هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	Advanced Computer Applications
Course Code:	0106 عال
Program:	Computer Science (Programming- Networks)
Department:	Applied Sciences
College:	Applied College
Institution:	Imam Mohammad Bin Saud Islamic University
Version:	1st version
Last Revision Date:	2023/02/26

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A. General information about the course:

Course Identification					
1. **Credit hours:**	3 (2 Theory, 2 lab)				
2. **Course type:**					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. **Level/year at which this course is offered:** 3rd Level					
4. **Course general Description:** The course is a continuation to the topics that have been introduced csc0114, but in a deeper and more specific manner scope focusing on the practical side of application. And the course covers topics related to library computer applications related to word processing, databases, and spreadsheets Access & Excel & Word This course should also be covering the following professional certification:					
5. **Pre-requirements for this course (if any):** cs0114					
6. **Co- requirements for this course (if any):** N/A					
7. **Course Main Objective(s):** The course introduces students to the foundations of information technology, It also trains students on how to use of a personal computer, how to operate it, and on using the most popular office applications.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom		
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning	60	100%
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	12
2.	Laboratory/Studio	48
3.	Field	
4.	Tutorial	
5.	Others (specify)	150
	Total	210

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	To mention the importance of office softwares in doing work, correspondence, data saving and management.	ع1، ع5	Class lectures. Class discussion. Questions/Answers session in class. Home work. Learning by discovery. Self-education. Brainstorming. Online search. KWL learning table. Mind maps. Concept maps.	Quizzes. Homework and Assignments. Written and online exams. Writing reports. Presentations. Discussion and debate. Achievement file. Performance
1.2	To know about the most prominent office softwares, their interfaces, and their components.	ع1، ع5		
1.3	To state the concept of databases, their types, and their most popular applications.	ع1، ع5		
2.0	Skills			
2.1	To use the word processing program skillfully in correspondence.	ع1، ع5	Class lectures. Class discussion. Questions/Answers session in class. Home work. Learning by discovery. Self-education. Brainstorming. Online search. Mind maps. Concept maps.	Quizzes. Homework and Assignments. Written and online exams. Writing reports. Presentations. Discussion and debate. Achievement file. Performance tests.
2.2	To design templates and use them in word processing program.	ع1، ع5		
2.3	To use charts programs to organize, display, search for data.	ع1، ع5		
2.4	To use database programs to create, modify, design, and accurately build. connections between databases.	ع1، ع5		
3.0	Values, autonomy, and responsibility			
3.1	Collaboration, teamwork, and professional ethics.	ق1	Class lectures. Class discussion. Questions/Answers session in class. Home work. Learning by discovery. Self-education. Brainstorming. Online search. Mind maps. Concept maps.	Quizzes. Homework and Assignments. Written and online exams. Writing reports. Presentations. Discussion and debate. Achievement file. Performance.
3.2	Take the responsibility for continuous learning, and self-development.	ق2		
3.3	Effective and efficient time management when applying acquired knowledge and skills.	ق3		

C. Course Content

No	List of Topics	Contact Hours
1.	**Word processor software (MS Word):** ○ Create and manage documents. ○ Search for text, insert hyperlinks, create bookmarks, move to a specific location or object in a document. ○ Prepare documents for collaboration (restrict editing, protect documents by using passwords) ○ Use advanced editing and formatting features. ○ Create and manage references. ○ Create and modify macros. ○ Perform mail merges(manage recipient lists - insert merged fields - preview merge results -create merged documents, labels, and envelopes)	16
2.	**Spreadsheet software (MS Excel):** ○ Create functions. ○ Functions (Sum, Average, Max, Min, if, AND, OR, NOT and VLOOKUP(), HLOOKUP(), MATCH(), and INDEX()) ○ Create and modify PivotTables. ○ Create and modify PivotCharts ○ Create advanced charts and tables. ○ Insert the header and footer to the worksheet. ○ Print the worksheet. Building a Dashboard using the spreadsheet software (MS Excel).	16
3	**Access software (MS Access)** ○ Create and manage a database ○ Build tables ○ Create queries ○ Create forms ○ Create reports	16
Total		48

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Mid-term	Week 7, 11	10%
2.	Quizzes (From 3-4 Quizzes)	Week 4, 8, 10	15%
3.	1st Practical Evaluation	Week 6	25%
4	2nd Practical Evaluation	Week 12	25%

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
5	Participation	All Semester	5%
6	Final	Week13	20%
7	Total Marks		100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	○ Microsoft Office Step by Step (Office 2021 and Microsoft 365)1st edition, ISBN: 0137544766, Authors: Joan Lambert, Curtis Frye. ○ Microsoft Office 2019 Step by Step, 1st edition Published by Microsoft Press (December 7th 2018) - Copyright © 2019. Computer Skills, King Abdulaziz University 9th edition Published by Khawarizm Academic - Copyright © 2021.
Supportive References	N/A
Electronic Materials	Online resources will be provided during class lectures on LMS.
Other Learning Materials	N/A

