

Academic program description form



University name: University of Basra

College/Institute: College of Education for Pure Sciences

Scientific Department: Department of Computer Science

Name of the academic or professional program: Bachelor of Computer Science

Name of final degree: Bachelor of Computer Science

Academic system: annual

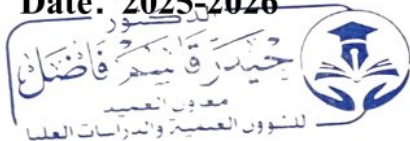
Description preparation date: 2025-2026

File filling date: 2025 -2026

The Signature:

Name of scientific assistant: Assist. Prof
Dr. Haider Kasim Fadel

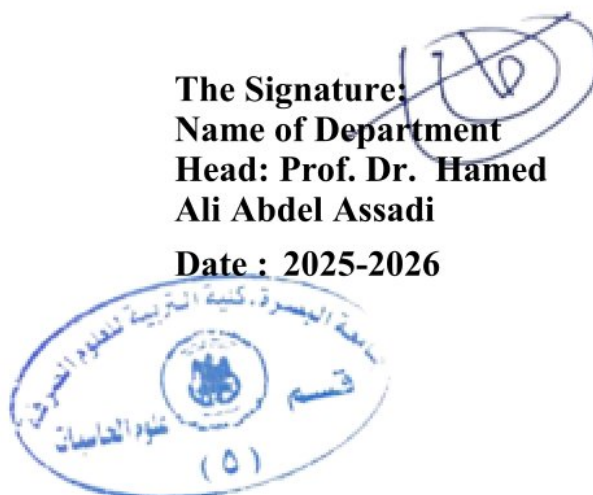
Date: 2025-2026



The Signature:

Name of Department Head: Prof. Dr. Hamed
Ali Abdel Assadi

Date : 2025-2026



Check the file from

The signature:

Division of Quality Assurance and University Performance

Name of the Director of the Quality Assurance and University Performance Division:

Assist. Prof. Dr. Ali Hussen Albadran

The date: 2025-2026

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A blue ink signature of Assist. Prof. Dr. Ali Hussen Albadran.

Authentication of the Dean

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1- Vision of the program

The Department of Computer Science at the College of Education for Pure Sciences at the University of Basra seeks to have a leading role in the field of pedagogical and scientific education by providing distinguished educational services and effective learning opportunities that take into account the balance between quantity and quality in preparing students. It also focuses on high-quality applied scientific research.

2- Mission of the program

The Computer Science Department continues its role in providing distinguished services to the community and also seeks to keep pace with international standards by providing all support for all of its educational programs.

3- Object of the program

Aims primarily to prepare and graduate a teacher with knowledge, critical thinking, and a sound vision for imparting knowledge and morals that qualify its students to achieve the goals of distinguished citizenship, and to be a good teacher capable of teaching computer science and the development that follows it, and who is qualified to complete his graduate studies. Through the following objectives:

- To be raised to believe in God and love the country, and to interact with the requirements of good and distinguished citizenship in maintaining a dignified life in which there is mutual respect and accountability.**
- To believe in the goals of the educational process and aspire to raise the nation's standing in all scientific and educational**

aspects.

- To provide information in the field of computer science to cover what is taught in the middle and middle schools in Iraq.
- To keep pace with the great and rapid development in his field of specialization and work to advance himself to the best level.
- To provide information in programming The administration of the schools in which he works is needed to distribute teaching sessions, record student grades, and organize records using a calculator by designing and creating databases for that.
- To assist the teaching staff in schools and students and encourage them to use modern educational techniques and advanced means of illustration that have direct contact with the computer.
- Educational programs and bags for school students. He is able to establish computer laboratories with good specifications in middle and middle schools.
- To keep pace with the labor market and its requirements.

4- Program accreditation

Nothing.

5- Other external influences

Nothing.

6- Program structure

Program structure	Number of courses	Study unit	percentage	Comments
Enterprise Requirements	9	14		
College Requirements	8	36		
Department Requirements	23	122		
Summer training	----	----	----	----
Other	----	----	----	----

- Notes may include whether the course is core or elective.

7- Program Description

Year/level	Course or course code	Name of the course or course	Credit hours	
/2025-2026 First	-----	Logical design	Theoretical	Practical
/2025-2026 First	-----	Structured programming	Theoretical	Practical
/2025-2026 First	-----	Mathematics	Theoretical	-----
/2025-2026 First	-----	Computer techniques and organization	Theoretical	Practical
/2025-2026 First	-----	Discrete structures	Theoretical	-----
/2025-2026 First	-----	Developmental and Educational Psychology	Theoretical	-----
/2025-2026 First	-----	Foundations of education	Theoretical	-----
/2025-2026 First	-----	Human rights and democracy	Theoretical	-----
/2025-2026 First	-----	Arabic language	Theoretical	-----
/2025-2026 First	-----	English Language	Theoretical	-----

/2025-2026 Second	-----	Numerical Analysis	Theoretical	Practical
/2025-2026 Second	-----	Microprocessors	Theoretical	Practical
/2025-2026 Second	-----	Database Design	Theoretical	Practical
/2025-2026 Second	-----	Data Structured	Theoretical	Practical
/2025-2026 Second	-----	Computational Theory	Theoretical	-----
/2025-2026 Second	-----	Object -Oriented Programming	Theoretical	Practical
/2025-2026 Second	-----	Educational Leadership and Management	Theoretical	-----
/2025-2026 Second	-----	Curricula and School Textbooks	Theoretical	-----
/2025-2026 Second	-----	Teaching Thinking	Theoretical	-----
/2025-2026 Second	-----	Arabic Language	Theoretical	-----

/2025-2026 Second	-----	English language	Theoretical	-----
/2025-2026 Second	-----	Baath Party crimes	Theoretical	-----
/2025-2026 Third	-----	Software Engineering	Theoretical	-----
/2025-2026 Third	-----	Compiler	Theoretical	Practical
/2025-2026 Third	-----	Visual Basic Programming	Theoretical	Practical
/2025-2026 Third	-----	Computer Graphics	Theoretical	Practical
/2025-2026 Third	-----	Computer Architecture	Theoretical	-----
/2025-2026 Third	-----	Artificial Intelligence	Theoretical	Practical
/2025-2026 Third	-----	Curricula and Methods of Teaching	Theoretical	-----
/2025-2026 Third	-----	Advising and Psychological Health	Theoretical	-----
/2025-2026 Fourth	-----	Computer and Data Security	Theoretical	Practical

/2025-2026 Fourth	-----	Operating Systems	Theoretical	Practical
/2025-2026 Fourth	-----	Communication & Computer Networks	Theoretical	Practical
/2025-2026 Fourth	-----	Data Mining	Theoretical	-----
/2025-2026 Fourth	-----	Web Design	Theoretical	Practical
/2025-2026 Fourth	-----	Measure and Evaluations	Theoretical	-----
/2025-2026 Fourth	-----	Practical Education (Observation and	Theoretical	-----
/2025-2026 Fourth	-----	Application) Research Project	Theoretical	-----

8- Expected learning outcomes of the programmed

Knowledge	
A. Cognitive Goals	<p>A1- Knowledge: enabling the student to understand the physical components of computers, computer software and information technologies and the ability to recall information related to the above.</p>
	<p>A2- Comprehension, enabling the student to translate theoretical concepts into computer programs and information technologies, as well as understanding and knowing the relationships that exist between theoretical concepts and the ability to deduce.</p>
	<p>A3- Application, enabling the student to apply the scientific concepts he has studied on the ground, that is, in practical life</p>
	<p>A4- Analysis: enabling the student to analyze the problem into parts, find a solution for each part, and then link the solutions together to give a complete solution to the problem.</p>
	<p>A5- Installation: Enabling the student to create unconventional and previously unused software and technologies for information</p>
	<p>A6- Evaluation: enabling the student to evaluate and evaluate the available software and information technologies</p>
Skills	

**B. The
programs
skill
objectives**

B1 - Observation: Providing a set of software and information technologies for the student for the purpose of studying and observing them

B2 - Simulation: enabling the student to prepare and write programs and information technologies under the direct supervision of the professor, which is an imitation of programs and information technologies presented to him.

B3 - Experimentation, which is similar to the previous goal except that the teaching supervision of the student is less and the student must implement the professor's directions and instructions.

B4 - Practice, enabling the student to prepare and write software and information technologies without any guidance from the teacher and with the fewest possible number of errors.

B5 - Mastery, enabling the student to master programming tools and information technologies and prepare and write correct programs and information technologies.

B6 - Creativity, enabling the student to be creative and creative in preparing and writing correct software and information technologies.

Values

Developing students' abilities to share ideas is an essential skill for their success in computer science. By sharing their ideas, students can:

	<ul style="list-style-type: none"> • Learn effective communication skills: Sharing ideas gives students the opportunity to practice effective communication skills, such as speaking, listening, and writing skills. • Enhancing critical thinking skills: By sharing their ideas and receiving feedback from others, students can enhance their critical thinking, problem-solving and analysis skills. • Developing teamwork skills: Sharing ideas is an essential part of group work, as students can work together to develop new ideas and innovative solutions to problems. • Building self-confidence: By sharing their ideas and receiving appreciation from others, students can build their confidence and abilities. • Increase creativity: Sharing ideas encourages creative thinking and developing new solutions to problems. • Here are some ways to develop students' ability to share ideas in the Computer Science Department: <ol style="list-style-type: none"> 1. Computer Science professors must create a safe environment in which students can express their opinions without fear of ridicule or criticism. 2. Discussion and debate can be encouraged in class by asking open-ended questions and motivating students to exchange ideas. 3. Interactive educational techniques, such as discussion groups and brainstorming, can be used to develop students' abilities to share ideas. 4. Opportunities for teamwork can be provided through group projects and practical experiences. 5. Students can be given the opportunity to give presentations to explain their ideas and projects.
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	<ol style="list-style-type: none"> 6. Students can be assessed on their ability to share ideas through tasks that require them to express their opinions and explain their ideas. 7. Opportunities can be provided for students to participate in conferences and workshops to share their ideas with experts in the field of computer science. 8. Students can be encouraged to publish their research in scientific journals and websites. 9. Social media can be used to share ideas with other students and experts in the field of computer science. 10. Opportunities can be provided for students to connect with Computer Science graduates to learn about their experiences in sharing ideas in the field of work.
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9- Teaching and learning strategies

This part of the strategy includes the teaching methods used that are in line with the nature of the computer science student and that impose different educational methods that suit them and achieve the maximum benefit. In order to achieve this desired benefit, the department's education system relies on self-learning, interactive and applied methods, using different methods of teaching and learning.

Lectures represent the largest proportion of core courses in the bachelor's program to establish the basic principles of computer science for all department students.

Audio-visual aids are used in lectures: the scientific material is prepared on the presentation program and displayed using the display devices for those presentations, where questions or activities carried out by the student are

integrated between the scientific concepts presented, and there is no doubt that this interaction between the student and the lecturer prevents distraction. It helps the student to focus for as long as possible

It is a style in which The faculty member and the student are in a positive position, as the issue or topic is raised, after which the student's different opinions are exchanged. Then the faculty member follows up on that with what is correct and what is incorrect, and crystallizes all of that into points about the topic or problem.

This method is followed in many courses, where some students are assigned to prepare some topics related to the scientific material in the form of seminars and then present them to their colleagues in the form of presentations with a full explanation of those topics. This is done under the supervision of the faculty member who reviews the scientific material. Before presenting it to the student, he corrects any errors and asks to add what he deems appropriate. The student also encourages listeners to direct questions and inquiries to their colleague who is presenting.

A large number of the courses taught in the department contain an applied part. In this method, the student applies what has been explained by the faculty member and under his supervision.

Computer-aided education - audio-visual media - World Wide Web (www).

10- Evaluation methods

The department's student evaluation methods take into account the measurement of the targeted learning outcomes that were achieved through previous learning methods, and the student is evaluated through: Written theoretical tests, which measure all the targeted learning outcomes that can be measured through this type of tests, not only knowledge, but also all mental skills, through diversification in the types of questions used. Practical tests and other tests represented by other assessment methods that differ from one course to another with the aim of achieving the targeted learning

outcomes for each course and include:

- ☐ Semester work
- ☐ Tasks, assignments and projects
- ☐ To examine the process
- ☐ Daily exams

11- The teaching staff

Faculty Members

Scientific rank	Specialization		Requires special skills (If any)		Preparing the teaching staff	
	private	General			temporal	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee

Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Assistant Professor	Information systems and software engineering	computer science	---	---	---	Permanent employee

Teacher	Psychological counseling and educational guidance	Educational guidance	---	---	---	Permanent employee
Teacher	Image processing	Computer science	---	---	---	Permanent employee
Teacher	Computer Vision	Computer science	---	---	---	Permanent employee
Teacher	Visual computing	Computer science	---	---	---	Permanent employee
Teacher	Information technology and communications	Computer science	---	---	---	Permanent employee
Teacher	Data mining	Computer science	---	---	---	Permanent employee

Teacher	Computer security	Computer science	---	---	---	Permanent employee
Assistant teacher	Information technology	Computer science	---	---	---	Permanent employee
Assistant teacher	Artificial intelligence	Computer science	---	---	---	Permanent employee
Assistant teacher	Artificial intelligence	Computer science	---	---	---	Permanent employee
Assistant teacher	Artificial intelligence	Computer science	---	---	---	Permanent employee
Assistant teacher	Artificial intelligence	Computer science	---	---	---	Permanent employee
Assistant teacher	Artificial intelligence	Computer science	---	---	---	Permanent employee
Professional development						

Orienting new faculty members

Professional development for new CS department members is essential to ensure they have the skills and knowledge needed to succeed in their careers . Here are some ways to develop their skills:

1. Providing orientation programs:

Orientation programs can be provided for new CS department members to help them adapt to the new work environment and learn how to use the resources available to them.

2. Providing training courses:

Training courses can be offered to new members of the Computer Science Department in various areas, such as teaching skills, research skills, and information technology use skills.

3. Encouraging attendance at conferences and workshops:

New members of the Computer Science Department are encouraged to attend conferences and workshops to keep up with the latest developments in the field of computer science.

4. Providing opportunities to communicate with experts:

Opportunities can be provided for new Computer Science Department members to network with experts in the field of Computer Science through mentoring programs or participation in conferences and workshops.

5. Support scientific research: The scientific research of new members of the Computer Science Department can be supported by providing them with research grants or helping them to publish their research in scientific journals.

6. Evaluating performance and providing feedback: The performance of new Computer Science department members can be evaluated periodically and feedback provided to them to help them improve their skills and perform their jobs better.

7. Providing opportunities for career advancement: Career advancement opportunities can be provided to new CS department members through promotion programs or leadership training.

8. Creating a supportive environment for learning: Computer Science Department management must create an environment supportive of learning and professional growth for its new members.

Professional development for faculty members

Professional development for members of the Computer Science Department is essential to ensure they keep up with the latest developments in this fast-paced field. Here are some ways to develop the skills of members of the Computer Science Department:

1. Attending conferences and workshops :

Members of the Computer Science Department can attend conferences and workshops to learn about the latest developments in the field of computer science and learn new skills.

2. Taking training courses:

Members of the Computer Science Department can take courses in various areas of computer science, such as programming, information systems design, computer networks, and cybersecurity

3. Reading books and scientific journals:

Members of the Computer Science Department can read books and scientific journals to learn about the latest research and studies in the field of computer science.

4. Participation in research projects:

Members of the Computer Science Department can participate in research projects to develop their research skills and gain new experiences.

5. Supervision of postgraduate students:

Members of the Computer Science Department can supervise graduate students to develop their teaching and mentoring skills.

6. Volunteering in the community :

Members of the Computer Science Department can volunteer in the

community to share their expertise with others and develop their communication and teamwork skills.

7. Use of social media:

Members of the Computer Science Department can use social media to connect with experts in the field of computer science and share their ideas and experiences.

8. Joining professional associations

Members of the Computer Science Department can join professional associations in the field of computer science to participate in the events and activities organized by these associations

9. Obtaining professional certificates:

Members of the Computer Science Department can obtain professional certificates in various fields of computer science to demonstrate their skills and experience.

10. Continue learning.

12- Acceptance Standard

The department has certain policies in accepting new students and students transferred from other departments in accordance with the controls and laws in force by the Ministry of Higher Education and Scientific Research. With regard to new students, the department

follows the general standards determined by the university and college in admission and according to the averages of admission. The Ministerial Council approved the preparatory studies for that year and the criteria for competition among applicants for the scientific departments in the college. However, there are requirements that must be met by the applicant to study computer science at this college Requirements include:

1-The student must have an Iraqi secondary school certificate or its equivalent and in the scientific specialization.

2-The student is distributed among the scientific departments in the College of Education for Pure Sciences on the basis of competition among applicants according to their grades in the ministerial examination for preparatory study and

their desires and according to the admission plan for the Computer Science Department in that year.

3-The student must submit the documents and certificates required of him within a specific period of time.

4- A student who holds a high school diploma from outside Iraq must prove that he has completed twelve years of study Primary and secondary school from a recognized school, and must present a certificate equivalent to his secondary school certificate issued by the Ministry of Education in Iraq.

The department annually receives top students in institutes, hosting students

from other universities, and students transferred from other universities. The number of academic units is distributed to the student in proportion to the subjects that the student has previously studied and equated with the academic units taught in the institution from which he is transferred. The academic units required of these students are calculated by equating the subjects and academic units that he studied at that institution, where the student is required to complete the units that he did not study and is exempted from the subjects that he studied previously.

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13- The most important sources of information about the program

- The website of the college and university.
- University requirements.
- Local scientific trends.
- Global scientific requirements.

14- Program development plan

- Participation in scientific conferences inside and outside the country.
- Participation in scientific workshops and seminars inside and outside the country.
- Twinning with international universities.
- Scientific trips.

Universities today face increasing challenges in keeping pace with rapid developments in the field of computer science. Therefore, it is necessary to review and develop study programs periodically to ensure that students obtain the skills and knowledge necessary to succeed in the labor market.

Steps to develop the study program:

To develop the study program for the Computer Science Department, the following steps must be followed :

☐ **Evaluation of the current program:**

☒ **Data collection:** Data should be collected about the current program, including the opinions of students, faculty members, and department graduates.

☒ **Data Analysis:** The data collected must be analyzed to determine the strengths and weaknesses of the current program.

☐ **Determine development goals:**

☒ **General objectives:** General objectives must be determined for program development, such as keeping up with developments in the field of computer science or improving the skills of department graduates.

✓ **Specific goals:** Specific goals must be determined for developing the program, such as adding new materials, modifying the content of existing materials, or improving teaching methods.

□ **Curriculum development:**

✓ **Review the content of the materials:** The content of the current materials must be reviewed to ensure their suitability to the needs of the labor market. ✓ **Adding new materials:** New materials must be added that cover the rapid developments in the field of computer science.

✓ **Modifying teaching methods:** Teaching methods must be modified to use modern methods that help students learn better.

□ **Faculty development:**

✓ **Providing training opportunities:** Faculty members must be provided with opportunities to train on the latest technologies and teaching methods.

✓ **Encouraging scientific research:** Faculty members must be encouraged to conduct scientific research and publish their research in scientific journals

✓ **Supporting participation in conferences and workshops:** Faculty members' participation in conferences and workshops must be supported to keep pace with the latest developments in the field of computer science.

