	1	Semester of Delivery	1		
Administering Department	CIS	College	CSIS		
Module Leader	Wed Akeel Jawad	e-mail	wid.jawad@uobasrah.edu.iq		
Module Leader's Acad. Title	Assist Professor	Module Leader's Qualification	Master		
Module Tutor	Name (if available)	e-mail	E-mail		
Peer Reviewer Name	Name	e-mail	E-mail		
Scientific Committee Approval Date	01/02/2024	Version Number	1.0		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	Computer skills	Semester	1
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Plan, create, modify, and presented spreadsheets 2. Organize, edit, and enhance data in spreadsheets to achieve business standards, and recognize and resolve many types of errors. 3. Use formulas and built-in functions appropriately and correctly to solve problems and critically assess the results 4. Learn the logical function to solve the selection problems. Logical functions use to compare values and give logical results only (True, False) 5. Learn the Statistical functions, The functions in this category perform statistical analysis on ranges of data, like average, count, countIf, Mean, etc. 6. Learn Math functions, This category contains a wide variety of functions that perform mathematical and trigonometric calculations like, sum, sumif , round, etc. 7. Learn the information functions, Each of these functions, referred to collectively as the information functions, checks the specified value and returns TRUE or FALSE depending on the outcome.like , ISBLANK , ISERROR , ISTEXT,..etc. 8. Learn the text function, The functions in this category perform very important processes to the textual information, like, search, mid, replace, find, left,..etc. 9. Learn Lookup and Reference Functions, Functions in this category are used to find (look up) values in lists or tables. A common example is a tax table. You can use the VLOOKUP function to determine a tax rate for a particular income level. 10. Learn Date and time functions, Functions in this category are used to deal with date and time values like, today, date, now, datedif, ..etc. 11. Plan, organize, create, and present spreadsheet data in graphic form, Microsoft Office Excel supports numerous types of charts to help you display data in ways that are meaningful to your audience. When you want to create a chart or change an existing chart, you can choose from a wide range of chart subtypes available for each of the following chart types. 12. Learn some Advanced Tools, like, Tables, Conditional format, Data validation, and What-If Analysis
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Give the student the most important skills to become an Excel **power users** have a broad understanding of Excel's functionality and they know which tool or function is best used in a given situation. Power users create complex workbooks for their use and are often called on to help develop workbooks for their colleagues, or to identify why their colleagues' workbooks don't work as intended.

	2- Learn the most important skills to deal with worksheets and workbooks. 3- Learn how to deal with and solve formula errors. 4- Learn how to write and use the most important functions in many categories. 5- Learn how to use chart graphical representation to analyze the data. 6- Learn additional advanced skills and tools like tables, data validation, and other tools to enhance the student's ability level.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. - Principles of electronic Worksheet creation and formatting, entering of data, formulas, error handling, and type of operators. - Functions Logical, statistical, math, text, lookup, and reference functions and data and time function - Graphical reprsentions Column, line, Bar, Area, and many other types - Advance tool Tables, conditional format, data validation, and what-if analyses

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes and the lab, interactive tutorials, and by considering types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	113	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7.5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**175**		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	General introduction about how to handle worksheets and workbooks and Worksheet creation and formatting, entering of data, formulas, types of operators, and error solving
Week 2	Logical functions
Week 3	Statistical functions
Week 4	Statistical functions
Week 5	Math functions
Week 6	Information functions
Week 7	Mid-term Exam + lab exam
Week 8	Lookup and reference function
Week 9	Lookup and reference function
Week 10	Text function
Week 11	Text function
Week 12	Date and time function
Week 13	Date and time function
Week 14	Basic chart
Week 15	Advanced tools

Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Worksheet creation and formatting; entering of data
Week 2	Lab 2: execute many examples of logical functions and make weakly practice exam
Week 3	Lab 3: execute many examples of statistical functions
Week 4	Lab 4: execute many examples of statistical functions and make weakly practice exam
Week 5	Lab 5: execute many examples of math functions and make weakly practice exam
Week 6	Lab 6: execute many examples of information functions and make weakly practice exam
Week 7	Lab 7: mid term lab exam
Week 8	Lab 8: execute many examples of lookup and reference functions and make weakly practice exam
Week 9	Lab9: execute many examples of lookup and reference functions and make weakly practice exam
Week 10	Lab 10: execute many examples of text functions
Week 11	Lab 11: execute many examples of text functions and make weakly practice exam
Week 12	Lab 12: execute many examples of date and time functions
Week 13	Lab 13:execute many examples of date and time functions and make weakly practice exam
Week 14	Lab 14:execute many examples of the basic chart
Week 15	Lab15: execute many examples of advanced tools

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Excel Data Analysis, Modeling and Simulation, Second Edition, Hector GuerreroCollege of William & Mary,Mason School of Business ,Williamsburg, VA, USA,2019	Yes
Recommended Texts	اكسل 2019 ، الدليل السهل ، 2019 ، نضال الشامي	Yes
Websites	Excel VBA Tutorial - Easy Excel Programming (excel-easy.com)	

Grading Scheme مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Computer Skills			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CSITCIS102				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	1		Semester of Delivery	1	
Administering Department	CIS		College	CSIT	
Module Leader	Marwah Kamil Hussein		e-mail	Marwa.hussein@uobasrah.edu.iq	
Module Leader's Acad. Title	Lecturer		Module Leader's Qualification	MSc.	
Module Tutor	Name (if available)		e-mail		
Peer Reviewer Name			e-mail		
Scientific Committee Approval Date	16/09/2024		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		Semester	
Co-requisites module		Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Computer basics, components and applications. 2. Different types of computers. 3. The concept of the internet and its applications (e-mail, browsers). 4. Professional document creation, editing and printing. 5. Electronic spreadsheets and how to use them to perform calculations. 6. The appropriate design and display of digital presentations. 7. How to search for information using different sources 8. How to design and develop applications using simple software.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Demonstrate knowledge of basic concepts of hardware, software, network, internet and clouds. 2. Manage files, folders and user accounts efficiently. 3. Develop well designed documents, workbooks and databases using MS Office. 4. Apply IT tools to collect, analyze, evaluate and report data.
Indicative Contents المحتويات الإرشادية	1. Introduction to the computer - Basic components of a computer (monitor, CPU, storage, etc.) - Keyboard vs. mouse - Desktop vs. laptop - Activity: power off/on computers 2. Introduction to Windows - Desktop (icons, Start button, taskbar) - Cursor/mouse - Activity: click & drag desktop icons - Programs (3 ways to start programs: icon, Start, All Programs) 3. Typing 4. Windows Navigation - Window features (minimize, resize, exit, click & drag) - Menu bar (drop-down arrow) - Tool bar (icons) (roll cursor over to ID) - Scrolling - Multiple ways to do the same thing (menu, icon, keyboard) 5. Word - How to open Word (icon, Start menu, All Programs) - What is a "document" - Using the cursor with text (how to position, different types of cursor) - Review menu bar and tool bar - Using the keyboard with text (arrows, backspace, delete, tab, shift, space, enter keys) - Highlighting text (click & drag, full line from margin, edit/select all) - Requirement to highlight text for formatting commands - Formatting commands (Bold/Italicize/Underline, show as "on/off" icons) - Font size, Font type (review drop-down arrow)

	- Text color, Text highlight (review drop-down arrow) - Alignment (left, center, right) - Undo/Redo - Spell check (by the word, by the document) - Find/replace - Bullets/numbers - Review Windows Navigation (lesson 6) - Copy/cut/paste 6. Excel - Introduction to Excel (cells, row, column) - Tables - Basic Excel formulas 7. Windows File Management - Options for storage (internal drive, flash drive, CD/DVD) - Introduce Flash Drive - Files and Folders - My Computer - Save As, Save and Exit without changes 8. Internet Navigation - What is the Internet - What is a Web Browser - Links and navigation bars - Back & forward arrow buttons, home button - Address bar (how to use the website address/URL in the address bar) 9. Internet Search - How to start a web browser (Mozilla Firefox or Internet Explorer) - Getting to Google (toolbars, search box, other Google features) - Job search 10. EMAIL - Open new email - Send emails (attachment, text...)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The primary approach for delivering this module will focus on fostering active student engagement in exercises, while simultaneously enhancing their critical thinking abilities. This will be accomplished through a combination of classroom and laboratory sessions, interactive tutorials, and the incorporation of captivating sampling activities to facilitate hands-on learning experiences for the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	113	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	✓ Using the Computer and Managing Files • Operating System • File Management • Utilities • Print Management
Week 2	✓ Word Processing • Using the Application • Document Creation • Formatting
Week 3	✓ Word Processing

	• Objects • Mail Merge • Prepare Outputs
Week 4	✓ Word Processing • Referencing • Enhancing Productivity • Collaborative Editing
Week 5	✓ Spreadsheets • Using the Application • Cells • Managing Worksheets • Formulas and Functions
Week 6	✓ Spreadsheets • Formatting • Charts • Prepare Outputs • Analysis
Week 7	✓ Spreadsheets • Validating and Auditing • Enhancing Productivity • Collaborative Editing
Week 8	Mid-term Exam
Week 9	✓ Presentation • Using the Application • Developing a Presentation • Text • Charts and Diagrams
Week 10	✓ Presentation • Graphical Objects • Prepare Outputs • Presentation Planning • Slide Masters and Templates
Week 11	✓ Presentation • Multimedia • Enhancing Productivity • Managing Presentations
Week 12	✓ Online Essentials • Web Browsing Concepts • Web Browsing
Week 13	✓ Online Essentials • Web-Based Information • Communication Concepts • Using E-mail
Week 14	✓ Visio • Using the Application • Creating Technical Layouts

Week 15	✓ Visio • Exploring Advanced Diagrams • Diagramming and Data • Advanced Custom Shape Design

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	1. Operating System: • Familiarization with the chosen operating system • Navigating through the desktop, taskbar, and start menu 2. File Management: • Creating, renaming, copying, moving, and deleting files and folders • Sorting and organizing files based on different criteria 3. Utilities: • Exploring system utilities for maintenance tasks • Performing basic optimization tasks for computer performance 4. Print Management: • Setting up and configuring printers • Printing documents and adjusting print settings
Week 2	1. Using the Application: • Opening the word processing application • Exploring the user interface and menus 2. Document Creation: • Creating and saving a new document • Opening an existing document 3. Formatting: • Applying font styles, sizes, and colors • Adjusting paragraph alignment • Adding bullet points or numbering • Applying basic text formatting (bold, italic, underline)
Week 3	1. Objects: • Inserting and formatting images and shapes • Adjusting object size and position • Applying borders and shading 2. Mail Merge: • Creating a data source with recipient information • Designing a template with placeholders • Performing a mail merge to generate personalized documents • Previewing and editing merged documents 3. Prepare Outputs: • Formatting documents for printing • Setting up headers, footers, and page numbers • Adding tables of contents or indexes • Creating PDF or electronic document formats
Week 4	1. Referencing: • Adding citations and creating a bibliography • Inserting footnotes or endnotes 2. Enhancing Productivity: • Using shortcuts and keyboard commands for faster editing • Customizing the user interface and toolbar 3. Collaborative Editing:

	• Enabling track changes and reviewing document revisions • Inserting comments and resolving conflicts
Week 5	1. Using the Application: • Navigating the spreadsheet application • Exploring different toolbars and options 2. Cells: • Entering and formatting data in cells • Adjusting cell alignment and text wrapping 3. Managing Worksheets: • Creating, renaming, and deleting worksheets • Moving and copying worksheets 4. Formulas and Functions: • Writing basic formulas for calculations • Using common functions (e.g., sum, average, count) • Referencing cells in formulas
Week 6	1. Formatting: • Formatting cell content • Applying conditional formatting 2. Charts: • Creating charts • Customizing chart elements 3. Prepare Outputs: • Setting up print areas • Saving and sharing spreadsheets 4. Analysis: • Using functions for data analysis • Sorting and filtering data
Week 7	1. Validating and Auditing: • Setting data validation rules • Auditing formulas for errors 2. Enhancing Productivity: • Using shortcuts for efficient navigation • Utilizing autofill and templates 3. Collaborative Editing: • Tracking changes by multiple users • Inserting comments
Week8	Lab Exam
Week9	1. Using the Application: • Navigating the presentation application • Exploring different toolbars and options 2. Developing a Presentation: • Creating slides and selecting layouts • Adding and arranging content (text, images, shapes) • Applying themes and customizing backgrounds 3. Text: • Formatting text (font, size, color) • Aligning and spacing text on slides 4. Charts: • Inserting and formatting charts • Adding labels and titles to charts
Week10	1. Graphical Objects: • Inserting and manipulating graphical objects • Applying effects and styles to graphics • Arranging and aligning graphical objects on slides 2. Prepare Outputs:

	• Setting up slide layouts and design elements • Configuring slide transitions and animations 3. Presentation Planning: • Outlining the structure and content of the presentation • Determining key messages and visuals for each slide 4. Slide Masters and Templates: • Modifying slide masters for consistent design • Creating and applying slide templates
Week11	1. Multimedia: • Inserting and managing multimedia elements (videos, audio, animations) • Configuring playback settings for multimedia • Syncing multimedia with slide transitions 2. Enhancing Productivity: • Utilizing shortcuts and productivity features • Using slide layouts and templates • Applying design themes for visual appeal 3. Managing Presentations: • Organizing and managing slides • Rearranging slide order • Configuring slide show settings
Week12	1. Web Browsing Concepts: • Understanding the basics of web browsing • Exploring different web browsers and their features • Learning about search engines and their functionalities 2. Web Browsing: • Opening a web browser and navigating to websites • Using bookmarks and favourites to save and access web pages • Exploring tabs and managing multiple web pages
Week13	1. Web-Based Information: • Searching and accessing information from websites • Evaluating online source reliability • Bookmarking useful websites 2. Communication Concepts: • Understanding online communication forms • Practicing netiquette and online etiquette • Recognizing online communication risks 3. Using E-mail: • Composing and sending emails • Managing email folders • Attaching files and formatting emails
Week14	1. Using the Application: • Opening and navigating the Visio application • Exploring the user interface and toolbars • Familiarizing with various Visio features and options 2. Creating Technical Layouts: • Creating and arranging shapes on a drawing canvas • Adding connectors and lines to create flowcharts or diagrams Applying formatting and styles to enhance the visual appearance
Week15	1. Exploring Advanced Diagrams: • Creating complex diagrams with advanced shapes and connectors • Using templates and stencils for specific diagram types • Incorporating advanced features like layers and callouts 2. Diagramming and Data: • Importing and linking external data to create data-driven diagrams • Customizing data visuals and applying data graphics

	• Creating organizational charts or network diagrams with data connectivity 3. Advanced Custom Shape Design: • Creating and modifying custom shapes using shape creation tools • Enhancing existing shapes to meet specific requirements • Utilizing shape behaviours and metadata for enhanced functionality

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	**Microsoft Office 2013** Visual Quickstart Guide*by Steve Schwartz*	
Recommended Texts	Gary B. Shelly, Misty E. Vermaat (2010). Microsoft Office 2010: Brief. Cengage Learning. OR any ECDL, ICDL or IC3 books	
Websites	https://www.microsoft.com	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
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MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Discrete Structures			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CSITCIS108				
ECTS Credits	76				
SWL (hr/sem)	175				
Module Level	1		Semester of Delivery	2	
Administering Department	Type Dept. Code		College	Type College Code	
Module Leader	Zahra Salman Bloshi		e-mail	zahraa.csit@avicenna.uobasrah.edu.iq	
Module Leader's Acad. Title	Assistant teacher		Module Leader's Qualification	Ph.D.	
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date	01/06/2023		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	This course aims at teaching students how to think mathematically. Students will learn a set of mathematical facts and techniques as well as some major discrete structures that related with computers. They will also learn how to use these facts, techniques and discrete structures to design computer-based solutions for real life problems.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Developing the acquisition of some acquired skills from inflammation Everyday life. • Developing mathematical skills (skills that help form mathematical sense) skills Estimation, mental calculation, judging the reasonableness of the results, etc.). • Acquiring various methods of conducting operations. • Develop the ability to seriously classify and collect numerous data, tabulate and read them representation and interpretation. •
Indicative Contents المحتويات الإرشادية	✓ Self-learning skills ✓ Skills to work in a team ✓ Thinking skills with mathematical logic ✓ Report writing skills

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by solving exercises..

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	47	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	128	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	8
Total SWL (h/sem)	**150**		

الحمل الدراسي الكلي للطالب خلال الفصل	

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (10)	5 and 10	LO #1, #2 and #10, #11
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	Projects / Lab.	0	0%	Continuous	All
	Report	0	0%	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	• Sets • Subsets • Operations on sets • Computer Representation of Sets
Week 2	• Cartesian product • Sequences • Properties of Integers
Week 3	• Matrices • Propositional and Logical Operations • Conditional Statements
Week 4	• Conditional Statements • Mathematical Induction • Product sets and Partitions
Week 5	• Methods of Proving Theorems • Recursive

	• Relations
Week 6	• Properties of Relations • Operations Relations • Computer Representation of Relations
Week 7	• Properties of Relations • Equivalence Relations • Computer Representation of Relations and Digraphs • Operations and Relations
Week 8	• Functions • Functions for Computer Science • Domain and codomain of the function
Week 9	• Range of the function • Graph of function • • Functions types
Week 10	• Permutation Functions • Graph • The types of graphs
Week 11	• Some Special Simple Graphs • Representing Graphs • Isomorphism and Isomorphic of graphs
Week 12	• Common graphs • Some important concepts
Week 13	• Kinds of graphs • More graphs
Week 14	• Trees • Labeled Trees
Week 15	• Tree Searching • Undirected Trees
Week 16	• Tree Traversal • Traversal Algorithms • Infix, Prefix, and Postfix Notation

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Kolman, Busby, and Ross (2008). Discrete Mathematical Structures, 6th ed. Prentice Hall.	Yes
Recommended Texts	Kenneth Rosen (2012). Discrete Mathematics and Its Applications, 7th ed. Mc-Graw Hill.	No
Websites		

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Computer Fundamentals			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☒ Lab ☒ Tutorial ☐ Practical ☐ Seminar	
Module Code	CSITCIS109				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	1		Semester of Delivery	2	
Administering Department	CIS		College	CSIT	
Module Leader	Asaad A. Alhijaj		e-mail	asaad.abdulhassan@uobasrah.edu.iq	
Module Leader's Acad. Title	Asst.Prof.		Module Leader's Qualification	Ms.c.	
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date	15/06/2023		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Describe the parts of typical desktop personal computers. 2. Describe the essential elements and duties of computer operating systems. 3. Determine the standards that qualified computer technicians adhere to. 4. Microsoft Windows installations, maintained, configured, and installed. 5. Introduced to the analysis of the architecture of a computer system and its components such as the execution unit, arithmetic and logical (ALU) unit, and memory unit. 6. Gives more details about the number system and logic gates and design it.