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom – A computer lab equipped and connected to a shared printer and the internet.
Technology equipment (projector, smart board, software)	Smart board, data projector, Microsoft Visio or Edraw Max and Internet browser.
Other equipment (depending on the nature of the specialty)	N\A

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Peer references – students.	1.Questionnaires and referendums approved by the department. 2.Peer evaluation of faculty members. 3.Review the results of the students' evaluation.
Effectiveness of students assessment	Peer references - program leaders - faculty members – students.	1.Questionnaires and referendums approved by the department. 2.Review course descriptions and course reports periodically. 3.Peer evaluation and periodic exchange of

Assessment Areas/Issues	Assessor	Assessment Methods
		correction and scrutiny among fellow faculty members. 4.Review samples of students' work.
Quality of learning resources	Program leaders - faculty members - students	1.Questionnaires and referendums approved by the department. 2.Write-offs and monitoring.
The extent to which CLOs have been achieved	Program leaders - faculty members.	1.Review the course report. 2. Analysis of exams forms, grades, students' work and records of achievement.
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Department of Applied Sciences – Applied College
REFERENCE NO.	
DATE	

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	*Introduction to Databases*
Course Code:	*عال 130*
Program:	*Programming Technology*
Department:	***Applied Sciences***
College:	*Applied College*
Institution:	***Imam Mohammad Bin Saud Islamic University***
Version:	***1st version***
Last Revision Date:	**2023/02/26**

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A. General information about the course:

Course Identification					
1. **Credit hours:**	3 (2 Theory, 2 lab)				
2. **Course type:**					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. **Level/year at which this course is offered:** 3rd Level					
4. **Course general Description:** This course teaches the basic concepts of database design and the Entity-Relationship Model (ERM) to represent design. In addition, the course is teaching how to convert ERM to DB Shema and the basics of normalization. Throughout the semester, the course includes an integrated case study in which all previous concepts are employed to build an integrated project. This course should also be covering the following professional certification: • Oracle Database: SQL Fundamentals I 1Z0-051. • Oracle Database SQL Certified Associate.					
5. **Pre-requirements for this course (if any):** 101 عال					
6. **Co- requirements for this course (if any):** N/A					
7. **Course Main Objective(s):** This course aims to introduce the student to the concept of relational databases and the stages of the development life cycle from building requirements, designing an entity and relationship model (ERM) and converting it into a database schema (DB Shema) and then improving it by using standard formulas (Normalization) to obtain an intact database and error-free.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom		
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning	48	100%
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	24
2.	Laboratory/Studio	24
3.	Field	
4.	Tutorial	
5.	Others (specify)	120
	Total	168

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Familiarity with the basic concepts of database systems.	ع1، ع2، ع3، ع5	Class lectures. Class discussion. Questions/Answers session in class. Home work. Learning by discovery. Self-education. Brainstorming. Online search. KWL learning table. Mind maps. Concept maps.	Quizzes. Homework and Assignments. Written and online exams. Writing reports. Presentations. Discussion and debate. Achievement file. Performance
1.2	Understand the components, classifications, levels and languages of database management systems and distinguish between them.	ع1، ع2، ع3، ع5		
1.3	Understand the elements of relational databases and the stages of their design and construction.	ع1، ع2، ع3، ع5		
2.0	Skills			
2.1	Analyze relational database requirements.	م1، م2، م3، م4، م7	Class lectures. Class discussion. Questions/Answers session in class. Home work. Learning by discovery. Self-education. Brainstorming. Online search. Mind maps. Concept maps.	Quizzes. Homework and Assignments. Written and online exams. Writing reports. Presentations. Discussion and debate. Achievement file. Performance tests.
2.2	Designing an entity and relationship model (ERM) scheme.	م1، م2، م3، م4، م7		
2.3	Apply the rules of the conversion algorithm for building logical tables (RDB Schema).	م1، م2، م4، م6، م7		
2.4	Apply normalization rules for a clear and error-free database.	م1، م2، م4، م5، م6، م7		
2.5	Using information and communication technology to exchange of the ideas, scientific research, and performance of the tasks and assignments.	م1,م2,م7		
2.6	Practice critical thinking and problem solving facing the learner in the course in creative ways.	م1,م2,م7		

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	Values, autonomy, and responsibility			
3.1	Collaboration, teamwork, and professional ethics.	ق1	Class lectures. Class discussion. Questions/Answers session in class. Home work. Learning by discovery. Self-education. Brainstorming. Online search. Mind maps. Concept maps.	Quizzes. Homework and Assignments. Written and online exams. Writing reports. Presentations. Discussion and debate. Achievement file. Performance.
3.2	Take the responsibility for continuous learning, and self-development.	ق2		
3.3	Effective and efficient time management when applying acquired knowledge and skills.	ق3		

C. Course Content

No	List of Topics	Contact Hours

1.	**Chapter 1: Introduction to Database System.**
	• Introduction.
	• Methods to access information.
	  ○ Manual files system.
	  ○ Traditional files system.
	  ○ Database system.
	• Data architecture in databases.
	• The concept of databases.
	• Database system applications.
	• Features of database system.
	• Disadvantages of database system.
	• Database system components.
	• Database management system components.
	• Database management system jobs.
	• Database system classifications.
	• Database management system levels.
	• Data independence.
	• Database management system languages.
	• Database life cycle.
		8

2.	**Chapter 2: Relational Database Design.** • The concept of relational databases. • Relational database features.	4

	• Relational database disadvantages.
	• Relational database elements.
	• Determinants in relational database constraints:
	  ○ Domain constraints.
	  ○ Key constraints.
	  ○ Referential integrity constraints.
	• The quality of relational database.	