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Curriculum Skills Chart

Please check the boxes corresponding to the individual learning outcomes from the program subject to evaluation

				Learning outcomes required from the programme															
Year/ level	Course Code	Course Name	Basic or optional	Cognitive -- objectives				Skills objectives of the programme				Emotional and value goals				General and qualifying transferable skills (other skills related to employability and personal (development			
				A1	A 2	A3	A 4	B 1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
first		Structured programming	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Logical design	Basic	•	•	•	○	•	•	•	•	•	•	•	○	•	•	•	•
		Discrete Structure	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		computer Technologies	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		mathematics	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	○
		Developmental and	Basic	•	•	•	○	•	•	•	○	•	•	○	○	•	○	○	○
		English Language	Basic	•	•	•	○	•	•	•	○	•	•	•	•	○	○	○	○
		Foundations of education	Basic	•	•	•	•	•	•	○	○	•	•	•	•	•	•	•	•
		human rights	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
second		Object Oriented	Basic	•	•	•	•	•	•	•	•	•	•	•	○	•	•	•	•
		Research methodology	Basic	•	•	•	•	•	•	•	○	•	•	•	○	•	•	•	•
		Databases	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Microprocessing	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Data structures	Basic	•	•	•	•	•	•	•	○	•	•	•	•	•	•	•	•
		Developmental psychology	Basic	•	•	•	•	•	•	•	•	•	•	•	○	•	•	•	•

		Numerical Analysis	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Automate Theory	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Management and	Basic	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Third		Computer architecture	Basic	•	•	•	•	•	•	•	○	•	•	•	•	•	•	•	•
		Visual programming	Basic	•	•	•	•	•	•	•	•	•	•	•	○	•	•	•	•
		Compiler	Basic	•	•	•	○	•	•	•	○	•	•	•	•	○	○	○	○
		Artificial intelligence	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Computer Graphics	Basic	•	•	•	•	•	•	•	○	•	•	•	•	•	•	•	•
		Software engineering	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Counseling and	Basic	•	•	•	•	•	•	•	○	•	•	•	•	•	•	•	•
		Teaching Methods	Basic	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
fourth		Computer security	Basic	•	•	•	•	•	•	○	○	•	•	•	•	•	•	•	•
		operating system	Basic	•	•	•	•	•	•	○	○	•	•	•	•	•	•	•	•
		computer networks	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Data mining	my choice	•	•	•	•	•	•	•	○	•	•	○	○	•	•	•	•
		Web Design	my choice	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Measurement and	Basic	•	•	•	•	•	•	•	○	•	•	•	○	•	○	○	○
		research project	Basic	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
		Practical education	Basic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•





Description of the academic program

University of Basrah

College of Education for Pure Sciences

Department of Computer Science

First Stage

Course Description Form

1. Course Name:	
<i>Logic Design</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2026-2025</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Nagam A. Taha</p> <p>Email:</p> <p>nagham.taha@uobasrah.edu.iq</p>	
8. Course Objectives	
Course Objectives	<p><i>This course aims to give the student a broad understanding of Logic Design and the fields of using digital circuits in designing systems such as digital computers, digital communication equipment, and many other applications that require electronic digital equipment. The student is also introduced to the concept of digital and binary systems and</i></p>

	<p><i>Boolean algebra functions. The course also includes the design and analyze of combinational and sequential logical circuits. Reinforce theory and techniques taught in the classroom through experiments and projects in the laboratory. The course can provide the student with the following parameters:</i></p> <ol style="list-style-type: none"> <i>1. Giving the student a balanced coverage of logical design.</i> <i>2. Combinational logic circuit design.</i>
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9. Teaching and Learning Strategies

Strategy	<ul style="list-style-type: none"> <i>• Educational strategy, collaborative concept planning.</i> <i>• Brainstorming education strategy.</i> <i>• Education Strategy Notes Series</i> <i>• Applying the theoretical aspect in practical laboratories by carrying out some</i> <i>• important scientific experiments that consolidate the information given in the</i> <i>• Theoretical aspect.</i> <i>• Using lectures by speaking to students and using Power Point slides and the blackboard</i>
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student knows what logical design is and what digital systems are	Introduction to logic design and	1- Presenting the theoret	✓ Homework assignments ✓ Daily exams ✓ Reports

			Digital Systems	ical material, whether through dialogue or displaying it on a display screen. 2- Applying the theoretical material to the calculator. 3- Assignments and exercises. 4- Theoretical and practical lectures weekly. 5- There	✓ Monthly exams ✓ Mid-term exam ✓ final exam
2	2	The student should know numerical systems	Number Systems		
3	2	The student should be able to perform mathematical operations on the binary system	Binary Arithmetic		
4	2	The student should know how to convert from one numerical system to another	Number-base Conversions		
5	2	The student knows how to find the first complement and the second complement of a binary number	Complements		
6	2	The student knows how to represent and deal with negative numbers	Signed Binary Numbers		
7	2	The student should know the types of binary codes and how to convert to them.	Binary Codes		
8	2	The student should know how a binary number is stored in memory and how processing operations are performed on it	Binary Storage and Registers		
9	2	The student knows what logic gates are and the truth table for each logic gate	Binary Logic		

10	2	The student knows what Boolean algebra is and what its applications.	Introduction to Boolean algebra and logic gates	is a discussion lesson and solving exercises 6- Assigning the student to prepare periodic reports	
11	2	The student should know the basic rules and laws of Boolean algebra	Basic Theorems and Properties of Boolean Algebra		
12	2	The student knows what logical functions are	Boolean Functions		
13	2	Getting to know Minterms and Maxterms as well as getting to know Standard Forms	Canonical and Standard Forms		

14	2	Extended knowledge about logic gates, truth tables, their applications, and how to apply them practically.	Digital Logic Gates		
15	2	Learn about the concept of integrated circuit, its types, and its advantages	Integrated Circuits		
18-16	6	1- Learn to use the Karnaugh Map to simplify logical functions for two, three, or four variables 2- Identify the concept of DON'T CARE CONDITIONS and its usefulness in the process of simplifying logical functions	Karnaugh map		
20-19	4	Learn how to convert any digital circuit consisting of an OR/and gate into a digital circuit containing NAND or NOR gates.	NAND and NOR Implementation		
22-21	4	Learn about combinational circuits and the concepts of analysis and design	Introduction to combinational logic		

23	2	Learn how to perform the addition process using Half Adder and Full Adder	Half Adder and Full adder		
24	2	Learn about the mechanism of performing the subtraction process using Full adder	Binary Subtractor		
25	2	Learn how to perform multiplication using a combinational circuit	Binary Multiplier		
26	2	Learn how to design a combinational circuit that compares two numbers	Magnitude Comparator		
27	2	Get to know Decoders and what their most important applications.	Decoders		
28	2	Learn about the basic concepts of Encoders and how to design them	Encoders		

30-29	4	Learn how to design a multiplexer to perform a specific function using a specific logical function	Multiplexers		
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11.Course Evaluation

The subject's grade is (100) distributed over the following aspects:

- Midterm exam: 20%
- Daily exams: 10%
- Report: 5%
- Lab exam: 15%
- Final lab exam: 15%
- Final exam: 35%
- Total score: 100%

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamentals of Logic Design, Sixth Edition Charles H. Roth, Jr. and Larry L. Kinney, 2010.
Main references (sources)	Digital design system, Ramaswary P.,ventus publishing,2011.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
<i>Structured Programming</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Dr. Zaid Ameen Abdujabbar</i> <i>Email: zaid.ameen@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"><i>• Study the principles of algorithms, flowcharts, and how to solve the problem.</i>

	<ul style="list-style-type: none"> • <i>Learn programming concepts including program structure, data types, arithmetic expression, logical expression, statement, and functions.</i> • <i>Learn the principles and concepts of functions, one-dimensional and multi-dimensional arrays, time complexity algorithm (best, average, worst), matrix search algorithm (sequential algorithm and bubble sort algorithm), arrays and pointers, and structure.</i>
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9. Teaching and Learning Strategies

<i>Strategy</i> <i>Discussion</i> <i>Teamwork</i>	<ul style="list-style-type: none"> • <i>Providing the student with basic and secondary topics related to algorithms and flow charts</i> • <i>Finding solutions to mathematical, numerical and applied problems and converting them into computer programs</i> • <i>Requiring the student to study computer programs related to theoretical vocabulary</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
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1	2	Learn algorithms and flowcharts	Algorithms and Flowcharts	Lectures and Lab	Exams
2	2	Learn algorithms and flowcharts	Algorithms and Flowcharts	Lectures and Lab	Exams
3	2	Learn the basics of programming in C++	The Basics in C++ programming & Program style	Lectures and Lab	Exams
4	2	Learn data types and statements for input and output	Data type and Input & Output Statements	Lectures and Lab	Exams
5	2	Teaching the statement of assignment and arithmetic and logical expression	Assignment statements and Expressions: Arithmetic & Boolean Logical operator.	Lectures and Lab	Exams
6	2	Teaching the statement of assignment and arithmetic and logical expression	Assignment statements and Expressions: Arithmetic & Boolean Logical operator.	Lectures and Lab	Exams
7	2	Learn control statements	Control structures (Selection). IF Statement	Lectures and Lab	Exams
8	2	Teaching the normal and nested control statement	Control structures (Selection). IF –else, and nested -if Statement	Lectures and Lab	Exams
9	2	Learn the normal and nested control statement	Control structures (Selection). IF –else, and nested -if Statement	Lectures and Lab	Exams

10	2	Learn the control statement with selection	Control structures (Selection). Switch case Statement	Lectures and Lab	Exams
11	2	Learn loop statements	Designing a loop (for, while, do while).	Lectures and Lab	Exams
12	2	Learn loop statements	Designing a loop (for, while, do while).	Lectures and Lab	Exams
13	2	Learn loop statements	Designing a loop (for, while, do while).	Lectures and Lab	Exams
14	2	Learn functions and procedure approaches	Predefined functions (function, Procedure, User defined function, Scopes of variables)	Lectures and Lab	Exams
15	2	Learn functions and procedure approaches	Predefined functions (function, Procedure, User defined function, Scopes of variables)	Lectures and Lab	Exams
16	2	Learn to send parameters via functions	Function (Passing arrays to functions, Calling functions)	Lectures and Lab	Exams
17	2	Learn to send parameters via functions	Function (Passing arrays to functions, Calling functions)	Lectures and Lab	Exams
18	2	Learn to program one-dimensional arrays	One Dimensional Arrays	Lectures and Lab	Exams

19	2	Learn to program search and sort operations within arrays	Applications in arrays: search and sort	Lectures and Lab	Exams
20	2	Learn to program search and sort operations within arrays	Applications in arrays: search and sort	Lectures and Lab	Exams
21	2	Learn to program two-dimensional arrays	Introduction to 2-Dimensional arrays	Lectures and Lab	Exams
22	2	Learn to program two-dimensional arrays	Applications of 2-Dimensional arrays	Lectures and Lab	Exams
23	2	Learn to program two-dimensional arrays	Applications of 2-Dimensional arrays	Lectures and Lab	Exams
24	2	Learn to declare and program pointers	Pointers : declaration and operations	Lectures and Lab	Exams
25	2	Learn 1D arrays with pointers	1-D Arrays and Pointers.	Lectures and Lab	Exams
26	2	Learn 2D arrays with pointers	2D-Arrayes and pointers	Lectures and Lab	Exams
27	2	Learn to define structures	Structure: Declaring and Defining a structure variable.	Lectures and Lab	Exams
28	2	Learn to program structure applications	Applications of structures	Lectures and Lab	Exams
29	2	Learn matrices with structures	Array and Structure	Lectures and Lab	Exams

30	2	Learn matrices with structures	Array and Structure	Lectures and Lab	Exams
<i>11.Course Evaluation</i>					
<p align="center">Score distribution:</p> <p>Annual pursuit 50% (25 marks for theoretical exams, 15 marks for the activity and Lab exam, and 10 marks for daily exams and reports on solving programming problems)</p> <p>Final exam 50% (15 marks for the final Lab exam and 35 marks for the final theoretical exam)</p>					
<i>12.Learning and Teaching Resources</i>					
Required textbooks (curricular books, if any)			Text Book: Structured Programming with C++, Kjell Backman, BookBoon, 2012		
Main references (sources)			References: A Tour of C++, BJARNE OUSTRUP, by Pearson Education, Inc., 2014		
Recommended books and references (scientific journals, reports...)			References: A Tour of C++, BJARNE TROUSTRUP, by Pearson Education, Inc., 2014		
Electronic References, Websites			/https://www.w3schools.com/cpp		

Course Description Form

1. Course Name:
<i>Mathematical</i>
2. Course Code:
3. Semester / Year:
<i>Annual</i>
4. Description Preparation Date:
<i>2025-2026</i>
5. Available Attendance Forms:
<i>Actual presence</i>
6. Number of Credit Hours (Total) / Number of Units (Total):
<i>3 hours per week / 6 units</i>
7. Course administrator's name (mention all, if more than one name)
 <i>Name: Msc. Zahraa Adnan Jameel</i> <i>Email: zahraa.adnan@uobasrah.edu.iq</i>
8. Course Objectives
<ul style="list-style-type: none">• <i>Introducing the student to the basic principles of calculus, which are included in all fields of mathematics, and its applications are included in engineering applications and all departments of science.</i>• <i>Acquiring mental skills and thinking in mathematics.</i>• <i>Introducing students to the importance of mathematics.</i>
9. Teaching and Learning Strategies

Strategy			1-Cooperative education planning strategy. 2- Brainstorming education strategy. 3- Educational notebook strategy.		
10.Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-3	6	Primary topics	Solving inequalities, algebra of functions, The domain and range of the function, absolute value function, Composite Function, inverse function, Some Specific Types of Functions (sign function, The greatest correct function, even and odd function, Rational function,	Theoreti cal	Exams

			polynomial, ...)		
4-6	6	Transcendental function	Trigonometric functions, some important identities for trigonometric functions, inverse of the trigonometric function, logarithmic function, exponential function	Theoretical	Exams
7-9	6	limit	limits and how to calculate the limit, One-sided limits, infinity limits, the limit at infinity, Limits Involving Trigonometric Functions	Theoretical	Exams
10-11	4	Continuity	Continuity	Theoretical	Exams
12-14	6	The Derivatives	Differentiation of Derivative, Basic Derivative rules, implicit differentiation, = chain law	Theoretical	Exams

15-17	6	Differentiation Of trigonometric functions	Differentiation of trigonometric functions, differentiation of inverse trigonometric functions, differentiation of logarithmic and exponential functions	Theoretical	Exams
18-20	6	Derivative applications	L'Hopital's rule, Rolle's theorem, Mean value theorem	Theoretical	Exams
21-23	6	Integral	Definition of indefinite integral and its properties, definition of definite integral and its properties	Theoretical	Exams
24-26	6	Inverses of trigonometric functions	Integrals of inverse trigonometric functions	Theoretical	Exams
27-30	8	Integration methods	Integration by parts, integration of powers of trigonometric functions,	Theoretical	Exams

			trigonometric substitution, integration by partial fractions, other substitutions		
11. Course Evaluation					
Distribution is as follows: 25 marks for monthly and daily exams for the first semester. 25 marks for monthly and daily exams for the second semester. 50 marks for final exams					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			حسبان التفاضل والتكامل : تأليف د. صبري العاني وجماعته		
Main references (sources)			التفاضل والتكامل والهندسة التحليلية : تأليف توماس (مترجم) حسبان التفاضل والتكامل : تأليف برسل (مترجم)		
Recommended books and references (scientific journals, reports...)			Calculus Early Transcendentals, 6e		
Electronic References, Websites			Science direct springer link		

Course Description Form

1. Course Name	
<i>Computer Techniques and Organization</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Hend Muslim Jasim Mohammed Email: <i>Hend.jasim@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<i>To highlight the major topics student computer study as introductory course. Students engaged to learn basic knowledge required to develop their skills.</i>

	<p><i>showing their eligibility to perceive advanced steps of their educational progress and to continue. The course merges and integrates different fields of the futuristic taught materials in advance. It covers the knowledge needed from the very theoretical to the practical and applicable tools they invoke to go along their interests in computer learning sessions.</i></p>
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9. Teaching and Learning Strategies

<i>Strategy</i>	
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10.Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
Week 1	4	<p>Computer machine history and generations</p> <p>Computer system components1:</p> <p>hardware, software (OS., application ,data), user, programmer</p>	Parts of commercial computer	lecture	exam

		Computer organization and architecture 1: Input unit, Output unit, Input Devices: keyboard, touchscreen, mouse, Output devices: Printers, monitors			
Week 2	4	Computer organization and architecture 2: CPU (control & ALU), memory unit (primary storage: RAM, ROM, Cache... & secondary storage: HD, SD, CD/DVD...) Computer organization and architecture 3: motherboard, buses, ports, connectors, interface & adapters, Data transmission & networking	Parts of commercial computer	lecture	exam
Week 3	4	Computer Software: Operating systems, applications, language compilers & interpreters	Operating systems: Dos	lecture	exam

		Operating system: booting, simple operating structure, layered structure Operating system: Dos			
Week 4	4	Operating system: Windows	Operating systems: Windows	lecture	exam
Week 5	4			lecture	exam
Week 6	4	Operating system: Linux	Operating systems: Linux	lecture	exam
Week 7	4	Computer software: MS- Word	MS-Word	lecture	exam
Week 8	4			lecture	exam
Week 9	4	Computer software: MS-Excel	MS-Excel	lecture	exam
Week 10	4			lecture	exam
Week 11	4	Computer software: MS- PowerPoint	MS- PowerPoint	lecture	exam

Week 12	4			lecture	exam
Week 13	4	Computer software: MS- Access	MS-Access	lecture	exam
Week 14	4	Software and hardware installation		lecture	exam
Week 15	4	Computer multimedia		lecture	exam
Week 17	4	Social media		lecture	exam
Week 18	4	Electronic mail		lecture	exam
Week 19	4	Introduction to computer networks		lecture	exam
Week 20	4	Web content		lecture	exam
Week 21	4	Search engines		lecture	exam
Week 22	4	Internet fundamentals		lecture	exam
Week 23	4	Internet security		lecture	exam

Week 24	4	Computer ethics and safety		lecture	exam
Week 25	4	Programming fundamentals: Sequencing, Selection, Repetition		lecture	exam
Week 26	4	Structural programming		lecture	exam
Week 27	4	Object oriented programming		lecture	exam
<i>11.Course Evaluation</i>					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc					
<i>12.Learning and Teaching Resources</i>					
Required textbooks (curricular books, if any)					
Main references (sources)			1. Windows 10 Step by Step, Second Edition, Joan Lambert, 2018 2. Microsoft office 2019 for Dummies, Wallace Wang,2018 3. A+ Certification Bible. 2009		

	<p>4. الدليل العملي في استخدام Ubuntu</p> <p>5. concepts of programming languages الوسائط المتعددة الرقمية</p> <p>1. Digital Multimedia</p> <p>6. مهارات الحاسوب المتقدمة</p>
<p>Recommended books and references (scientific journals, reports...)</p>	<p>1. Windows 10 Step by Step, Second Edition, Joan Lambert, 2018</p> <p>2. Microsoft office 2019 for Dummies, Wallace Wang, 2018</p> <p>3. A+ Certification Bible. 2009</p> <p>4. الدليل العملي في استخدام Ubuntu</p> <p>5. concepts of programming languages الوسائط المتعددة الرقمية</p> <p>6. Digital Multimedia</p> <p>7. مهارات الحاسوب المتقدمة</p> <p>8.</p>
<p>Electronic References, Websites</p>	