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Identify the components of standard desktop personal computers. 2. Identify fundamental components and functions of personal computer operating systems. 3. Identify best practices followed by professional personal computer technicians. 4. Install and configure computer components. 5. Install and configure system components. 6. Maintain and troubleshoot peripheral components. 7. Troubleshoot system components. 8. Install and configure operating systems. 9. Maintain and troubleshoot installations of Microsoft Windows. 10. Students will be introduced to the design and analysis of the hardware of a computer system and its components such as the execution unit, arithmetic and logical (ALU) unit, and memory unit. 11. The characteristics of instruction sets and the architecture of RISC and CISC machine. 12. Gives the students more details about the number system and logic gates and design it.
Indicative Contents المحتويات الإرشادية	1. Personal Computer Components: 2. Operating System Fundamentals 3. Personal Computer Technician Professional Best Practices 4. Installing and Configuring Peripheral Components 5. Maintaining and Troubleshooting Peripheral Components 6. Troubleshooting System Components 7. Installing and Configuring Operating Systems 8. Introduction to Computer Architecture. 9. Computer Instruction Set. 10. Memory Organization. 11. Introduction to number systems 12. Coding systems 13. Logic gates 14. Simplify using gates

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by solving exercises.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (hr/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	**77**	**Structured SWL (hr/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (hr/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	98	**Unstructured SWL (hr/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (hr/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**175**		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	#1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	#3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	#5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	#1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Personal Computer Components • Personal Computer Components • System Unit Components • Storage Devices • Personal Computer Connection Methods
Week 2	Operating System Fundamentals • Personal Computer Operating Systems • Windows User Interface Components • Windows File System Management • Windows System Management Tools
Week 3	PC Technician Professional Best Practices • Tools of the Trade

	• Electrical Safety • Environmental Safety and Materials Handling • Perform Preventative Maintenance • Diagnostics and Troubleshooting • Professionalism and Communication
Week 4	Installing and Configuring Peripheral Components • Install and Configure Display Devices • Install and Configure Input Devices • Install and Configure Adapter Cards • Install and Configure Multimedia Devices
Week 5	Installing and Configuring Peripheral Components • Install and Configure Storage Devices • Install and Configure Power Supplies • Install and Configure Memory • Install and Configure CPUs • Install and Configure System Boards
Week 6	Maintaining and Troubleshooting Peripheral Components • Troubleshoot Display Devices • Maintain and Troubleshoot Input Devices • Troubleshoot Adapter Cards • Troubleshoot Multimedia Devices
Week 7	Troubleshoot Storage Devices • Troubleshoot Power Supplies • Troubleshoot Memory • Troubleshoot CPUs • Troubleshoot System Boards
Week 8	Installing and Configuring Operating Systems • Install Microsoft Windows • Upgrade Windows • Add Devices to Windows • Optimize Windows
Week 9	Introduction to Computer Architecture. • Von Neumann Architecture. • Hardware, Software, and Firmware. • Basics of Computer Architecture. • Computer Structures.

Week 10	Computer Instruction Set.
	• Instruction Types.
	  • Data Transfer Instructions.
	  • Arithmetic Instructions.
	  • Logical Instructions.
	  • Program-control Instructions.
	  • System-control Instructions.
	I/O Instructions.
	• RISC and CISC.

Week 11	Memory Organization. • Memory Types. • Access Modes.

	• RAM Types. • Multilevel Memories (Memory Hierarchy). • Cache Memory. • Elements of Cache Design. • Associative Memory. • Memory Interleaving.
Week 12	Introduction to number systems • Place values and binary to decimal conversion • Decimal to binary conversion • Octal to decimal conversion |(and vice versa) • Hexadecimal to decimal conversion |(and vice versa) • Arithmetic operations in binary
Week 13	Coding systems • Ascii • Excess-3 code • Gray code
Week 14	Logic gates • (And, Or, Xor, Not) gates • (Nor, Nand, Xnor) gates
Week 15	Simplify using gates
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	First Look at Computer Parts and Tools
Week 2	Introducing Windows Operating Systems
Week 3	All about Motherboards & Supporting Processors and Upgrading Memory
Week 4	Supporting Hard Drives
Week 5	Installing Windows
Week 6	Satisfying Customer Needs
Week 7	PC Maintenance and Troubleshooting Strategies
Week 8	Maintaining Windows and Optimizing Windows
Week 9	Troubleshooting Windows and Applications and Troubleshooting Windows Startup Problems
Week 10	Troubleshooting Hardware Problems
Week 11	Memory addressing
Week 12	Perform various encryption operations.
Week 13	Learn how to deal with logical design programs.
Week 14	How to design logic gates.
Week 15	Simple logical design project.

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Textbook: 1. (Wiley series on parallel and distributed computing) Abd-El-Barr M., El-Rewini H. - Fundamentals of Computer Organization and Architecture-Wiley (2005) 2. Michael Meyers-Mike Meyers CompTIA A+ Guide_ Essentials Lab Manual, Third Edition (Exam 220-701) (Mike Meyers' Computer Skills) (2010) 3. CH Roth Jr, LL Kinney, EB John. Fundamentals of logic design- Cengage Learning (2013)	Yes (E-copy)

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C - Good	جيد	70 – 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 – 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 – 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Human Right			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CSIT0111				
ECTS Credits	2				
SWL (hr/sem)					
Module Level			Semester of Delivery	1	
Administering Department	CIS		College	CSIT	
Module Leader	Dr. hassan malih naser		e-mail	Hassan.malih@uobasrah.edu.iq	
Module Leader's Acad. Title	Lecturer		Module Leader's Qualification	MSc.	
Module Tutor	Name (if available)		e-mail		
Peer Reviewer Name			e-mail		
Scientific Committee Approval Date	2024-2025		Version Number		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	This subject links the student's scientific side with dealing with all the requirements of his life in terms of his interaction with society.	Semester	
Co-requisites module		Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	1. to develop the methods of understanding human rights accurately. 2. to develop the techniques of learning the laws of human rights. 3. To develop problem solving skills and text understanding of human rights. 4. historical insights into human rights since their inception. 5. This course deals with the basic concept of Human rights. 6. This is the basic theme for the understandings of human rights 7. To Understanding Human Rights in the 2005 Iraqi Constitution 8. To understand human rights in different systems of government, for example: totalitarian, dictatorships, authoritarian dictatorships, Presidential. Democracies and parliamentary democracies
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Recognize how understand the human rights. 2. To know what are human rights. 3. list for the most important terms of human rights 4. Summarize what is meant by a human rights. 5. Learning the relationship between rights and duties. 6. Explain human rights in different eras 7. Define human rights. 8. Identify the fundamental difference between women's and men's rights. 9. Identify human rights in different systems of government.
Indicative Contents المحتويات الإرشادية	General and transferable skills (other skills related to employability and personal development). 1. Enabling students to write reports on topics related to human rights. 2. Enabling students to connect theories to the practical realities of rights and freedoms. 3. Enabling students to pass professional examinations organized by local or international bodies. 4. Enabling students to engage in continuous self-development after graduation. 5. Holding special seminars for students to develop their personalities.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Teaching and Learning Strategy 1. Lectures on the subject in paper and electronic format (PowerPoint) are presented to students. 2. Lectures are delivered in detail. 3. Request periodic reports and homework on the core topics of the subject. Evaluation Methods

	1. Daily discussion to determine students' comprehension of the subject and assess daily participation. 2. Daily exams with a variety of short scientific questions to assess students' comprehension of the subject. 3. Allocating a portion of each semester's grade to homework. 4. Daily exams (Quizat), monthly exams for the curriculum, and a final exam. Affective and Value-Based Objectives 1. Encourage students to understand the overall purpose of studying the subject. 3. Encourage students to understand the function, code, or term within the subject. 4. Encourage students to reflect on how to develop themselves in the field of computers and software. 4- Enabling students to use computers and software. D- General and transferable skills (other skills related to employability and personal development). 1- Enabling students to write reports on topics related to democracy. 2- Enabling students to connect theories to the practical realities of rights and freedoms. 3- Enabling students to pass professional exams organized by local or international bodies. 4- Enabling students to engage in continuous self-development after graduation. 5- Holding special seminars for students for the purpose of personal self-development.

Student Workload (SWL)
الحمل الدراسي للطالب

Structured SWL (h/sem)			32	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
		Time/Number			
Formative assessment	**Quizzes**				
	Assignments				
	Projects / Lab.				
	Report				
Summative assessment	**Midterm Exam**				
	Final Exam				
Total assessment					
الحمل الدراسي المنتظم للطالب خلال الفصل					
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل			18	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	3

Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50

Module Evaluation تقييم المادة الدراسية					
As		**Time/Number**	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	**2**	**15% (15)**	**5 and 10**	**LO #1, #2 and #10, #11**
	Assignments	**2**	**15% (15)**	**2 and 12**	**LO #3, #4 and #6, #7**
	Projects / Lab.			**Continuous**	**All**
	Report	**1**	**10% (10)**	**13**	**LO #5, #8 and #10**
Summative assessment	**Midterm Exam**	**2hr**	**10% (10)**	**7**	**LO #1 - #7**
	Final Exam	**3hr**	**50% (50)**	**16**	**All**
Total assessment			**100% (100 Marks)**		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to the creation Theory and definition of human rights
Week 2	Human rights in ancient civilizations
Week 3	Human rights in divine laws and religions
Week 4	The concept and characteristics of human rights
Week 5	The concept of freedom and liberties
Week 6	Iraqi Constitution 2005
Week 7	Mid-Exam
Week 8	Types of rights and freedoms/ the right to life and work
Week 9	The History of Democracy
Week 10	political systems
Week 11	main pillars of democracy and democracy types
Week 12	Human rights guarantees at the international level

Week 13	Islam and Democracy
Week 14	Technological progress and its impact on rights and freedoms
Week 15	**repetition of the important keywords**

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts	Text, Visits, discussion with experts. to have a discussion	yes
Recommended Texts		
Websites		

Grading Scheme

مخطط الدرجات

Group	**Grade**	التقدير	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria

Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Module Information					
Module Title	Mathematics for Information Systems			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	UoB12345				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level		1	Semester of Delivery		1
Administering Department		CIS	College	CSIS	
Module Leader	Hadell ismail mustafa		e-mail	hadeel.mustafa@uobasrah.edu.iq	
Module Leader's Acad. Title		Lecturer	Module Leader's Qualification		Ph.D.
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name		Name	e-mail	E-mail	
Scientific Committee Approval Date		01/06/2024	Version Number		1.0

Relation with other Modules			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	1. Gain the necessary mathematical knowledge to deal with the language of computers. 2. The skill of using mathematical laws and expressing them in scientific mathematical symbols 3. Understanding of mathematical structures, especially the numerical, algebraic and geometric systems. 4. Awareness of the integration of experience represented in the investment of mathematical knowledge in other fields of study. 5. Understanding the nature of mathematics as an integrated system.
Module Learning Outcomes	6. Understand quadratic, cubic, exponential, logarithmic and hyperbolic functions. 7. Understand the inverse of the previous functions and their graphs. 8. Learning limits, continuity. 9. Learning derivatives and their applications. 10. Learning integrations and its applications.
Indicative Contents	Indicative content includes the following. <u>Functions</u> Functions and Their Graphs, Trigonometric Functions [8 hrs] <u>Limits and Continuity</u> Limit of a Function and Limit Laws, The Precise Definition of a Limit, One-Sided Limits, Continuity [8 hrs] <u>Derivatives</u> The Derivative as a Function, Differentiation Rules, Derivatives of Trigonometric Functions, The Chain Rule, Implicit Differentiation. [9 hrs] <u>Applications of Derivatives</u> Extreme Values of Functions on Closed Intervals, The Mean Value Theorem, Monotonic Functions and the First Derivative Test, Concavity and Curve Sketching, Applied Optimization. [10 hrs] <u>Integrals</u> The Definite Integral, The Fundamental Theorem of Calculus, Indefinite Integrals and the Substitution Method, Definite Integral Substitutions and the Area Between Curves.[10 hrs]

Learning and Teaching Strategies

Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by solving exercises.

Student Workload (SWL)

Structured SWL (h/sem)	47	**Structured SWL (h/w)**	3
Unstructured SWL (h/sem)	103	**Unstructured SWL (h/w)**	6
Total SWL (h/sem)	**150**		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	20% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	20% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	0	0% (0)		
	Report		0% (0)		
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Functions and Their Graphs, Trigonometric Functions
Week 2	Rates of Change and Tangent Lines to Curves, Limit of a Function and Limit Laws, The Precise Definition of a Limit

Week 3	One-Sided Limits, Continuity
Week 4	Tangent Lines and the Derivative at a Point, The Derivative as a Function, Differentiation Rules
Week 5	The Derivative as a Rate of Change, Derivatives of Trigonometric Functions
Week 6	The Chain Rule, Implicit Differentiation
Week 7	Mid-term Exam
Week 8	Area and Estimating with Finite Sums, Sigma Notation and Limits of Finite Sums
Week 9	The Definite Integral
Week 10	The Fundamental Theorem of Calculus
Week 11	The Fundamental Theorem of Calculus
Week 12	Indefinite Integrals and the Substitution Method
Week 13	Indefinite Integrals and the Substitution Method
Week 14	Indefinite Integrals and the Substitution Method
Week 15	Preparation before final exam
Week 16	

Delivery Plan (Weekly Lab. Syllabus)

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources

	Text	**Available in the Library?**
Required Texts	Calculus, George B. Thomas, Pearson 14th edition	Yes
Recommended Texts	Calculus, Vol.1, EDWIN "JED" HERMAN	No
Websites	https://www.coursera.org/learn/introduction-to-calculus	

Grading Scheme				
Group	**Grade**		**Marks %**	**Definition**
Success Group (50 - 100)	**A –** Excellent		90 - 100	Outstanding Performance
	B - Very Good		80 - 89	Above average with some errors
	C – Good		70 - 79	Sound work with notable errors
	D – Satisfactory		60 - 69	Fair but with major shortcomings
	E – Sufficient		50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail		(45-49)	More work required but credit awarded
	F – Fail		(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Information System Principles			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CSITCIS103				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	1		Semester of Delivery	1	
Administering Department	CIS		College	CSIS	
Module Leader	Marwah Kamil Hussein		e-mail	Marwa.hussein@uobasrah.edu.iq	
Module Leader's Acad. Title	Ass. Prof.		Module Leader's Qualification	A.P.	
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date	01/07/2024		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Learn having an understanding of information Systems provides added insight into other fields. 2. Learn an understanding of the effective and responsible use and management of information systems is important for managers and other business knowledge workers in today's global information Society. 3. Learn that people must understand the components of information systems and how all of these components work together to bring value to an organization. 4. We need to turn our attention to the role that information systems play in an Organization. 5. The competitiveness of most companies is in a large degree based on the effective use of information systems, therefore we must to think about what advantages and disadvantages Can bring to the businesses and society the integrating information system
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Identify components of an information systems infrastructure and their role in achieving organization goals. (SO:0; PI:0.1) 2. 2. Relate how information systems are enabling new forms of commerce and collaboration between individuals, organizations, and governments. (SO:6; PI:6.2) 3. 3. Explain the use of information system in an organization and its value in supporting organizational processes and decision making. (SO:6; PI:6.1) 4. 4. Analyze security, professional, social and ethical issues in development, deployment and usage of an information system. (SO:4; PI:4.2) CYS (SO:6; PI:6.2) 5. 5. Show responsibility for their own learning and continuing personal and professional development. (SO:4; PI:4.1)
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. - Use of Information System in Organization - Careers in information systems - Hardware and software concepts - Software development concepts and detailed stages - Database and data modeling concepts - Internet and WWW - Knowledge Management and Specialized Information Systems - Valuing Information System and Globalization - Information and Decision Support Systems - Business Intelligence - Security, Privacy and Ethical issues of Information System

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by solving exercises.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	118	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**150**		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	20% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	20% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	0	0% (0)		
	Report		0% (0)		
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Why information system are important

Week 2	Is framework for business professionals.
Week 3	The components of information system
Week 4	The role of information Systems
Week 5	Advantages and disadvantages of information system
Week 6	Careers in information systems
Week 7	Mid-term Exam
Week 8	Information technology concepts
Week 9	Classification of information
Week 10	System concepts
Week 11	Hardware
Week 12	Internal and external memory
Week 13	Software
Week 14	Application software
Week 15	Cloud computing
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Ralph, M. Stair, George W. Reynolds, Thomas Chesney, "Principles of Business Information Systems", 3rd Edition, 2018. ISBN 9781473748415	Yes

Recommended Texts	Joseph Valacich , Christoph Schneider, "Information Systems Today: Managing in a Digital World" 7th Edition, 2015 ISBN-13: 978-0133940473 ISBN-10: 01339404705	No
Websites		

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A –** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C – Good	جيد	70 - 79	Sound work with notable errors
	D – Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E – Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

2024\2025

Module Information					
Module Title	Computer Programming I			**Module Delivery**	
Module Type	BASIC			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CIS101				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level		1	**Semester of Delivery**		1
Administering Department		CIS	**College**	CSIT	
Module Leader	Noor Mohammed Jumaa		**e-mail**	noor.jumaa@uobasrah.edu.iq	
Module Leader's Acad. Title		Assistant lecturer	**Module Leader's Qualification**		M.Sc
Module Tutor	No		**e-mail**	E-mail	
Peer Reviewer Name		No	**e-mail**	E-mail	
Scientific Committee Approval Date		2023-11-04	**Version Number**		1.0

Relation with other Modules			
Prerequisite module	No	**Semester**	No
Co-requisites module	No	**Semester**	No

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	Understanding the effective and responsible use and management of a programming language is crucial for managers and other business knowledge workers in today's global information society. Therefore, individuals should understand the components of a programming language and how all these components work together. • What is a programming language? • Learn the basics of writing algorithms and flowcharts. • How to approach and solve problems. • Learn the fundamental concepts of structured programming using C++. • Learn control structures. • Introduction to functions.
Module Learning Outcomes	1. Knowledge objectives: • Develop the fundamental skills for using algorithms to solve problems programmatically • Test algorithms and debug errors • Translate algorithms into a program written in C++ • Implement, execute, and test a program written in C++ 2. Course-specific skills objectives: • Ability to convert problems into programming algorithms • Ability to convert algorithms into a program written in C++ • Ability to test the program and how to debug and handle errors

Learning and Teaching Strategies	
Strategies	The main strategy for developing such a unit is blended learning aimed at practical competency by defining specific, measurable, achievable, relevant, and time-bound (SMART) learning objectives for each part of the unit. Combine online resources, video lectures, readings, and interactive activities to provide a balanced learning experience. In addition, encourage students to engage in exercises that hone and expand their critical thinking skills, achieved through classroom and laboratory sessions, interactive lessons, and studying types of simple experiments that include some basic modeling activities relevant to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem)	75	**Structured SWL (h/w)**	4
Unstructured SWL (h/sem)	98	**Unstructured SWL (h/w)**	2
Total SWL (h/sem)	**175**		

Module Evaluation					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	6 and 10	LO #4, #5 and #8, #9
	Assignments	2	10% (10)	4 and 11	LO #3, # 2and #8, #9
	Projects /	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	General introduction to computers and programming languages
Week 2	Concept of algorithms and the mechanism of writing them
Week 3	Writing algorithms and flowcharts
Week 4	Introduction to C++ and the mechanism of writing comments and basics of writing a program
Week 5	Data types and variables in C++
Week 6	Basic input and output, operators, and arithmetic operations

Week 7	Midterm exam
Week 8	Decision-making statements(If statement)
Week 9	Decision-making statements (nested if statement)
Week 10	Decision-making statements (switch case)
Week 11	Loops and their types (for loop)
Week 12	Loops and their types (nested for loop)
Week 13	Loops and their types (while loop)
Week 14	Loops and their types (do while loop) with an introduction to functions in C++
Week 15	Preparatory week before the final exam

Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered
Week 1	Lab 1: How to open CodeBlocks used for writing C++ code, how to create a file and save it, and identifying the menus.
Week 2	Lab 2: Providing the student with an introduction to how to start writing a program with execution.
Week 3	Lab 3: execute many examples of VARIABLE TYPES
Week 4	Lab 4: Implementing several programs about input and output methods, with the implementation of arithmetic operations on them.
Week 5	Lab 5: Implementing a set of programs about arithmetic and relational operations on variables.
Week 6	Lab 6: Implementing a set of programs using an if statement
Week 7	Lab 7: Implementing a set of programs using nested if statement
Week 8	Lab 8: Implementing programs using (switch case)
Week 9	Lab 9: Implementing Programs Using Loops and Their Types (For Loop)
Week 10	Lab 10: Implementing Programs Using Loops and Their Types (Nested For Loop)
Week 11	Lab 11: Implementing Programs Using Loops and Their Types (While Loop)
Week 12	Lab 12: Implementing Programs Using Loops and Their Types (Do While Loop)
Week 13	Lab 13: Comprehensive Practical Exam Covering All of the Above
Week 14	Lab 14: Implementing Programs Using Function Writing in C++