3	**Chapter 3: Entity Relationships Diagram.**
	• The concept of entity relationships model ERM.
	• The components entity relationships model ERM.
	  ○ Entities:
	  - Types of entities.
	  - Degree of entities.
	  ○ Attributes:
	  - Types of adjectives.
	  - Null values.
	  ○ Relationships:
	  - Relationship degree.
	  - Types of relationships.
	  - Participation restrictions.
	  - A relationship has qualities.
	• Steps to design an entity relationships model ERM.
	• Entity relationships diagram requirements.
	• Examples of entity relationships model.
		16

4	**Chapter 4: Relational Database Schema:**
	• The concept of relational database schema.
	• Mapping algorithm.
	  ○ Step 1: Convert regular entities (strong).
	  ○ Step 2: Convert vulnerable entities.
	  ○ Step 3: Convert bilateral relations from type 1:1.
	  ○ Step 4: Convert bilateral relations from type 1:M.
	  ○ Step 5: Convert bilateral relations from type M:N.
	  ○ Step 6: Convert relations above bilateralism.
	  ○ Step 7: Convert adjectives for multiple values.
	• Mapping summary.
	• Examples of mapping ERD to relational schema.
		8

5	**Chapter 5: Methods of Database Normalization:** • Introduction to database normalization. • The concept of normalization. • The goal of normalization (why do we do normalization?). • Problems of data. • Normalization and functional dependencies. ○ The concept of functional dependencies.	12

	○ Functional dependencies types. • Rules of normalization. • Advantages of normalization. • Disadvantages of normalization. • Examples of RDB Normalization.	
Total		48

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Mid-Term	Week 7	20%
2.	Quizzes (2 Quizzes)	Week 5, 10	10%
3.	Exercises and Practicality	Week 2-11	15%
4	Software Project (Implement RDB Lifecycle Stages)	Week 11	10%
5	Participation	Week 1-11	5%
6	Final	Week 12	40%
7	Total Marks		100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	1. Database systems: design, implementation, & management. Coronel, C., & Morris, S. (2016). Cengage Learning. 2. Database Management System. Horizon Books. by Ayyavaraiah, M. and Gopi, A. 3. Database Management System. PHI Learning Pvt. Ltd. by Panneerselvam, R.
Supportive References	N/A
Electronic Materials	Online resources will be provided during class lectures on LMS.
Other Learning Materials	N/A

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom – A computer lab equipped and connected to a shared printer and the internet.
Technology equipment (projector, smart board, software)	Smart board, data projector, Microsoft Visio or Edraw Max and Internet browser.
Other equipment (depending on the nature of the specialty)	N\A

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Peer references – students.	1.Questionnaires and referendums approved by the department. 2.Peer evaluation of faculty members. 3.Review the results of the students' evaluation.
Effectiveness of students assessment	Peer references - program leaders - faculty members – students.	1.Questionnaires and referendums approved by the department. 2.Review course descriptions and course reports periodically. 3.Peer evaluation and periodic exchange of correction and scrutiny

Assessment Areas/Issues	Assessor	Assessment Methods
		among fellow faculty members. 4.Review samples of students' work.
Quality of learning resources	Program leaders - faculty members - students	1.Questionnaires and referendums approved by the department. 2.Write-offs and monitoring.
The extent to which CLOs have been achieved	Program leaders - faculty members.	1.Review the course report. 2. Analysis of exams forms, grades, students' work and records of achievement.
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Department of Applied Sciences – Applied College
REFERENCE NO.	
DATE	

هيئة تقويم التعليم والتدريب
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Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Programming 1**
Course Code:	**CS 120**
Program:	**Computer Science (Cybersecurity- Programming- Networks)**
Department:	**Applied Sciences**
College:	**Applied College**
Institution:	**Imam Muhammad Bin Saud Islamic University**
Version:	**1st Version**
Last Revision Date:	**06 Feb 2023**

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A. General information about the course:

Course Identification					
1. Credit hours:	4 (3 theory , 2 lab)				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Third semester					
4. Course general Description: Through this course, the student is introduced to a set of basic skills in object-oriented programming (OOP). This course includes identifying the environment that is used for editing the program (Editing), translating it into machine language, executing it, recognizing and correcting errors, as well as representing data and operations of all kinds, in addition to using sentences, commands, and structural control tools. Throughout the semester, the course includes an integrated case study in which all previous concepts are employed to build an integrated project.					
5. Pre-requirements for this course (if any): CS 115					
6. Co- requirements for this course (if any): N/A					
7. Course Main Objective(s): The course aims to lay the foundation for the basic skills in object-oriented programming for the student to be able to propose solutions to problems so that they are valid for formulation in the form of a computer program.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom		
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning	55	100%
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	33
2.	Laboratory/Studio	22
3.	Field	
4.	Tutorial	
5.	Others (specify)	137
	Total	192