Course Description Form

1. Course Name:	
<i>Discrete Structure</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2026-2025</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Name: Rana Jassim Mohammed</p> <p>Email: rana.mohammed@uobasrah.edu.iq</p>	
8. Course Objectives	
Course Objectives	<p><i>Students should learn a particular set of mathematical facts and how to apply them; more importantly, such a course should teach students how to think logically and mathematically.</i></p>

9. Teaching and Learning Strategies					
Strategy	Providing the student with primary and secondary topics related to logic, understanding topics, and vocabulary The theory of methods of proof and identification of many concepts and theories that enable it Of understanding algorithms. The method of learning is through explanation in the classroom, examinations, and participation During the lecture, use of illustrations and many experiments to solve mathematical operations.				
10.Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1		Mathematical Logic Introduction ,Simple Logic Statement ,zVariable use in proposition statement, Compound Logic statement ,	Mathematical Logic		✓ Homework assignments ✓ Daily exams ✓ Reports ✓ Monthly exams ✓ Mid-term exam final exam
2		Logical proposition, Logical Equivalence ,Quantifiers	Logical		✓ Homework assignments
3		Conditional statement & Variation, Logical Reasoning			✓ Daily exams

4		Sets theory ,Introduction, Methods of Expressing Sets			✓ Reports
5		Principle Concept sets, Venn Diagrams			Monthly exams
6		Algebra of sets, Family of sets & Index family of sets			✓ Homework assignments
7		Order Pairs & Product sets, Boolean Algebra			✓ Daily exams
8		Relations, Introduction, Binary relation			✓ Reports
9		Graph of relation, Photographer representation of relation			Monthly exams
10		The Domain & Range of relation, Identity Relation & Inverse relation			✓ Homework assignments
11		Composition relation, Type of relation			✓ Daily exams
12		Equivalence relation, Function , Introduction			✓ Reports
13		Principle Concept & Definition, Model of function			Monthly exams
14		Composition function , Algebra of function			✓ Homework assignments

15		Draw graphs function, Discussion function through the planning equity			✓ Daily exams
		عطلة نصف السنة			✓ Reports
16		Graph theory , Introduction, Principle concept, Type of graphs, Definition			Monthly exams
17		Example of graph, Graph and matrices			✓ Homework assignments
18		Finite automata			✓ Daily exams
19		The Mathematical System and the Graphs, Introduction, Principle concept			✓ Reports
20		Mathematical system, Groups, Cossets			Monthly exams
21		Normal subgroups, Quotient group			✓ Homework assignments
22		Homomorphism , Rings, Fields			✓ Daily exams
23		Vectors and matrices, Introduction			✓ Reports
24		Vectors, Matrices, Models of square matrices			Monthly exams
25		Algebra in the matrices, Determination			✓ Homework assignments

26		Minors & Cofactors, Solving system of liner equation using the non-homogeneous, Grammar rule			✓ Daily exams
27		, Solving system of liner equation using the non-homogeneous, Grammar rule			✓ Reports
28		Principle concept			Monthly exams
29		Graph theory , Introduction, Principle concept			✓ Homework assignments
30		Type of graphs, Definition			✓ Daily exams

11.Course Evaluation

Quizzes : 10%

Term Tests: 40%

Final Exam: 50%

12.Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	
<i>Main references (sources)</i>	<i>Rosen, Kenneth. Discrete Mathematics and Its Applications 7th edition. McGraw-Hill Science, 2011.</i>
<i>Recommended books and references (scientific journals, reports...)</i>	<i>Todd Feil, Joan Krone, "Essential Discrete Mathematics", Prentice Hall, 2003.</i>
<i>Electronic References, Websites</i>	

Course Description Form

1. Course Name:	
<i>Foundations of education</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2026-2025</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Zainab J. Abduljuleel</p> <p>Email:zainab.abduljuleel@uobasrah.edu.iq <input type="checkbox"/></p>	
8. Course Objectives	
Course Objectives	Course Objectives
9. Teaching and Learning Strategies	
Strategy	

10.Course Structure					
<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	2	What We Measure: This phrase likely refers to the various aspects or outcomes that are assessed in education. It could encompass measuring student learning, teacher effectiveness, school performance, or the overall impact of educational systems.	Basic Concepts in Education		✓ Homework assignments ✓ Daily exams ✓ Reports ✓ Monthly exams
2	2	This section would delve into the fundamental concept of education, exploring its purpose, goals, and essence. It might discuss the role of education in shaping individuals, societies, and civilizations.	Definition of Education		Homework assignments
3	2	: This segment would categorize	Types of Education		Daily exams

		<p>and explain the different forms of education, such as formal education (schools, universities), informal education (lifelong learning, community programs), and non-formal education (vocational training, apprenticeships).</p>			
4	2	<p>: This section might explore the various methodologies and approaches used in education, such as traditional instruction, constructivist learning, inquiry-based learning, and experiential learning.</p>	Forms of Education		Reports
5	2	<p>: This segment would trace the historical evolution of education, examining its development through different eras, such as ancient civilizations,</p>	Eras of Education		Monthly exams

		medieval times, Renaissance, and modern periods.			
6	2	This section would investigate the interplay between education and the surrounding environment, including the influence of social, cultural, and economic factors on educational practices and outcomes.	Education and Its Relationship to the Environment:		Homework assignments
7	2	: This segment would explore the diverse forms of education prevalent in contemporary society, such as inclusive education, special education, online education, and blended learning.	Types of Modern Education		Daily exams
8	2	: This indicates an assessment or evaluation conducted midway through a course or academic term to measure student progress and understanding.	Midterm Exam		Reports

9	2	This section would delve into the educational system and practices of ancient Sparta, focusing on its emphasis on physical fitness, military training, and obedience.	Spartan Education:		Monthly exams
10	2	: This segment would explore the educational practices and experiences of girls in ancient Israelite society, considering their access to education, societal expectations, and prevailing gender roles.	Education of Girls Among the Israelites		Homework assignments
11	2	: This section would examine the educational system and ideals of ancient Athens, highlighting its focus on intellectual pursuits, civic engagement, and the development of well-rounded individuals.	Athenian Education		Daily exams

12	2	: This segment would explore the educational practices and institutions in ancient Mesopotamia, including the role of scribes, schools, and religious teachings.	Education in Mesopotamia		Reports
13	2	This section would delve into the structure and organization of the educational system in ancient Mesopotamia, examining its curriculum, teaching methods, and societal goals.	Education System in Mesopotamia:		Monthly exams
14	2	: This segment would explore the educational system and philosophies of ancient China, emphasizing its emphasis on Confucian values, moral cultivation, and civil service preparation.	Ancient Chinese Education		Homework assignments

15	2	This section would examine the structure and organization of the educational system in ancient China, including its different levels, curriculum, and assessment methods.	Education System in Ancient China:		Daily exams
18-16	2	This segment would explore the educational practices and experiences of girls in ancient China, considering their access to education, societal expectations, and gender roles.	Education of Girls in China:		Reports
20-19	2	: This section would delve into the educational system and practices of ancient Sparta, focusing on its emphasis on physical fitness, military training, and obedience.	Education System among the Spartans		Monthly exams

22-21	2	: This segment would explore the various methodologies and approaches used to research and study the history of education, including archival research, comparative studies, and oral histories.	Research Methods in History of Education		Homework assignments
23	2	This section would examine the characteristics, trends, and challenges of education in the modern era, considering the influence of technology, globalization, and changing societal needs.	Modern Education:		Daily exams
24	2	This segment would explore the educational practices and systems prevalent in ancient civilizations, such as Mesopotamia, Egypt, Greece, and Rome.	Education in Ancient Times:		Reports

25	2	: This section would examine the educational landscape during the medieval period, including the role of monasteries, universities, and guilds in disseminating knowledge and shaping educational practices.	Education in the Middle Ages		Monthly exams
26	2	: This segment would explore the educational principles, practices, and institutions associated with Christianity, emphasizing its focus on religious instruction, moral development, and character formation.	Christian Education		Homework assignments
27	2	: This section would delve into the educational system and philosophies of Islam, highlighting	Islamic Education		Daily exams

		its emphasis on Quranic studies, Islamic law, and the pursuit of knowledge.			
28	2	: This segment would explore the various educational institutions established in Islamic societies, such as madrasas, mosques, and libraries, and their role in preserving and transmitting knowledge.	Educational Institutions in Islam		Reports
29	2	: This section would examine the core principles and values that underpin Islamic education, emphasizing the importance of faith, knowledge, character, and social responsibility.	Principles of Islamic Education		Monthly exams
29	2	: This segment would explore the historical roots and influences that have shaped educational practices and philosophies	Historical Foundations of Education		Homework assignments

		throughout time, including philosophical, religious, and social movements.			
30	2	This section would examine the social,	Social Foundations of Education:		Daily exams

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Book: Foundations of Education
Main references (sources)	Foundations of Modern and Contemporary Education
Recommended books and references (scientific journals, reports...)	Academic Journals, Periodicals, Research, and Studies in the Field of Specialization: This segment highlights the importance of staying informed about current research and developments in the field of education. It emphasizes the value of utilizing academic

	journals, periodicals, and scholarly research to inform one's teaching practices and professional development.
Electronic References, Websites	Various Communication Platforms (Google, YouTube, etc.): This phrase acknowledges the role of technology and online resources in accessing information, connecting with colleagues, and engaging in professional learning. It encourages educators to utilize various platforms like Google, YouTube, and educational websites to enhance their knowledge and skills.

Course Description Form

1. Course Name:	
<i>Developmental and Educational Psychology</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Ashwaq Jabbar Hammoud</i>	
<i>Email: :ashwaq.jabar@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"><i>• The educational psychology course aims to gain theoretical knowledge to</i>

			<i>explain human behavior through studying psychological theories and their opinions in explaining individual behavior in educational situations, developing students' cognitive abilities as well as developing them in the physical, social and emotional aspects in the various stages of development.</i>		
9. Teaching and Learning Strategies					
<i>Strategy</i> <i>Discussion</i> <i>Teamwork</i>		<i>1- Explaining the scientific material in detail and accurately during the lecture</i> <i>2- Writing reports on main topics</i> <i>3- Open discussions</i>			
10.Course Structure					
<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	2	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage</i>	Educational psychology	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>

		<i>of understanding behavior</i> <i>C- Controlling human behavior</i>			<i>Weekly, monthly, daily exams and the end of the year exam.</i>
2	2	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i> <i>C- Controlling human behavior</i>	<i>Introduction to psychology</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>
3	2	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is</i>	<i>Introduction to psychology</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>

		<i>the next stage of understanding behavior</i> C- <i>Controlling human behavior</i>			
4	2	-Cognitive objectives -I understand behavior B- Predicting behavior. <i>Prediction is the next stage of understanding behavior</i> C- Controlling human behavior	<i>Descriptive method and experimental method</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>
5	2	-Cognitive objectives -I understand behavior	<i>Sosometric measurement and the clinical approach</i>	<i>The lecturer gives detailed</i>	<i>Weekly, monthly, daily exams and the end</i>

		<p><i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>		<p><i>theoretical lectures</i></p>	<p><i>of the year exam.</i></p>
6	2	<p><i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>	<p><i>Sample, psychological research</i></p>	<p><i>The lecturer gives detailed theoretical lectures</i></p>	<p><i>Assign grades to the homework assignments and reports assigned to them</i></p>

7	2	<p><i>-Cognitive objectives</i></p> <p><i>-I understand behavior</i></p> <p><i>B- Predicting behavior.</i></p> <p><i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>	<p><i>tools, and characteristics of scales</i></p>	<p><i>The lecturer gives detailed theoretical lectures</i></p>	<p><i>Weekly, monthly, daily exams and the end of the year exam.</i></p>
8	2	<p><i>-Cognitive objectives</i></p> <p><i>-I understand behavior</i></p> <p><i>B- Predicting behavior.</i></p> <p><i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling</i></p>	<p><i>Questionnaire and interview</i></p>	<p><i>The lecturer gives detailed theoretical lectures</i></p>	<p><i>Assign grades to the homework assignments and reports assigned to them</i></p>

		<i>human behavior</i>			
<i>9</i>	<i>2</i>	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i> <i>C- Controlling human behavior</i>	<i>Standards, tests, observation</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>
<i>10</i>	<i>2</i>	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i>	<i>Structural, functional, and connectionist school</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>

		<i>C- Controlling human behavior</i>			
<i>11</i>	<i>2</i>	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior</i>	<i>Hypothesis, factor analysis, psychoanalysis, and Freudianism</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>
<i>12</i>	<i>2</i>	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of</i>	<i>Behaviorism, new behaviourism, gestalt, cognitive, humanism</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>

		<i>understanding behavior C- Controlling human behavior</i>			
13	2	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior</i>	<i>Motivation: its definition, importance, and theories</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>
14	2	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is</i>	<i>Emotion, its definition, types, and theories</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports</i>

		<i>the next stage of understanding behavior</i> C- <i>Controlling human behavior</i>			<i>assigned to them</i>
15	2	-Cognitive objectives -I understand behavior B- Predicting behavior. <i>Prediction is the next stage of understanding behavior</i> C- Controlling human behavior	<i>Definition of tendencies, their manifestations, interpretation, and measurement methods</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>
16	2	-Cognitive objectives -I understand behavior	<i>sentiment scales, Trends, their definition, components</i>	<i>The lecturer gives detailed</i>	<i>Assign grades to the homework assignments</i>

		<p><i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>		<p><i>theoretical lectures</i></p>	<p><i>and reports assigned to them</i></p>
17	2	<p><i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>	<p><i>characteristics, methods of measuring them, and methods of their change</i></p>	<p><i>The lecturer gives detailed theoretical lectures</i></p>	<p><i>Weekly, monthly, daily exams and the end of the year exam.</i></p>
18	2	<p><i>-Cognitive objectives</i></p>	<p><i>White classification</i></p>	<p><i>The lecturer</i></p>	<p><i>Assign grades to</i></p>

		<p><i>-I understand behavior</i></p> <p><i>B- Predicting behavior.</i></p> <p><i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>		<p><i>gives detailed theoretical lectures</i></p>	<p><i>the homework assignments and reports assigned to them</i></p>
19	2	<p><i>-Cognitive objectives</i></p> <p><i>-I understand behavior</i></p> <p><i>B- Predicting behavior.</i></p> <p><i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>	<p><i>To define inclinations, trends, and values</i></p>	<p><i>The lecturer gives detailed theoretical lectures</i></p>	<p><i>Weekly, monthly, daily exams and the end of the year exam.</i></p>

20	2	<p>-Cognitive objectives</p> <p>-I understand behavior</p> <p>B- Predicting behavior.</p> <p>Prediction is the next stage of understanding behavior</p> <p>C- Controlling human behavior</p>	<p>Definition of intelligence, theories of intelligence, methods of research into intelligence, types of intelligence tests</p>	<p>The lecturer gives detailed theoretical lectures</p>	<p>Assign grades to the homework assignments and reports assigned to them</p>
21	2	<p>-Cognitive objectives</p> <p>-I understand behavior</p> <p>B- Predicting behavior.</p> <p>Prediction is the next stage of understanding behavior</p> <p>C- Controlling</p>	<p>Mental abilities: attention and perception</p>	<p>The lecturer gives detailed theoretical lectures</p>	<p>Weekly, monthly, daily exams and the end of the year exam.</p>

		<i>human behavior</i>			
22	2	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i> <i>C- Controlling human behavior</i>	<i>Mental abilities: memory and thinking</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>
23	2	<i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i>	<i>Learning theories</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>

		<i>C- Controlling human behavior</i>			
<i>24</i>	<i>2</i>	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior</i>	<i>self education</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>
<i>25</i>	<i>2</i>	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of</i>	<i>The term personality, its importance, dimensions, and theories</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>

		<i>understanding behavior C- Controlling human behavior</i>			
26	2	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior</i>	<i>Compatibility indicators and the importance of mental health</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>
27	2	<i>-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is</i>	<i>The most important problems of youth and adolescents</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Weekly, monthly, daily exams and the end of the year exam.</i>

		<i>the next stage of understanding behavior</i> C- <i>Controlling human behavior</i>			
28	2	-Cognitive objectives -I understand behavior B- Predicting behavior. <i>Prediction is the next stage of understanding behavior</i> C- Controlling human behavior	<i>Compatibility indicators and the importance of mental health</i>	<i>The lecturer gives detailed theoretical lectures</i>	<i>Assign grades to the homework assignments and reports assigned to them</i>
29	2	-Cognitive objectives -I understand behavior	<i>Compatibility indicators and the importance of mental health</i>	<i>The lecturer gives detailed</i>	<i>Weekly, monthly, daily exams and the end</i>

		<p><i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>		<p><i>theoretical lectures</i></p>	<p><i>of the year exam.</i></p>
30	2	<p><i>-Cognitive objectives</i> <i>-I understand behavior</i> <i>B- Predicting behavior.</i> <i>Prediction is the next stage of understanding behavior</i></p> <p><i>C- Controlling human behavior</i></p>	<p><i>Compatibility indicators and the importance of mental health</i></p>	<p><i>The lecturer gives detailed theoretical lectures</i></p>	<p><i>Assign grades to the homework assignments and reports assigned to them</i> <i>Weekly, monthly, daily exams and the end of the year exam.</i></p>
<p><i>11.Course Evaluation</i></p>					

Score distribution: Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, monthly, or written .tests and reports...etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	General psychology book, Dr. Saleh Al-Dahri, Dr. Wahib Al-Kubaisi
Recommended books and references (scientific journals, reports...)	Psychology, 0107, Robert Sessions and Woodworth, translated by Abdul Hamid Kazem
Electronic References, Websites	- /product/com.aialibrary://https/category

Course Description Form

1. Course Name:	
<i>Arabic Language</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025-2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>1 hours per week / 2 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Ragaad Ahmed</i> <i>Email: ragadahmmad1996@gmail.com</i>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"><i>The student should be able to use the language correctly in writing and in communicating with others.</i>

	<ul style="list-style-type: none"> Developing the student's literary taste so that he understands the aesthetic aspects of speech styles, meanings, and images.
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9. Teaching and Learning Strategies

Strategy	<p><i>Dialogue strategy</i></p> <p><i>Discussion strategy</i></p>
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10. Course Structure

Weeks	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Defining the noun, verb, and letter, and indicating the signs of each section	<p>Word sections</p> <p>Surat Al-Dhuha and Al-Ikhlās, a study of their linguistic and grammatical aspects</p> <p>The subject and the predicate</p>	<p>Holding research seminars in which some topics are explained and analyzed and how to</p>	<p>Submitting reports. Daily, semester and final tests.</p>
2					
3		It dealt with the linguistic aspect, the syntactic aspect, and the semantic aspect			
4					
5		It dealt with the linguistic aspect, the syntactic aspect, and the semantic aspect			