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	• Fundamentals of programming c++ , richard l. halterman, school of computing southern Adventist university, December 2,2018. • A first book of c++ by gary Bronson, 4th edition , 2012 • Problem solving with c++ by walter Savitch ,7th edition , 2009 C++ the complete reference by Herbert Schildt, 4th edition, 2003	Available
Recommended Texts	) تعلم لغة C++ للمبتدئين (; لغات البرمجة للمبتدئين	Yes
Websites	https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/med_lab_tech_students/medicallabtechnology.pdf	

Grading Scheme

Group	Grade		Marks %	Definition
Success Group (50 - 100)	**A -** Excellent		90 - 100	Outstanding Performance
	B - Very Good		80 - 89	Above average with some errors
	C - Good		70 - 79	Sound work with notable errors
	D - Satisfactory		60 - 69	Fair but with major shortcomings
	E - Sufficient		50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail		(45-49)	More work required but credit awarded
	F – Fail		(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

2024/2025

Module Information					
Module Title	Computer ProgrammingII			Module Delivery	
Module Type	BASIC			☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CIS106				
ECTS Credits	8				
SWL (hr/sem)	200				
Module Level	1	Semester of Delivery	2		
Administering Department	CIS	College	CSIT		
Module Leader	NOOR MOHAMMED JUMAA	e-mail	Noor.jumaa@uobasrah.edu.iq		
Module Leader's Acad. Title	Assist	Module Leader's Qualification	M.Sc		
Module Tutor	No	e-mail	E-mail		
Peer Reviewer Name	No	e-mail	E-mail		
Scientific Committee Approval Date	29/02/2024	Version Number	1.0		

Relation with other Modules			
Prerequisite module	Computer ProgrammingI1	Semester	1
Co-requisites module	None	Semester	No

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	1. Learn of programming languages provides added insight into other fields. 2. Learn an understanding of the effective and responsible use and management of program language is important for managers and other business knowledge workers in today's global information Society. 3. Learn that people must understand the components of programming langauge and how all of these components work together to bring value to an organization. 4. We need to turn our attention to the role that programming language playin today's global information Society. 5. Why learn about loop type? - for..loop - while..loop 6. Why Learn about functions? - Defining a Function, Calling a Function, Function Arguments(Call by value, Call by Reference) 7. Why learn about series? 8. Why learn about Shape? 9. Why learn about Array?
Module Learning Outcomes	1- Give the student the most important skills to become a C++ power users have a broad understanding of C++ language and they know which tool or function is best used in a given situation. 2- Learn how to write and use the most important functions 3- Ability to convert issues into a program written in C++ 4- Ability to test programs and how to debug them

Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes and the lab, interactive tutorials, and by considering types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	90	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	108	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**200**		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	LO #3, #4 and #8, #9
	Assignments	2	10% (10)	4and 11	LO #3, #2 and #9, #10
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	1hr	10% (10)	12	LO #1 - #11
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction to Computer Programming language
Week 2	Loop type (break with continue)
Week 3	Series in C++
Week 4	Shape in C++
Week 5	Function in C++
Week 6	Function in C++
Week 7	Introduction to array
Week 8	One dimention array
Week 9	One dimention array with search

Week 10	One dimention array with Sort
Week 11	One dimention array with Function
Week 12	Midterm exam
Week 13	Two dimention array
Week 14	Two dimention array with Array sort and search
Week 15	Two dimention array with Function

Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered
Week 1	Lab 1: execute many examples of Loop type
Week 2	Lab 2: execute many examples of Loop type (break with continue)
Week 3	Lab 3: execute many examples of Use Series in C++
Week 4	Lab 4: execute many examples of Use Shape in C++
Week 5	Lab 5: execute many examples of function in C++
Week 6	Lab 6: execute many examples of function in C++
Week 7	Lab 7: execute many examples of array
Week 8	Lab 8 execute many examples of one dimention array
Week 9	Lab9: execute many examples of search in array
Week 10	Lab 10: execute many examples of sort in one array
Week 11	Lab 11: exam
Week 12	Lab 12: execute many examples of One dimention array with Function
Week 13	Lab 13:execute many examples of two dimention
Week 14	Lab 14: execute many examples of Two dimention array with sort
Week 15	Lab15: execute many examples of Two dimention array with Function

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	1. Fundamentals of Programming C++, Richard L. Halterman, school of Computing Southern Adventist University, December 2, 2018.	Yes

	2. A first book of c++ by Gary Bronson, 4th edition, 2012 by Gary Bronson 3. Problem solving with c++ by Walter Savitch, 7th edition,2009. 4. C++: The Complete Reference by Herbert Schildt, 4th edition, 2003	
Recommended Texts	تعلم لغة (C++) للمبتدئين ; لغات البرمجة للمبتدئين	Yes
Websites	https://www.programiz.com/cpp-programming	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A** – Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C – Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E – Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Baath			Module Delivery	
Module Type	Core			☐ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CSIT0102				
ECTS Credits	7				
SWL (hr/sem)					
Module Level			Semester of Delivery		
Administering Department	CIS		College	CSIT	
Module Leader	Dr.Hassan malih Naser		e-mail	Hassan.malih@uobasrah.edu.iq	
Module Leader's Acad. Title	Lecturer		Module Leader's Qualification	MSc.	
Module Tutor	Name (if available		e-mail		
Peer Reviewer Name			e-mail		
Scientific Committee Approval Date	01/06/2024		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	This course emphasizes to students the need to adhere to ethical principles when teaching this subject, which must be passed on to current and future generations. It focuses on studying and teaching a period during which the Iraqi state was known for its violations of human rights, its perpetration of crimes against humanity, and its infamous "era of graves" and genocide.	Semester	
Co-requisites module		Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	The importance of the curriculum lies in informing students about "the crimes of killing Iraqi scholars, including clerics who opposed the Ba'ath Party, the suppression of the Shaaban uprising, and the crimes against the Turkmen, particularly in the Ninety-Day Zone in Kirkuk Governorate, which included displacement, land seizure, and annexation to other governorates. It also covers the cross-border crimes that led to the launching of foreign wars against neighboring countries such as Iran and Kuwait."
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	It is a missing piece of research knowledge in the Iraqi research field, relating to the more than three decades during which the Ba'ath Party ruled Iraq, committing major human and political crimes. It will be presented to students and discussed using direct questions.
Indicative Contents المحتويات الإرشادية	Understanding the nature of the totalitarian political system established by the Ba'ath Party, whose influence was not limited to Iraq but extended to several other countries. In the fields of philosophical and psychological studies, there are topics related to studying the manufacture of fear, cruelty, and violence, which are among the main pillars of the Ba'ath Party. There is also a study of the social and psychological effects resulting from genocide and human rights violations.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Lectures on the subject are delivered in paper and electronic format (PowerPoint), and presented to students. 2. Deliver lectures in detail. 3. Request periodic reports and homework on the core topics of the subject. 1. Daily discussions to determine the extent of students' comprehension of the subject and to evaluate daily participation. 2. Daily exams with a variety of short scientific questions to assess students' comprehension of the subject. 3. Allocating a portion of each semester's grade for homework. 4. Daily exams (quizzes) and monthly exams for the curriculum and the final exam.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	77	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem)	98	**Unstructured SWL (h/w)**	5

الحمل الدراسي غير المنتظم للطالب خلال الفصل		الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learn Outcome
ıative	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #
ssment	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #
mative	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
ssment	Final Exam	3hr	50% (50)	16	All
l assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Violations of rights and freedoms ▯ Section One: A descriptive overview of the political systems in Iraq (1921-2003)
Week 2	The second topic: The Baath regime's violations of public rights and freedoms.
Week 3	The third topic: The impact of the Baath regime's behavior on society
Week 4	The fourth topic: The impact of the transitional phase in combating authoritarian politics.
Week 5	Psychological and social fields
Week 6	Religion and State
Week 7	Culture, media and the militarization of society
Week 8	First exam
Week 9	he impact of wars on the environment and population
Week 10	The use of internationally prohibited weapons and environmental pollution
Week 11	The scorched earth policy
Week 12	Draining the marshes and forced migration

Week 13	The destruction of the agricultural environment
Week 14	Mass graves and the bombing of places of worship
Week 15	**Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Recommended supporting books and references (scientific journals, reports, etc.)	
Recommended Texts	Required textbooks (methodology if any)	
Websites	Electronic references, online sites	

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings

	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

Module Information					
Module Title	Business statistics			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CSIT0207				
ECTS Credits	6				
SWL (hr/sem)	148				
Module Level	2	Semester of Delivery			
Administering Department	CSIT0207	College	CSIT		
Module Leader	Hadeel Ismail Mustafa	e-mail	hadeelismu@gmail.com		
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.		
Module Tutor	Name (if available)	e-mail	E-mail		
Peer Reviewer Name	Name	e-mail	E-mail		
Scientific Committee Approval Date	1/06/2024	Version Number	1.0		

Relation with other Modules			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	- Learn the basics of applied statistics - Learn the basics of tabulating data - Learn the basics of methods for describing data, analyzing it statistically, and eliciting decisions - The ability to criticize websites and discover design errors with graphical and functional interfaces - Learn the basics of some basics of mathematical statistics - Learn the basics of the statistical programmer spss
Module Learning Outcomes	1 - The student learns the basic principles of descriptive statistics 2 - The student learns to deal with data 3 - The student learns to choose the appropriate statistical measures for any statistical study

Indicative Contents	Introduction - Meaning and definition of statistics - Types of data and data sources - Types statistics - Scope of statistics - Importance of statistics in business - Limitations of statistics Central tendency - Arithmetic mean - Median - Mode Central tendency - Relationships of mean, median and mode - The beast measure of central tendency Central tendency - Geometric mean - Harmonic Dispersion - Meaning and definition of dispersion - Significance and properties Of measuring Variation - Measures of dispersion - Mean deviation - Standard deviation Dispersion - Skewness: meaning of definition - Test of skewness - Measures skewness Dispersion - Momerats - Kurtosis Random variable - Principles of probability theory - Definition of Random variable - Types of Random variable - Function of Random variable Random variable - Moment generating function - Joint distribution and distribution and marginal distribution Distribution - Discrete Distributions - Binomial distribution - Bernoulli distribution Poisson distribution Distribution - Continuous distribution - Uniform distribution - Gamma distribution normal distribution Simple Linear Regression

	- Simple Linear Regression Model - Regression Model and Regression Equation - Correlation Coefficient

Learning and Teaching Strategies

Strategies	Providing distinguished educational and research services that keep pace with local and international quality standards in the fields of computer and informatics, allowing for the preparation of a distinguished, competitive graduate, in addition to the completion of high-end projects and reports, and the active participation in community service.

Student Workload (SWL)

Structured SWL (h/sem)	60	**Structured SWL (h/w)**	2
Unstructured SWL (h/sem)	88	**Unstructured SWL (h/w)**	
Total SWL (h/sem)	**148**		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	4 and 12	
	Assignments	2	10% (10)	6 and 9	
	Projects / Lab.	-	-	-	-
	Report	1	10% (10)	12	
Summative assessment	**Midterm Exam**	2hr	20% (20)	8	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction
Week 2	Central tendency

Week 3	Central tendency
Week 4	Central tendency
Week 5	Dispersion
Week 6	Dispersion
Week 7	Exam
Week 8	Dispersion
Week 9	Random variable
Week 10	Random variable
Week 11	Distribution
Week 12	Distribution
Week 13	Simple Linear Regression
Week 14	Exam
Week 15	

Delivery Plan (Weekly Lab. Syllabus)

	Material Covered
Week 1	An introductory lecture on SPSS
Week 2	Methods of entering data into the program according to their types
Week 3	Central tendency
Week 4	Dispersion
Week 5	Data analysis (parametric and nonparametric tests)
Week 6	Simple Linear Regression Model
Week 7	Exam

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	‘’Statistics for business and economics 12e’’ By Daviad R. Anderson , Dennis J. SWEENEY, Thomas A.Williaws. 2014	YES(E-copy)
Recommended Texts	‘’ Introduction to Real World Statistics With Step-by-Step SPSS Instructions’’ by Edward T. Vieira, Jr.2017	YES(E-copy)
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Database Principles			Module Delivery	
Module Type	Core			☒Theory ☒Lecture ☒Lab ☐Tutorial ☒Practical ☐Seminar	
Module Code	CSITCIS203				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	2		Semester of Delivery	3	
Administering Department	CIS		College	CSIT	
Module Leader	Asaad A. Alhijaj		e-mail	asaad.abdulhassan@uobasrah.edu.iq	
Module Leader's Acad. Title	Asst.Prof		Module Leader's Qualification	Ms.c.	
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date	1/06/2023		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	CSITCIS101 Programming I, CSITCIS105 IS Principles	Semester	1
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Database and database users, 2. Database concepts and architecture, 3. Data modeling with ER model, 4. Relational model, language and systems, 5. Relational data model, 6. Constraints (integrity), 7. Relational algebra, 8. SQL, 9. Database design, theory and methodology, 10. Functional dependencies and normalization, 11. Relational database design algorithm, 12. Practice of database design and tuning, 13. Object-oriented and extended relational database technology, 14. Concepts for object-oriented database, standard languages, and design, extended relational databases.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Describe database concepts and architecture including query processing and optimization, concurrency controls and database recovery. 2. Identify database requirements and constraints to solve a business problem. 3. Design logical and mathematical models to organize data within a database. 4. Develop databases and execute queries using SQL. 5. Analyze functional dependencies and apply normalization rules to minimize redundancy. 6. Develop skills to work in a group project to produce quality deliverables. 7. Develop skills to structure themselves to work in a cohesive manner.
Indicative Contents المحتويات الإرشادية	• Introduction to Databases • Conceptual Database Design • Entity Relationship Diagram • Enhanced ER (EER) Model Concepts (ERD) • Relational Data Model and Relational Database Constraints • Relational Algebra • Normalization • Structured Query Language (SQL) • Advanced SQL • File Structure and Indexes • Database Performance Issues

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The module is delivered through a series of lectures. The lecture sessions discuss and explain to students the theoretical underpinnings of how Databases are designed and implemented.

	Assessment is divided into Five elements. First, there are a number of quizzes that assess the student's competency in specific topics on a weekly basis. There is a midterm class test. There are then two take-home assignments. Mini-Projects developed by a team of 3 to 5 students. Finally, an end-of-semester exam tests the learner's understanding of the theoretical material.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	113	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**175**		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (20)	4 and 12	LO #1- #4 and #8- #10
	Assignments	2	10% (10)	6 and 12	LO #6, and #8, #9
	Projects / Lab.	1	10% (10)	14	LO #2- #12
	Report	-	-	-	-
Summative assessment	Midterm Exam	2hr	10% (10)	9	LO #1 - #8
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to Databases
Week 2	Conceptual Database Design
Week 3	Entity Relationship Diagram (ERD)

Week 4	Enhanced ER (EER) Model Concepts
Week 5	Relational Data Model and Relational Database Constraints
Week 6	Relational Algebra-- **1st Assignment**
Week 7	Structured Query Language (SQL)
Week 8	Advanced SQL
Week 9	**Midterm Exam**
Week 10	Normalization
Week 11	File Structure and Indexes
Week 12	Database Performance Issues -
Week 13	**2nd Assignment**
Week 14	**Mini-project evaluation**
Week 15	Review and Exam Preparation: a review of key topics and concepts, exam practice, and preparation
Week 16	**Final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab1: Introduction to MS-Access
Week 2	Lab2: Tables Design 1
Week 3	Lab3:Tables Design 2
Week 4	Lab4:Forms
Week 5	**1st Quiz**
Week 6	Lab5:Queries1
Week 7	Lab6:Queries2
Week 8	Lab7:Reports
Week 9	**2nd Quiz**
Week 10	Lab8:Switchboard and user interface
Week 11	Lab9: Macro's and VBA
Week 12	Mini-Project Projects Evaluation

Learning and Teaching Resources مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	[1] Kroenke, David, and David J. Auer. *Database concepts*. Prentice Hall, 2013. [2] Silberschatz, Abraham, Henry F. Korth, and S. Sudarshan. *Database system concepts*. 4th edition. Hightstown: McGraw-Hill, 2002 **ISBN 0-07-255481-9**. [3] Elmasri, Ramez., Fundamentals of database systems / Ramez Elmasri, Shamkant B. Navathe.—6th ed.,p. cm. ISBN-13: 978-0-136-08620-8	No
Recommended Texts	Bagui, S. & Earp, R (2004). ***Learning SQL A Step-by-Step Guide Using Access®***. Addison-Wesley Publishing. ISBN: 0-32-111904-5.	No
Websites	http://mailman.cs.yale.edu/mailman/listinfo/db-book-list	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A –** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C – Good	جيد	70 – 79	Sound work with notable errors
	D – Satisfactory	متوسط	60 – 69	Fair but with major shortcomings
	E – Sufficient	مقبول	50 – 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Data Structures			Module Delivery	
Module Type	Core			☐ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code					
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	2	Semester of Delivery			
Administering Department		College			
Module Leader	Dr. Raidah S. Khudeyer	e-mail	Raidah.khudayer@uobasrah.edu.iq		
Module Leader's Acad. Title	professor	Module Leader's Qualification	Ph.D.		
		e-mail			
Peer Reviewer Name		e-mail			
Scientific Committee Approval Date	1/6/2024	Version Number			

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims **أهداف المادة الدراسية**	1. To know the meaning of data structures in computer science and their classification. 2. To understand how each data structure is stored in memory. 3. To understand how access to each data structure is stored in memory. 4. To perform basic operations on each data structure. 5. To implement each data structure by using any programming language.
Module Learning Outcomes **مخرجات التعلم للمادة الدراسية**	1. It provides the means of data types and data structures. 2. Identify the classification of data structures and the main operations of them. 3. Identify arrays and discuss the features, main operations, how to access each element, and how to implement them in Java. 4. Identify how representation strings are created and how to create a string object in Java. 5. Identify linked lists and discuss the features, main operations, types, and how to implement them in Java. 6. Identify the stacks and discuss the features, main operations, Applications, including implementation in Java using arrays and linked lists. 7. Discuss how to evaluate the expression using the stack. 8. Learn how to write the implementation of a recursive function by using a stack. 9. Identify the queues and discuss the features, main operations, applications, and how to implement them in Java using arrays and linked lists.
Indicative Contents **المحتويات الإرشادية**	• Introduction to Data Structures • Classification of Data Structures • Arrays • Strings • Linked lists • Stacks • Application of Stack • Recursion • Queues

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in this module is through a series of lectures on the theoretical underpinnings of how the data is organized in memory and how it is implemented by using one of the programming languages, such as Java. This will be achieved through, instead of theoretical lectures in classes and projects in the lab, many assignments increase the activities and understanding of students: 1. Several quizzes assess the student's competency at the end of each topic. 2. There is a midterm class test. 3. There are take-home mini-projects by a team of 2 students.