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Familiarity with the basic concepts of object-oriented programming.	ع1، ع2، ع5	• Classroom Lecture • Dialogue and discussion • Survey • Learning by discovery • Self-learning • Developed lecture • Brainstorming • Web polling • KWL Learning Schedule • Mind Maps • Concept Maps	• Traditional and electronic achievement tests • Classroom Questions • Assignments and periodic evaluations • Presentations • Discussion and debate • Cognitive Performance Tests • Achievement File
1.2	Knowledge of the types of programming errors, comparison between them, and how to avoid and address them.	ع1، ع5		
2.0	Skills			
2.1	Write a simple program in Java using the basic components of the language.	م1، م2، م3، م4، م7	• Practical presentation • Developed Lecture • Discovery learning • Peer Learning • Self-learning • Dialogue and discussion • Web polling • Brainstorming • Collaborative Learning • Problem solving • Project-Based Learning • Online discussion forums	• Presentations • Grading scales • Performance tests • Production Metrics • Observation • Software Projects • Achievement File • Peer Evaluation • Self-evaluation
2.2	Addressing programming errors that appear when executing the program.	م1، م2، م4، م7		
2.3	Use all kinds of operations when writing a program in Java.	م1، م2، م3، م4، م7		
2.4	Use structural control string tools when writing a program in Java.	م1، م2، م3، م4، م7		
2.5	Adjust the mechanism for tracking the progress of the program's implementation.	م1، م2، م7		
2.6	The use of information and communication technology in	م1، م2، م7		

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	communication, exchange of ideas, scientific research, and performance of tasks and costs.			
2.7	Practice critical thinking and problem solving facing the learner in the course in creative ways.	م1، م2، م7		
3.0	Values, autonomy, and responsibility			
3.1	Cooperation, teamwork, and imitation of professional ethics.	ق1	• Project-Based Learning • Collaborative Learning • Dialogue and discussion • Practical lecture • Modeling and role models • Web polling	• Note cards • Discussion and dialogue • Classroom Questions • Grading metrics • Measures of values • Self-evaluation • Peer Evaluation • Achievement File
3.2	Take responsibility for continuous learning and continued personal development.	ق2		
3.3	Manage time efficiently and effectively when applying acquired knowledge and skills.	ق3		

C. Course Content

No	List of Topics	Contact Hours

1.	**Chapter 1: Introduction to Java**
	• Review concepts in programming.
	• Compilers.
	• Bugs.
	• The basic structure of Java code.
	• Components of the Java language:
	  ○ Language Rules.
	  ○ Reserved words.
	  ○ Escape Characters
	  ○ Variables and constants.
	  ○ Statements
	  ▪ Declaration Statements
	  ▪ Comments Statements
	  ▪ Input/Output Statements
	  • Standard Input/Output Statements
	  • GUI Input/Output Statements
	  ○ Control statements
		10

	○ Operators	
2.	**Chapter 2: Operations in Java** • Operations ○ Assignment Operations ○ Arithmetic Operations ○ Logical Operations ○ Relational Operations ○ Textual Operations ○ Casting Operations • Expressions • Order of precedence	15
3.	**Chapter 3: Control Structure - Conditional Statements** • simple if • if else • nested if else • ?: procedure • nested conditional • switch	15
4.	**Chapter 4: Control Structure – Looping and Jumping Statements** • Looping Statements Tools: ○ for ○ while ○ do while ○ nested loop • Jumping Statements Tools: ○ break ○ continue ○ return	15
Total		55

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm	Week 7	15%
2.	Quizzes (3-4 Quizzes)	All Semester	10%
3.	Lab Evaluations	All Semester	20%
4.	Project	Week 10	10%
5.	Participation	All Semester	5%
6.	Final	Week 12-13	40%
	Total		**100%**

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Deitel P.J., Deitel H.M. - Java. How to Program, 10th Edition
Supportive References	1- Head First Java, by Kathy Sierra and Bert Bates. 2- Java: A Beginner's Guide, by Herbert Schildt. 3- Effective Java: Programming Language Guide (Java Series), by Joshua Bloch. 4- Simple Program Design, by Lesley Robertson.
Electronic Materials	Online resources will be provided during class lectures.
Other Learning Materials	N/A

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom, Computer lab
Technology equipment (projector, smart board, software)	Data Show, Smart Board, NetBeans software
Other equipment (depending on the nature of the specialty)	-

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Student , Peer Reviewer	1. Questionnaires and referendums approved by the department. 2. Peer evaluation of faculty members. 3. Review the results of student evaluation.
Effectiveness of students assessment	Students, Faculty, Program Leaders, Peer Reviewer	1. Questionnaires and referendums approved by the department. 2. Review course descriptions and course reports periodically. 3. Peer evaluation and periodic exchange of correction and auditing between faculty colleagues. 4. Review samples of students' work.
Quality of learning resources	Student, Faculty, Program Leaders	1. Questionnaires and referendums approved by the department. 2. Deletion and monitoring lists.