6	Kan and her sisters,	Initiation	address	
7	and if and her sisters,	copies	them.	
8	nor does it negate sex		Theoreti	
9	Identify their	The subject	cal	
10	concepts, types and	and the deputy	lecture +	
11	provisions	subject	methods	
12	Recognizing their		of	
13	concepts, types, direct	The direct	presenta	
14	object, and types of	object and the	tion,	
15	absolute object	absolute object	dialogue	
16			and	
17	How to differentiate	Number and its	discussio	
18	between the hamzat al-	provisions	n	
19	wasl and the hamzat			
20	al-qat`	How to write		
21	Introduction to	hamza		
22	literature, its			
23	importance and	Literature and		
24	function	texts		
25	Theatrical lyric	Elements of		
26	Educational	literature		
27	representation	Hair types		
28	A theoretical			
29	introduction to ancient	Examples of		
30	poetry	ancient poetry		
31	The poem I wish my			
32	poetry was a model			
33				

24	An example of his poetry	The poet Malik bin Al-Rib		
25	An example of his poetry	The poet Abu Firas Al-Hamdani		
26	An example of his poetry	Al-Sharif Al-Radi		
27	An example of his poetry	Abu Alaa Al-Maarri		
28	An example of his poetry	Lisan al-Din ibn al-Khatib		
29	An example of his poetry	Examples of modern poetry		
30	A theoretical introduction to modern poetry	Jaafar Al-Hilli		
31	An example of his poetry	Abu Al-Qasim Al-Shabi jeweler		
32	An example of his poetry	Ahmed Al-Safi		
33	An example of his poetry	Elijah Abu Madi		
34	An example of his poetry	Badr Shaker Sayyab		
		Nazik al-Malaika		

11. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the

:student, such as

Daily, everyday setting

.Oral, monthly or written tests and reports...etc

,First semester 20 percent

.Chapter Two, twenty percent

,Daily activity ten degrees

The final exam is fifty marks.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Arabic language and grammar books
Main references (sources)	Special methods in education for teaching the Arabic language / Author nbsp Al-Ibrashi Muhammad Attia Author Place of publication nbsp Cairo
Recommended books and references (scientific journals, reports...)	Exchange written by Dr. Hatem Al-Damen
Electronic References, Websites	

Course Description Form

1. Course Name:	
<i>English Language</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025-2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>1 hour per week / 2 units</i>	
7. Course administrator's name (mention all, if more than one name)	
 <i>Name: Ahmed Kadhim Shanan</i> <i>Email: ahmed.shanan@uobasrah.edu.iq</i> 	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"><i>Enabling students to improve listening, speaking writing, and reading skills.</i><i>Acquiring self-learning skills for the language</i>
9. Teaching and Learning Strategies	

<i>Strategy</i>	<ul style="list-style-type: none"> • <i>Presentations</i> • <i>Listen to video clips through display screens</i> • <i>Adopting the method of discussion with students through translation of clips and conversation</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	1		<i>Present Simple Tense: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
2	1		<i>Present Continuous Tense: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
3	1		<i>Present Perfect Tense: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
4	1		<i>Past Simple Tense: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
5	1		<i>Past Continuous Tense: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
6	1		<i>Past Perfect Tense: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
7	1		<i>Future Simple Tense: Part 1</i>	<i>Lectures</i>	<i>Exams</i>
8	1		<i>Future Simple Tense: Part 2</i>	<i>Lectures</i>	<i>Exams</i>
9	1		<i>Articles and nouns: (a/an and the)</i>	<i>Lectures</i>	<i>Exams</i>
10	1		<i>Countable and uncountable: Exercises</i>	<i>Lectures</i>	<i>Exams</i>

11	1		<i>Singular and Plural Nouns: Part 1</i>	<i>Lectures</i>	<i>Exams</i>
12	1		<i>Singular and Plural Nouns: Part 2</i>	<i>Lectures</i>	<i>Exams</i>
13	1		<i>Adjectives and adverbs – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
14	1		<i>Comparative 1, 2, 3: – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
15	1		<i>Conjunction: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
16	1		<i>Prepositions: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
17	1		<i>Modals 1: Can – Could – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
18	1		<i>Modals 2: Must – May – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
19	1		<i>Modals 3: Have to –Would: Exercises</i>	<i>Lectures</i>	<i>Exams</i>
20	1		<i>Modals: if – wish: Part 4 – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
21	1		<i>Questions: Part 1 – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
22	1		<i>Questions: Part 2 – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
23	1		<i>Questions: Part 3 – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
24	1		<i>Auxiliary Verbs: Part 1 – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
25	1		<i>Auxiliary Verbs: Part 2 – Exercises</i>	<i>Lectures</i>	<i>Exams</i>
26	1				

27	1		<i>Relative Clauses 1 Exercises</i>		
28	1		<i>Relative Clauses 2 Exercises</i>		
29	1		<i>Relative Clauses 3 Exercises</i>		
30	1		<i>Passive 1: Exercises</i>		
			<i>Passive 2: Exercises</i>		
11.Course Evaluation					
<p><i>homework</i></p> <p><i>Monthly exams</i></p> <p><i>Mid-year and final-year exams</i></p>					
12.Learning and Teaching Resources					
<i>Required textbooks (curricular books, if any)</i>			<ul style="list-style-type: none"> ENGLISH. GRAMMAR. <i>IN USE</i>. <i>Fifth Edition. Raymond Murphy.</i> <i>Basic English Grammer By ANNE SEATON</i> 		
<i>Main references (sources)</i>			<ul style="list-style-type: none"> <i>Essential-English BY C.E. ECKERSLEY</i> <i>English Vocabulary in Use: Vocabulary Reference and Practice: with Answers</i> 		
<i>Recommended books and references (scientific journals, reports...)</i>					
<i>Electronic References, Websites</i>					

Course Description Form

1. Course Name:	
<i>Democracy and Human Rights</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025-2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>1 hour per week / 2 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Name: Zainab Hamza Abbas</p> <p>Email: : ceps.lect.067@avicenna.uobasrah.edu.iq</p>	
8. Course Objectives	
<p style="text-align: center;">Course Objectives</p> <p><i>Explaining human rights, their importance, and the extent of their impact on humans in particular and on society in general</i></p>	<ul style="list-style-type: none"> • <i>What are the necessary rights of the</i> • <i>Asan</i> • <i>and how are the heavenly laws recommended for them?</i> • <i>Explaining the most important rights</i> • <i>guaranteed by Islam to humans.</i>

	<ul style="list-style-type: none"> • <i>Human rights across ancient civilizations.....</i>
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9. Teaching and Learning Strategies

<p><i>Strategy</i></p> <p><i>Dialogue and discussion</i></p>	<p><i>The learning strategy involves the students' participation with the teacher in presenting many questions</i></p> <p><i>The rights and freedoms that are important to humans and discuss them directly with the students, and express their opinions about those rights and the extent of their importance to them.</i></p>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	1	Students discuss and express their opinions	The concept of human rights	Dialogue and discussion	✓ Homework assignments ✓ Daily exams ✓ Reports ✓ Monthly exams
2	1	Students discuss and express their opinions	Stages of human rights development	Dialogue and discussion	✓ Homework assignments
3	1	Students discuss and express their opinions	The concept of human rights	Dialogue and discussion	✓ Daily exams

4	1	Students discuss and express their opinions	Human rights in civilization Egyptian	Dialogue and discussion	✓ Reports
5	1	Students discuss and express their opinions	Human rights in civilization Greek and Roman	Dialogue and discussion	✓ Monthly exams
6	1	Students discuss and express their opinions	Human rights in the Middle Ages	Dialogue and discussion	✓ Homework assignments
7	1	Students discuss and express their opinions	Types of human rights	Dialogue and discussion	✓ Daily exams
8	1	Students discuss and express their opinions	Characteristics and advantages of human rights	Dialogue and discussion	✓ Reports
9	1	Students discuss and express their opinions	The most important rights guaranteed by Islam For human	Dialogue and discussion	✓ Monthly exams
10	1	Students discuss and express their opinions	The message of rights by Imam Zain Al-Abidin (PBUH)	Dialogue and discussion	✓ Homework assignments
11	1	Students discuss and express their opinions Students discuss and express their opinions	The most important rights mentioned by the Imam (peace be upon him)	Dialogue and discussion	✓ Daily exams

12	1	Students discuss and express their opinions	Universal Declaration of Human Rights	Dialogue and discussion	✓ Reports
13	1	Students discuss and express their opinions	Comparison between the rights message and the declaration Universal Human Rights	Dialogue and discussion	✓ Monthly exams
14	1	Students discuss and express their opinions	Women's rights	Dialogue and discussion	✓ Homework assignments
15	1	Students discuss and express their opinions	Child Rights	Dialogue and discussion	✓ Daily exams
16	1	Students discuss and express their opinions	The concept of freedom	Dialogue and discussion	✓ Reports
17	1	Students discuss and express their opinions	Stages of development of freedom	Dialogue and discussion	✓ Monthly exams
18	1	Students discuss and express their opinions	Types of freedoms	Dialogue and discussion	✓ Homework assignments
19	1	Students discuss and express their opinions	The Islamic concept of freedom	Dialogue and discussion	✓ Daily exams

20	1	Students discuss and express their opinions	Manifestations of freedom	Dialogue and discussion	✓ Reports
21	1	Students discuss and express their opinions	Effects of freedom	Dialogue and discussion	✓ Monthly exams
22	1	Students discuss and express their opinions	Sources of freedoms	Dialogue and discussion	✓ Homework assignments
23	1	Students discuss and express their opinions	Freedom through the Universal Declaration For human rights	Dialogue and discussion	✓ Daily exams
24	1	Students discuss and express their opinions	Democracy	Dialogue and discussion	✓ Reports
25	1	Students discuss and express their opinions	The Islamic concept of democracy	Dialogue and discussion	✓ Monthly exams
26	1	Students discuss and express their opinions	Types of democracy	Dialogue and discussion	✓ Homework assignments
27	1	Students discuss and express their opinions	Types and sections of the democratic system	Dialogue and discussion	✓ Daily exams

28	1	Students discuss and express their opinions	Characteristics of a democratic system	Dialogue and discussion	✓ Reports
29	1	Students discuss and express their opinions	Advantages of the democratic system	Dialogue and discussion	✓ Monthly exams
30	1	Students discuss and express their opinions	Disadvantages of the democratic system	Dialogue and discussion	✓ Homework assignments

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Binding human rights + binding freedom and democracy
Main references (sources)	The Holy Qur'an - the Noble Prophet's Sunnah
Recommended books and references (scientific journals, reports...)	Hafez Alwan Al-Dulaimi, human rights Message Center, Social Rights in Isla
Electronic References, Websites	Message Center, Social Rights in Islam



Description of the academic program

University of Basrah

College of Education for Pure Sciences

Department of Computer Science

Second Stage

Course Description Form

1. Course Name:	
<i>Database structure and Algorithm</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
 Name: <i>Rana J. Mohammed</i> Email: <i>rana.mohammed@uobasrah.edu.iq</i>	
8. Course Objectives	
Course Objectives	<i>1- The student will be familiar with the concept of data structures and their uses</i>

	<p><i>2- The student will learn the computer terminology related to data structures</i></p> <p><i>3- The student should describe the steps for solving the program</i></p> <p><i>4- The student explains the different methods of solving using different graphic structures</i></p> <p><i>5- The student practically applies different graphic structures</i></p>
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9. Teaching and Learning Strategies

<i>Strategy</i>	<p><i>1- Preparing teaching staff for the purpose of qualifying them to teach computer science in schools and institutes affiliated with the Ministry of Education</i></p> <p><i>2- Developing students' mental mathematical abilities so that they keep pace with the paths and levels of technical and scientific development in the world</i></p> <p><i>3- A field link between intellectual and sports nutrition through scientific knowledge and its reflection on the student's field behavior</i></p> <p><i>4- Explaining in theoretical and practical form the interconnection and marriage between the computer and the rest of the scientific branches</i></p> <p><i>5- Preparing teaching staff for the purpose of qualifying them to teach computer science in schools and institutes affiliated with the Ministry of Education</i></p>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Introduction to data structure -Non primitive data structure -Linear data structure	Lecture and practical application	Discussion and exams
2	3 theoretical + 2 practical	For the student to practically apply different graphic structures	-Array -One dimensional arrays	Lecture and practical application	Discussion and exams
3	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Two - dimensional arrays	Lecture and practical application	Discussion and exams

4	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Functions -use of function -Function details -function calling	Lecture and practical application	Discussion and exams
5	3 theoretical + 2 practical	For the student to practically apply different graphic structures	-Recursively Example on recursively functions	Lecture and practical application	Discussion and exams
6	3 theoretical + 2 practical	For the student to practically apply different graphic structures	- Functions overloading - Function templates	Lecture and practical application	Discussion and exams
7	3 theoretical + 2 practical	For the student to practically apply different graphic structures	String and Structure -Functions and purpose	Lecture and practical application	Discussion and exams

8	3 theoreti cal + 2 practica l	For the student to practically apply different graphic structures	-Examples on use string functions	Lecture and practical applicatio n	Discussion and exams
9	3 theoreti cal + 2 practica l	For the student to practically apply different graphic structures	Structure definition -Structures arrays	Lecture and practical applicatio n	Discussion and exams
10	3 theoreti cal + 2 practica l	For the student to practically apply different graphic structures	Pointers -Address of operator (& Deference - operator(*)	Lecture and practical applicatio n	Discussion and exams
11	3 theoreti cal + 2 practica l	For the student to practically apply different graphic structures	Pointers and arrays	Lecture and practical applicatio n	Discussion and exams
12	3 theoreti cal + 2	For the student to practically apply different	-Linked list -Types of linked lists	Lecture and practical	Discussion and exams

	practical	graphic structures	-Linked list implementation in c++	application	
13	3 theoretical + 2 practical	For the student to practically apply different graphic structures	-Operations on single linked list -Linked list Examples -Comparison between array and linked list	Lecture and practical application	Discussion and exams
14	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Review	Lecture and practical application	Discussion and exams
15	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Exam	Lecture and practical application	Discussion and exams

16	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Stack - Implementation -Analysis of stacks -push operation -pop operation -top operation	Lecture and practical application	Discussion and exams
17	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Stack examples	Lecture and practical application	Discussion and exams
18	3 theoretical + 2 practical	For the student to practically apply different graphic structures	stack operations Postfix -Infix, prefix and	Lecture and practical application	Discussion and exams
19	3 theoretical + 2	For the student to practically apply different	Queue	Lecture and practical	Discussion and exams

	practical	graphic structures	-Basic operations on queue -Program	application	
20	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Sorting -Bubble sort -Selection sort -Insertion sort	Lecture and practical application	Discussion and exams
21	3 theoretical + 2 practical	For the student to practically apply different graphic structures	-Quick sort -Merge sort	Lecture and practical application	Discussion and exams
22	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Searching -Linear search -Binary search	Lecture and practical application	Discussion and exams
23	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Binary search an examples	Lecture and practical application	Discussion and exams

24	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Trees -Binary trees -Binary trees representation in c++	Lecture and practical application	Discussion and exams
25	3 theoretical + 2 practical	For the student to practically apply different graphic structures	-Tree traversals Insertion of - key in tree	Lecture and practical application	Discussion and exams
26	3 theoretical + 2 practical	For the student to practically apply different graphic structures	-Binary search in tree -Delete node in tree	Lecture and practical application	Discussion and exams
27	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Graphs -Basic operations on graph -Examples	Lecture and practical application	Discussion and exams

28	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Review	Lecture and practical application	Discussion and exams
29	3 theoretical + 2 practical	For the student to practically apply different graphic structures	Exam	Lecture and practical application	Discussion and exams

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Data Structures and Algorithms Alfred V. Aho, Bell Laboratories, Jersey Murray Hill, New John E. Hopcroft, Cornell University, Ithaca, New York Jeffrey D. Ullman, Stanford California University, Stanford,

<p>Recommended books and references (scientific journals, reports...)</p>	<p>Data structures and Algorithm Analysis in C++ Mark Allen Weiss , Florida International University , 2014</p>
<p>Electronic References, Websites</p>	

Course Description Form

1. Course Name:	
<i>Object oriented programing</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2026–2025</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Ghazwan A. Alali</i> <i>Email: ghazwan.alali@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<i>Study the basic concepts of entity programming and identify the basics of object programming work and how to take</i>

	<i>advantage of them and facilitate the reuse of code.</i> <i>Explain the principle of classes, how to define the objects of these classes and the use of many important principles that facilitate the programming process and make it more efficient.</i>				
9. Teaching and Learning Strategies					
Strategy		<ul style="list-style-type: none">• <i>Applying the theoretical aspect in practical laboratories by carrying out some</i>• <i>important scientific experiments that consolidate the information given in the</i>• <i>Using lectures by speaking to students and using Power Point slides and the blackboard</i>			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1		<i>Learn about the concept of Java program,</i>	<i>What is a Java program, the processing</i>	<i>Displaying it on a</i>	<i>Homework assignments</i>

		<i>the basic elements of a Java program</i>	<i>of a Java program, the basic elements of a Java program</i>	<i>display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Daily - exams</i> <i>Exams - Mid-term -</i>
<i>2</i>		<i>Learn about the concept of functions in java</i>	<i>User functions, benefits of using functions, predefined functions</i> <i>Using predefined functions in a program</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily - exams</i> <i>Exams - Mid-term -</i>
<i>3</i>		<i>Learn about the concept of functions in java</i>	<i>Functions that return a value and it's rules</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical</i>	<i>Homework assignments</i> <i>Daily - exams</i> <i>Exams - Mid-term -</i>

				<i>material in the laboratories</i>	
4		<i>Learn about the concept of functions in java</i>	<i>,and functions that do not return a value</i>	<i>Displaying it on a display screen.</i> 2- <i>Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
5		<i>Learn about the concept of Variables types</i>	<i>Variables types</i>	<i>Displaying it on a display screen.</i> 2- <i>Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
6		<i>Learn about the concept of string class</i>	<i>Strings class</i>	<i>Displaying it on a</i>	<i>Homework assignments</i>

		<i>and its functions</i>		<i>display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Daily - exams</i> <i>Exams - Mid-term -</i>
<i>7</i>		<i>Learn about the concept of string class and uses</i>	<i>Strings class</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily - exams</i> <i>Exams - Mid-term -</i>
<i>8</i>		<i>Learn about the concept of Classes</i>	<i>User-Defined Classes and ADTs</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in</i>	<i>Homework assignments</i> <i>Daily - exams</i> <i>Exams - Mid-term -</i>

				<i>the laboratories</i>	
9		<i>Learn about the concept of Classes and its Constructors</i>	<i>Constructors</i>	<i>Displaying it on a display screen. 2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments Daily - exams Exams - Mid-term -</i>
10		<i>Learn about the concept of Classes and its objects</i>	<i>Variable Declaration and Object Instantiation</i>	<i>Displaying it on a display screen. 2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments Daily - exams Exams - Mid-term -</i>
11		<i>Learn about the concept of Classes and its</i>	<i>The class members, language- based</i>	<i>Displaying it on a display screen.</i>	<i>Homework assignments Daily - exams</i>

		<i>Constructors and functions</i>	<i>operations that affect classes, functions and classes</i>	<i>2- Applying the theoretical material in the laboratories</i>	<i>Exams - Mid-term -</i>
<i>12</i>		<i>Learn about the concept of feature of Constructor</i>	<i>constructor functions , using constructor functions , copy constructor , classes and function , static members of a class</i>	<i>Displaying it on a display screen. 2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments Daily - exams Exams - Mid-term -</i>
<i>13</i>		<i>Learn about the concept of This reserving word</i>	<i>this</i>	<i>Displaying it on a display screen. 2- Applying the theoretical material in</i>	<i>Homework assignments Daily - exams Exams - Mid-term -</i>