	4. There is an end-of-semester exam.

Student Workload (SWL)
الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	64	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	86	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**150**		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	4 and 8	LO #3- #5 and #7
	Assignments	2	10% (10)	6 and 10	LO #8, #9
	Projects / Lab.	1	20% (20)	14	LO #3- #9
	Report	-	-	-	-
Summative assessment	**Midterm Exam**	1hr	10% (10)	7	LO #1 - #6
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction - Types of Data Types, Types of Data Structures
Week 2	Arrays DS: definition, features, logic, physical structure, and access equations of a one-dimensional array.
Week 3	Arrays DS: logic, physical structure, and access equations of two-dimensional arrays.
Week 4	Arrays DS: logic, physical structure, access equation of three and multi-dimensional arrays, and triangle arrays.
Week 5	Strings DS: definition, basic representations in memory, and creating a string object.
Week 6	Stack DS: definition, features, implementation using lists and arrays
Week 7	Stack DS: application uses a list and arrays

Week 8	Mid-term Exam
Week 9	Queue DS: definition, features, implementation using lists and Arrays
Week 10	Queue DS: application uses a list and an array
Week 11	Queue DS: types of queues
Week 12	Object-Oriented Programming (OOP) definition, Classes and Objects, Encapsulation, Inheritance, Polymorphism
Week 13	Linked Lists DS: definition, advantages and disadvantages of arrays and linked lists, basic operations of linked lists, types of linked lists.
Week 14	Stack and queue implementation using linked lists
Week 15	Implementation of linked lists using OOP

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Arrays in the Java language
Week 2	Tasks in arrays using the Java language
Week 3	String methods in the Java language
Week 4	Tasks in Strings using Java language
Week 5	Stack in Java language
Week 6	Stack to evaluate expression
Week 7	Queues in Java language
Week 8	Queues to evaluate expression
Week 9	OOP in Java languages
Week 10	Linked Lists in Java language
Week 11	Tasks in linked lists (single and circular linked lists)
Week 12	Tasks in linked lists (double and Circular Double Linked Lists)
Week 13	Implement a stack and a queue using linked lists in Java
Week 14	Implementation of linked lists using OOP in Java

Week 15	Final project presentation

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	1. DATA STRUCTURES AND ALGORITHMS IN JAVA, MICHAEL T. GOODRICH, ROBERTO TAMASSIA, MICHAEL H. GOLDWASSER (6 TH EDITION) , 2014. 2. Data Structures and Algorithmic Thinking with Python By Narasimha Karumanchi, 2016. 3. A Textbook of Data Structures and Algorithms, Granville Barnett, and Luca Del Tongo 2008	
Recommended Texts	Hands-On Data Structures and Algorithms with Java by Michael T. Goodrich, 2014	No
Websites	https://realJava.com/Java-data-structures/ GeeksforGeeks: https://www.geeksforgeeks.org/	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

2025/2024

Module Information معلومات المادة الدراسية					
Module Title	Decision Support Systems			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CSIT0210				
ECTS Credits	5				
SWL (hr/sem)	32				
Module Level	2		Semester of Delivery	2	
Administering Department	CIS		College	CSIT	
Module Leader	Dr.Aliea S.Sabir		e-mail	aliea.sabir@uobasrah.edu.iq	
Module Leader's Acad. Title	Assist. Professor		Module Leader's Qualification	PH.D.	
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date	01/06/2023		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	• Understand the conceptual foundations of decision-making • Understand the systems approach • Understand the phases of decision-making: intelligence, design, choice, and implementation • Differentiate between the concepts of making a choice and establishing a principle of choice • Recognize how decision style, cognition (reasoning), management style, personality, and other factors influence decision-making • Understand how computer technologies can assist managers in their work • Learn the basic concepts of decision-making • Learn the basic concepts of decision support systems • Recognize the different types of decision support systems used in practice • Understand how the World Wide Web/Internet has affected decision support systems • What is Management Information Systems (MIS) • Understand the different model classes • Explain what optimization, simulation, and heuristics are, and when and how to use them • Describe how to structure a linear programming model • Describe the key issues of model management
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• This course provides the required skills and knowledge of the various decision-making models so that decisions can be based on logical and mathematical foundations under different circumstances, such as in cases of uncertainty, lack of information, or certainty. • This course studies the design of computerized systems to support individual or organizational decisions. • Moreover, the course aims at understanding the need for computerized support of managerial decision-making and what was an early framework for managerial decision-making.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. **DECISION-MAKING** • DECISION-MAKING AND PROBLEM-SOLVING • DECISION-MAKING DISCIPLINES • THE STRUCTURE OF DSS SYSTEMS • CLOSED AND OPEN SYSTEMS • SYSTEM EFFECTIVENESS AND EFFICIENCY • INFORMATION SYSTEMS AND MODELS - 1ICONIC (SCALE) MODELS - ANALOG MODEL - MATHEMATICAL (QUANTITATIVE) MODELS

- SIMULATION MODELS
- THE BENEFITS OF MODELS
- PHASES OF THE DECISION-MAKING PROCESS
  - THE INTELLIGENCE PHASE
  - DESIGN PHASE
  - CHOICE PHASE
  - IMPLEMENTATION PHASE
- PROGRAMMED VERSUS NONPROGRAMMED PROBLEMS

Management Support Systems

- Managerial Decision-making And Information Systems
- Managers And Computer Support
- Computerized Decision Support And The Supporting Technologies
- Framework For Decision Support
- Computer Support For Structured Decisions
- E-concept Of Decision Support Systems
- Group Support Systems
- Enterprise Information Systems (EIS)
- Knowledge Management Systems
- Expert Systems
- Artificial Neural Networks
- Hybrid Support Systems
- Emerging Technologies And Technology Trends

Management Information Systems

- Introduction (MIS)
  - Characteristics of MIS
  - Characteristics of Computerized MIS
  - Nature and Scope of MIS
- Enterprise Resource Planning (ERP)
  - Why ERP
  - Scope of ERP
  - Advantages of ERP
  - Disadvantages of ERP
- Customer Relationship Management (CRM)
  - Why CRM?
  - Advantages of CRM
  - Disadvantages of CRM

Decision theory

- IDENTIFICATION OF THE PROBLEM AND ENVIRONMENTAL ANALYSIS
  - VARIABLE IDENTIFICATION
  - FORECASTING
  - MODEL CATEGORIES
  - MODEL MANAGEMENT
  - KNOWLEDGE-BASED MODELING
  - CURRENT TRENDS
- STATIC AND DYNAMIC MODELS
- DECISION-MAKING UNDER CERTAINTY (DMUC)
- DECISION-MAKING UNDER RISK (DMUR)
- DECISION-MAKING UNDER UNCERTAINTY

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The module is delivered through a series of lectures. The lecture sessions discuss and explain to students the theoretical underpinnings of how software systems are analyzed and designed. Assessment is divided into four elements. First, many quizzes assess students' competency in specific topics every week. There is a midterm class test. There are then two take-home assignments. Finally, there is an end-of-semester exam that tests the learners' understanding of the theoretical material.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	30	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	68	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	4.5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**100**		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	20% (20)		
	Assignments	1	10% (10)		
	Projects / Lab.	-	-		
	Report	1	10% (10)		
Summative assessment	**Midterm Exam**	2hr	20% (10)		
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**DECISION-MAKING,** DECISION-MAKING AND PROBLEM-SOLVING**,** DECISION-MAKING DISCIPLINES**,** THE STRUCTURE OF THE DSS SYSTEM**,** CLOSED AND OPEN SYSTEMS
Week 2	SYSTEM EFFECTIVENESS AND EFFICIENCY, INFORMATION SYSTEMS AND MODELS, 1ICONIC (SCALE) MODELS, ANALOG MODEL, MATHEMATICAL (QUANTITATIVE) MODELS, SIMULATION MODELS, PROGRAMMED VERSUS NONPROGRAMMED PROBLEMS
Week 3	**Management Support Systems,** Managerial Decision-making, And Information Systems Managers And Computer Support, Computerized Decision Support, And The Supporting Technologies Framework For Decision Support
Week 4	Computer Support For Structured Decisions, E-concept Of Decision Support Systems, Group Support Systems, Enterprise Information Systems (EIS)
Week 5	Knowledge Management Systems, Expert Systems, Artificial Neural Networks, Hybrid Support Systems, Emerging Technologies, And Technology Trends
Week 6	**Management Information Systems**, Introduction (MIS), Characteristics of MIS, Characteristics of Computerized MIS, Nature, and Scope of MIS
Week 7	**Midterm exam**
Week 8	Enterprise Resource Planning (ERP), Why of ERP, Scope of ERP, Advantages of ERP, Disadvantages of ERP
Week 9	Customer Relationship Management (CRM): Why CRM? Advantages of CRM Disadvantages of CRM
Week 10	**Decision theory:** IDENTIFICATION OF THE PROBLEM AND ENVIRONMENTAL ANALYSIS, VARIABLE IDENTIFICATION, FORECASTING, MODEL CATEGORIES
Week 11	MODEL MANAGEMENT, KNOWLEDGE-BASED MODELING, CURRENT TRENDS, STATIC AND DYNAMIC MODELS
Week 12	DECISION-MAKING UNDER CERTAINTY (DMUC)
Week 13	DECISION-MAKING UNDER RISK (DMUR)
Week 14	DECISION-MAKING UNDER UNCERTAINTY
Week 15	DECISION-MAKING UNDER UNCERTAINTY
Week 16	**The preparatory week before the Final Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**

Required Texts	Efraim Turban, Ramesh Sharda, Dursun Delen, "Decision Support and Intelligence Systems", Prentice Hall; 7th edition, 2005.	yes
Recommended Texts	V.L. Sauter, Decision Support Systems For Business Intelligence, New York: John Wiley & Sons, 2010.	No
Websites	Free Online Course: Decision Support Systems from YouTube | Class Central	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A –** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C – Good	جيد	70 – 79	Sound work with notable errors
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	E – Sufficient	مقبول	50 – 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required, but credit awarded
	F – Fail	راسب	(0-44)	A considerable amount of work is required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example, a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails," so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

2024-2025

Module Information معلومات المادة الدراسية					
Module Title	Information Retrieval			Module Delivery	
Module Type	Core			☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code	CSIT0205				
ECTS Credits	5				
SWL (hr/sem)	32				
Module Level	2		Semester of Delivery	2	
Administering Department	CIS		College	CSIT	
Module Leader	Dr.Aliea S.Sabir		e-mail	aliea.sabir@uobasrah.edu.iq	
Module Leader's Acad. Title	Assist Professor		Module Leader's Qualification	Ph.D	
Module Tutor	Name (if available)		e-mail	E-mail	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date	01/06/2023		Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	none	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	**1-** Overview of the basic concept of information retrieval system **2-** Discuss How to do efficient (fast, compact) text indexing. **3-** Discuss the most important Retrieval models: Boolean, vector-space, probabilistic, and machine-learning models. **4-** Take brief details about the Evaluation and IR interface issues **5-** Discuss the Document clustering and classification.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	**1-** To learn the basic concept of information retrieval systems, the differences between Unstructured (text) vs. structured (database) data in the mid-nineties and today, and take a deep detail of the classic search model. **2-** To learn how to construct an index and What strategies can we use with limited main memory. **3-** To learn compression (in general), use compression for inverted indexes, and discuss DICTIONARY COMPRESSION and POSTINGS COMPRESSION in detail. **4-** To learn what is Wild-card queries, and Query processing. **5-** To learn the Ranked retrieval model, Scoring documents, Term frequency, Collection statistics, Weighting schemes, and Vector space scoring **6-** To learn the most important Evaluation metrics used in information retrieval. **7-** To learn the path from IR to text classification.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The module is delivered through a series of lectures. The lecture sessions discuss and explain to students the theoretical underpinnings of how software systems are analyzed and designed. Assessment is divided into four elements. First, many quizzes assess the student's competency in specific topics weekly. And there are several practical assessments to execute the important algorithm there is a midterm class test. There is then two a take-home assignment. Finally, there is an end-of-semester exam that tests the learners' understanding of the theoretical material.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	30	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	93	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**32**		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (10)		
	Assignments	1	10% (10)		
	Projects / Lab.	0	-		
	Report	1	10% (10)		
Summative assessment	Midterm Exam	2hr	20% (10)		
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	An Introduction to Information Retrieval: What Is Information Retrieval? *Dealing with Large, Unstructured Data Collections , Formal Characterization*
Week 2	***Typical Information Retrieval Tasks***
Week 3	**Information Retrieval System Components and Types**
Week 4	*Boolean retrieval: **An example information retrieval problem***
Week 5	**A first take at building an inverted index, Processing Boolean queries**
Week 6	**The extended Boolean model versus ranked retrieval, References and further reading**
Week 7	**Midterm exam**
Week 8	***The term vocabulary and the posting lists , Document delineation and character sequence decoding , Determining the vocabulary of terms***
Week 9	*Dictionaries and tolerant retrieval*
Week 10	*Index construction*

Week 11	*Index compression*
Week 12	*Scoring, term weighting, and the vector space model*
Week 13	**Evaluating an IR system,** Unranked retrieval evaluation**,** Precision, and Recall
Week 14	**Text Classification,** Standing queries Spam filtering**,** Categorization/Classification
Week 15	Classification Methods**, 1-** Manual classification**,2 -**Hand-coded rule-based classifiers **, 3-** Supervised learning Search engine type
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	*Introduction to Information Retrieval*, by C. Manning, P. Raghavan, and H. Schütze (Cambridge University Press, 2008).	yes
Recommended Texts	*Modern Information Retrieval*, by R. Baeza-Yates and B. Ribeiro-Neto.	no
Websites	CS 276: Information Retrieval and Web Search (stanford.edu)	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A** – Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C – Good	جيد	70 – 79	Sound work with notable errors
	D – Satisfactory	متوسط	60 – 69	Fair but with major shortcomings
	E – Sufficient	مقبول	50 – 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

Module Information
معلومات المادة الدراسية

Module Title	Marketing			Module Delivery	
Module Type				☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CSIT0202				
ECTS Credits	4				
SWL (hr/sem)					
Module Level	2	Semester of Delivery	1		
Administering Department	CIS	College	CSIT		
Module Leader	Reem qasim	e-mail	reem.qasim@uobasrah.edu.iq		
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification			
Module Tutor	Name (if available)	e-mail	E-mail		
Peer Reviewer Name	Name	e-mail	E-mail		
Scientific Committee Approval Date	11/09/2025	Version Number			

Relation with other Modules

Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	- Understanding modern marketing and its tools - Understand the basic principles, theories and concepts of marketing. - Understanding of marketing and the marketing mix. - Understanding the nature of consumer behavior and the factors that contribute to its formation and influence it. - Learn how to enter the world of existing markets with projects or provide new services to consumers. - Learn to apply principles and tools. - Learn and understand individual marketing and marketing as a career can work in practice.
Module Learning Outcomes	- Understand the concept and process of marketing - The ability to build and develop a marketing strategy for a product or service - Explain the characteristics of consumer behavior

	- The ability to segment and target the market and successfully market a new product - Deep understanding of the marketing mix from the point of view of the seller 4Ps and from the point of view of the buyer 4Cs - The importance of the brand and the value of the brand of the product and service and how to develop it

Learning and Teaching Strategies

Strategies	The strategy that will be adopted in presenting a subject will be in a positive manner and will be delivered through stories, realistic proverbs, and sequential events, with the aim of helping students in Breaking away from stereotypical and traditional thinking and progressing towards presenting creative ideas that are characterized by realistic imagination that is appropriate to an environment Local business, following the example of the experiences that took place in developed countries.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	68	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	4 and 12	
	Assignments	2	10% (10)	6 and 9	
	Projects / Lab.	-	-	-	-
	Report	1	10% (10)	12	

Summative assessment	**Midterm Exam**	2hr	20% (20)	8	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي

	Material Covered
Week 1	What Is Marketing
Week 2	Marketing Strategy
Week 3	Analyzing the Marketing Environment
Week 4	Consumer Markets and Consumer Buyer Behavior
Week 5	Customer-Driven Marketing Strategy: Creating Value for Target Customers Products, and Brands
Week 6	Products, and Brands
Week 7	Exam
Week 8	Services, and Brands
Week 9	New Product Development
Week 10	Pricing
Week 11	Communicating
Week 12	Advertising and Public Relations
Week 13	Personal Selling and Sales Promotion
Week 14	Direct and Online Marketing:
Week 15	Creating Competitive Advantage

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	

Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	Philip Kotler & Gary Armstrong (2020). Principles of Marketing. 20th ed., Prentice Hall.	No
Recommended Texts	Jeff Tanner, Principles of Marketing, Baylor University Mary Raymond, Clemson University, 2010.	No
Websites		

Grading Scheme

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A –** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C – Good	جيد	70 – 79	Sound work with notable errors
	D – Satisfactory	متوسط	60 – 69	Fair but with major shortcomings
	E – Sufficient	مقبول	50 – 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM / 2024-2025

Module Information					
Module Title	Object Oriented Programming			Module Delivery	
Module Type	Core			☒ Theory ☐ Lecture ☒ Lab ☒ Tutorial ☐ Practical ☐ Seminar	
Module Code					
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	2	Semester of Delivery	3		
Administering Department	ICS	College	CSIT		
Module Leader	Wed Akeel Jawad	e-mail	wid.Jawad@uobasrah.edu.iq		
Module Leader's Acad. Title	Asst. prof.	Module Leader's Qualification	MSc		
Module Tutor	Name (if available)	e-mail	E-mail		
Peer Reviewer Name	Name	e-mail	E-mail		
Scientific Committee Approval Date	1/06/2024	Version Number	2.0		

Relation with other Modules			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Introduce the concepts of object-oriented programming in a higher level programming language, such Java 2. Analyze a problem statement to design a model of objects necessary to create software architecture. 3. Gain skills in designing, and programming software for reuse of code. 4. Establish development methods in object-oriented programming to qualify students for teaching the language in other settings.
Module Learning Outcomes	1. Identify what mean of object-oriented programming and structural programming. 2. Learn the basic of java programming language: structure, data type, input and output statement. 3. Identify on control statements and define arrays and how to access to elements 4. Identify on how to write method and call it in java. 5. Understand and practical mastery of object-oriented concepts such as classes, objects. 6. Identify on access modifies 7. Identify on data abstraction, methods overriding, method overloading. 8. Understand inheritance concept, types and how implements of it. 9. Understanding polymorphism concept, types. 10. Understanding Encapsulation concept.
Indicative Contents	• Introduction to OOP • java basics • Classes, objects • constructors Strings • Inheritance concept • this and supper • overloading and overriding • Access modifiers • Polymorphism concept • Encapsulation concept

Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in this module through a series of lectures the theoretical underpinnings of meaning of object oriented programming language (such as java) and it concepts. This will be achieved through of theoretical lectures in classes and projects in lab, there are many assignments that increase the activities and understanding of students:

	1. There are a number of quizzes that assess the student's competency in end of each topic. 2. There is a midterm class test. 3. There are take-home mini-projects by a team of 2 students. 4. There are end-of-semester exam test.