Assessment Areas/Issues	Assessor	Assessment Methods
The extent to which CLOs have been achieved	Faculty, Program Leaders	1. Review the course report. 2. Analyze test forms, grades and student work and records of their achievements.
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

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Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Web Design**
Course Code:	**CS 119**
Program:	**Computer Science (Programming)**
Department:	**Applied Sciences**
College:	**Applied Collage**
Institution:	**Al Imam Muhammad bin Saud Islamic University**
Version:	**2**
Last Revision Date:	**19/02/2023**

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A. General information about the course:

Course Identification					
1. Credit hours:	4 hours (3 hours Lecture, 2 hours Lab)				
2. Course type:					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Three/ One					
4. Course general Description: This course covers several topics that equip students with the necessary skills and knowledge to create visually appealing and functional websites. Throughout the course, students will learn the essential tools and techniques required to design, develop, and manage websites effectively. This includes the study of design principles and learning the required tools that will help students to build web pages such as HTML and CSS.					
5. Pre-requirements for this course (if any): CS115					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) In this course, you will gain a foundational knowledge of website creation and be able apply it to the planning, design and development of your own portfolio website over the course of the semester.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom		
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning	55	100%
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	33
2.	Laboratory/Studio	22
3.	Field	
4.	Tutorial	
5.	Others (specify)	165

	Total	231

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Knowledge of the essential and general concepts of world wide web.	ع1، ع2، ع4، ع5	- Lectures. -Discussions. -Surveys. -Experimental Learning. -Self-Learning. -Development Lectures. -Brainstorming - Web Survey. -KWL - Learning Schedule. - Mind Maps. -Concept Maps.	-In-person and Online Exams. -Classroom Questions. -Assignments. -Participations. -Discussions. -Debates. -Cognitive Tests. -Student Activity File.
1.2	Knowledge of web design principles.	ع1، ع4، ع5		
2.0	Skills			
2.1	Using HTML to build web pages	م1، م2، م3، م4، م5، م7	-Labs. -Discussions. -Peers Learning. -Experimental Learning. -Self-Learning. -Development Lecture. -Brainstorming - Web Survey. -Teamwork. - Project. -Online Discussions.	-Presentations. -Rubrics. -Auditions. -Projects. -Observations. -Labs -Peer Assessments. -Self Assessment. -Student Activity File.
2.2	Formatting web pages using CSS	م1، م2، م3، م4، م5، م7		
2.3	Publishing a website on the internet.	م1، م2، م4، م7		
2.4	Building a website using one of the applications and applying the skills and knowledge that were equipped in the course.	م1، م2، م3، م4، م7		
2.5	The use of information and communication technology in communication, exchanging ideas, scientific research, and tasks accomplishments.	م1، م2، م7		
2.6	Practicing critical thinking and solving problems that the learner faces in the course in creative ways.	م1، م2، م7		
3.0	Values, autonomy, and responsibility			

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.1	Cooperation, teamwork, and professional ethics.	ق1	-Labs. -Discussions. -Peers Learning. -Experimental Learning. -Self- Learning. -Development Lecture. -Brainstorming - Web Survey. -Teamwork. - Project. -Online Discussions.	-Presentations. -Rubrics. -Auditions. -Projects. -Observations. -Labs -Peer Assessments. -Self Assessment. -Student Activity File.
3.2	Take responsibility for continuous learning and continuing personal development.	ق2		
3.3	Efficient and effective time management when applying acquired knowledge and skills.	ق3		

C. Course Content

No	List of Topics	Contact Hours

1.	Web Design:
	• Frontend Versus Backend
	• Design
	  ○ Interaction Design
	  ○ User Interface Design
	  ○ User Experience Design
	• Development
	  ○ Authoring
	  ○ Styling
	  ○ Scripting and Programming
	• Content Strategy
	• Multimedia
	• HTML
	• CSS
	• JavaScript
	• Server-Side Programming and Database Management
		2 Hours

2.	How is The Web Work:
	• The Internet Versus the Web
	  ○ Internet
	  ○ Web
	• A Brief History of the Web
	• How You Reach a Website?
	• Browsers
	• HTTP
		2 Hours

	• DNS • Web Page Addresses (URLs) • Website Types • Website Components • The Anatomy of a Web Page	

3.	Hypertext Markup Language (HTML):
	• HTML Editing Tools
	• Creating a Simple Page
	• Basic HTML Document Structure P88
	• HTML Components
	  ○ Tags
	  ▪ Containers
	  ▪ Standalone Tags
	  ▪ Nesting HTML Tags
	  ○ Attributes
	• Information Browsers Ignores
	  ○ Line Breaks
	  ○ Tabs and Multiple Spaces
	  ○ Multiple <P> Tags
	  ○ Unrecognized Tags
	  ○ Text in Comments
	• Paragraphs and Headings (Block-Level Elements)
		5 Hours