				<i>the laboratories</i>	
<i>14</i>		<i>Learn about the concept of Inner Classes and its types</i>	<i>Inner Classes</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
<i>15</i>		<i>Learn about the concept of Abstraction and encapsulation</i>	<i>Abstraction and encapsulation</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
<i>16</i>		<i>Learn about the concept of Inheritance</i>	<i>Inheritance</i>	<i>Displaying it on a display screen.</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i>

				<p><i>2- Applying the theoretical material in the laboratories</i></p>	<p><i>Exams -</i></p> <p><i>Mid-term -</i></p>
17		<p><i>Learn about the concept of Inheritance and its uses</i></p>	<p><i>Inheritance</i></p>	<p><i>Displaying it on a display screen.</i></p> <p><i>2- Applying the theoretical material in the laboratories</i></p>	<p><i>Homework assignments</i></p> <p><i>Daily -</i></p> <p><i>exams</i></p> <p><i>Exams -</i></p> <p><i>Mid-term -</i></p>
18		<p><i>Learn about the concept of Polymorphism</i></p>	<p><i>Polymorphism</i></p>	<p><i>Displaying it on a display screen.</i></p> <p><i>2- Applying the theoretical material in the laboratories</i></p>	<p><i>Homework assignments</i></p> <p><i>Daily -</i></p> <p><i>exams</i></p> <p><i>Exams -</i></p> <p><i>Mid-term -</i></p>

19		<i>Learn about the concept of Abstract</i>	<i>Abstract Methods and Classes</i>	<i>Displaying it on a display screen.</i> 2- <i>Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
20		<i>Learn about the concept of Interfaces</i>	<i>Interfaces</i>	<i>Displaying it on a display screen.</i> 2- <i>Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
21		<i>Learn about the concept of Interfaces</i>	<i>Interfaces example</i>	<i>Displaying it on a display screen.</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>

				<i>2- Applying the theoretical material in the laboratories</i>	
22		<i>Learn about the concept of Exception</i>	<i>User-defined Exception</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily - exams</i> <i>Exams - Mid-term -</i>
23		<i>Learn about the concept of Exception</i>	<i>User-defined Exception</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily - exams</i> <i>Exams - Mid-term -</i>

24		<i>Learn about the concept of GUI</i>	<i>Creating Window JFrame</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
25		<i>Learn about the concept of GUI</i>	<i>graphic user interfaces</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>
26		<i>Learn about the concept of GUI and how to create programs</i>	<i>graphic user interfaces 2</i>	<i>Displaying it on a display screen.</i>	<i>Homework assignments</i> <i>Daily -</i> <i>exams</i> <i>Exams -</i> <i>Mid-term -</i>

				<i>2- Applying the theoretical material in the laboratories</i>	
27		<i>Learn about the concept of GUI and how to create programs</i>	<i>graphic user interfaces 3</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>Exams -</i> <i>Mid-term -</i>
28		<i>Learn about the concept of GUI and how to create programs</i>	<i>graphic user interfaces 4</i>	<i>Displaying it on a display screen.</i> <i>2- Applying the theoretical material in the laboratories</i>	<i>Homework assignments</i> <i>Daily -</i> <i>Exams -</i> <i>Mid-term -</i>

29		<i>Learn about the concept of GUI and how to create programs</i>	<i>graphic user interfaces 5</i>	<i>Displaying it on a display screen.</i> 2- Applying the theoretical material in the laboratories	<i>Homework assignments</i> Daily - exams Exams - Mid-term -
30		<i>Learn about the concept of GUI and how to create programs</i>	<i>graphic user interfaces 5</i>	<i>Displaying it on a display screen.</i> 2- Applying the theoretical material in the laboratories	<i>Homework assignments</i> Daily - exams Exams - Mid-term -

11.Course Evaluation

The subject's grade is (100) distributed over the following aspects:

- Midterm exam + Lab exam 45%**
- Daily exams + Report 5%**
- Final lab exam: 15%**
- Final exam: 35%**

• Total score: 100%	
<i>12.Learning and Teaching Resources</i>	
Required textbooks (curricular books, if any)	
Main references (sources)	An Introduction to Object-Oriented Programming with Java Object-Oriented Programming and Java An Introduction to Object-Oriented Programming with Java™
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
<i>Numerical analysis.</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Dr. Takia Ahmed Jawad Al-Griffi. Email: takia.ahmed@uobasrah.edu.iq</p>	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none">• <i>Enabling the student to solve problems related to numerical analysis.</i>

	<ul style="list-style-type: none"> • <i>Enable the student to benefit from the material in scientific applications.</i> • <i>Familiarity with designing and writing programs related to numerical analysis.</i> • <i>Familiarity with designing, writing, and developing algorithms related to theoretical subjects.</i> • <i>Enable the student to work in a group to solve problems associated with numerical analysis programs.</i>
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9. Teaching and Learning Strategies

<i>Strategy</i>	<i>1- Educational strategy, collaborative concept planning.</i> <i>2- Brainstorming education strategy.</i> <i>3-Education Strategy of Notes Series.</i>
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10.Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1 2 3 4 5 6 7 8 9 10	6	Enabling the student to solve problems related to numerical analysis.	Numerical analysis	1- Explaining the scientific material to students in detail. 2- Students' participation in solving	Weekly, monthly, daily, and written exams, and the end-of-year exam.

11				mathematical problems.	
12					
13					
14				3- The	
15				student's	
vacation				familiarity	
16				with	
17				designing,	
18				writing, and	
19				developing	
19				algorithms	
20				related to the	
21				theoretical	
22				subject.	
23					
24					
25				4- Enabling	
26				the student to	
27				solve	
28				problems	
29				related to	
30				numerical analysis.	

11.Course Evaluation

Distribution is as follows: 15 marks for the practical aspect and 35 marks for the theoretical aspect. Monthly and daily exams for the first semester. 15 marks for the practical aspect and 35 marks for the theoretical aspect. Monthly and daily exams for the second semester. 50 marks for final exams.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	مقدمة في التحليل العددي (د. كاظم محمد حسين اللامي).
Main references (sources)	مقدمة في التحليل العددي ترجمة (د. كاظم اللامي و د. منتهى جرجيس). مبادئ التحليل العددي (د. محمد علي صادق السيفي).

<p>Recommended books and references (scientific journals, reports...)</p>	<p>Hildbrand D. B. (introduction of .numerical analysis) Froberg C. E. (introduction of numerical . analysis) Burden (numerical analysis).</p>
<p>Electronic References, Websites</p>	<p>https://zlibrary-asia.se/ /https://www.researchgate.net</p>

Course Description Form

1. Course Name:	
<i>Database</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
 <i>Name: Ali A. Abed Ali</i> <i>Email: alialsawad@uobasrah.edu.iq</i>	
8. Course Objectives	
Course Objectives	<i>The goal of studying databases is to offer introduction to database management systems, with an emphasis on how to organize, maintain, and retrieve information.</i>

	- efficiently and effectively - from a database management system.
9. Teaching and Learning Strategies	
Strategy	<p>A- Cognitive objectives:</p> <ul style="list-style-type: none"> • Introduction to database management systems • Design an integrated database that includes a number of tables, queries, and reports • Linking the components of the rule with different types of relationships • Design visual interfaces that manage the database • Apply a number of SQL instructions in searching and retrieving data <p>B- Skills objectives for the course:</p> <ul style="list-style-type: none"> • Familiarity with designing and developing programs related to databases • Familiarity with writing and developing algorithms related to databases • Enabling the student to solve problems associated with database management programs • Enable the student to work within a group to solve problems related to database programs <p>Teaching and learning methods</p> <ul style="list-style-type: none"> • Providing the student with basic and secondary topics related to database management systems • Translating theoretical topics and vocabulary related to database management systems into computer programs

- *Asking the student to use computer programs related theoretical vocabulary*

10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1 - 2	4	Introduction to Access 2010, the first types of access objects, basic database concepts, opening a database, components of a database, what are accounts, sayings and keys? What are relationships? Designing a Database, Tips on Choosing Different types, Differentiating the Database, Its database, Modifying It, and the Table in Design View	Introduction of Database and Data Analyses. Components of a Database System	Lectures	Exams

3 - 4	4	rt, search, and filter ta in a datasheet. mport and export data	Data Models	Lectures	Exams
5 - 7	6	reate tables and protect er-specific data, create oes of queries, such as ect query, create a ery in Design view, w the query, edit a ery, work with ultiple related tables, rk with query datasheets, save queries.	Integrity Rules. Relationships within the Relational Database. The Entity Relationship Model (ERM)	Lectures	Exams
8 - 10	6	sign and use forms d form basics, modify sting forms, fully nfigure the form, store er-specific forms, eate controls that play text, numbers, d dates, choose fonts, ors, and other corative touches, add ts, boxes, and ckgrounds, and rform calculations in forms and subforms.	Forms Designing, Building, Editing & Used it. Also, Making controls objects, for multiple tasks, beside forms format styles	Lectures	Exams

10 - 11	4	ormalizing and normalizing database tables	Normalization of Database Tables, De-normalization	Lectures	Exams
12 - 13	4	roduction to defining SQL commands	Introduction to SQL, Data Definition Commands	Lectures	Exams
14 - 16	6	rowse data types, create table structures, SQL constraints, SQL indexes	Data Types, Creating Table Structures, SQL Constraints, SQL Indexes	Lectures	Exams
17-18	4	hat are the data processing commands and their application	Data Manipulation Commands	Lectures	Exams
19	2	plain the concepts of logical operations: AND, OR, and NOT	Logical Operators: AND, OR, and NOT, Special Operators	Lectures	Exams
20-22	6	arn how to perform dates, copy parts of	Advanced Data Updates,	Lectures	Exams

		ables, add primary and foreign key mappings, and delete a table from the database	Copying Parts of Tables, Adding Primary and Foreign Key Designations, Deleting a Table from the Database		
23-24	4	explain aggregation functions and data aggregation	Aggregate Functions, Grouping Data	Lectures	Exams
25-26	4	explain operations on relational groups	Relational Set Operators	Lectures	Exams
27-28	4		SQL Join Operators	Lectures	Exams
29-30	4	discussing projects and reviewing the material before the final exam	Project & Review	Lectures	Exams

11.Course Evaluation

**Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports
etc**

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Database Systems: Design, Implementation, and Management, Ninth Edition, By Carlos Coronel, Steven Morris, and Peter Rob, 2011.
Main references (sources)	1. Silberschatz, Korth, “Data base System Concepts”, 4th ed., McGraw hill, 2006. 2. Peter Rob and Carlos Coronel, Database Systems-Design, Implementation and Management (7/e), Cengage Learning, 2007.
Recommended books and references (scientific journals, reports...)	1. Introduction Database Concepts and Microsoft Acc 20
Electronic References, Websites	

Course Description Form

1. Course Name:	
<i>Computational Theory</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>3 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Oday J. Alfuraiji</i> <i>Email: odayalfuraiji@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<i>This course emphasizes computability and computational complexity theory. Topics include regular and context-free languages.</i>

	<i>languages, decidable and undecidable problems, reducibility, recursive function theory, time and space measures on computational completeness, hierarchy theorems, inherently complex problems,</i>
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9. Teaching and Learning Strategies

<i>Strategy</i>	<i>Providing the student with primary and secondary topics related to computational theory design.</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	3	Obtaining knowledge of mathematical methods and preparation for design	Introduction	Lecture	Exam

2	3	Obtaining knowledge of mathematical methods and preparation for design	Sets and operations	Lecture	Exam
3	3	Obtaining knowledge of mathematical methods and preparation for design	Elementary concepts	Lecture	Exam
4	3	Obtaining knowledge of mathematical methods and preparation for design	Kleen colsure	Lecture	Exam
5	3	Obtaining knowledge of	Introduction to grammar	Lecture	Exam

		mathematical methods and preparation for design			
6	3	Obtaining knowledge of mathematical methods and preparation for design	Phrase structure grammar	Lecture	Exam
7	3	Obtaining knowledge of mathematical methods and preparation for design	Chomsky normal form	Lecture	Exam
8	3	Obtaining knowledge of mathematical methods and preparation for design	Bakups-nour notation BNF	Lecture	Exam

10-9-	3	Obtaining knowledge of mathematical methods and preparation for design	Derivation and languages	Lecture	Exam
11	3	Obtaining knowledge of mathematical methods and preparation for design	Derivation trees	Lecture	Exam
12	3	Obtaining knowledge of mathematical methods and preparation for design	Ambiguous CFL	Lecture	Exam
13	3	Obtaining knowledge of	Chomsky hierarchy	Lecture	Exam

		mathematical methods and preparation for design			
14	3	Obtaining knowledge of mathematical methods and preparation for design	Context free grammar	Lecture	Exam
15	3	Obtaining knowledge of mathematical methods and preparation for design	Regular grammar	Lecture	Exam
16	3	Obtaining knowledge of mathematical methods and preparation for design	Regular expression	Lecture	Exam

17	3	Obtaining knowledge of mathematical methods and preparation for design	Transition graph	Lecture	Exam
18	3	Obtaining knowledge of mathematical methods and preparation for design	automata	Lecture	Exam
19	3	Obtaining knowledge of mathematical methods and preparation for design	Basic machine	Lecture	Exam
20	3	Obtaining knowledge of	Finite state automata	Lecture	Exam

		mathematical methods and preparation for design			
21	3	Obtaining knowledge of mathematical methods and preparation for design	Finite state automata DFA NFA	Lecture	Exam
22	3	Obtaining knowledge of mathematical methods and preparation for design	Finite state automata as language acceptor	Lecture	Exam
23	3	Obtaining knowledge of mathematical methods and preparation for design	Finite state automata as language translator	Lecture	Exam

24	3	Obtaining knowledge of mathematical methods and preparation for design	Push down automata PDA	Lecture	Exam
25	3	Obtaining knowledge of mathematical methods and preparation for design	Push down automata PDA as language acceptor	Lecture	Exam
26	3	Obtaining knowledge of mathematical methods and preparation for design	Push down automata PDA as language translator	Lecture	Exam
27	3	Obtaining knowledge of	Turing machine	Lecture	Exam

		mathematical methods and preparation for design			
28	3	Obtaining knowledge of mathematical methods and preparation for design	Turing machine acceptor	Lecture	Exam
29-30	3	Obtaining knowledge of mathematical methods and preparation for design	Turing machine translator	Lecture	Exam

11.Course Evaluation

**Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports
etc**

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Introduction to Computer Theory 2nd Edition Daniel I. A.
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Main references (sources)	Introduction to Automata Theory, Languages, and Computation, 2/E, John E. Hopcroft, Rajeev Motwani, Jeffrey D.Ullman, Addison-Wesley 2001. ISBN 0-201 44124-1.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
<i>Leadership and Educational administration</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: D.r salman Fayyad Dowod Email: salmanfayyad@gmail.com	
8. Course Objectives	
Course Objectives	1- That students become familiar with the concept of educational administration and supervision.

		<p><i>2- That students become familiar with the theories of educational administration</i></p> <p><i>3- That students become aware of administrative patterns</i></p> <p><i>4- That students realize the role of educational administration in achieving the goals of the educational process</i></p> <p><i>5- That students become familiar with educational leadership styles.</i></p> <p><i>6- That students become familiar with the concept of educational supervision.</i></p>			
9. Teaching and Learning Strategies					
Strategy		-Lectures/discussions/brainstorming/writing report			
10.Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-4	2 H	- That students realize the importance of educational administration and its role in achieving	1- Administration and education administration	-Lectures/ discussions/ brainstorming/ writing reports	:Tests - Preliminary (pre-tests)
5-8			- nature of the administration		- Structural (daily -)tests

		<i>educational goals</i>			<i>-Final assessment (final exams)</i>
<i>9-13</i>	<i>2 H</i>	<i>- That students acquire positive attitudes towards school administration</i>	<i>2-theories administration</i>		
<i>14-18</i>	<i>2 H</i>	<i>- Creating positive tendencies towards educational administrative theories</i>	<i>Patterns of educational administration</i>		
<i>19-21</i>	<i>2 H</i>	<i>- That students employ the scientific knowledge they have acquired in serving the</i>	<i>School administration</i>		

		<i>educational process.</i>			
<i>22-25</i>	<i>2 H</i>	<i>-Students should plan for class management</i>	<i>Classroom administration</i>		
<i>24-26</i>	<i>2 H</i>	<i>For students to understand the concept of leadership and classroom leadership.</i>	<i>Education leadership</i>		
<i>27-30</i>	<i>2 H</i>	<i>- For students to understand the concept of educational enlightenment</i>	<i>Education supervision</i>		

11. Course Evaluation

Total grade (100) - Semester exams (40) - Class participation (10) grades - Final exam grade (50) grades

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Adesina, S (2001). Basic Principles of Supervision, New York, American.
Main references (sources)	
Recommended books and references (scientific journals, reports...)	

Electronic Websites	References,	
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Course Description Form

1. Course Name:	
<i>Curriculum and School Books</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Zainab J. Abduljuleel</p> <p>Email: zainab.abduljuleel@uobasrah.edu.iq</p>	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> <i>Introducing the student to the concept of the school curriculum and its importance in the educational process.</i> <i>Studying the types of curricula and their historical development.</i>

			<ul style="list-style-type: none">• <i>Analyzing the content of textbooks and linking them educational goals.</i>• <i>Applying evaluation standards for curricula and textbooks.</i>		
9. Teaching and Learning Strategies					
Strategy			<ul style="list-style-type: none">• <i>Presentations</i><ul style="list-style-type: none">• <i>Group discussions and open dialogues</i>• <i>Critical analysis of textbook samples</i>• <i>Practical workshops for designing educational activities</i>		
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-4	2	Learn research methodology tools	<ul style="list-style-type: none">• Understanding the concept of the curriculum and its development Introduction to Educational Curricula: Concept, Importance, Evolution	Lectures and discussion	Exams
5-7			<ul style="list-style-type: none">• Distinguishing types of curricula Types of Curricula: Traditional, Integrated, Competency-Based Presentations, Text Analysis		

8-10			<ul style="list-style-type: none"> • Analyzing textbook content Textbook Structure: Standards, Framework, Content 		
11			<ul style="list-style-type: none"> • Evaluating curricula and textbooks Curriculum Evaluation: Standards, Mechanisms, Models Discussions, Practical Examples Analytical Test 		
12			<ul style="list-style-type: none"> • Linking the curriculum to local contexts Curricula in Iraq: Challenges, Development, Future 		
13-14			<ul style="list-style-type: none"> • Sample: Selection, Types, Sample Size 		
15			<ul style="list-style-type: none"> • Research Methodologies: Historical Research Method, Importance, Data Collection, Criticism 		
16			<ul style="list-style-type: none"> • Systems Analysis Method: Types, Steps 		
19-17			<ul style="list-style-type: none"> • Descriptive Research Method: Importance, Types 		

23-20			<ul style="list-style-type: none"> • Experimental Research Method: Importance, Experimental Control, Experimental Designs 		
27-24			<ul style="list-style-type: none"> • Scientific Research Writing: Title, Writing Style, Research Components 		
28-30			<ul style="list-style-type: none"> • Scientific Research Institutions in Iraq: Obstacles to Scientific Research, Reality of Scientific Research. 		