Student Workload (SWL)

Structured SWL (h/sem)	**79**	**Structured SWL (h/w)**	**5**
Unstructured SWL (h/sem)	**96**	**Unstructured SWL (h/w)**	**6.4**
Total SWL (h/sem)	**175**		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	4 and 8	LO #2- #5
	Assignments	2	10% (10)	6 and 10	LO #7- #9
	Projects / Lab.	2	20% (20)	14	LO #2- #14
	Report	-	-	-	-
Summative assessment	**Midterm Exam**	1hr	10% (10)	8	LO #1- #7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction: What is Object-oriented programming (OOP), what is the structure of object oriented programming? What are the main concepts of OOP? What are the benefits of OOP? Program template for Java programs, identifier, basic data types, variables and constant.
Week 2	Class Declaration Creation Constructors overloading Constructor
Week 3	Exercises in Classes

Week 4	variable types, this keyword and method overloading and type Promotion(casting)
Week 5	Inheritance, definition, types, super keyword
Week 6	Exercises in Inheritance
Week 7	Method Overriding and access modifiers
Week 8	Mid-term Exam
Week 9	Encapsulation concept
Week 10	Polymorphism , definition, types
Week 11	Exercises in polymorphism and Encapsulation
Week 12	Abstraction: abstract class
Week 13	Exercises in abstraction
Week 14	interface concept, implement and extends with interface
Week 15	Exercises in interface
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered
Week 1	Lab 1: java and NetBeans
Week 2	Lab 2 : training in Arrays
Week 3	Lab 3 : training with overloading method
Week 4	Lab 4 : classes and object
Week 5	1st Quiz
Week 6	Lab 6: training in classes and constructor
Week 7	Lab 7: training with access modifier
Week 8	Lab 8: training in inheritance
Week 9	Lab 9: training with super keyword
Week 10	Lab 10: training with overridden method
Week 11	2nd Quiz
Week 12	Lab 10: training with abstract class
Week 13	Lab 11: training with interface
Week 14	Lab 12: training in all OOP Concepts

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	A. A. Puntambekar. (2020). Object oriented programming,	No
Recommended Texts	[1] C. Thomas Wu (2010). An Introduction to Object-Oriented Programming with Java. Fifth Edition. McGraw-Hill. [2] Herbert Schildt (2007). Java: The Complete Reference. Seventh Edition. McGraw-Hill.	No
Websites	https://www.google.iq/books/edition/Object_Oriented_Programming/WKUbEAAAQBAJ?hl= en&gbpv=1&dq=object+oriented+programming+java&printsec=frontcover	

Grading Scheme				
Group	**Grade**		**Marks (%)**	**Definition**
Success Group (50 - 100)	**A -** Excellent		90 - 100	Outstanding Performance
	B - Very Good		80 - 89	Above average with some errors
	C - Good		70 - 79	Sound work with notable errors
	D - Satisfactory		60 - 69	Fair but with major shortcomings
	E - Sufficient		50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail		(45-49)	More work required but credit awarded
	F – Fail		(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

نموذج وصف المادة الدراسية لسنة 2025/2024

معلومات المادة الدراسية			
طرق إيصال المادة العلمية		برمجة مواقع1	عنوان الوحدة
• نظري • محاضرات مفتوحة للطالب • مختبرات • أفلام علمية • سمنيارات • سفرات علمية للمستشفى		مادة رئيسية	نوع الوحدة
			نموذجCode
		6	الساعات المعتمدة ضمن النظام الأوربي
		150	SWL (hr/sem)

2	فصل الدراسي	الثانية	المرحلة الدراسية
كلية علوم الحاسوب وتكنولوجيا المعلومات	الكلية	نظم المعلومات الحاسوبية	القسم الاداري
arafat.alyousuf@uobasrah.edu.iq	e-mail	د.نهلة عباس فليح	مدرس المادة
دكتور إدارة تكنولوجيا المعلومات	المؤهلات	مدرس	اللقب العلمي
E-mail	e-mail	Nahla.flayh@uobasrah.edu.iq	مدرس مادة
E-mail	e-mail		المصادر
4.0	رقم الاصدار		تاريخ موافقة اللجنة العلمية

العلاقة مع المواد الدراسية الأخرى			
لايوجد	الفصل الدراسي	لايوجد	متطلبات الأساسية للوحدة
لايوجد	الفصل الدراسي	لايوجد	متطلبات الوحدة الأخرى

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
أهداف المادة الدراسية	• تزويد الطالب بالمعرفة الأساسية حول تقنيات تطوير واجهات الويب. • تمكين الطالب من استخدام HTMLفي بناء البنية الأساسية لصفحات الويب. • تمكين الطالب من استخدام CSSلتنسيق الصفحات وتحسين تجربة المستخدم. • تعريف الطالب بمفاهيم JavaScriptالأساسية لبرمجة صفحات ويب ديناميكية وتفاعلية.

	• Apply correct HTML syntax and semantic elements to build accessible web pages. • Incorporate hyperlinks, images, multimedia, and forms for interactive content. 3. **Style Web Pages Using CSS** • Use CSS selectors, properties, and values to format web pages. • Apply layout techniques such as the box model, flexbox, and grid systems. • Enhance design with colors, typography, and responsive design principles. 4. **Implement Interactivity Using JavaScript** • Understand JavaScript syntax, variables, data types, and operators. • Apply control structures, loops, and functions to solve problems. • Manipulate the Document Object Model (DOM) to add interactivity. • Use event handling to respond to user actions. 5. **Apply Problem-Solving and Debugging Skills** • Identify and fix common errors in HTML, CSS, and JavaScript code. • Use browser developer tools to inspect, debug, and optimize code. 6. **Design and Build a Basic Web Application** • Integrate HTML, CSS, and JavaScript to create a functional, user-friendly website. • Apply responsive and accessible design principles for different devices.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	By the end of this module, students will be able to: **1. HTML (Structure & Content)** • Identify the role of HTML in web development and its relation to CSS and JavaScript. • Construct well-structured web pages using correct HTML syntax and semantic tags. • Integrate multimedia elements (images, audio, video) and hyperlinks into web pages. • Develop interactive forms using input elements, labels, and form attributes. **2. CSS (Design & Layout)** • Apply CSS selectors, properties, and values to style HTML elements. • Implement layout techniques using the box model, flexbox, and CSS grid. • Design responsive web pages that adapt to different devices and screen sizes.

	• Employ CSS to enhance the visual appeal of websites, including typography, colors, and backgrounds. **3. JavaScript (Interactivity & Logic)** • Demonstrate understanding of JavaScript syntax, variables, data types, and operators. • Implement control structures (if statements, loops) and functions to solve problems. • Manipulate the Document Object Model (DOM) to dynamically update web content. • Apply event handling to respond to user interactions (e.g., clicks, form submissions). **4. Integration & Problem-Solving** • Combine HTML, CSS, and JavaScript to build a functional, user-friendly website. • Debug and test web applications using browser developer tools. • Apply best practices for code readability, maintainability, and web standards compliance. • Demonstrate awareness of accessibility principles and responsive design in real-world projects. **5. Professional & Transferable Skills** • Work independently and collaboratively on web development tasks. • Communicate technical ideas effectively through documentation and presentations. • Develop problem-solving and critical thinking skills applicable to broader computing contexts. 1.
Indicative Contents المحتويات الإرشادية	**1. Introduction to Web Development** • Overview of the Internet and World Wide Web • Client–server architecture and HTTP protocol • Role of HTML, CSS, and JavaScript in web applications • Development environments and tools (text editors, browsers, developer tools) **2. HTML: Structure and Content** • Basic structure of an HTML document • Headings, paragraphs, lists, and links • Multimedia elements: images, audio, and video • Tables and forms (input elements, labels, attributes, validation basics) • Semantic HTML and accessibility principles **3. CSS: Styling and Layout** • Introduction to CSS syntax and selectors • Colors, fonts, and backgrounds

	• The CSS box model (margins, borders, padding, content) • Positioning, floats, flexbox, and grid layout • Responsive web design (media queries, fluid layouts) • External stylesheets and CSS best practices **4. JavaScript: Interactivity and Logic** • JavaScript syntax, variables, and data types • Operators, expressions, and control structures (if, switch, loops) • Functions and scope • Arrays and objects (basic usage) • DOM manipulation (accessing, modifying, and creating elements) • Event handling (clicks, mouse events, form events) • Introduction to debugging with browser developer tools **5. Integration and Mini Projects** • Combining HTML, CSS, and JavaScript in a single web project • Form validation with JavaScript • Interactive elements (menus, image sliders, simple games) • Applying responsive design principles in projects **6. Best Practices and Professional Skills** • Code organization, commenting, and documentation • Web standards (W3C) and accessibility guidelines (WCAG) • Introduction to performance and security considerations • Collaborative development (version control basics – optional/introductory)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Employing these strategies can create a comprehensive and engaging learning experience in a web programming module, such as lectures, interactive discussions, hands-on lab sessions, case studies, assignments, projects, guest lectures, online resources, assessments, group projects, and continuous support.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (hr/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	64	**Structured SWL (hr/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (hr/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	86	**Unstructured SWL (hr/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (hr/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	#1, #2 and #3
	Assignments	2	10% (10)	2 and 12	#4, #5 #7and #8
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	#5, #6, #8
Summative assessment	Midterm Exam	2hr	10% (10)	7	#1 - #5
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to Web Development: Internet, WWW, Client-Server Architecture, HTTP Protocol
Week 2	2 HTML Basics: Document structure, headings, paragraphs, lists
Week 3	3 HTML: Hyperlinks, images, audio, video
Week 4	4 HTML Forms: Input elements, labels, attributes, basic validation
Week 5	5 CSS Basics: Syntax, selectors, properties, colors, fonts
Week 6	6 CSS Layouts: Box model, positioning, floats, flexbox
Week 7	7 CSS Responsive Design: Media queries, fluid layouts, grid layout
Week 8	8 JavaScript Basics: Syntax, variables, data types, operators
Week 9	9 JavaScript Logic: Control statements, loops, functions
Week 10	10 JavaScript DOM Manipulation and Event Handling
Week 11	11 Integration of HTML, CSS, and JavaScript: Building Interactive Web Pages
Week 12	12 Web Standards, Accessibility, Debugging, and Final Project

Week 13	Introduction to Web Development: Internet, WWW, Client-Server Architecture, HTTP Protocol •
Week 14	2 HTML Basics: Document structure, headings, paragraphs, lists •
Week 15	3 HTML: Hyperlinks, images, audio, video •
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to Web Development: Internet, WWW, Client-Server Architecture, HTTP Protocol
Week 2	HTML Basics: Document structure, headings, paragraphs, lists
Week 3	HTML: Hyperlinks, images, audio, video
Week 4	HTML Forms: Input elements, labels, attributes, basic validation
Week 5	CSS Basics: Syntax, selectors, properties, colors, fonts
Week 6	CSS Layouts: Box model, positioning, floats, flexbox
Week 7	CSS Responsive Design: Media queries, fluid layouts, grid layout
Week 8	JavaScript Basics: Syntax, variables, data types, operators
Week 9	Integration of HTML, CSS, and JavaScript: Building Interactive Web Pages
Week10	JavaScript DOM Manipulation and Event Handling
Week11	Web Standards, Accessibility, Debugging, and Final Project
Week13	Project Discussion
Week14	Project Discussion
Week15	Final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Textbook: 1. Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics" by Jennifer Niederst Robbins, 5th edition, published in October 2018.	Yes (E-copy)
Recommended Texts	"HTML and CSS: Visual QuickStart Guide" by Elizabeth Castro and Bruce Hyslop, 8th edition, published in September 2013.	Yes (E-copy)
Websites	W3Schools PHP Tutorial: (www.w3schools.com/php)	

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Web ProgrammingII			Module Delivery	
Module Type	Core			☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	CSITCIS0209				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	2		Semester of Delivery	2	
Administering Department	CSITCIS0209		College	CSIT	
Module Leader	Jalal Dheyaa Mohammed		e-mail	Nahla.flayh@uobasrah.edu.iq	
Module Leader's Acad. Title	Lecturer		Module Leader's Qualification	MSc	
Module Tutor	Name (if available)		e-mail	jalal.dheyaa@uobasrah.edu.iq	
Peer Reviewer Name	Name		e-mail	E-mail	
Scientific Committee Approval Date			Version Number	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	Web Programming I	Semester	1
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Understanding PHP Basics: Learn the fundamentals of PHP programming language, including syntax, variables, data types, operators, control structures, and functions. 2. Web Development Concepts: Gain an understanding of web development concepts such as client-server architecture, HTTP protocol, request/response cycle, and the role of PHP in web development.

	3. Working with HTML and CSS: Learn how to integrate PHP code within HTML and CSS to create dynamic web pages. Understand how to generate HTML content using PHP and manipulate CSS styles based on dynamic conditions. 4. Handling Form Data: Explore techniques for handling form submissions using PHP. Learn how to retrieve form data, validate and sanitize input, and perform server-side form processing. 5. Working with Databases: Understand the basics of database management systems and how to interact with databases using PHP. Learn how to establish database connections, execute SQL queries, and handle result sets. 6. Session and Cookies Management: Explore techniques for managing user sessions and cookies using PHP. Learn how to create, store, and retrieve session data, as well as how to implement user authentication and authorization. 7. File Handling: Gain knowledge on file handling operations in PHP, such as reading from and writing to files, uploading files, and manipulating file metadata. 8. Working with APIs: Understand the concepts of Application Programming Interfaces (APIs) and learn how to interact with external APIs using PHP. Explore techniques for consuming and integrating data from popular APIs.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	When completing a web programming module focused on PHP, the student can gain the following learning outcomes: 1. Basic PHP Knowledge: Demonstrate a solid understanding of PHP syntax, variables, data types, operators, control structures, and functions. 2. Dynamic Web Page Creation: Develop the ability to integrate PHP code with HTML and CSS to create dynamic web pages that can generate and manipulate content based on user input or database interactions. 3. Form Handling: Successfully handle form submissions using PHP by retrieving form data, validating and sanitizing input, and performing server-side form processing. 4. Database Interaction: Exhibit competence in establishing connections with databases, executing SQL queries, handling result sets, and implementing basic database operations such as inserting, updating, and deleting data. 5. Session and Cookies Management: Implement session and cookies management techniques in PHP to maintain user sessions, store user data, and implement basic user authentication and authorization functionalities. 6. File Handling: Acquire skills in reading from and writing to files, uploading files, and manipulating file metadata using PHP. 7. API Integration: Demonstrate the ability to consume data from external APIs, understand API documentation, and effectively integrate API functionality into PHP-based web applications.
Indicative Contents المحتويات الإرشادية	• Introduction to PHP:

	a. PHP syntax and basic language constructs b. Variables, data types, and operators c. Control structures (conditionals, loops) d. Functions and procedural programming • Web Development Basics: a. Client-server architecture and HTTP protocol b. Request/response cycle c. Introduction to HTML and CSS d. Integrating PHP with HTML and CSS • Form Handling and Validation: a. Creating HTML forms b. Handling form submissions with PHP c. Validating and sanitizing user input d. Displaying form errors and feedback • Database Interaction with PHP: a. Introduction to relational databases (e.g., MySQL) b. Establishing database connections in PHP c. Executing SQL queries with PHP d. Handling result sets and retrieving data • Session Management and Authentication: a. Understanding sessions and cookies b. Managing user sessions in PHP c. Implementing user authentication and authorization d. Securing sensitive data and preventing session hijacking • File Handling and Uploading: a. Reading from and writing to files with PHP b. Handling file uploads and validating file types c. Manipulating file metadata (e.g., resizing images) d. File system operations and directory handling • Working with APIs a) Introduction to APIs and their usage in web development

	b) Making API requests with PHP c) Parsing and manipulating API responses (JSON, XML) d) Integrating data from popular APIs (e.g., Google Maps, Twitter)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Employing these strategies can create a comprehensive and engaging learning experience in a web programming module, such as lectures, interactive discussions, hands-on lab sessions, case studies, assignments, projects, guest lectures, online resources, assessments, group projects, and continuous support.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (hr/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (hr/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (hr/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	113	**Unstructured SWL (hr/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7
Total SWL (hr/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	#1, #2 and #3
	Assignments	2	10% (10)	2 and 12	#3, #4 and #6
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	#5, #6
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	#1 - #4
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to PHP • PHP syntax and basic language constructs • Variables, data types, and operators
Week 2	Introduction to PHP • Control structures (conditionals, loops) • Functions and procedural programming
Week 3	Web Development Basics: • Client-server architecture and HTTP protocol • Request/response cycle
Week 4	Web Development Basics: • Introduction to HTML and CSS • Integrating PHP with HTML and CSS
Week 5	Form Handling and Validation: • Creating HTML forms • Handling form submissions with PHP
Week 6	Form Handling and Validation: • Validating and sanitizing user input • Displaying form errors and feedback
Week 7	Database Interaction with PHP: • Introduction to relational databases (e.g., MySQL) • Establishing database connections in PHP
Week 8	Database Interaction with PHP: • Executing SQL queries with PHP • Handling result sets and retrieving data
Week 9	Session Management and Authentication: • Understanding sessions and cookies • Managing user sessions in PHP
Week 10	Session Management and Authentication: • Implementing user authentication and authorization • Securing sensitive data and preventing session hijacking

Week 11	File Handling and Uploading: Reading from and writing to files with PHP Handling file uploads and validating file types
Week 12	File Handling and Uploading: Manipulating file metadata (e.g., resizing images) File system operations and directory handling
Week 13	Working with APIs • Introduction to APIs and their usage in web development • Making API requests with PHP
Week 14	Working with APIs • Parsing and manipulating API responses (JSON, XML) • Integrating data from popular APIs (e.g., Google Maps, Twitter)
Week 15	Project Presentations and Wrap-up • Group project presentations • Discussion and reflection on the course
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	• Setting up the development environment (XAMPP, WAMP, etc.)
Week 2	• Writing basic PHP scripts, Variable declaration and manipulation
Week 3	• Applying predefined functions (string & math)
Week 4	• Creating a simple HTML webpage, Embedding PHP code within HTM , Displaying dynamic content with PHP
Week 5	• Creating a form with HTML, Processing form data with PHP
Week 6	• Implementing form validation and error handling

Week 7	• Setting up a local database server (MySQL, MariaDB, etc.), Establishing a database connection in PHP
Week 8	• Executing SQL queries and retrieving data
Week 9	• Implementing user registration and login functionality, Managing user sessions using PHP
Week 10	• Implementing basic authentication and access control
Week 11	• Uploading files with PHP, Validating and storing uploaded file.
Week 12	• Displaying uploaded files on a webpage
Week 13	• Making API requests using PHP, Parsing and processing API responses (JSON, XML),integrating external API data into a web application
Week14	• Project Discussion
Week15	• Final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Textbook: 1. PHP and MySQL Web Development" by Luke Welling and Laura Thomson, addison-Wesley Professional, 2016 2. "Modern PHP: New Features and Good Practices" by Josh Lockhart, 2015	Yes (E-copy)
Recommended Texts	PHP for the Web: Visual Quick Start Guide" by Larry Ullman:	Yes (E-copy)
Websites	W3Schools PHP Tutorial: (www.w3schools.com/php)	

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Module Description for Semester System

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

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Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extracurricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Advance object oriented

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature: Haider

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hussin

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

أ.م.د. عرفات ناصر حاتم

Date:

Signature:

مكتب العميد DEAN OFFICE

Approval of the Dean

Course Description Form

1. Course Name:					
Advance Object Oriented Programming					
2. Course Code:					
3. Semester / Year:					
1/3					
4. Description Preparation Date:					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
64/3					
7. Course administrator's name (mention all, if more than one name)					
Name:Noor Saad Fahad Email: noor.alfahad@uobasrah.edu.iq					
8. Email: Course Objectives					
Course Objectives	• Learn about object-oriented programming (JAVAFX) • Learn about developing Java GUI programs. • JavaFX provides a powerful, streamlined, flexible framework that simplifies the creation of modern, visually exciting GUIs.				
9. Teaching and Learning Strategies					
Strategy	Teach the students about the basics of JAVAFX, and how to start to create a graphical user interface. They can also learn about creating dynamic GUI by applying events. This can be done through extensive theoretical and laboratory lectures.				
10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**

1	2	Learn about the basics	JAVAFX basics	Theoretical & Laboratory	Discussion
2	2	Learn about the concepts	JAVAFX Concepts	Theoretical & Laboratory	Discussion & questions
3	2	Learn about the different layouts	JAVAFX layout panes	Theoretical & Laboratory	Discussion and questions
4	2	Learn about the different layouts	JAVAFX layout panes	Theoretical & Laboratory	Discussion and questions
5	2		First Exam		
6	2	Learn how to create 2D shapes	2D shapes	Theoretical & Laboratory	Discussion and questions
7	2	Learn how to create 2D shapes	2D shapes	Theoretical & Laboratory	Discussion and questions
8	2	Learn how to create 2D shapes	2D shapes	Theoretical & Laboratory	Discussion and questions

9	2	Learn how to create 2D shapes	Properties and Operations of 2D shapes	Theoretical & Laboratory	Discussion and questions
10	2	Learn about events and animations	Event driven programming and animations	Theoretical & Laboratory	Discussion and questions
11	2		Second Exam		
12	2	Learn about events and animations	Event driven programming and animations	Theoretical & Laboratory	Discussion and questions
13	2	Learn about events and animations	Event driven programming and animations	Theoretical & Laboratory	Discussion and questions
14	2	Learn about 3D shapes and images	3D shapes and images	Theoretical & Laboratory	Discussion and questions
15			Preparing for final exams		
11. Course Evaluation					
Exams, discussions					
12. Learning and Teaching Resources					

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Database managemat Syste

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hussen

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د.
عرفات ناصر جاسم

Approval of the Dean

Course Description Form

1. Course Name
Database Management Systems
2. Course Code
3. Semester / Year
3rd year
4. Description Preparation Date
10-09-2025
5. Available Attendance Forms:
Theoretical lectures + Practical labs
6. Number of Credit Hours (Total) / Number of Units (Total): 14
14 (2 hours theory + 2 hours practical weekly = 4 hours per week / 3 credits)
7. Course administrator's name (mention all, if more than one name): Sarah Ibrahim Kadhim
Name: Sarah Ibrahim Kadhim Email: sara.ibrahim@uobasrah.edu.iq
8. Email: Course Objectives

Course Objectives	The course aims to: • Provide students with fundamental concepts of database management systems. • Introduce students to different database models, focusing on the relational model. • Develop database design skills using Entity-Relationship Diagrams (ERD). • Train students to use SQL for retrieval, insertion, update, and deletion operations. • Enable students to design and implement small databases using modern DBMS tools (such as MySQL, Oracle, or SQL Server). • Familiarize students with key concepts in database security, backup, and referential integrity.