4.	Fonts, Colors, and General Formatting in HTML: • Formatting Text: Font's Type, Color, Size and Direction • Spacing and Positioning • Colors in HTML B3, Chapter 5 Page 75 • General Formatting of the Page B3, Chapter 6 Page 96 • Webpage Background	5 Hours
5.	Inserting Interactive Objects with HTML: • Insert images. • Insert an audio file. • Insert a video file.	5 Hours
6.	Insert Links with HTML: • Linking to Another Website or Another Page of The Same Website. • Linking into Another Position in The Same Web Page. • Linking A Site to an Email Address. • Linking A Media to Another Website or Another Page of The Same Website. • Linking A Media into Another Position in The Same Web Page. • Linking A Media to an E-Mail Address. • Affecting The Appearance of Links.	5 Hours
7.	Insert Lists and Tables with HTML: • Tables:	6 Hours

	○ Components of tables ○ Inserting tables ○ Properties of tables • Lists: ○ Inserting Ordered lists ○ Inserting Unordered lists ○ Definition Lists ○ Nesting Lists	
8.	Frames in HTML: • Concept of Frames • Frames Attributes • Types of Frames	5 Hours
9.	Forms in HTML: • Concepts of Forms • Forms Attributes • Forms Elements ○ Textboxes ○ Passwords ○ Checkboxes ○ Radio Buttons ○ Option Lists ○ Text Area ○ Submit and Reset Buttons ○ Select Menu ○ Other Elements: Label, Field Set, Legend	8 Hours
10.	Cascading Style Sheet CSS: • CSS • How CSS Work • CSS RULES: ○ Selector ○ Property ○ Value • Adding CSS to an HTML Document • Properties of CSS: ○ Test and Fonts ○ Comments ○ Colors ○ Background ○ Frame ○ Size ○ Box properties ○ Images ○ Others.	8 Hours
11.	Publishing and Managing the Website	4 Hours
Total		55

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	One Midterm Exam	Week 6	20
2.	Quizzes	The whole semester	10
3.	Project	Week 10	10
4.	Labs	The whole semester	15
5.	Attendance and Classroom Participation		5
6.	Final Exam	Week 12	40
7.	Total		100

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Web Design in a Nutshell, By Jennifer Niederst, 1st Edition.
Supportive References	Learning Web Design a Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics, By Jennifer Robbins, 4th Edition. Building Websites All in One for Dummies, By Doug Sahlin and Claudia Snell, 2nd Edition.
Electronic Materials	Course Lectures on the Blackboard.
Other Learning Materials	N/A

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture room with Smart board Lab with 25 PCs.
Technology equipment (Projector, smart board, software)	PC and WIFI Internet access within the classroom Projector Visual Studio Code او Notepad++
Other equipment (Depending on the nature of the specialty)	N/A

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching strategies	Students – Peers	1. Questionnaires and surveys approved by the department. 2. Peers' assessments by faculties. 3. Reviewing the results of the students' evaluation.
Effectiveness of students' assessment	Peers, Program Leaders, Faculty, Students.	1. Questionnaires and surveys approved by the department. 2. Review course specifications and course reports periodically. 3. Peers assessments. 4. Review samples of students works.
Quality of learning resources	Program Leaders, Faculty.	1. Review course report. 2. Analyze exam models and students grade records.
The extent to which CLOs have been achieved		
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COMPUTER PROGRAMS DEVELOPMENT COMMITTEE
REFERENCE NO.	SECOND - THE THIRD SEMESTER OF THE YEAR 1444
DATE	20 / 06 / 2023 G, 02/ 11 /1444 H

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA
T4
2020

توصيف المقرر الدراسي

اسم المقرر:	اللغة الإنجليزية المتخصصة
رمز المقرر:	نجل 102
البرنامج:	العلوم التطبيقية - تقنية البرمجة – الشبكات – الأمن السيبراني
الكلية:	الكلية التطبيقية
المؤسسة:	جامعة الإمام محمد بن سعود الإسلامية

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أ. التعريف بالمقرر الدراسي:

1. الساعات المعتمدة: 3 (نظري)

2. نوع المقرر:

أ. متطلب جامعة ☐ متطلب كلية ☐ متطلب قسم ☐ متطلب برنامج ☑

ب. إجباري ☑ اختياري ☐

3. السنة / المستوى الذي يقدم فيه المقرر

المستوى الثاني

4. المتطلبات السابقة لهذا المقرر (إن وجدت):

نجل 101

5. المتطلبات المتزامنة مع هذا المقرر (إن وجدت)

لا يوجد

6. نمط الدراسة (اختر كل ما ينطبق)

م	نمط الدراسة	عدد الساعات التدريسية	النسبة
1	المحاضرات التقليدية	33	100%
2	التعليم المدمج		
3	التعليم الإلكتروني		
4	التعليم عن بعد		
5	أخرى		

7. ساعات الاتصال (على مستوى الفصل الدراسي)

م	النشاط	ساعات التعلم
1	محاضرات	33
2	معمل أو إستوديو	
3	دروس إضافية	
4	أخرى (تنفيذ الواجبات والدراسة الذاتية والمشاريع والبحث والاختبارات والعمل الجماعي)	90
	الإجمالي	126

ب- هدف المقرر ومخرجاته التعليمية:

1. الوصف العام للمقرر

In this course the students will be fully updated in line with the latest developments in information communication technology. This course teaches students the language and skills they need to understand and work in the world of computers. A focus on terminology is combined with vocabulary to give students the tools to use English in areas such as describing features and functions, applying for jobs, etc.