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Research . Dr.. Zoqan Obaidat et al., Amman, 2002
Main references (sources)	1 - Scientific thinking. Dr.. Fouad Zakaria, Kuwait, 1978. 2- Scientific research methods and methods. Dr.. Wajih Mahjoub, Baghdad, 1993. 3- Scientific Research Methodology. Manu Guedro, Dr. Mohamed Abdel Nabi El-Sayed Ghanem, 2002.

	<p>4- The principles of scientific research and its methods. Ahmed Badr, Kuwait, 1986.</p> <p>5- Basics of scientific research. Dr.. Ahmed Suleiman Odeh and Dr. Fathi Hassan Malkawi, Amman, 2000.</p> <p>6- Research methods in education and psychology. Dr.. Sami Muhammad Melhem, Amman, 2006.</p> <p>7- Methodological patterns and their applications. D. Anwar Hussein Abdel Rahman and Dr. Adnan Haqqi, Baghdad, 2007.</p> <p>8- Conceptual and theoretical foundations. Dr.. Anwar Hussein Abdel Rahman and Dr. Adnan Haqqi, 2008.</p> <p>8- Kirk. R. Experimental Design, California, 2005.</p>
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
<i>Teaching Thinking</i>
2. Course Code:
3. Semester / Year:
<i>Annual</i>
4. Description Preparation Date:
2025–2026
5. Available Attendance Forms:
<i>Actual presence</i>
6. Number of Credit Hours (Total) / Number of Units (Total):
<i>2 hours per week / 4 units</i>
7. Course administrator's name (mention all, if more than one name)
<p>Name: Wijdan Abdalkaream</p> <p>Email: wijdan.abdalkarem@uobasrah.edu.iq</p>
8. Course Objectives

Course Objectives		<ul style="list-style-type: none">○ <i>Introducing the student to the concept of thinking, its type and its importance in the educational process.</i>• <i>Developing the student's critical and creative thinking skills</i>			
9. Teaching and Learning Strategies					
Strategy		<ul style="list-style-type: none">• <i>Presentations</i>• <i>Group discussions and critical dialogues</i>• <i>Practical exercises and interactive activities</i>• <i>Analysis of real-life cases and studies</i>• <i>Video presentations and recordings of thinking tools</i>			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
2-1 4-3 6-5	2	Learn research methodology tools	<ul style="list-style-type: none">• Understanding the nature and components of thinking Introduction to Teaching Thinking: Concept, Importance• Distinguishing basic types of thinking Types of Thinking: Automatic, Directed, Critical, Creative• Applying critical thinking skills Critical Thinking:	Lectures and discussion	Exams

8-7			<p>Characteristics, Skills, Applications Case studies</p> <p>• Developing creative thinking Creative Thinking: Tools, Techniques, Applications</p>		
10-9			<p>• Using thinking teaching strategies Thinking Teaching Strategies: Six Thinking Hats, Mind Maps</p>		
12-11			<p>• Analyzing obstacles to thinking Obstacles to Thinking: Mental, Psychological, Social</p>		
14-13			<p>• Linking thinking to problem-solving Thinking and Problem-Solving: Models, Steps, Applications</p>		
16-15			<p>• Understanding logical thinking Logical Thinking: Reasoning, Fallacies, Applications</p>		
18-17			<p>• Applying thinking in educational contexts Teaching Thinking in Curricula</p>		

20-19			<ul style="list-style-type: none"> • Evaluating thinking skills Evaluating Thinking: Tools, Standards, Models Workshops, Applications Peer evaluation 		
22-21			<ul style="list-style-type: none"> • Exploring metacognitive thinking Metacognition: Awareness, Organization, Monitoring Exercises Thinking journals 		
24-23			<ul style="list-style-type: none"> • Integrating technology in teaching thinking Technology and Teaching Thinking: Tools, Applications, Challenges 		
26-25			<ul style="list-style-type: none"> • Developing emotional intelligence and thinking Emotional Intelligence and Thinking: Relationship, Applications 		
28-27			<ul style="list-style-type: none"> • Designing supportive thinking environments Thinking Learning Environments: Classroom, Home, Community 		

30-29			<ul style="list-style-type: none"> • Practical and comprehensive applications Final Project: Comprehensive Application of Thinking Strategies Group project 		
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11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Research . Dr.. Zoqan Obaidat et al., Amman, 2002
Main references (sources)	1 - Scientific thinking. Dr.. Fouad Zakaria, Kuwait, 1978. 2- Scientific research methods and methods. Dr.. Wajih Mahjoub, Baghdad, 1993. 3- Scientific Research Methodology. Manu Guedro, Dr. Mohamed Abdel Nabi El-Sayed Ghanem, 2002. 4- The principles of scientific research and its methods. Ahmed Badr, Kuwait, 1986. 5- Basics of scientific research. Dr.. Ahmed Suleiman Odeh and Dr. Fathi Hassan Malkawi, Amman, 2000. 6- Research methods in education and psychology. Dr.. Sami Muhammad Melhem, Amman, 2006.

	<p>7- Methodological patterns and their applications. D. Anwar Hussein Abdel Rahman and Dr. Adnan Haqqi, Baghdad, 2007.</p> <p>8- Conceptual and theoretical foundations. Dr.. Anwar Hussein Abdel Rahman and Dr. Adnan Haqqi, 2008.</p> <p>8- Kirk. R. Experimental Design, California, 2005.</p>
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
<i>Arabic Language</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025-2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>1 hours per week / 2 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Ragaad Ahmed</i> <i>Email: ragadahmmad1996@gmail.com</i>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"><i>The student should be able to use the language correctly in writing and in communicating with others.</i>

	<ul style="list-style-type: none"> Developing the student's literary taste so that he understands the aesthetic aspects of speech styles, meanings, and images.
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9. Teaching and Learning Strategies

Strategy	<p><i>Dialogue strategy</i></p> <p><i>Discussion strategy</i></p>
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10. Course Structure

Weeks	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Defining the noun, verb, and letter, and indicating the signs of each section	<p>Word sections</p> <p>Surat Al-Dhuha and Al-Ikhlās, a study of their linguistic and grammatical aspects</p> <p>The subject and the predicate</p>	<p>Holding research seminars in which some topics are explained and analyzed and how to</p>	<p>Submitting reports. Daily, semester and final tests.</p>
2					
3		It dealt with the linguistic aspect, the syntactic aspect, and the semantic aspect			
4					
5		It dealt with the linguistic aspect, the syntactic aspect, and the semantic aspect			

6	Kan and her sisters,	Initiation	address	
7	and if and her sisters,	copies	them.	
8	nor does it negate sex		Theoreti	
9	Identify their	The subject	cal	
10	concepts, types and	and the deputy	lecture +	
11	provisions	subject	methods	
12	Recognizing their		of	
13	concepts, types, direct	The direct	presenta	
14	object, and types of	object and the	tion,	
15	absolute object	absolute object	dialogue	
16			and	
17	How to differentiate	Number and its	discussio	
18	between the hamzat al-	provisions	n	
19	wasl and the hamzat			
20	al-qat`	How to write		
21	Introduction to	hamza		
22	literature, its			
23	importance and	Literature and		
24	function	texts		
25	Theatrical lyric	Elements of		
26	Educational	literature		
27	representation	Hair types		
28	A theoretical			
29	introduction to ancient	Examples of		
30	poetry	ancient poetry		
31	The poem I wish my			
32	poetry was a model			
33				

24	An example of his poetry	The poet Malik bin Al-Rib		
25	An example of his poetry	The poet Abu Firas Al-Hamdani		
26	An example of his poetry	Al-Sharif Al-Radi		
27	An example of his poetry	Abu Alaa Al-Maarri		
28	An example of his poetry	Lisan al-Din ibn al-Khatib		
29	An example of his poetry	Examples of modern poetry		
30	A theoretical introduction to modern poetry	Jaafar Al-Hilli		
31	An example of his poetry	Abu Al-Qasim Al-Shabi jeweler		
32	An example of his poetry	Ahmed Al-Safi		
33	An example of his poetry	Elijah Abu Madi		
34	An example of his poetry	Badr Shaker Sayyab		
		Nazik al-Malaika		

11. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the

:student, such as

Daily, everyday setting

.Oral, monthly or written tests and reports...etc

,First semester 20 percent

.Chapter Two, twenty percent

,Daily activity ten degrees

The final exam is fifty marks.

12. Learning and Teaching Resources

**Required textbooks (curricular
books, if any)**

Arabic language and grammar books

Main references (sources)

**Special methods in education for teaching the
Arabic language / Author nbsp Al-Ibrashi
Muhammad Attia Author Place of publication
nbsp Cairo**

**Recommended books and
references (scientific journals,
reports...)**

Exchange written by Dr. Hatem Al-Damen

Electronic References, Websites

Course Description Form

1. Course Name:	
<i>English Language</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>1 hour per week / 2 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Ahmed Kadhim Shanan</i> <i>Email: ahmed.shanan@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none">• Enabling students to improve listening, speaking, writing, and reading skills.

			<ul style="list-style-type: none">• Acquiring self-learning skills for the language		
9. Teaching and Learning Strategies					
Strategy			<ul style="list-style-type: none">• Presentations• Listen to video clips through display screens• Adopting the method of discussion with students through translation of clips and conversation		
10.Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	1		Types of Present Tenses: Exercises	Lectures	Exams
3-4	1		Types of Past Tenses: Exercises	Lectures	Exams
5-6	1		Future Tense: Exercises	Lectures	Exams
7-8	1		Articles and nouns: (a/an and the)	Lectures	Exams
9-10	1		Countable and uncountable: Exercises	Lectures	Exams
11-12	1		Singular and Plural Nouns: Exercises	Lectures	Exams
13-14	1		Adjectives and adverbs: Exercises	Lectures	Exams
15-16	1		Comparative 1, 2, 3: Exercises	Lectures	Exams
17-18	1		Conjunction: Exercises	Lectures	Exams
19-20	1		Prepositions: Exercises	Lectures	Exams
21-22	1		Modals 1: Exercises	Lectures	Exams
23-24	1		Questions: Exercises	Lectures	Exams
25-26	1		Auxiliary Verbs: Exercises	Lectures	Exams
27-28	1		Relative Clauses: Exercises	Lectures	Exams
29-30	1				

			Passive: Exercises		
<i>11.Course Evaluation</i>					
<i>homework</i> <i>Monthly exams</i> <i>Mid-year and final-year exams</i>					
<i>12.Learning and Teaching Resources</i>					
<i>Required textbooks (curricular books, if any)</i>			<ul style="list-style-type: none"> • ENGLISH. GRAMMAR. <i>IN USE. Fifth Edition. Raymond Murphy.</i> • <i>Basic English Grammer By ANNE SEATON</i> 		
<i>Main references (sources)</i>			<ul style="list-style-type: none"> • <i>Essential-English BY C.E. ECKERSLEY</i> • <i>English Vocabulary in Use: Vocabulary Reference and Practice: with Answers</i> 		
<i>Recommended books and references (scientific journals, reports...)</i>					
<i>Electronic References, Websites</i>					

Course Description Form

1. Course Name:	
<i>Baath Party crimes in Iraq</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>1 hours per week / 2 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Zeinab Abase</p> <p>Email: zeinab.abase@uobasrah.edu.iq</p>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"> • <i>Learn about the government system in Iraq</i>

	<ul style="list-style-type: none"> • <i>The most important violations committed by the previous regime against the Iraqi people</i> • <i>The most important violations against international law that the previous regime was subjected to</i>
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9. Teaching and Learning Strategies

Strategy	<i>The teaching method follows the lecture method and the questioning method, relying on the Foundations of Education book, and sometimes requires the use of the blackboard and pen.</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	1	<ul style="list-style-type: none"> • To learn about the system of government in Iraq • The most important violations committed by the previous regime against the Iraqi people • The most important 	Baath Party crimes	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance

		violations against international law that the former regime was subjected to are the crimes of the Baath Party			
2	1	The concept of crimes	Chapter One	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
3	1	Monarchy in Iraq	Chapter Two	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance

4	1	Republican Governance	Chapter Two	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
7-5	1	Stages of Republican rule in Iraq	Chapter Two	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
10-8	1	The first stage (1958-1968)	Chapter Two	Lecture - interro	The quarterly exam in addition

				gation method	to daily participa tion and attendan ce
11 13	1	The second stage (1968- 1978)	Chapter Two	Lecture - interro gation method	The quarterly exam in addition to daily participa tion and attendan ce
14	1	The third stage (1978-2003)	Chapter Two	Lecture - interro gation method	The quarterly exam in addition to daily participa tion and attendan ce

15	1	The most important violations committed by the Baath Party regime	Chapter Three	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
16	1	Violations of intellectual freedom	Chapter Three	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
17 19	1	Violation of public rights	Chapter Three	Lecture - interro	The quarterly exam in addition

				gation method	to daily participa tion and attendan ce
20 22	1	Social, political and religious violations	Chapter Three	Lecture - interro gation method	The quarterly exam in addition to daily participa tion and attendan ce
23 25	1	Violation of party pluralism	Chapter fourth	Lecture - interro gation method	The quarterly exam in addition to daily participa tion and attendan ce

26	1	Methods used in torture	Chapter four	Lecture - interro gation method	The quarterly exam in addition to daily participa tion and attendan ce
27 30	1	Practices followed in suppressing the Shaabani uprising	Chapter five	Lecture - interro gation method	The quarterly exam in addition to daily participa tion and attendan ce
11. Course Evaluation					

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)

Book Of Baath Party crimes

Main references (sources)

Recommended books and references (scientific journals, reports...)

Electronic References, Websites



Description of the academic program

University of Basrah

College of Education for Pure Sciences

Department of Computer Science

Third Stage

Course Description Form

1. Course Name:	
<i>Artificial Intelligence</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2925–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Dr. Zakariya A. Oraibi</p> <p>Email:</p> <p>zakaria_au@uobasrah.edu.iq</p>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"> • <i>Learning the essentials of Artificial Intelligence.</i>

			<ul style="list-style-type: none">• <i>Learning the programming language of Prolog.</i>• <i>Incentivize students to use AI tools to solve problems.</i>		
9. Teaching and Learning Strategies					
Strategy		<ul style="list-style-type: none">• <i>Students will learn the basic structure of AI along with different strategies to solve problems using AI tools. In addition, they will learn to program these tools in the lab.</i>			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Introduction to AI	In Class	Homework
2	2		Intelligent Agents	In Class	Quiz
3	2		Learning	In Class	Quiz
4	2		Logical Agents	In Class	Homework
5	2		Introduction to Prolog	Lab	Direct Implementation
6	2		First Order Logic	In Class	Homework

			<i>– Part 1</i>		
<i>7</i>	<i>2</i>		<i>Recursive Rules in Prolog</i>	<i>Lab</i>	<i>Direct Implementation</i>
<i>8</i>	<i>2</i>	<i>-</i>	<i>First Order Logic Part 2 -</i>	<i>In Class</i>	<i>Quiz</i>
<i>9</i>	<i>2</i>		<i>Backtracking and Queries in Prolog</i>	<i>Lab</i>	<i>Direct Implementation</i>
<i>10</i>	<i>2</i>		<i>Solving Problems by Search</i>	<i>In Class</i>	<i>Homework</i>
<i>11</i>	<i>2</i>		<i>Arithmetic Operations in Prolog – Part 1</i>	<i>Lab</i>	<i>Direct Implementation</i>
<i>12</i>	<i>2</i>		<i>Arithmetic Operations in Prolog – Part 2</i>	<i>Lab</i>	<i>Direct Implementation</i>
<i>13</i>	<i>2</i>		<i>Using Python to Solve Different AI Problems</i>	<i>In Class</i>	<i>Homework</i>

14	2		<i>Generative Adversarial Neural Networks (GANs): Introduction</i>	<i>In Class</i>	<i>Quiz</i>
15	2		<i>GANs Applications</i>	<i>Yes</i>	<i>Direct Implementation</i>
16	2		<i>Adversarial Search</i>	<i>In Class</i>	<i>Homework</i>
17	2		<i>Depth and Breadth First Search in Prolog</i>	<i>Lab</i>	<i>Direct Implementation</i>
18	2		<i>A* Algorithm in Prolog</i>	<i>In Class</i>	<i>Quiz</i>
19	2		<i>Constrained Satisfaction Problems</i>	<i>Lab</i>	<i>Direct Implementation</i>
20	2		<i>List in Prolog – Part 1</i>	<i>In Class</i>	<i>Quiz</i>
21	2		<i>Planning</i>	<i>In Class</i>	<i>Homework</i>
22	2		<i>List in Prolog – Part 2</i>	<i>Lab</i>	<i>Direct Implementation</i>

23	2		<i>Uncertainty and Probabilistic Reasoning</i>	<i>In Class</i>	<i>Homework</i>
24	2		<i>List in Prolog – Part 3</i>	<i>Lab</i>	<i>Direct Implementation</i>
25	2		<i>Natural Language Processing</i>	<i>In Class</i>	<i>Quiz</i>
26	2		<i>Learning Probabilistic Models</i>	<i>In Class</i>	<i>Quiz</i>
27	2		<i>Reinforcement Learning</i>	<i>In Class</i>	<i>Homework</i>
28	2		<i>Constraint Logic Problems (CLP) in Prolog</i>	<i>Lab</i>	<i>Direct Implementation</i>
29	2		<i>Image Synthesis with GANs</i>	<i>Lab</i>	
30			<i>Image Translation with GANs</i>	<i>Lab</i>	<i>Direct Implementation</i>
11. Course Evaluation					
<i>Term Tests: 30%</i>					
<i>Laboratory: 15%</i>					

Quizzes: 5%

Final Exam: 50%

12. Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	<i>Artificial Intelligence A Modern Approach: 3rd Edition</i> <i>Deep Learning: by Ian Goodfellow, Yoshua Bengio, and Aaron Courville</i>
<i>Main references (sources)</i>	- <i>N/A</i>
<i>Recommended books and references (scientific journals, reports...)</i>	- <i>Generative Deep Learning</i> - <i>Advanced Deep Learning with Keras.</i>
<i>Electronic References, Websites</i>	- <i>Coursera.org/</i> - <i>https://online.stanford.edu/programs/artificial-intelligence-professional-program</i>

Course Description Form

1. Course Name:	
<i>compilers</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: Oday M. J. Alfuraiji Email: odayalfuraiji@uobasrah.edu.iq</p>	
8. Course Objectives	
	<p><i>The main purpose of the course is to teach students the phases of the language</i></p>

<i>Course Objectives</i>	<i>translator and their theoretical understanding, then simulate each phase practically in the laboratory.</i>
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9. Teaching and Learning Strategies

<i>Strategy</i>	<ul style="list-style-type: none"> • <i>Providing the student with primary and secondary topics related to translator design.</i> • <i>Translating topics and theoretical vocabulary related to translators into computer programs.</i> • <i>Requiring the student to use computer programs related to theoretical vocabulary</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
<i>1</i>	<i>4</i>		<i>Introduction to compiler</i>	<i>Lecture</i>	<i>Exam</i>
<i>2</i>	<i>4</i>		<i>Lexical analyzer</i>	<i>Lecture</i>	<i>Exam</i>