9. Teaching and Learning Strategies	
Strategy	Classroom lectures supported with practical examples. Laboratory sessions using DBMS software.

	Presentations and individual/group assignments. Mini-projects for designing and implementing a database.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Understand the basic concepts of DBMS	Introduction to Database Systems	Lecture	Lecture
2-3	4	Design a database using ERD	Relational Model and ERD	Lecture + Lab	Assignment/Practical Test
4-5	4	Write SELECT queries with conditions	SQL Language – Basic Queries	Lab	Practical Test
6-7	4	Write SELECT queries with conditions	SQL Language – Basic Queries	Lab	Assignment/Short Exam
8	4	Manage data using SQL	Data Operations (INSERT, UPDATE, DELETE)	Lecture + Lab	Practical Evaluation
9	4	Apply constraints to data	Constraints and Referential Integrity	Lecture + Lab	Practical Exercise
10	2	Simplify tables and eliminate redundancy	Normalization	Lecture	Assignment
11	4	Understand security and access control	User Management and Privileges	Lab	Practical Evaluation
12-13-14	4	Design and implement an	Mini Project	Lab + Supervision	Project Presentation

		integrated database			
15	2	Review of all topics	Comprehensive Review	Lecture	Review Questions

11. Course Evaluation
Quizzes: 10% Assignments and exercises: 10% Mini project: 10% Theoretical final exam: 35% Practical final exam: 15%

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	Elmasri & Navathe, *Fundamentals of Database Systems*, Latest Edition. Silberschatz, Korth & Sudarshan, *Database System Concepts*, Latest Edition.
Recommended books and references (scientific journals, reports...)	MySQL and Oracle official documentation. TutorialsPoint, W3Schools SQL Documentation.
Electronic References, Websites	https://dev.mysql.com/downloads/installer/ https://www.mysql.com/products/workbench/

Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Decision Support System

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28/9/2025

Signature:

Scientific Associate Name:

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Director of the Quality Assurance and University Performance Department:

Date:

Signature:

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University of Basrah
College of Computer Science and Information Technology

Course Information	
Course Title	Decision Support Systems
Credits	3 Hours
Teaching Method	3 Hours of Lecture

Assessment Policy		
Assessment Type	**Expected Due Date**	**Weight**
First Exam	To be announced by the dept.	
Second Exam	To be announced by the dept.	
Student activities (Quizzes)	To be announced later	
Lab	To be announced later	
Lab (final)	To be announced later	
Final Exam	To be announced later	

Learning Outcomes

The objective of this course is to study how Decision Support Systems (DSS) work and the theory behind different DSS techniques, thereby enabling them to understand today's turbulent business environment and how organizations survive and even excel in such environments (particularly solving problems and exploiting opportunities). This course provides the required skills and knowledge of the various decision making models so that decisions can be based on logical and mathematical foundations under different circumstances, such as in cases of uncertainty, lack of information, or certainty. This course studies the design of computerized systems to support individual or organizational decisions. Moreover, the course aims at understanding the need for computerized support of managerial decision making and what was an early framework for managerial decision making.

Week	Topics
	• Decision Support System and Business Intelligence • Decision Making, Systems, Modeling, and Support • DSS Concepts, Methodologies, and Technologies: An Overview • Modeling and Analysis • Data Warehousing for Business Intelligence

Textbook

Efraim Turban, Ramesh Sharda, Dursun Delen, "Decision Support and Intelligence Systems", Prentice Hall; 7th edition, 2005.

Reference

- V.L. Sauter, Decision Support Systems For Business Intelligence, New York: John Wiley & Sons, 2010.
- George M. Marakas. Decision Support Systems in the Twenty-first Century. Prentice Hall, ????

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Ethics

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د.
عرفات ناصر جاسم

Approval of the Dean

University of Basrah
College of Computer Science and Information Technology

Course Information	
Course Title	Computing Ethics
Course Number	IT111
Prerequisites	None
Credits	2 Hours
Teaching Method	2 Hours of Lecture

Assessment Policy		
Assessment Type	**Expected Due Date**	**Weight**
First Exam	To be announced by the dept.	15%
Second Exam	To be announced by the dept.	15%
Student activities (Quizzes)	To be announced later	10%
Lab	To be announced later	10%
Final Exam	To be announced later	50%

Learning Outcomes

This course will develop the ethical foundations of good professional practice in computing and will give students an informed awareness of the principal issues of ethics and professional responsibility in the development and use of computers and information systems. It will provide a basic survey of ethical theories and discuss the role of professional organizations in maintaining good practice, both in general and then specifically in the computing industry. It will also consider legislation that applies in the computing industry, including three major areas of ethical concern in computing: computer cracking, data privacy and intellectual property of software.

Week	Topics
	Introduction to Ethics
	Introduction to Ethics
	Ethics Philosophical Issues
	Ethics Philosophical Issues
	Intellectual Property Rights
	Intellectual Property Rights
	Intellectual Property Rights
	Computer Crimes
	Computer Crimes
	Computer Crimes
	Information Privacy

	Information Privacy
	Information Privacy
	The Concept of Plagiarism
	The Concept of Plagiarism

Textbooks
• Michael J. Quinn, Ethics for the Information Age, 3rd Ed., Addison-Wesley 2009.

Reference
• Gorge Reynoids, Ethics in Information Technology, Thomason, 2003. • Sara Baase, A Gift of Fire: Social, Legal and Ethical Issues for Computer and the Internet, 2nd ed., 2003. • Tavani H. T. and Hoboken N. J., Ethics and Technology, John Wiley, 3rd Ed, 2004. • Deborah G. Johnson, Computer Ethics. 3rd Edition, Englewood Cliffs, N.J., Prentice Hall, 2001..

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Scientific Supervision and Scientific Evaluation Apparatus
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Academic Program and Course Description Guide

2025

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Computer Network I

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature: Haider M

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hasan

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature: أ.م.د. عرفان ناصر جاسم

Approval of the Dean

Course Description Form

1. Course Name: Computer Networks 2
2. Course Code: N/A
3. Semester / Year: first semester/ 2025/2026
4. Description Preparation Date: 13/ 9/ 2025
5. Available Attendance Forms: In- Person (Theoretical lectures)
6. Number of Credit Hours (Total) / Number of Units (Total): 3 hours per week
7. Course administrator's name (mention all, if more than one name)
Name: Asst. Prof. Dr. Huda Abdulraheem Ahmed Email: huda.ahmed@uobasrah.edu.iq
8. Email: Course Objectives

Course Objectives	• Introduce students to the concept of computer networks. • Identify types of networks and their applications. • Familiarize students with communication protocols and technologies. • Develop students' skills in analyzing network performance and applying different methods.

9. Teaching and Learning Strategies

Strategy	The strategy focuses on both theoretical and practical aspects. Lectures are supported by visual and audio presentations. Practical lectures include interactive applications with individual and group assignments and discussions. Projects are also required to develop students' abilities and skills.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	3	Students understand the fundamentals of computer networks	Introduction to Computer Networks and their Components	Theoretical Lecture and demonstration	Simple daily quizzes
2	3	Students understand the functions of the OSI and TCP/IP models	OSI and TCP/IP Models: layers and their functions, comparisons, benefits	Theoretical Lecture and presentation	
3	3	Students understand and identify transmission media	Media (Cabling & Transmission Media)	Theoretical Lecture and presentation	
4	3	Understand Local Area Networks	Local Area Networks (LANs) and Ethernet: LAN protocols, CSMA/CD, basic topologies	Theoretical Lecture and presentation	
5		First midterm exam		First midterm exam	
6	3	Understand the concept of addressing	Addressing and Subnetting: IPv4, IPv6, subnetting, subnet mask	Theoretical Lecture and presentation	Simple daily quizzes
7	3	Understand transport protocols	Transport Layer Protocols: TCP vs. UDP, reliability concepts, flow control	Theoretical Lecture and presentation	
8	3	Understand Networks Layer	Network Layer and Routing: IP, ARP, ICMP, static and dynamic routing.	Theoretical Lecture and presentation	
9	3	Understand Data link Layer	Data Link Layer: frames, framing, error control, MAC addresses, VLANs	Theoretical Lecture and presentation	
10		Second Midterm Exam		Midterm Exam	

11	3	Understand Application Layer	Application Layer Protocols: DNS, HTTP, Email (SMTP/POP/IMAP), FTP.	Theoretical Lecture and presentation	
12	3	Understand Basic Network Security Principles	Basic Network Security Principles: firewalls, encryption concepts, authentication.	Theoretical Lecture and presentation	
13	3	Understand Wireless and WAN Networks	Wireless and WAN Networks: types of wireless networks, access points, challenges, intercity networking.	Theoretical Lecture and presentation	
14	3	Understand Performance and Measurements	Network Performance and Measurements: delay, bandwidth, packet loss, throughput, QoS	Theoretical Lecture and presentation	

11. Course Evaluation
Theoretical Exams covering concepts and models. Class participation and discussions, Reports and Projects.

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	/
Main references (sources)	CCNAv7: Introduction to Network (ITN) Companion Guide/ CISCO Networking Academy
Recommended books and references (scientific journals, reports...)	“Fundamentals of Microsoft learn: standards covering computer networking”
Electronic References, Websites	CISCO Networking Academy Coursera

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Computer NetworkII

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د.
عرفات ناصر جاسم

Approval of the Dean

Course Description: Computer networks II

1. Course Name:	
Computer networks II	
2. Course Code	
CSIT0309	
3. Semester / Year	
Second/2024-2025	
4. Description Preparation Date	
1/9/2023	
5. Available Attendance Forms	
Regular attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 hours/3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Dr. Muslim Mohsin Khudhair **Email:** muslim.khudhair@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives	• Learn the basics of computer networks • Learn the basics and types of network models • Learn the basics of each layer of network models • Learn the basics of network planning and the types of devices used • The ability to connect networks • Learn the basics of network operating systems • Learn how to configure the settings for each device on the network
9. Teaching and Learning strategies	
Strategy	A- Cognitive Objectives 1- Network Design 2- Network Implementation and Construction 3- Communicate with the beneficiary and be able to identify the objectives and reasons for building networks. 4- Be able to build and manage networks properly. B- Course Skill Objectives 1- Be able to design and manage networks using practical examples and network simulation programs.

	2- Work within a team, understand assigned tasks, and complete them within a specified timeframe. 3- Be able to detect errors, find appropriate technical solutions, and properly manage and monitor the network.

10. Course Structure

Week	Hours	Required Outcomes	Unit or Subject Name	Learning Method	Evaluation Learning
1-2	8	Theoretical	Networking basics, network technologies, and types	Lecture using data show	Questions and Discussion
3-4	8	Theoretical	Study network operating systems and network device configuration	Lecture using data show	Questions and Discussion
5	4	Theoretical and practical	Study network protocols and communication methods	Lecture - Explanation	Laboratory and Theoretical Exam
6-7	8	Theoretical and practical	Enabling technologies of the World Wide Web	Lecture using data show	Theoretical Exam
8	4	Theoretical and practical	Study network access layer	Lecture - Explanation	Questions and Discussion
9-11	8	Theoretical and practical	Study network layer	Lecture - Explanation	Questions and Discussion
12-13	8	Theoretical and practical	Study network addressing	Lecture - Explanation	Laboratory and Theoretical Exam
14-15	6	Theoretical and practical	Study transport layer and application layer Build networks and present required projects	Lecture - Explanation	Discussion, questions and providing technical solutions to some network problems

11. Course Evaluation

1. Weekly laboratory and monthly theoretical tests.
2. Practical projects and networks designed using network simulation software.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Mark A. Dye • Rick McDonald • Antoon W. Rufi, Network Fundamentals, CCNA Exploration Companion Guide, Copyright© 2008 Cisco Systems, Inc.

Recommended books and references (scientific journals, reports...)	1. Behrouz A. Forouzan - Data Communications andNetworking with TCP_IP Protocol Suite-McGraw Hill(2021) 2. James F. Kurose, Keith W. Ross - Computer NetworksA Top-Down Approach -Laxmi Publications (2017)
Electronic References, Websites	http://www.Cisco.netacad.net

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: operating System

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hassan

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

University of Basrah

College of Computer Science and Information Technology

Course Information	
Course Title	Operating System I
Course Number	IS400
Prerequisites	IS???
Credits	3 Hours
Teaching Method	2 Hour of Lecture + 2 Hours Lab

Assessment Policy		
Assessment Type	Expected Due Date	Weight
First Exam	To be announced by the department.	
Second Exam	To be announced by the department.	
Student activities (Quizzes)	To be announced later	
Lab	To be announced later	
Lab (final)	To be announced later	
Final Exam	To be announced later	

Learning Outcomes

This course aims to provide a clear description of the concepts that underlie operating systems. As prerequisites, the student must be familiar with basic data structures, computer organization, and high-level languages such as C, C++, or Java.

Week	Topics
1,2	Introduction to Operating Systems What Operating Systems Do Operating-System Operations Protection and Security Distributed Systems Special-Purpose Systems Computing Environments Open-Source Operating Systems
3,4	Operating-System Structures Operating-System Services User Operating-System Interface System Calls System Programs Virtual Machines
5,6,7	Processes Process Concept Process Scheduling Operations on Processes Interprocess Communication
8	Threads Multithreading Models

	Thread Libraries Threading Issues
9,10,11	CPU Scheduling Scheduling Criteria Scheduling Algorithms Thread Scheduling Multiple-Processor Scheduling
12,13	Process Synchronization The Critical-Section Problem Synchronization Hardware Semaphores Monitors Atomic Transactions
14,15	Deadlocks Deadlock Characterization Methods for Handling Deadlocks Deadlock Prevention Deadlock Avoidance Deadlock Detection
16	Memory Management

Textbooks
Avi Silberschatz, Peter B. Galvin, and Greg Gagne, "Operating System Concepts", John Wiley & Sons, 8th edition.

Reference
William Stallings, "Operating Systems: Internals and Design Principles", Prentice Hall, 6th Edition.

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: OperationReSearch For Bs

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د.
عرفات ناصر جاسم

Approval of the Dean

Course Description Form

1. Course Name: Operations Research	
2. Course Code: CSITCIS307	
3. Semester / Year: second course/2025	
4. Description Preparation Date: 21/08/2025	
5. Available Attendance Forms: The Operations Research course can be attended theoretically in the hall.	
6. Number of Credit Hours (Total) / Number of Units (Total)/3 hours/3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Zainab B Dahoos Email: zainab.dahoos@uobasrah.edu.iq	
8. Email: Course Objectives	
Course Objectives	• Modeling realistic problems with different mathematical formulas. • Finding a solution to any problem available in the labor market after modeling it using different methods of solution. • Searching for the best solution to the problem and searching for the best method used to deliver the product to the labor market.
9. Teaching and Learning Strategies	
Strategy	Providing distinguished educational and research services that keep pace with local and international quality standards in the fields of computer and informatics. These services allow preparing a distinguished, competitive graduate. In addition to that, the completion of high-end scientific research and effective participation in community service and building a knowledge-based economy.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week1	3	Definition of operation research	Introduction – Linear programming Models, Forms of Linear programming Models	Theoretical lecture	Quiz
Week2	3	Definition of Linear programing	Linear programming	Theoretical lecture	homework
Week 3	3	Application about linear programing	Application Examples , Solving Linear Programming Models	Theoretical lecture	Quiz
Week 4	3	Definition of graphical method	Graphical method	Theoretical lecture	Quiz
Week5	3	Application about graphical method	Examples about graphical method	Theoretical lecture	Quiz
Week6	3	Simplex Method		Theoretical lecture	Quiz
Week7	3	Solve problems about Simplex Method	Solving Linear Programming Problems by Simplex Method	Theoretical lecture	Quiz
Week7	3	Definition of duality in Linear Programming Problem	duality in linear programing	Theoretical lecture	Quiz
Week8	3	Definition of Artificial Variable Technique	Artificial Variable Technique	Theoretical lecture	Quiz
Week9		Application about Duality in Linear Programming Problem	Duality in Linear Programming Problem	Theoretical lecture	Quiz
Week10		Application in Assignment 1	Assignment 1	Theoretical lecture	Quiz

Week11		Transportation Problems	Transportation models	Theoretical lecture	Quiz
Week12		Examples in Transportation problems	Initial Basic Feasible Solution of Transportation problems	Theoretical lecture	Quiz
Week13		Examples in Optimal Solution	Optimal Solution of Linear Programming Problems	Theoretical lecture	Quiz
Week14		Examples in Transportation Problem	Unbalanced Transportation Problem	Theoretical lecture	Quiz
Week15		Examples in Assignment 2	Assignment 2	Theoretical lecture	Quiz
Week16		Examples in The Hungarian Method	The Hungarian Method for Assignment Problem	Theoretical lecture	Quiz

11. Course Evaluation

		Time/Number	Weight (Marks)
Formative assessment	**Quizzes**	2	10% (10)
	Assignments	2	10% (10)
Summative assessment	**First Exam**	1hr	15% (15)
	Second Exam	1 hr	15%(15)
	Final Exam	3hr	50% (50)
Total assessment			100% (100 Marks)

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Makebest Decisions Through Operations Research, S.D.SHARMA
Main references (sources)	

Recommended books and references (scientific journals, reports...)	Prem Kumar Gupta, D.S. HIRA, S.CHAND بحوث العمليات ((مفهوما وتطبيقا) تأليف الدكتور حامد سعد نور الشمرتي
Electronic References, Websites	

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

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Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Computer Simulation

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

أ.م.د. عرفات ناصر جاسم

Date:

Signature:

Approval of the Dean

Course Title: Computer Simulation 3 Hrs. (3 Lectures)

1. Description

A conceptual foundation for discrete events and continuous time simulation on computers is presented. Statistical considerations such as random number generation, design of experiments, output analysis, and model correctness are considered. Programming in discrete event simulation languages such as GPSS, Simscript, or SIMULA. Implementation issues for simulation languages.

2. Textbook (s)

- Discrete Systems Simulation. J. Banks et al., Prentice Hall, 2014

3. References

- Modeling and Simulation: The Computer Science of Illusion, Stanislaw Raczynski, John Wiley & Sons, Ltd., The Atrium, Southern Gate, Chichester,
- , 2006
- Simulation with Visual SLAM and AweSim. John Wiley & Sons, 1999. A. Pritsker & J. O'Reilly.