2. الهدف الرئيس للمقرر

The course aims at training students in English required by the latest developments in information communication technology. It provides them with the necessary language skills to perform their duties in English wherever required.

3. مخرجات التعلم للمقرر:

	مخرجات التعلم للمقرر	رمز مخرج التعلم المرتبط للبرنامج
1	**المعرفة والفهم**	
1.1	الإلمام بالمفاهيم الأساسية للحاسب الآلي وكيفية توظيفها في مجال الدراسة.	ع1، ع5
2	**المهارات**	
2.1	القدرة على تحليل مكونات الحاسب الآلي المادية والبرمجية بلغة جيدة.	م1، م2، م7
2.2	تمييز مفاهيم الاتصالات والشبكات باللغة الانجليزية.	م1، م2، م7
2.3	التواصل وتبادل الأفكار حول المقرر واستخدام تقنية المعلومات والاتصال في البحث العلمي وأداء المهام والتكاليف باللغة الإنجليزية.	م1، م2، م7
2.4	ممارسة التفكير الناقد وحل المشكلات التي تواجه المتعلم في المقرر بطرق ابداعية.	م1، م2، م7
3	**القيم**	
3.1	التعاون والعمل بروح الفريق والتمثل بأخلاقيات المهنة.	ق1
3.2	تحمل مسؤولية التعلم المستمر، والاستمرار في التطوير الشخصي.	ق2
3.3	إدارة الوقت بكفاءة وفعالية عند تطبيق المعارف والمهارات المكتسبة.	ق3

ج. موضوعات المقرر

م	قائمة الموضوعات	ساعات الاتصال
1	- **Computers Today:** • A digital age. • Computer essential. • Inside the system. • Buying a computer.	6
2	- **Input /output devices:** • Type, click, and talk. • Favorite image. • Display screens and ergonomic. • Choosing a printer. • Devices for the disables.	6
3	- **Storage devices:** • Magnetic. • Optical. • Flash.	6
4	- **Basic software:** • Operating system. • Word processing. • Spreadsheets and databases.	3
5	- **Faces of the internet:** • Internet and email. • The web. • Chat and conferencing. • Internet security.	3
6	- **Creative software:** • Graphics and designs. • Desktop publishing. • Multimedia. • Web design **.**	3
7	- **Programing:** • Program design and computer languages. • Java. • Jobs.	3

8	- **Computers tomorrow:** • Communication system. • Networks. • Video games. • New technology.	3
المجموع		33

د. التدريس والتقييم:

1. ربط مخرجات التعلم للمقرر مع كل من استراتيجيات التدريس وطرق التقييم

الرمز	مخرجات التعلم	استراتيجيات التدريس	طرق التقييم
1.0	**المعرفة والفهم**		
1.1	الإلمام بالمفاهيم الأساسية للحاسب الآلي وكيفية توظيفها في مجال الدراسة.	– المحاضرة الصفية – الحوار والمناقشة – الاستقصاء – التعلم بالاكتشاف – التعلم الذاتي – المحاضرة المطورة – العصف الذهني – الاستقصاء عبر الويب – جدول التعلم KWL – الخرائط الذهنية – خرائط المفاهيم	– الاختبارات التحصيلية التقليدية والإلكترونية – الأسئلة الصفية – الواجبات والتقييمات الدورية – العروض التقديمية – المناقشة والمناظرة – اختبارات الأداء المعرفية – ملف الإنجاز
2.0	**المهارات**		
2.1	القدرة على تحليل مكونات الحاسب الآلي المادية والبرمجية بلغة جيدة.	– العرض العملي – المحاضرة المطورة – التعلم بالاكتشاف – التعلم بالأقران – التعلم الذاتي – الحوار والمناقشة – الاستقصاء عبر الويب – العصف الذهني – التعلم التعاوني – حل المشكلات – التعلم القائم على المشروعات – منتديات النقاش الإلكتروني	– العروض التقديمية – سلالم التقدير – اختبارات الأداء – مقاييس الإنتاج – الملاحظة – المشاريع البرمجية – ملف الإنجاز – تقويم الأقران – التقويم الذاتي
2.2	تمييز مفاهيم الاتصالات والشبكات باللغة الانجليزية.		
2.3	التواصل وتبادل الأفكار حول المقرر واستخدام تقنية المعلومات والاتصال في البحث العلمي وأداء المهام والتكاليف باللغة الإنجليزية.		
2.4	ممارسة التفكير الناقد وحل المشكلات التي تواجه المتعلم في المقرر بطرق ابداعية.		