3	4		<i>Regular Expressions</i>	<i>Lecture</i>	<i>Exam</i>
4	4		<i>Operations on Languages</i>	<i>Lecture</i>	<i>Exam</i>
5	4		<i>Transition Diagrams</i>	<i>Lecture</i>	<i>Exam</i>
6	4		<i>Finite Automata NFA & DFA</i>	<i>Lecture</i>	<i>Exam</i>
7	4		<i>Convert RE to NFA</i>	<i>Lecture</i>	<i>Exam</i>
8	4		<i>Symbols Tables</i>	<i>Lecture</i>	<i>Exam</i>
-9- 10	4		<i>Syntax Analyzer</i>	<i>Lecture</i>	<i>Exam</i>
11	4		<i>Context Free Grammars</i>	<i>Lecture</i>	<i>Exam</i>
12	4		<i>Derivations</i>	<i>Lecture</i>	<i>Exam</i>
13	4		<i>Left recursion and left factoring</i>	<i>Lecture</i>	<i>Exam</i>
14	4		<i>Top Down Parsing</i>	<i>Lecture</i>	<i>Exam</i>

<i>15</i>	<i>4</i>		<i>First And Follow sets</i>	<i>Lecture</i>	<i>Exam</i>
<i>16</i>	<i>4</i>		<i>Non recursive predictive parser 1</i>	<i>Lecture</i>	<i>Exam</i>
<i>17</i>	<i>4</i>		<i>recursive predictive parse 2</i>	<i>Lecture</i>	<i>Exam</i>
<i>18</i>	<i>4</i>		<i>Error Recovery</i>	<i>Lecture</i>	<i>Exam</i>
<i>19</i>	<i>4</i>		<i>Bottom Up Parsing</i>	<i>Lecture</i>	<i>Exam</i>
<i>20</i>	<i>4</i>		<i>Shift reduce parser</i>	<i>Lecture</i>	<i>Exam</i>
<i>21</i>	<i>4</i>		<i>LR parser</i>	<i>Lecture</i>	<i>Exam</i>
<i>22</i>	<i>4</i>		<i>Operator precedence parsing</i>	<i>Lecture</i>	<i>Exam</i>
<i>23</i>	<i>4</i>		<i>Semantic Analyzer</i>	<i>Lecture</i>	<i>Exam</i>
<i>24</i>	<i>4</i>		<i>Type Checking</i>	<i>Lecture</i>	<i>Exam</i>

25	4		<i>Intermediate representation</i>	<i>Lecture</i>	<i>Exam</i>
26	4		<i>Semantic Rules & Semantic trees</i>	<i>Lecture</i>	<i>Exam</i>
27	4		<i>LRN notation</i>	<i>Lecture</i>	<i>Exam</i>
28	4		<i>Three Address Code</i>	<i>Lecture</i>	<i>Exam</i>
29	4		<i>Quadruples and Triples</i>	<i>Lecture</i>	<i>Exam</i>

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	<i>Compilers: Principles, Techniques, and Tools (2ndEdition) Alfred V. Aho, Monica S. Lam, Ravi Sethi,Jeffrey D. Ullman</i>
<i>Main references (sources)</i>	<i>Brown, P.J. Writing Interactive Compilers and Interpreters ISBN</i>

	<i>047127609X Useful practical advice, not much theory</i>
<i>Recommended books and references (scientific journals, reports...)</i>	
<i>Electronic References, Websites</i>	

Course Description Form

1. Course Name:
<i>Computer Graphics</i>
2. Course Code:
3. Semester / Year:
<i>Annual</i>
4. Description Preparation Date:
<i>2025–2026</i>
5. Available Attendance Forms:
<i>Actual presence</i>
6. Number of Credit Hours (Total) / Number of Units (Total):
<i>4 hours per week / 6 units</i>
7. Course administrator's name (mention all, if more than one name)
 <i>Name: Entesar Talal</i> <i>Email: entesar.talal@uobasrah.edu.iq</i>
8. Course Objectives
<i>The main goal of this course is to introduce the student to how to build and develop the basic algorithms used in drawing with a computer. An example of this is the algorithms specialized in drawing lines and circles, which are</i>

considered the basic nucleus for building and drawing video clips and images on a computer.

1- Explain how the computer deals with programming commands for drawing

2- How to deal with the computer screen in a coordinate way

3- Understanding the general concepts of two-dimensional and three-dimensional coordinates

4- Learn the general applications and commands used with graphics in general and computer

graphics in particular

5- Applying multiple drawing algorithms theoretically and applying them practically using programming languages.

9. Teaching and Learning Strategies

Lecture strategy

Brainstorming strategy

Teamwork strategy

Discussion strategy

10. Course Structure

<i>Evaluation method</i>	<i>Learning method</i>	<i>Unit or subject name</i>	<i>Required Learning Outcomes</i>	<i>Hours</i>	<i>Week</i>
<i>Exams</i>	<i>lectures</i>	<i>Introduction to computer drawing and its applications</i>	<i>Definition of graphic drawing and its importance. Terminology used in drawing programs, in addition to learning the basic benefits and applications of computer drawing</i>	<i>4</i>	<i>1-2</i>
<i>Exams</i>	<i>lectures</i>	<i>Number routines to prepare the computer for drawing</i>	<i>Create and understand basic drawing elements for building a drawing program.</i>	<i>4</i>	<i>3-4</i>
<i>Exams</i>	<i>lectures</i>	<i>Basic function, circles, arc, rectangle, ellipse text, charts, sketches</i>	<i>Introducing basic drawing tools, text, symbols, graphic charts, and text writing tools.</i>	<i>8</i>	<i>5-8</i>

		...			
<i>Exams</i>	<i>lecture s</i>	<i>Colors in computer graphics</i>	<i>Colors and effects, how colors work, and working with digital colors.</i>	<i>8</i>	<i>9- 12</i>
<i>Exams</i>	<i>lecture s</i>	<i>Algorithms for draw straight lines</i>	<i>Learn font graphics algorithms DDA, Presenham</i>	<i>8</i>	<i>15- 16</i>
<i>Exams</i>	<i>Lectur es</i>	<i>Two Dimensional Transformation</i>	<i>Learn how to work with two- dimensional objects</i>	<i>8</i>	<i>17- 20</i>
<i>Exams</i>	<i>lecture s</i>	<i>Three Dimensional Transformation</i>	<i>Learn how to work with three- dimensional objects</i>	<i>8</i>	<i>21- 24</i>
<i>Exams</i>	<i>lecture s</i>	<i>Moving pictures</i>	<i>Learn to move things and make animations</i>	<i>8</i>	<i>25- 28</i>
<i>Exams</i>	<i>lecture s</i>	<i>Drawing Mathematical Function</i>	<i>Learn to draw mathematical functions</i>	<i>4</i>	<i>29- 30</i>
11. Course Evaluation					

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

Theoretical exam + practical exam + theoretical assignments + practical assignments + reports + end-of-year project + daily tests

12.Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	<i>-V.Scott Gordon &John Clevenger ,Computer Graphics Programming in OpenGL,2020</i>
<i>Main references (sources)</i>	<i>-Donald Hearn & M. Pauline Baker, computer Graphics second edition, Prentice Hall international Edition 1994</i> <i>-Anton's opengl 4 tutorial (kindle edition) Anton gerdelan computer- graphics, 2014</i>
<i>Recommended books and references (scientific journals, reports...)</i>	<i>Computer graphics: a programming approach</i>
<i>Electronic References, Websites</i>	<i>مواقع الانترنت المختصة بتعليم وشرح مادة الرسم بالحاسبة</i> <i>YouTube videos</i>

Course Description Form

1. Course Name:	
<i>Visual Programming VB.NET</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Abdulla J. Y. Email: abdullajas@uobasrah.edu.iq	
8. Course Objectives	
<i>Master programming using VB.NET.</i> <i>Develop graphical applications.</i> <i>Connect applications to databases.</i> <i>Apply object-oriented programming (OOP) in software development.</i>	<i>Learn input/output operations.</i> <i>Understand basic programming concepts within Windows.</i>

<i>Study the principles of programming with Visual Basic .NET.</i>	<i>Recognize the properties of programming files in Visual Basic .NET.</i> <i>Understand programming language communication</i>
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9. Teaching and Learning Strategies

<i>Strategy</i>	<i>Interactive Lectures: Provide theoretical concepts in interactive classes.</i> <i>Practical Application: Lab sessions to practice concepts taught in lectures.</i> <i>Projects: Programming tasks for practical implementation, either individually or in groups.</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
<i>1-4</i>	<i>8</i>	<i>Introduction to visual programming with VB.NET and its distinguishing</i>	<i>Introduction to visual programming</i>	<i>Theoretical Lectures</i>	<i>Daly Exam</i>

		<i>features compared to other programming languages.</i>			
5-10	12	<i>Understanding and handling messages with Basic syntax in a Windows environment</i>	<i>Message processing</i>	<i>Theoretical Lectures</i>	<i>Daly Exam</i>
11-14	8	<i>Introduction to Visual Basic programming, focusing on input and output operations</i>	<i>What is Visual basic</i>	<i>Theoretical Lectures</i>	<i>Exam</i>
15-20	10	<i>Understanding function building and loops, their components, and operations</i>	<i>Functions and Looping</i>	<i>Theoretical Lectures</i>	<i>Daly Exam</i>

21-22	4	<i>How to manage arrays</i>	<i>Arrays</i>	<i>Theoretical Lectures</i>	<i>Daly Exam</i>
23-25	6	<i>Managing menus and resources</i>	<i>Menus and Resources</i>	<i>Theoretical Lectures</i>	<i>Exam</i>
25-30	10	<i>Handling files and databases</i>	<i>Files and database</i>	<i>Theoretical Lectures</i>	<i>Daly Exam</i>
<i>11.Course Evaluation</i>					
<p><i>Monthly Exams: 25 points</i></p> <p><i>Applied Projects: 10 points</i></p> <p><i>Lab Exercises: 15 points (weekly)</i></p>					
<i>12.Learning and Teaching Resources</i>					
Required textbooks (curricular books, if any)					
<i>Main references (sources)</i>			<ul style="list-style-type: none"> <i>Programming Microsoft Visual Basic 2005 by Francesco Balena, 2006</i> <i>Microsoft Visual Basic 2005 Step by Step by Michael Alvarson</i> 		
<i>Recommended books and references (scientific journals, reports...)</i>			<i>Scientific journals and reports relevant to VB.NET programming.</i>		
<i>Electronic References, Websites</i>			<div> <i>Microsoft Learn</i> <i>Coursera VB.NET Programming Specialization</i> </div>		

Course Description Form

1. Course Name:	
Software Engineering	
2. Course Code:	
3. Semester / Year:	
2026-2025	
4. Description Preparation Date:	
2025	
5. Available Attendance Forms:	
هندسة برامجيات (google.com)	
6. Number of Credit Hours (Total) / Number of Units (Total):	
4	
7. Course administrator's name (mention all, if more than one name)	
Name: Iman Qays Abduljaleel	
Email: iman.abduljaleel@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none">• What is Software Engineering, and how does it differ from Information Systems and Computer Engineering?• Explanation of the components of Software Engineering.• Explanation of the types of models, how to configure them, their disadvantages, and benefits.• Ethics of software engineers and designers.

	<ul style="list-style-type: none"> • How to manage and work on systems. • Knowing how to configure a software system. • The process of configuring requirements and linking them to the system. • Understanding the process of designing the system interface and linking it to processing and requirements. • Understanding how to develop an existing system and make changes to it.
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9. Teaching and Learning Strategies

Strategy	Daily exams and interaction with students through question and answer
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Understanding the Fundamentals Of software engineering, also, the concepts Different Methods are Utilized to Develop software Projects	Introduction to software engineering, The Nature of Software, Defining Software	Laptop, Screen to present the lecture slide White board elaboration	Interactive discussion during lecture, Every week quiz, and 3-to-4exams Throughout the year
2	2		Software Application Domains, Software Characteristics, Programmer & Software Engineer		
3	2		A software system consists of, the characteristic of software engineer, The Attributes of Good Software, The Goals of Software Engineering, Legacy Software		
4	2		Defining the Discipline, The Software Process, The Process Framework, Umbrella Activities, Process Adaptation		
5	2		Code of Ethics, Computer-Based System Engineering and Systems Engineering		
6	2		Emergent properties, Reliability relationships		
7	2		System components and Component types		

8	2	Software Processes , Generic software process models		
9	2	Formal systems development		
10	2	Extreme programming, Spiral development		
11	2	Spiral model of the software process, The requirements engineering process		
12	2	System evolution		
13	2	Automated process support (CASE)		
14	2	Case technology, CASE classification		
15	2	First Semester Exam		
16	2	Project Managements, Software project management		
17	2	Software management distinctions		
18	2	Risk Management		
19	2	Project planning process		
20	2	Project plan structure		
21	2	Activity organization		
22	2	Bar charts and activity networks		
23	2	Task durations and dependencies		
24	2	Activity network, Activity timeline, Staff allocation software		
25	2	Requirements, Requirement's engineering		
26	2	What is a requirement' Non-functional requirement types, Requirements measures, User requirements		
27	2	Problems with natural language		
28	2	Requirement, Requirements Engineering Processes		
29	2	Requirements Engineering Processes		
30	2	Software Security Engineering		

11.Course Evaluation

6 marks- interaction score and regular Quizzes all over the year.
10 marks for preparing reports, presenting them and discussing their topic.
Exam1 out of 17
Exam2 out of 17
Effort score: collecting the above-mentioned points out of 50
Final exam scores out of 50

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)

- Software Engineering eighth edition Ian Sommerville 2004, 2008, 2014, and 2017
- Classical and Object-Oriented Software Engineering 3rd Edition
- R. Pressman and D. Lnce , "Software Engineering Practitioner approach 4TH European ,Mergraw 1997.
- Somerville," Software Engineering "5 TH, Addison Wesley 1996
- Software Engineering: A Practitioner's Approach 4th Edition, by Roger S. Pressman, Bruce Maxim, 2020

Recommended books and references
(scientific journals, reports...)

Electronic References, Websites

Course Description Form

1. Course Name:	
<i>Computer Architecture</i>	
2. Course Code:	
3. Semester / Year: Year (3rd year)	
2025–2026	
4. Description Preparation Date: 28-9-2024	
2025	
5. Available Attendance Forms:	
Google form	
6. Number of Credit Hours (Total) / Number of Units (Total):	
2Units	
7. Course administrator's name (mention all, if more than one name)	
<ul style="list-style-type: none"> Name: Dalia Adil Younus Email: dalia.adil@uobasrah.edu.iq 	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"> The fundamentals of computer architecture Instruction Set Architecture (ISA) Memory Hierarchy Processor Organization Pipelining
9. Teaching and Learning Strategies	

<i>Strategy</i>	<ul style="list-style-type: none"> • PowerPoint • Assignments • Discussion • Quizzes • Exam
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1-3	6	<ul style="list-style-type: none"> • General definition, • Purpose of Digital Arithmetic and Introduction to computer architecture, CPU organization and parts 	Introduction & Overview		<ul style="list-style-type: none"> • PowerPoint • Assignments • Discussion • Quizzes
4-9	12	<ul style="list-style-type: none"> • Addition and Subtraction Algorithms • Multiplication Algorithms • Booth Multiplication Algorithms • Division Algorithm 	Algorithm and design of the common fixed points arithmetic operations		
10	2		Exam		
11-14	8	<ul style="list-style-type: none"> • Design of Shifter • General Purpose Register • Arithmetic logic unit 	Execution Unit		
15-20	12	<ul style="list-style-type: none"> • Secondary memory • Cache memory • Virtual memory • Main memory 	Memory Hierarchy		
21	2		Exam		
22-25	8	<ul style="list-style-type: none"> • Synchronous Pipeline • Nonlinear Pipeline <ul style="list-style-type: none"> • Pipeline Performance measures 	Asynchronous Pipeline		
26-30	10	<ul style="list-style-type: none"> • Synchronous Pipeline • Nonlinear Pipeline • Pipeline Performance measures 	Asynchronous Pipeline		

11. Course Evaluation

30% Exams 20% (Assignments, Quizzes, and Discussions) 50 Final Exams
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12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamentals of Computer Organization and Architecture, 7th ed. (W.Stallings), 2005 Computer System Architecture 3rd ed. (Morris Mano), 1992
Main references (sources)	Essentials of Computer Architecture, 2nd ed. (Douglas Comer), CRCpress, 2017
Recommended books and references (scientific journals, reports...)	Essentials of Computer Architecture, 2nd ed. (Douglas Comer), CRCpress, 2017

Course Description Form

1. Course Name:	
<i>Counseling and mental health</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Ashwaq Jabar	
Email: ashwaq.jabar@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives:	<ul style="list-style-type: none"><i>The computer student learns the importance of guidance</i>

<p><i>The student remembers the information given in the course</i></p> <p><i>The student understands the course topics and related objectives</i></p>	<ul style="list-style-type: none"> • <i>Psychological and mental health in daily life</i> • <i>How to employ this knowledge in confronting situations</i> • <i>Daily life in the field of education and family</i> • <i>It makes College of Education students feel valuable and important</i> • <i>Counseling and mental health in their dealings with school students after graduation and practicing their specializations</i> • <i>As teachers in primary, middle and middle schools</i>
<p>9. Teaching and Learning Strategies</p>	
<p><i>Strategy</i></p>	<ul style="list-style-type: none"> • <i>The student should be able to apply what he has learned to solve problems in the practical field</i> • <i>The student should be able to analyze and arrange information to benefit</i>

		<p><i>from it in solving problems to obtain correct results</i></p> <ul style="list-style-type: none"> <i>• The student understands himself, his environment, and how to deal with others</i> <i>• The student must have ideas about the course material and know how to devise appropriate solutions to it</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
2+1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4+3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2	<p><i>Introducing students to the meaning of mental health, introducing them to the signs that indicate that an individual</i></p>	<p><i>Educational guidance</i></p> <p><i>Justifications and importance of educational guidance in schools</i></p> <p><i>Foundations of guidance and</i></p>	<p><i>In-person lectures</i></p>	<p><i>Exams, daily interaction and attendance</i></p>

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 5+4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 7+6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 9+8 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<p><i>enjoys mental health, and introducing them to the goals of mental health and its importance.</i></p>	<p><i>psychological counseling</i></p> <p><i>Guidance objectives</i></p> <p><i>Educational guidance curricula</i></p> <p><i>Characteristics of the educational guide</i></p> <p><i>Indicative methods</i></p> <p><i>1- The role of the teacher in the guidance process</i></p> <p><i>2- Problems that occur in schools and the role of</i></p>		
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<div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 11+10 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 13+12 <input type="checkbox"/> </div>			<p><i>guidance in solving them</i></p> <p><i>3- Academic delay and bullying among students</i></p> <p><i>1- The role of the teacher in the counseling process</i></p> <p><i>2- Problems that occur in schools and the role of guidance in solving them</i></p> <p><i>3- Academic delay</i></p> <p><i>4- Bullying among students</i></p>		
14- 17					

18-21			<p><i>1- Dropping out of school</i></p> <p><i>2- Cheating in exams</i></p> <p><i>3- Theft</i></p> <p><i>4- Choose the appropriate specialization</i></p> <p><i>5- Exam anxiety</i></p>		
18-21			<p><i>1- Mental health</i></p> <p><i>2-Mental health goals</i></p> <p><i>3-The importance of mental health in all areas of life</i></p> <p><i>4- Concepts related to mental health</i></p>		

22- 25			<p><i>1- Manifestations of psychological compatibility</i></p> <p><i>2- Types of psychological adjustment</i></p>		
26- 27			<p><i>3- Mental health and adaptation</i></p> <p><i>4- School and mental health</i></p> <p><i>5- Manifestations of teacher burnout</i></p>		
28- 30			<p><i>1- Neurosis</i></p> <p><i>2- Anxiety</i></p>		
<i>11.Course Evaluation</i>					
<i>Mid-year exams</i>					