4. Course Objectives

- Understand the nature of simulation modeling.
- Distinguish between discrete and continuous simulation.
- Implementing simulation techniques to single-server and n-server queuing systems and how to compute the performance measures, such as total number of customers in the system, average waiting time, …
- Be familiar with using the simulation technique for selecting optimal alternative ordering policies for an inventory system.
- Identify the advantages and disadvantages of both simulation packages and programming languages.
- Applied different methods for generating and testing random numbers and random variables that were implemented in system modeling.

5. Course Outcomes

On successful completion of this course, the students should be able to

- Discuss when to use simulation, its advantages, and actual areas of its application.

- Explore the concepts of system and model, and how to build and use a simulation model of a system.
- Identify a set of steps to guide a model builder in a thorough and sound simulation.
- Apply the descriptive statistics that were used for predicting system performance.
- Describe different algorithms to generate random numbers and their subsequent testing for randomness.
- Discuss how a system is modeled in terms of its state at each point in time and the activities and events that cause the system state to change.
- Describe the simulation languages and software for discrete-event simulation, and building a simulation package.
- Discuss the general characteristics of queues, the effect of varying the input parameters, and the mathematical solution of a small number of important and basic queuing models.

6. Topics Covered

No.	Topics	Weeks
1	• Basic Simulation Modeling • When Simulation Is the Appropriate Tool • When Simulation Is Not Appropriate • Advantages and Disadvantages of Simulation • Areas of Application • Systems and System Environment • Components of a System • Discrete and Continuous Systems • Model of a System • Types of Models • Discrete-Event System Simulation • Steps in a Simulation Study	3
2	• Modeling Complex Systems • Dynamical, Finite State, and Complex Model Simulations	2
3	Simulation Software • Comparing Simulation Packages with Programming Languages • Classification of Simulation Software • Desirable Software Features ○ General Capabilities.	2

	○ Hardware and Software Requirements ○ Statistical Capabilities	
4	Review of Basic Probability and Statistics. • Random Variables and Their Properties • Estimation of means, Variances and Correlations • Confidence Intervals and Hypothesis Test for the Mean.	3

5	Generating Random Varieties
	• General Approaches to Generating Random Variates
	• Generating Continuous Random Variates
	  • Uniform
	  • Exponential
	  • Normal
	  • Generating Discrete Random Variates
	  • Generating Arrival Processes
		3

	TOTAL	

7. Assessment Method

- Classroom performance : 5 %
- Quiz : 5 %
- Project : 10 %
- Examination : 40 %
- Final Examination : 40 %

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2025

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Web Programming 2

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hasso

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د.
عرفات ناصر جاسم

Approval of the Dean

Course Description Form

1. Course Name:
Web ProgrammingII
2. Course Code:
3. Semester / Year:
2ND year
4. Description Preparation Date:
12/9/2025
5. Available Attendance Forms:
Daily Attendance Sheet
6. Number of Credit Hours (Total) / Number of Units (Total):15
7. Course administrator's name (mention all, if more than one name)
Name:Dr. Nahla A. Flayh Email:Nahla.flayh@uobasrah.edu.iq
8. Email: Course Objectives

Course Objectives	The objectives of this course are: 1. Understanding PHP Basics: Learn the fundamentals of PHP programming language, including syntax, variables, data types, operators, control structures, and functions. 2. Web Development Concepts: Gain an understanding of web development concepts such as client-server architecture, HTTP protocol, request/response cycle, and the role of PHP in web development. 3. Working with HTML and CSS: Learn how to integrate PHP code within HTML and CSS to create dynamic web pages. Understand how to generate HTML content using PHP

	and manipulate CSS styles based on dynamic conditions. 4. Handling Form Data: Explore techniques for handling form submissions using PHP. Learn how to retrieve form data, validate and sanitize input, and perform server-side form processing. 5. Working with Databases: Understand the basics of database management systems and how to interact with databases using PHP. Learn how to establish database connections, execute SQL queries, and handle result sets. 6. Session and Cookies Management: Explore techniques for managing user sessions and cookies using PHP. Learn how to create, store, and retrieve session data, as well as how to implement user authentication and authorization. 7. File Handling: Gain knowledge on file handling operations in PHP, such as reading from and writing to files, uploading files, and manipulating file metadata.
9. Teaching and Learning Strategies	
Strategy	The *Web ProgrammingII* course adopts a variety of teaching and learning strategies to ensure students develop both theoretical understanding and practical skills: 1. **Lectures (Theory Delivery)** ○ Provide foundational knowledge of PHP, and DataBase. ○ Use multimedia presentations and live coding demonstrations. 2. **Hands-On Laboratory Sessions** ○ Conduct practical exercises in computer labs to apply lecture concepts. ○ Guide students through coding tasks, debugging, and small projects. 3. **Project-Based Learning (PBL)**

	○ Assign individual and group projects (e.g., building a personal portfolio site). ○ Encourage creativity, problem-solving, and application of best practices. 4. **Active and Collaborative Learning** ○ Use pair programming, group discussions, and peer code reviews. ○ Encourage teamwork and knowledge sharing. 5. **E-Learning and Online Resources** ○ Integrate Learning Management Systems (LMS) for assignments, quizzes, and resources. ○ Provide supplementary tutorials, coding sandboxes (e.g., CodePen, JSFiddle), and video lessons. 6. **Formative Assessments and Feedback** ○ Use short quizzes, coding exercises, and in-class activities for continuous evaluation. ○ Provide timely feedback to help students improve progressively. 7. **Self-Directed Learning** ○ Encourage students to explore web development tools, online documentation, and communities. ○ Promote independent problem-solving and lifelong learning habits. 8. **Demonstrations and Case Studies** ○ Showcase real-world websites and applications to highlight best practices. ○ Analyze case studies of good vs. poor web design and coding practices.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Understand PHP syntax, variables, data types, and operators	Introduction to PHP	Lecture + Hands-on coding	Short quiz + coding exercises
2	3	Apply control structures, loops, and functions in PHP	Introduction to PHP	Lecture + Lab work	Lab assignment

3	3	Explain client-server architecture and HTTP protocol	Web Development Basics	Lecture + Discussion	Quiz
4	3	Demonstrate request/response cycle, HTML & CSS basics, integrate PHP with HTML/CSS	Web Development Basics	Hands-on coding + Demo	Practical exercise
5	3	Create HTML forms and handle submissions with PHP	Form Handling and Validation	Lab work	Coding assignment
6	3	Validate and sanitize user input, display form errors	Form Handling and Validation	Lecture + Lab	Lab test
7	3	Explain relational databases and establish DB connection with PHP	Database Interaction	Lecture + Lab practice	Quiz + coding exercise
8	3	Execute SQL queries and retrieve results using PHP	Database Interaction	Hands-on lab	Coding project
9	3	Understand sessions, cookies, and manage user sessions	Session Management & Authentication	Lecture + Lab	Quiz + coding demo
10	3	Implement authentication, authorization, and secure session handling	Session Management & Authentication	Case study + Lab	Coding project

11	3	Perform file reading/writing, handle file uploads and validation	File Handling and Uploading	Lab work	Practical exercise
12	3	Manipulate file metadata, directory handling	File Handling and Uploading	Lecture + Lab	Coding assignment
13	3	Use APIs in PHP, make API requests	Working with APIs	Lecture + Demo	Quiz
14	3	Parse API responses (JSON/XML), integrate external APIs	Working with APIs	Lab work	Coding project
15	3	Present group project and reflect on learning outcomes	Project Presentations & Wrap-up	Group work + Discussion	Group presentation

11. Course Evaluation

- Continuous Assessment: Quizzes and lab exercises are conducted weekly to provide timely feedback and track progress.
- Project-Based Assessment: Both midterm and final projects assess students' ability to integrate theory into practical web development tasks.
- Participation: Students are encouraged to actively engage in labs, discussions, and peer reviews.

Flexibility: Evaluation methods may be adjusted to suit online or blended learning environments, ensuring fairness and accessibility.

- 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Welling, L., & Thomson, L. (2017). PHP and MySQL Web Development (5th ed.). Addison-Wesley.
Recommended books and references (scientific journals, reports...)	Freeman, E., & Robson, E. (2020). Head First HTML and CSS (2nd ed.). O'Reilly.

Electronic References, Websites	**W3Schools** *Description:* Educational website with interactive tutorials and examples for HTML, CSS, and JavaScript. *Link:* W3Schoos

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2025

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Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Business Informationsyst

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature: **Signature:**

Head of Department Name: **Scientific Associate Name:**

Prof. Dr. Haider M.Al-Mashhadi **Prof. Dr. Abbas H.Al-Asaadi**

Date: 28-9-2025 **Date:** 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

جامعة البصرة
شعبة ضمان الجودة وتقييم الاداء
كلية علوم الحاسوب وتكنلوجيا المعلومات

أ.م.د. عثمان ناظر جاسم

Approval of the Dean

Course Description Form

1. Course Name:	
Business Information System	
2. Course Code:	
3. Semester / Year:	
2024\2025	
4. Description Preparation Date:	
31\5\2025	
5. Available Attendance Forms:	
Lectures + laboratories and programs	
6. Number of Credit Hours (Total) / Number of Units (Total)	
3	
7. Course administrator's name (mention all, if more than one name)	
Name:Arafat Naser Jasim Email:Arafat alyousuf@uobasrah.edu.iq	
8. Email: Course Objectives	
Course Objectives	• It focuses in particular on the use of information technology to support management and decision-making functions • It aims to provide students with the skills necessary to analyze, design and develop information systems that meet the needs of managers at various administrative levels. • Introducing students to the use of information systems in business process management, inventory tracking, customer relationship management, and strategic decision making. • Analyzes user needs and designs and develops information systems that meet these needs
9. Teaching and Learning Strategies	

Strategy	Providing practical training as an essential part of studying business information systems, allowing students to apply the acquired knowledge in real work environments

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week1	3	Understanding the organization and the purpose of its existence	What is an organization?	Explaining an introduction to what an organization is, who it consists of, and what are the goals of its existence	Explanation and discussion
Week2	3	We learn about the most important features of organizations	Organization features	Open the door to discussion on each point	Explanation and discussion
Week3	3	Understanding regulatory policy, culture and environment	What is organizational culture	We define the difference between policy and organizational culture	ask the questions
Week4	3	Explain what the environment is	the organization's environment	Environmental impacts on the organization	Explanation and discussion
Week5	3	Organizational structure	Explain the organizational structure	divisions of the structure	Explanation and discussion
Week6	3	Monthly exam	Monthly exam	Monthly exam	Monthly exam
Week7	3	Understanding how business systems affect a country's economy	How the organization of business systems affects organizations and businesses Economic impacts	Explaining and clarifying the relationship between organizations and the economy	ask the questions
Week8	3	Clarifying the concept of agency theory	agency theory	Its importance and reasons for its existence	Explanation and discussion

Week9	3	Organizational and behavioral influences Information technology crushes organizations	Information technology crushes organizations	Explain what the effects are and their details	Explanation and discussion
Week10	3	Clarifying organizational resistance to change	Organizational resistance to change	Statement of the reasons driving resistance	Explanation and discussion
Week11	3	What is transaction cost theory	transaction cost theory	Statement of the reasons for the emergence of importance to the organization	ask the questions
Week12	3	Explaining the importance of business transformation	The role of information systems in business today How information systems transform businesses	Explaining the importance of business transformation in light of information systems	Explanation and discussion
Week13	3	The role of information systems in business today	The importance of systems in business	What systems should be identified	Explanation and discussion
Week14	3	Understanding practical applications of business information systems	Examples of business applications	Why we focused on these examples	Explanation and discussion
Week15	3	Final exam of the course	Final exam of the course	Final exam of the course	Final exam of the course

11. Course Evaluation	
Final exam for the course	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	**Information Systems For Business And Beyond** ***A Look At The Technology, People, And Processes Of Information Systems***

Main references (sources)	***DAVID T. BOURGEOIS, PH.D.*Published Through The Open Textbook Challenge By The Saylor AcademyWashington, D.C 2.Business Information Systems ,Elizabeth hardcastle &Ventus publishing Aps.2008**
Recommended books and references (scientific journals, reports...)	**Business Information Systems Third Edition Paul Beynon-Davies Professor Of Organisational Informatics, Cardiff Business School, Cardiff Universit** 4.Hapter Eight: Case Four-Old Chemistry Building Renovation Projec
Electronic References, Websites	https://www.coursera.org/articles/business-systems-analyst

Ministry of Higher Education and Scientific Research
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2025

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Data Mining & warehousing

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature: Haider

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hassiw

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د. عفاف ناصر جاسم

جامعة البصرة
شعبة ضمان الجودة وتقييم الأداء
كلية علوم الحاسوب وتكنولوجيا المعلومات

جامعة البصرة
مكتب العميد
DEAN OFFICE
UNIVERSITY OF BASRAH
College of Computer Science & Info. Tech.

Approval of the Dean

Course Description Form

1. Course Name:
Data Mining & Warehouse
2. Course Code:
3. Semester / Year:
2/4
4. Description Preparation Date:
5. Available Attendance Forms:
6. Number of Credit Hours (Total) / Number of Units (Total)
64/3
7. Course administrator's name (mention all, if more than one name)
Name:Noor Saad Fahad Email: noor.alfahad@uobasrah.edu.iq
8. Email: Course Objectives

Course Objectives	• Learn about Data Warehouse • Learn about the ETL • Learn how to analysis data • Learn about data mining • Learn how to find patterns in data • Evaluate the results for decision making
9. Teaching and Learning Strategies	
Strategy	Explain the concepts of data warehouse and data mining in full details through theoretical lectures, so the students can understand and acquire the ability to understand data, analysis data, find the trends and patterns. The theoretical knowledge will be applied in the laboratory corresponds to each lecture.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	2	Learn about the basic concepts	Introduction to data warehouse	Theoretical & Laboratory	Discussion
2	2	Understand the infrastructure of DW	DW implementation	Theoretical & Laboratory	Discussion
3	2	Understand the process of DW	ETL-1	Theoretical & Laboratory	Discussion and questions
4	2	Understand the process of DW	ETL-	Theoretical & Laboratory	Discussion and questions
5	2		First Exam		
6	2	Learn about the analysis of the data	OLAP-1	Theoretical & Laboratory	Discussion and questions
7	2	Learn about the analysis of the data	OLAP-2	Theoretical & Laboratory	Discussion and questions
8	2	Learn about DM	Introduction to DM	Theoretical & Laboratory	Discussion

9	2	Understand the preprocess of DM	DM preprocessing	Theoretical & Laboratory	Discussion
10	2	Understand the different operations of DM	Decision tree and naïve bayes	Theoretical & Laboratory	Discussion and questions
11	2		Second Exam		
12	2	Understand the different operations of DM	Neural Network	Theoretical & Laboratory	Discussion and questions
13	2	Understand the different operations of DM	Association	Theoretical & Laboratory	Discussion and questions
14	2	Understand the different operations of DM	Clustering	Theoretical & Laboratory	Discussion and questions
15			Preparing for the final exam		
11. Course Evaluation					
Exams, discussions					
12. Learning and Teaching Resources					

Required textbooks (curricular books, if any)	
Main references (sources)	The Data Warehouse ETL Toolkit Practical Techniques for Extracting, Cleaning, Conforming, and Delivering Data. - 2. The Data Warehouse Toolkit: The Definitive Guide to Dimensional Modeling, Third Edition Data Mining, Edition 4 Concepts and Techniques By Jiawei Han, Jian Pei and Hanghang Tong, 2022
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

Introduction:

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In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

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Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extracurricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: E-Technology

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature: **Signature:**

Head of Department Name: **Scientific Associate Name:**

Prof. Dr. Haider M.Al-Mashhadi **Prof. Dr. Abbas H.Al-Asaadi**

Date: 28-9-2025 **Date:** 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د.
عرفات ناصر ياسين

Approval of the Dean

Course Description Form

1. Course Name: El ectronic Technology
2. Course Code: E- Technology
3. Semester / Year: 2024-2025 / First Course
4. Description Preparation Date: 1/9/2025
5. Available Attendance Forms: Inside Classroom
6. Number of Credit Hours (Total) / Number of Units (Total) 3 units /45 hours
7. Course administrator's name (mention all, if more than one name)
Name: Zainab Ibraheem Othman Email: Zianab.othman@uobasrah.edu.iq
8. Email: Course Objectives

Course Objectives	The purpose of this course is to provide student with basic information about recent concepts technology . give the students skills in recent virtual application , that consider new tools in organization and management now.

9. Teaching and Learning Strategies

Strategy	Groups of many planes and ways that contribute in the learning processing like projects , seminars and lectures … etc.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3		E- Management	lecturer	

2	3		Functions and components of e-management	Lecturer	
3	3		Electronic systems for e-management	Lecturer	
4			Design and implementation	Lecturer	
5					Exam1
6			e-governance definition and benefits	Seminar	
7			Types of e-governance , advantage & disadvantage	Seminar	
8			Stages of e-governance	Seminar	
9					Exam2

			Communication and challenges in e-governance		
10			e-journalism essentials of e-journalism		
11			Important facts about e-journalism		
12			e-shopping what is online shopping types of e-shopping		
13					Exam3
14			e-learning why develop e-learning e-learning approaches		
15			Healthcare systems		
11. Course Evaluation 100 marks as following					
75 exam , 15 Absorbe , 5 Attending , 5 communion					

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	- American government a brief introduction , by Theodore J.Lowi ,2019,w.w.norton &company new york ,London. - Introduction to E-commerce , by Zheng Qin ,Springer , 2009 ,Tsinghua university press . - E- learning methodologies A guide for designing and developing e-learning courses ,2011, rome - Different papers that related with these topics.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Geographic Information System

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hassan

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

Course description template

Geographic Information Systems

This course description provides a concise overview of the key characteristics of the course and the expected learning outcomes, demonstrating how students can make the most of the available learning opportunities. It must also be linked to the program description.

1. Educational institution	University of Basra / College of Computer Science and Information Technology
2. Academic department/center	Computer Information Systems
3. Course name	Geographic Information Systems
4. Available attendance formats	Lectures divided into groups for students
5. Semester/Year	First Semester / Fourth Year
6. Total number of course hours	3 hours (including semester exams)
7. Date this description was prepared	October 29, 2024
8. Course Objectives	
Learn the concept of GIS and other related concepts.	
Explore GIS applications and how they are used.	
Learn how to collect and analyze spatial data.	
Design and integrate databases with GIS systems.	
Learn statistical analysis techniques for spatial data.	
6. Total course hours	

9. Course outcomes, teaching and learning methods, and assessment

A- Cognitive Objectives:

.1Learn the concept of Geographic Information Systems (GIS).

.2Learn applications such as ArcGIS that are used for GIS.

.3Learn statistical analysis techniques.

.4Integrate some applications with the ArcGIS Desktop software package.

B- Skills-Based Objectives of the Course:

1. Ability to design and program GIS applications.
2. Ability to work effectively in a team, understanding assigned tasks and completing them within the given timeframe.

Teaching and Learning Methods

1. Delivering lectures and presenting topics using a data projector.
2. Facilitating discussion by asking questions, encouraging dialogue, and engaging students.
3. Assigning students to develop software programs that meet industry requirements.
4. Assigning students to prepare short reports on specific topics.
5. Assigning students to develop initial project proposals and create basic application designs.
6. Assigning students to present optional lectures on topics related to application design.

Assessment Methods

1. Weekly lab quizzes and monthly theoretical exams.
2. Practical projects and websites designed using content management systems and Bootstrap.

C- Affective and Value-Based Objectives

1. Understanding professional ethics and maintaining high standards of professionalism.
2. Fostering a spirit of cooperation and teamwork.
3. Encouraging creativity and developing competitive skills among students.

Teaching and Learning Methods

Our mission is to provide high-quality educational and research services that meet both local and international standards in the fields of computer science and information technology, enabling us to produce highly qualified and competitive graduates, while also undertaking high-level projects and reports and actively contributing to community service.