3.0	القيم		
3.1	التعاون والعمل بروح الفريق والتمثل بأخلاقيات المهنة.	– التعلم القائم على المشروعات – التعليم التعاوني – الحوار والمناقشة – المحاضرة العملية – النمذجة والقدوة – الاستقصاء عبر الويب	– بطاقات الملاحظة – المناقشة والحوار – الأسئلة الصفية – مقاييس التقدير – مقاييس القيم – التقويم الذاتي – تقويم الأقران – ملف الإنجاز
3.2	تحمل مسؤولية التعلم المستمر، والاستمرار في التطوير الشخصي.		
3.3	إدارة الوقت بكفاءة وفعالية عند تطبيق المعارف والمهارات المكتسبة.		

2. أنشطة تقييم الطلبة

م	أنشطة التقييم	توقيت التقييم (بالأسبوع)	النسبة من إجمالي درجة التقييم
1	اختباري أعمال الفصل	الأسبوع 7، 10	%30
2	تقييم للمهارات اللغوية	مستمر	%12
3	مشاركة	مستمر	%6
4	مشروع حول موضوعات المقرر	الأسبوع 11	%12
5	الاختبار الفصلي	الأسبوع 13	40%
6	المجموع		100%

هـ - أنشطة الإرشاد الأكاديمي والدعم الطلابي:

- توزيع الأدلة الإرشادية المعدة من قبل عمادة شؤون القبول والتسجيل.
- تخصيص ساعات مكتبية لأعضاء هيئة التدريس لمتابعة استفسارات الطلاب الأكاديمية.
- دراسة المشكلات الدراسية لطلاب الكلية وكل ما يتعلق بأسباب الفصل والتعثر الدراسي والتأخر وانخفاض المعدل.

و – مصادر التعلم والمرافق:

1. قائمة مصادر التعلم:

المرجع الرئيس للمقرر	1. Trish Stott, At your service, English for the Travel and Tourist Industry, Oxford: OUP. 2. InfoTech English for computer users (4th ed.) by : Santiago Esteras. 3. Student,s book: Infi Tech English for computer users (4th ed) by: Santiago Esteras. 4. Touchstone 2 (students and work book) by McCarthy. McCarten and Sendirod.
المراجع المساندة	-
المصادر الإلكترونية	1. www.TalkEnglish.com 2. http://www.cambridge.org/us/esl/touchstone/student/index.html 3. www.wjcompass.com

	4. موقع المقرر على شبكة الانترنت من خلال منصة blackboard يتم من خلاله تسليم الواجبات الكترونياً وطرح أسئلة النقاش ورفع محتوى المقرر بحيث يتاح للطالبة الرجوع للمحاضرات بشكل كامل، ونشر الاختبارات القصيرة الإلكترونية، والفيديوهات التعليمية المرتبطة بالمقرر، كما يتم عرض الاعلانات الخاصة بالمقرر وتقديم التغذية الراجعة المباشرة وفق ما يراه أستاذ المقرر.
أخرى	-

2. المرافق والتجهيزات المطلوبة:

العناصر	متطلبات المقرر
المرافق (القاعات الدراسية، المختبرات، قاعات العرض، قاعات المحاكاة ... إلخ)	قاعة دراسية - معمل لغة انجليزية.
التجهيزات التقنية (جهاز عرض البيانات، السبورة الذكية، البرمجيات)	سبورة ذكية، جهاز عرض بيانات.
تجهيزات أخرى (تبعاً لطبيعة التخصص)	-

ز. تقويم جودة المقرر:

مجالات التقويم	المقيمون	طرق التقييم
فاعلية أساليب التدريس	المراجع النظير – الطلاب	1. الاستبانات والاستفتاءات معتمدة من القسم.. 2. تقويم الأقران من أعضاء هيئة التدريس. 3. مراجعة نتائج تقويم الطلاب.
فاعلية طرق تقييم الطلاب	المراجع النظير– قيادات البرنامج – أعضاء هيئة التدريس – الطلاب	1. الاستبانات والاستفتاءات المعتمدة من القسم. 2. مراجعة تواصيف المقررات وتقارير المقررات بشكل دوري. 3. تقويم الأقران والتبادل الدوري للتصحيح والتدقيق بين الزملاء من أعضاء هيئة التدريس. 4. مراجعة عينات من أعمال الطلاب.
مصادر التعلم	قيادات البرنامج – أعضاء هيئة التدريس – الطلاب	1. الاستبانات والاستفتاءات المعتمدة من القسم. قوائم الشطب والرصد.
مدى تحصيل مخرجات التعلم للمقرر	قيادات البرنامج - أعضاء هيئة التدريس	1. مراجعة تقرير المقرر. 2. تحليل نماذج الاختبارات والدرجات وأعمال الطلاب وسجلات إنجازهم.

ح. اعتماد التوصيف

جهة الاعتماد	لجنة البرامج والخطط – الكلية التطبيقية
رقم الجلسة	السابعة - الفصل الدراسي الثاني من العام الجامعي 1441 - 1442 هـ
تاريخ الجلسة	1442/9/22هـ