Assessment Methods

.9Course Outcomes, Teaching and Learning Methods, and Assessment

A- Learning Objectives

1. Understand the concept of Geographic Information Systems (GIS).
2. Learn to use GIS software applications such as ArcGIS.
3. Learn statistical analysis techniques.
4. Integrate selected applications with the ArcGIS Desktop software package.

.10 The course syllabus

Assessment method	Teaching method	اسم الوحدة / أو الموضوع	Required learning outcomes:	Ocloc"k	Week
Theory exam	Lecture using a data projector	Introduction: why does GIS matter? Data, information, evidence, knowledge, wisdom	An overview of the GIS concept and related terminology	2	1
Theory exam	Lecture using a data projector	Science, geography, and applications Representative application areas and their foundations	GIS applications and their representation	4	3-2
Theory exam	Lecture using a data projector	Spatial data properties and structure	Spatial data, its characteristics, and methods of organization	6	6-4
Theory exam	Lecture using a data projector	Spatial data management, geodatabase basics	Spatial data management	4	8-6
Theory exam	The lecture will use a data projector	Vector based spatial analysis	Spatial data analysis	4	10-9
Theory exam	The lecture will use a data projector	Spatial statistics and geo-statistics	Statistical methods for spatial and geographic data	4	13-11
Theory exam	The lecture will use a data projector	collection and data quality	Data collection and cleaning	4	15-14

11. Infrastructure	
1. Required textbooks	

. 12Course development plan
This plan involves students participating in preparing and presenting seminars on the theoretical material, and discussing the topics during each lecture, with the aim of simplifying the content and enhancing students' understanding and knowledge.

2. Main references (sources)	Paul A. Longley, Michael F. Goodchild, David J. Maguire, David W. Rhind-Geographic Information Systems and Science-Wiley (2005)ز
a. Recommended books and publications (scientific journals, reports, etc.)	Michael J. de Smith, Michael F. Goodchild, Paul A. Longley. 2015. *Geospatial Analysis: A Comprehensive Guide to Principles, Techniques and Software Tools* (http://www.spatialanalysisonline.com/). This book is a compressive, in-depth handbook of GIS analytical tools and methods.
b. Online resources, websites, etc.	

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Information Systems Security

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

شعبة ضمان الجودة وتقييم الأداء
كلية علوم الحاسوب وتكنلوجيا المعلومات
د.م.د. غفران ناظر جاسم

Approval of the Dean

Course Description Form

1. Course Name: Information Systems Security	
2. Course Code: N/A	
3. Semester / Year: second semester/ 2025/2026	
4. Description Preparation Date: 19/ 9/ 2025	
5. Available Attendance Forms: In- Person (Theoretical lectures)	
6. Number of Credit Hours (Total) / Number of Units (Total): 3 hours per week	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Prof. Dr. Huda Abdulraheem Ahmed Email: huda.ahmed@uobasrah.edu.iq	
8. Email: Course Objectives	
Course Objectives	• Understand the fundamentals of information security • Identify and analyze security threats and vulnerabilities • Apply security mechanisms and controls • Design and implement secure information system solutions • Evaluate security policies, standards, and risk management approaches • Secure emerging technologies and environments • Develop professional and ethical responsibility in cybersecurity practice
9. Teaching and Learning Strategies	
Strategy	The strategy focuses on both theoretical and practical aspects. Lectures & Discussions – Deliver theoretical concepts (CIA triad, cryptography, threats, policies) supported with interactive class discussions.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Students understand the Introduction to Information Security	Definition & importance of Information Security	Theoretical Lecture and demonstration	Simple daily quizzes
2	3	Students understand Security Policies, Standards & Governance	Security policies, procedures, and guidelines International standards (ISO/IEC 27001, NIST, COBIT)	Theoretical Lecture and presentation	
3	3	Students understand Cryptography Basics	History & role of cryptography, Symmetric vs. asymmetric encryption, Hash functions & digital signatures, Applications in securing communications	Theoretical Lecture and presentation	
4	3	Understand Network Security Fundamentals	Firewalls, IDS, IPS; VPNs & secure tunneling; Wireless security (WEP, WPA, WPA2, WPA3); Common network attacks (DoS, spoofing, sniffing)	Theoretical Lecture and presentation	
5	3	First midterm exam		First midterm exam	Simple daily quizzes
6	3	Understand the Authentication, Access Control & Identity Management	Authentication methods (passwords, biometrics, multi-factor); Authorization vs. authentication;	Theoretical Lecture and presentation	

			Role-based access control (RBAC) & discretionary access control; Identity and access management (IAM)		
7	3	Understand Operating System & Application Security	OS vulnerabilities (Windows, Linux, macOS); Patch management and hardening; Secure coding practices; Application-level threats (SQL injection, XSS, buffer overflow)	Theoretical Lecture and presentation	
8	3	Understand Malware & Cyber Threats	Types of malwares (viruses, worms, ransomware, trojans, spyware); Attack vectors & life cycle of malware; Botnets and Advanced Persistent Threats (APT); Antivirus and endpoint protection strategies	Theoretical Lecture and presentation	
9	3	Understand Security in Cloud Computing	Cloud service models (IaaS, PaaS, SaaS);Cloud security risks (data breaches, insider threats); Shared responsibility model; Security tools for cloud environments	Theoretical Lecture and presentation	
10	3	Second Midterm Exam		Midterm Exam	

11	3	Understand Security in Databases & Storage Systems	Database threats (SQL injection, privilege escalation)	Theoretical Lecture and presentation	
12	3	Understand Cybersecurity in Emerging Technologies	IoT security challenges; Mobile device security; Blockchain and distributed ledgers in security; AI in cybersecurity (threat detection, intrusion prevention)	Theoretical Lecture and presentation	
13	3	Understand Incident Response & Forensics	Incident response life cycle; Computer forensics basics; Evidence collection & chain of custody; Cybersecurity tools (SIEM, logging, monitoring)	Theoretical Lecture and presentation	
14	3	Understand Ethical, Legal & Professional Issues	Cyber laws and regulations (international and local); Ethical hacking & penetration testing; Privacy concerns in digital systems; Security audits and certifications (CISSP, CEH, CISM)	Theoretical Lecture and presentation	
15	3	Future of Information	Emerging threats (quantum	Theoretical Lecture and presentation	

		Security & Final Review	computing, AI-driven attacks) Security trends (Zero Trust Architecture, SASE, DevSecOps) Final review & Q/A Course wrap-up		

11. Course Evaluation	
Theoretical Exams covering concepts and models. Class participation and discussions, Reports and Projects.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	William Stallings – Network Security Essentials: Applications and Standards (Pearson, 6th Edition, 2020) → Widely used for fundamentals of network and internet security.
Main references (sources)	CompTIA Security+ Guide to Network Security Fundamentals – by Mark Ciampa (Cengage, 7th Edition, 2021) → Beginner-friendly, good for foundational knowledge.
Recommended books and references (scientific journals, reports...)	Bruce Schneier – Applied Cryptography: Protocols, Algorithms, and Source Code in C (Wiley, 2nd Edition, 2015) → Standard reference on cryptographic methods.
Electronic References, Websites	CISSP Official (ISC)² Study Guide – by Mike Chapple & James Michael Stewart (Sybex, 9th Edition, 2021) → For professional certification, structured and practical.

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University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Mobile Application

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature: Abbas Hassan

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

Course Description Form

1. Course Name: Mobile Applications	
2. Course Code: CSIT0401	
3. Semester / Year: First/ 2024-2025	
4. Description Preparation Date: 19/9/2025	
5. Available Attendance Forms: in class	
6. Number of Credit Hours (Total) / Number of Units (Total) 4 hours/ 6 Units	
7. Course administrator's name (mention all, if more than one name)	
Name: Zainab Hameed Alfayez Email: zainab.meejeed@uobasrah.edu.iq	
8. Email: Course Objectives	
Course Objectives	After successfully completing this course, students will have gained comprehensive theoretical knowledge as well as practical skills related to the system development process of information systems. students who successfully complete the course should be able to: • gather data to analyse and specify the requirements of a system. • design system components and environments. • build general and detailed models that assist programmers in implementing a system. • design a database for storing data and a user interface for data input and output, as well as controls to protect the system and its data
9. Teaching and Learning Strategies	
Strategy	The module is delivered through a series of lectures. The lecture sessions discuss and explain to students the theoretical underpinnings of how software systems are analyzed and designed. Students also given a project to encourage them to work in teams and being a team player.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	What is mobile apps, mobile apps paradigms	Introduction	Presentation	In class activity
2	2	Different types of mobile platform: Android, IOS, windows…etc.	Mobile apps platforms	Presentation	Student classroom participation
3	2	Deep explanation of flutter framework	Mobile framework	Presentation	Student classroom participation
4	2	Demonstrate Widget Tree and Flutter Inspector	flutter widgets	Presentation	Student classroom participation
5	2	Text, TextField, , Button, Icons, Listview, Gridview and more	Visible Widgets	In class discussion	Quiz
6	2	Container, Row, Column, stack and more	Invisible Widgets	In class discussion	Homework: project
7	2	Understanding widgets lifecycle, pressing, tapping	Flutter interaction	In class discussion	Quiz
8	2	Transfer between pages in Flutter	Navigation and routing	In class discussion	Homework: project
9	2	Local Database in Flutter	Saving persisting data-1	presentation	Quiz
10	2	Cloud database in Flutter	Saving persisting data-2	presentation	Student classroom participation
11	2	mobile user interface challenges and principles	Design	presentation	Student classroom participation
12	2	camera, audio player and videos	Mobile internal service	presentation	Student classroom participation
13	2	Understanding sensors	Mobile internal service	In class discussion	Homework
14	2	include maps into the app	Google Maps in Flutter	presentation	Student classroom participation

15	2	Show user current Location on the app	Locations	presentation	Student classroom participation

11. Course Evaluation	
Assessment is divided into four elements. First there are a number of quizzes that assess the student's competency in specific topics on a weekly basis. there is a midterm class test. There is then two a take home assignment. Finally, there is a lab project that tests the learners understanding of the theoretical and lab material.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	None
Main references (sources)	Bailey T., Biessek A., and Wills T, Flutter for Beginners: An introductory guide to building cross-platform mobile applications with Flutter 2.5 and Dart, 2nd Edition, Packt Publishing, 2021, ISBN-10 : 1800565992, ISBN-13 : 978-1800565999
Recommended books and references (scientific journals, reports...)	Tyagi P., Pragmatic Flutter Building Cross-Platform Mobile Apps for Android, iOS, Web & Desktop, 1st Edition, CRC Press, 2021, ISBN: 9781000427103
Electronic References, Websites	https://docs.flutter.dev/ https://www.tutorialspoint.com/flutter/index.htm https://www.udemy.com/course/mobile-app-development-with-flutter/

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In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Network Protocols and E-Commerce

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 25-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

Course Description: Network Protocols and E-Commerce

1. Course Name:	
Network Protocols and E-Commerce	
2. Course Code	
3. Semester / Year	
First/2024-2025	
4. Description Preparation Date	
1/9/2024	
5. Available Attendance Forms	
Regular attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 hours/3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Dr. Muslim Mohsin Khudhair **Email:** muslim.khudhair@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives	A- Cognitive Objectives **1-** Learn about e-commerce and how it works. **2-** Learn about network protocols. **3-** Communicate with the beneficiary and be able to identify the objectives and reasons for advertising and e-commerce. **4-** Be able to build an e-commerce business correctly. B- Course Skill Objectives **1-** The ability to manage and administer e-business. **2-** Work within a team, understand assigned tasks, and complete them within a specified timeframe. **3-** Be able to understand how e-commerce works and the risks associated with it.
9. Teaching and Learning strategies	
Strategy	1. Deliver lectures and present the topic using a data show. 2. Discuss by asking questions, opening the door to dialogue, and interacting with students.

	3. Assign students to design and conduct studies on the labour market and link it to e-commerce, in line with labour market requirements. 4. Assign students to prepare brief reports on selected topics. 5. Assign students to prepare preliminary projects for building e-commerce websites. 6. Assign students to conduct optional lectures on topics related to networks, communications, and e-commerce.

10. Course Structure

Week	Hours	Required Outcomes	Unit or Subject Name	Learning Method	Evaluation Learning
1-2	6	Theoretical	Introduction to electronic commerce	Lecture using data show	Questions and Discussion
3-4	6	Theoretical	Business Models for e-commerce	Lecture using data show	Questions and Discussion
5	3	Theoretical	Electronic Marketing vs. traditio nal marketing	Lecture - Explanation	Laboratory and Theoretical Exam
6-7	6	Theoretical	Enabling technologies of the World Wide Web	Lecture using data show	Theoretical Exam
8	3	Theoretical	Electronic security	Lecture - Explanation	Questions and Discussion
9-11	6	Theoretical	Electronic payment systems	Lecture - Explanation	Questions and Discussion
12-13	6	Theoretical	E-payment security issues	Lecture - Explanation	Laboratory and Theoretical Exam
14-15	6	Theoretical	• Mobile Commerce • .Customer effective web desi gn. • Legal and ethical issues in e-business.	Lecture - Explanation	Discussion, questions, and technical solutions to some e-commerce problems

11. Course Evaluation

1. Weekly laboratory and monthly theoretical tests.
2. Practical projects and e-commerce websites using web development languages.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Rana Tassabehji - Applying E-Commerce in Business-Sage Publications Ltd

	(Advanced Studies in E-Commerce) - E-Commerce_ Concepts, Principles, and Application-Springer
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

Introduction:

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: orginizational Behavior

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature: **Signature:**

Head of Department Name: **Scientific Associate Name:**

Prof. Dr. Haider M.Al-Mashhadi **Prof. Dr. Abbas H.Al-Asaadi**

Date: 28-9-2025 **Date:** 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د. عرفان ناطر

جامعة البصرة
شعبة ضمان الجودة وتقييم الاداء
كلية علوم الحاسوب وتكنلوجيا المعلومات

Approval of the Dean

1. Course Name: organizational behavior

2. Course Code:

3. Semester / Year: Second semester/fourth stage

4. Description Preparation Date:

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

7. Course administrator's name (mention all, if more than one name)

Name: Reem qasim

reem.qasim@uobasrah.edu.iq :Email

8. Email: Course Objectives

Course Objectives	1- Teach students what organizational behavior is. 2- Learn how to deal with people's feelings and emotions through psychological analysis of their behavior. 3- Learn how to develop self-esteem, personal skills, and how to influence.

9. Teaching and Learning Strategies

Strategy	The strategy that will be followed in presenting a topic will be in a positive way and will be delivered through stories, realistic examples and sequential events, with the aim of helping students break out of stereotypical and traditional thinking and move towards presenting fruitful creative ideas.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowing what organizational behavior is and the reasons for studying this field	Introduction to the Field of Organizational Behavior	Lecture using data show	discussion
3+2	4	A statement of the behaviors of individuals, what directs these behaviors, and the values of influence	Individual Behavior, Personality, and Values	Lecture using data show	discussion

5+4	4	What is perception, the levels that an individual can reach, and the methods of learning in organizations?	Perception and Learning in Organizations	Lecture using data show	discussion
6+7	4	Knowing emotions, their types, and how to behave in situations , Stress in the workplace	Emotions and attitudes, Stress in the workplace	Lecture using data show	discussion
8	2	Exam			
9	2	Ways to motivate employees and focus on the most effective ones	Foundations of Employee Motivation	Lecture using data show	discussion
10+11	4	Factors influencing decisions and knowing what creativity is and what encourages it	Decision Making and Creativity	Lecture using data show	discussion
12	2	Exam			
13	2	Work teams and the impact of their formation on the organization	Team Dynamics	Lecture using data show	discussion
14	2	Knowing the elements of power and the impact that can accompany power	Power and Influence in the Workplace	Lecture using data show	discussion
15	2	Organizational culture and its impact on the organization's progress	Organizational Culture	Lecture using data show	discussion

11. Course Evaluation

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	Mcshane, Glinow, 2010, Organizational Behavior, Emergi Knowledge And Practice For The Real World —5th
Recommended books and references (scientific journals, reports...)	Stephen P. Robbins and Timothy A. Judge Essentials of Organizational Behavior. 15th ed. Pearson Education. 2014.

Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

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Academic Program Description Form

University Name: University of Basra

Faculty/Institute: Collage of Computer Science and Information System

Scientific Department: Computer Information System

Academic or Professional Program Name: Software Quality Assurance

Final Certificate Name: B.SC. oF Computer Information System

Academic System: Semester System

Description Preparation Date: 1-9-2024

File Completion Date:

Signature:

Head of Department Name:

Prof. Dr. Haider M.Al-Mashhadi

Date: 28-9-2025

Signature:

Scientific Associate Name:

Prof. Dr. Abbas H.Al-Asaadi

Date: 28-9-2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

أ.م.د. عراك ناصر جاسم

شعبة ضمان الجودة وتقييم الاداء

Approval of the Dean

Course Description Form

1. Course Name: Software Quality Assurance
2. Course Code:
3. Semester / Year: four year - second Semester
4. Description Preparation Date: 18/09/2025
5. Available Attendance Forms: Face-to-Face (In-class / On-campus)
6. Number of Credit Hours (Total) / Number of Units (Total) 3 Hours
7. Course administrator's name (mention all, if more than one name)
Name: Dr.Maysaa A.Naser Email: maysaa.naser@uobasrah.edu.iq
8. Email: Course Objectives

Course Objectives	• To provide students with knowledge required for software quality assurance. • To train them in software testing and documentation. • To enable them to apply software quality assurance tools and techniques.
9. Teaching and Learning Strategies	
Strategy	• Theoretical lectures. • Case studies and group projects. • Problem-based learning activities

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1–2	4	Understand basic concepts and importance of software quality assurance.	Introduction to SQA	Lecture + Discussion	Quiz
3–4	4	Identify international software quality standards (ISO, CMMI) and their applications.	Software Quality Standards	Lecture + Case Study	Assignment
5–6	4	Explain verification and validation processes and apply them in practice.	Verification & Validation	Lecture + Discussion	First Exam
7–8	4	Apply different software testing techniques and document test cases.	Software Testing Techniques	Lecture	Report
9–10	4	Use automated tools for software testing and analyze results.	Automated Testing Tools	Lecture + Discussion	Short Exam
11–12	4	Understand quality management activities within the software development life cycle	Quality Management	Lecture + Discussion	Presentation
13–14	4	Integrate knowledge and skills to evaluate software quality; prepare for final assessment.	Review and Integration	Lecture + Discussion	Final exam

11. Course Evaluation

- **Quizzes:** 5% (to assess understanding of basic concepts).
- **Assignments / Reports:**10% (covering case studies and practical exercises).
- **first Exam:** 15% (theoretical)
- **Class Participation & Activities:** 5% (discussions, teamwork).
- **Final Exam:** 15% (comprehensive assessment of all course outcomes).

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Daniel Galin, Software Quality Assurance: From Theory to Implementation, Pearson, 2018.

	Jeff Tian, Software Quality Engineering: Testing, Quality Assurance, and Quantifiable Improvement, Wiley, 2005.
Main references (sources)	Ian Sommerville, Software Engineering, 10th Edition, Pearson, 2016. Roger S. Pressman and Bruce Maxim, Software Engineering: A Practitioner's Approach, 9th Edition, McGraw-Hill, 2019
Recommended books and references (scientific journals, reports...)	• Capers Jones, *Applied Software* Measurement: Global Analysis of Productivity and Quality, McGraw-Hill, 2008. • IEEE Software Quality Standards Documentation. • ACM Digital Library articles on Software Quality Assurance
Electronic References, Websites	• EEE Xplore Digital Library (https://ieeexplore.ieee.org) • ACM Digital Library (https://dl.acm.org) • Software Testing Help (https://www.softwaretestinghelp.com) • ISTQB Resources (https://www.istqb.org) https://nibmehub.com/opac-service/pdf/read/Software%20Quality%20Assurance%20From%20Theory%20to%20Implementation.pdf