<p><i>Daily attendance</i></p> <p><i>Discussion and dialogue</i></p> <p><i>Second month exam</i></p>	
<p>12.Learning and Teaching Resources</p>	
<p><i>Required textbooks (curricular books, if any)</i></p>	<p><i>Principles of psychological counseling for counselors and specialists (2008) Muhammad Ahmad Khaddam, Mashaqba - Amman</i></p> <p><i>Principles of guidance and psychological counseling (2010) Sami Muhammad Melhem, Amman_Dar Al Masirah</i></p>
<p><i>Main references (sources)</i></p>	<p><i>1- Personality Psychology 1990, Hana Aziz Dawoud, Nadhim Hashim Al-Obaidi, University of Baghdad</i></p> <p><i>2- Psychological counseling and educational guidance 1991, Mustafa Mahmoud Al-Imam, Anwar</i></p>

	<p><i>Hussein Abdel Rahman, University of Baghdad</i></p> <p><i>3- Fundamentals of Psychology</i></p> <p><i>1982, Ahmed Ezzat Rajeh, Alexandria</i></p>
<p><i>Recommended books and references</i></p> <p><i>(scientific journals, reports...)</i></p>	<p><i>1- Psychological Guidance and Counseling 2005, Hamed Abdel Salam Zahrani, Cairo and the World of Books</i></p> <p><i>2- Reference in Mental Health 2009, Adeeb Muhammad Al-Khalidi, Baghdad, Ababil Office</i></p>
<p><i>Electronic References, Websites</i></p>	<p><i>Psychology websites and scientific societies</i></p>

Course Description Form

1. Course Name:	
<i>Teaching curricula and methods</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025–2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Zainab Ali Abboud Email: zzn.ali@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives:	

<p><i>Explaining the concept of teaching methods, their importance and the extent of their impact on preparing the student teacher's personality and how to use appropriate methods to deliver the material, taking into account the chronological age and individual differences of the students.</i></p>	<ul style="list-style-type: none"> • <i>For the student to become familiar with the concept of the subject matter, curricula and general teaching methods</i> • <i>That the student be able to understand the concept of science and education and what is the appropriate method for each teaching method</i>
<p>9. Teaching and Learning Strategies</p>	
<p><i>Strategy</i></p>	<ul style="list-style-type: none"> • <i>The learning strategy is based on students' participation with the teacher in presenting many questions</i> • <i>Important psychological, educational and academic information about appropriate curricula and teaching methods for learning and discussing them directly with students.</i> • <i>Expressing their opinions about this information and how important it is to them.</i>

- *Writing reports on the main topics of the curriculum*

10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
<i>1</i>	<i>2</i>		<i>- The nature of science</i>	<i>Lecture Dialogue and discussion</i>	<i>Exam</i>
<i>2</i>			<i>-Learning processes</i>		
<i>3</i>			<i>-Scientific thinking skills</i>		
<i>4</i>			<i>-Components of science</i>		
<i>5</i>			<i>_ Objectives of science</i>		

6			<i>-Learning theories</i>		
7			<i>-The concept of the curriculum and its origins</i>		
8			<i>-The old curriculum</i>		
9			<i>_The modern curriculum</i>		
10			<i>-Curriculum elements</i>		
11			<i>_Types of curriculum</i>		
12			<i>-The official curriculum</i>		

<i>13</i>			<i>Childhood (early)</i>		
<i>14</i>			<i>-The hidden curriculum</i>		
<i>15</i>			<i>- Curriculum organisations</i>		
<i>16</i>			<i>_ Educational objectives in teaching the subject</i>		
<i>17</i>			<i>_General goals</i>		
<i>18</i>			<i>_Special goals</i>		
<i>19</i>			<i>_Behavioral goals</i>		

20			<i>_Classification of educational objectives</i>		
21			<i>_A model of a typical teaching plan</i>		
22			<i>_Criteria for choosing the teaching method</i>		
23			<i>-Educational applications of the curriculum</i>		
24			<i>-Strategies for teaching the subject</i>		

25			<i>-General characteristics of a good teaching method</i>		
26			<i>-Fundamentals of good teaching</i>		
27			<i>Characteristics of a successful teacher</i>		
28			<i>- Types of teaching methods</i> <i>1. Course evaluation</i>		
28			<i>Distribution of the score out of 100</i>		

29			<p><i>according to the tasks assigned to the student, such as:</i></p> <p><i>daily setting,</i></p> <p><i>Oral, monthly or written tests</i></p> <p><i>and</i></p> <p><i>reports...etc</i></p>		
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11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	<p><i>Teaching curricula and methods.</i></p> <p><i>Majid Ayoub Al-Qasi, 2018, first edition</i></p> <p><i>Amjad Publishing and Printing House</i></p>
<i>Main references (sources)</i>	<p><i>Modern curricula and teaching methods, Mohsen Ali Attia, 2013</i></p> <p><i>Dar Al-Manhaj for Publishing and Distribution</i></p>

<i>Recommended books and references (scientific journals, reports...)</i>	<i>Modern curricula and teaching methods, Basra Research Journal</i>
<i>Electronic References, Websites</i>	



Description of the academic program

University of Basrah

College of Education for Pure Sciences

Department of Computer Science

Fourth Stage

Course Description Form

1. Course Name:	
<i>Operating System</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2026–2025	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Khawla Hussein Ali Email: khawla.ali@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives	<p><i>How OS provides the interface between hardware and applications...</i></p> <p><i>Theoretical aspects of OS and practical using JAVA language.....</i></p>

				
9. Teaching and Learning Strategies					
Strategy		One of the best ways to teach operating system concepts and skills is to use a blended approach that combines theory and practice. Theory helps students to grasp the fundamental concepts and principles of operating systems, such as their functions, structures, components, and design goals.			
10.Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	4	Presentation	<p>Introduction & Background</p> <ul style="list-style-type: none">• Introduction to operating system, Application software, System software, Machine language,• Microprogramming, Physical devices• History of Operating Systems, Introduction to Unix, MS-DOS and Windows <p>Operating System Structure</p>	Attendance	Exam

3-7			<ul style="list-style-type: none"> • <i>Process management, Memory management, File management, I/O system management, Secondary storage management, Networking</i> • <i>System protection, Operating system services</i> • <i>OS layered approach, OS/2 layer structure, Virtual machines</i> 		
7-11	4	<i>Presentation</i>	<ul style="list-style-type: none"> • <i>System design goals, Mechanisms and policies, Operating system implementation, System generation</i> • <i>Process Concepts</i> • <i>The process concept, Program vs process</i> • <i>Process creation, Process control block, Process table, Shell, Operation on processes</i> <ul style="list-style-type: none"> • <i>Kernel/kernel mode</i> • <i>System calls, Types of systems calls</i> 		

12 - 15			<ul style="list-style-type: none"> <i>Interrupts, Interrupt processing, Types of Interrupts</i> 		
15 - 18			<p><i>Memory Management</i></p> <ul style="list-style-type: none"> <i>Memory, memory hierarchy, Process loading and swapping, Memory management, Memory allocation methods, Single partition allocation</i> <i>Storage management strategies, Fetch strategies, Placement strategies, Replacement strategies, Variable partition with compaction,</i> <i>Non contiguous memory allocation: Paging vs Segmentation, Simple paging, Implementation of paging, Simple segmentation, Segment addressing,</i> <p><i>Virtual Memory</i></p> <ul style="list-style-type: none"> <i>Virtual memory, Mechanism of virtual memory, Address translation, Page fault,</i> 		

21	-	22	<ul style="list-style-type: none"> • <i>Page replacement, Page replacement algorithm, FIFO, Belady's anomaly, Optimal LRU, Random page replacement, LFU, MFU, Non-used recently page replacement algorithm</i> • <i>Paging Mechanism, Additional techniques, Memory protection and sharing, MS-DOS Memory management, Windows memory management, Unix memory management</i> 		
22	-	24	<p><i>Process Management</i></p> <ul style="list-style-type: none"> • <i>Context Switch, Process states, Process states 4transitions, Process life cycle, Five state process model, Unix process state transition diagram</i> • <i>Scheduler, Scheduling algorithm, Objectives of Scheduling, Criteria for scheduling, CPU-bound vs I/O-bound processes</i> 		
24	-	26			

<p>27 - 28</p>			<ul style="list-style-type: none"> • <i>Types of Scheduling, Process scheduling queues</i> • <i>FCFS, SJF, Priority, Round Robin, Multilevel feedback queues scheduling</i> • <i>BSD Unix scheduling, Multiple processor scheduling</i> • <i>Threads, Thread support Solaris</i> 		
<p>28 - 29</p>			<p><i>Threads & Multitasking</i></p> <ul style="list-style-type: none"> • <i>Multitasking, Threads</i> • <i>Types of threads, Kernel threads, User level threads</i> • <i>Multithreading model, One to One Model, Many to One Model, Many to Many Model</i> • <i>Solaris 2 threads, Windows 2000 threads, Linux threads, Java threads</i> 		
<p>30</p>			<p><i>Concurrent Processes</i></p> <ul style="list-style-type: none"> • <i>Concurrent processes, Resources, Race condition</i> • <i>Critical section, Mutual Exclusion, Deadlock</i> <p><i>Inter-process communication</i></p>		

			<ul style="list-style-type: none"> <i>Pipes, Semaphores, use of semaphore for critical section problem, Monitors, Signals, Message passing, use of messages for synchronization, Shared memory, Object linking & embedding</i> 		
11.Course Evaluation					
<i>Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc</i>					
12.Learning and Teaching Resources					
<i>Required textbooks (curricular books, if any)</i>			<i>Operating system concepts by Abraham S., Peter B., Grec G.</i>		
<i>Main references (sources)</i>					
<i>Recommended books and references (scientific journals, reports...)</i>					
<i>Electronic References, Websites</i>			<i>Operating system principles</i> <i>Modern operating systems</i>		

Course Description Form

1. Course Name:	
<i>Communication and Computer Networks</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Husam Aakef Abdulmalik</i> <i>Email: hussam.akif@uobasrah.edu.iq</i>	
8. Course Objectives	
<i>Course Objectives</i>	<ul style="list-style-type: none"><i>-Studying the basic concepts of communications and computer networks in terms of their types, devices, methods of connecting them, and the technology used in them.</i>

	<ul style="list-style-type: none"> • -Studying the OSI model gives the student an idea of the basic stages of the data transmission process in communications systems. - Study some TCP/IP protocols - Study IP Addressing, Subnetting and Routing - Study methods for detecting errors. • - Studying the types of signals in communications systems, Digital Signals and Analog Signals
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9. Teaching and Learning Strategies

Strategy	<ul style="list-style-type: none"> • Presentation, • practical training • and discussion
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	4	Learning the basics of networks, their devices and types	Introduction to Data Communication	Lectures+practical experiments	
3-4	4	Learning the types and	Networks Topology	Lectures+practical experiments	Discussion + Exams

		<i>methods of connecting networks</i>			
<i>5-7</i>	<i>4</i>	<i>Understanding the mechanism of sending data through the OSI layered model</i>	<i>Layered Architecture, The OSI Model (7 Layers)</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
<i>8-10</i>	<i>4</i>	<i>Know the most important protocols operating in each layer and the function of each</i>	<i>The TCP/IP Protocol Suite, SMTP, HTTP, FTP, NFS, SNMP, DNS,DHCP, MIME, Telnet, RPC, iSCSI, TCP, UDP, IP, ICMP, ARP, RARP, CSMA/CD,</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
<i>11-12</i>	<i>4</i>	<i>Lerning network layer functions and addressing using IP addresses</i>	<i>Network Layer and IP Addressing</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
<i>13-14</i>	<i>4</i>	<i>Knowing the mechanism of dividing the network into subnetworks</i>	<i>Subnetting</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>

15-16	4	<i>Understanding routing methods and protocols and how routers work</i>	<i>Routing and routing table</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
17	4	<i>Learning the functions of the data link layer</i>	<i>Data Link Layer</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
18-20	4	<i>Learning the types of errors, ways to detect them, and some ways to correct them</i>	<i>Error detection and correction , Type of Errors</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
21	4	<i>Learning of the functions of the physical layer</i>	<i>Physical Layer</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
22-23	4	<i>Learning the types of digital and analogue signals and the difference between them</i>	<i>Analog and Digital Signals</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
24-25	4	<i>Learning digital transmission and methods of converting data into digital signals</i>	<i>Digital Transmission, Encoding (Digital-to_Digital , Analog-to-Digital)</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>

26-27	4	<i>Learning analogue transmission and methods of converting data into analogue signals</i>	<i>Analog Transmission, Encoding (Digital-to-Analog , Analog-to-Analog)</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>
30-28	4	<i>Learning multiplexes, their types, and how they work</i>	<i>Multiplexing</i>	<i>Lectures+practical experiments</i>	<i>Discussion + Exams</i>

11. Course Evaluation

Daily exams 10%

Monthly theoretical exams 70%

Monthly practical exams 20%

12. Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	<i>Data Communication and Networking, by Behrouz A. Forouzan, 2003</i>
<i>Main references (sources)</i>	<i>Computer Networks, by Andrew S. Tanenbaum, 2003</i>
<i>Recommended books and references (scientific journals, reports...)</i>	<i>CCNA , CCNP Courses</i>
<i>Electronic References, Websites</i>	<i>Cisco Networking Academy Courses</i>

Course Description Form

1. Course Name:	
<i>Web Design</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2026–2025</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
 Name: <i>Dr.Mohammed Abdulridha Hussain</i> Email: <i>Mohammed.abdulridha@uobasrah.edu.iq</i> 	
8. Course Objectives	
Course Objectives	<i>Teaching students programming skills and</i>

			<i>tools for web design and Internet programming</i>		
9. Teaching and Learning Strategies					
<i>Strategy</i>			<i>Client-side script (HTML, CSS, Java script)</i> <i>Server-side script (PHP) and MySQL database</i>		
10.Course Structure					
<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
<i>1</i>		<i>Introduction Internet Programming</i>	<i>Introduction Internet Programming</i>	<i>Lecture / LAB</i>	<i>Exam</i>
<i>2</i>		<i>HTML</i>	<i>HTML</i>	<i>Lecture / LAB</i>	<i>Exam</i>
<i>3</i>		<i>HTML Table</i>	<i>HTML Table</i>	<i>Lecture / LAB</i>	<i>Exam</i>
<i>4</i>		<i>HTML Form</i>	<i>HTML Form</i>	<i>Lecture / LAB</i>	<i>Exam</i>
<i>5</i>		<i>HTML Frame</i>	<i>HTML Frame</i>	<i>Lecture / LAB</i>	<i>Exam</i>

6		CSS	CSS	Lecture / LAB	Exam
7		Positioning Elements	Positioning Elements	Lecture / LAB	Exam
8		Backgrounds	Backgrounds	Lecture / LAB	Exam
9		Element Dimensions and Text Flow	Element Dimensions and Text Flow	Lecture / LAB	Exam
10		Menu	Menu	Lecture / LAB	Exam
11		Javascript	Javascript	Lecture / LAB	Exam
12		Variables and Arithmetic Expressions	Variables and Arithmetic Expressions	Lecture / LAB	Exam
13		Control Structures Functions	Control Structures Functions	Lecture / LAB	Exam
14		Arrays	Arrays	Lecture / LAB	Exam

15		<i>Examples</i>	<i>Examples</i>	<i>Lecture / LAB</i>	<i>Exam</i>
22		<i>PHP</i>	<i>PHP</i>	<i>Lecture / LAB</i>	<i>Exam</i>
23		<i>Control Structures PHP String Functions</i>	<i>Control Structures PHP String Functions</i>	<i>Lecture / LAB</i>	<i>Exam</i>
24		<i>MySQL and PHP</i>	<i>MySQL and PHP</i>	<i>Lecture / LAB</i>	<i>Exam</i>
25		<i>Insert Data</i>	<i>Insert Data</i>	<i>Lecture / LAB</i>	<i>Exam</i>
26		<i>Update Data</i>	<i>Update Data</i>	<i>Lecture / LAB</i>	<i>Exam</i>
27		<i>Delete Data</i>	<i>Delete Data</i>	<i>Lecture / LAB</i>	<i>Exam</i>
28		<i>Select Data</i>	<i>Select Data</i>	<i>Lecture / LAB</i>	<i>Exam</i>
29		<i>Search and retrieve</i>	<i>Search and retrieve</i>	<i>Lecture / LAB</i>	<i>Exam</i>
30		<i>Session Control</i>	<i>Session Control</i>	<i>Lecture / LAB</i>	<i>Exam</i>

<i>11.Course Evaluation</i>	
<i>Term Tests (20%)</i> <i>Laboratory (15%)</i> <i>Quizzes (15%)</i> <i>Final Exam (50%)</i>	
<i>12.Learning and Teaching Resources</i>	
<i>Required textbooks</i> <i>(curricular books, if any)</i>	<i>Learning PHP, MySQL & JavaScript with jQuery, CSS & HTML5, 4th ed. (Robin Nixon), OReilly, 2015</i> <i>PHP and MySQL Web Development, (Luke Welling and Laura Thomson), Sams, 2001</i>
<i>Main references (sources)</i>	
<i>Recommended books and references (scientific journals, reports...)</i>	
<i>Electronic References, Websites</i>	

Course Description Form

1. Course Name:	
<i>Data Mining</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2024–2023</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Hend Muslim Jasim Mohammed</i> <i>Email: Hend.jasim@uobasrah.edu.iq</i>	
8. Course Objectives	
<ul style="list-style-type: none">Course Objectives:	<ul style="list-style-type: none"><i>Give an overview of data mining, its applications, basic issues, and tasks.</i>

<ul style="list-style-type: none"> • <i>The student will be familiar with the basic</i> • <i>Concepts of data mining.</i> • <i>The student knows the types of databases and how to process their data.</i> • <i>Increase the student's knowledge of data mining tasks and techniques.</i> • <i>Classification methods.</i> 	<ul style="list-style-type: none"> • <i>Identifying the important tasks of descriptive and predictive data mining and how to apply them practically.</i> • <i>Types of databases and how to save data</i>
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9. Teaching and Learning Strategies

<p><i>Strategy</i></p>	<ul style="list-style-type: none"> • <i>Presentation of theoretical material, whether through dialogue, interaction, or display on a display screen.</i> • <i>Assignments and exercises.</i> • <i>Assigning the student to prepare weekly reports.</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
1	2		Introduction to Data mining	Session, Lecture	Exam
2	2		Knowing data and types of data	Lecture	Exam
3	2		Measure of Similarity of Data	Lecture	Exam
4	2		Association Rules and A Prior Algorithm	Lecture	Exam
5	2		Frequent Patterns	Lecture	Exam
6	2		Data Warehouse (OLAP	Lecture	Exam
7	2		Data Cleaning	Lecture	Exam
8	2		Different between Data mining and Data Base	Lecture	Exam
9	2		Exam-1	Lecture	Exam
10	2		Data Clustering	Lecture	Exam
11	2		K-Means Clustering	Lecture	Exam
12	2		Exercises on Clustering	Lecture	Exam
13	2		Classifications	Lecture	Exam
14	2		Bays Classifier	Lecture	Exam

15	2		Regressions	Lecture	Exam
16	2		Different between Clustering and Classification	Lecture	Exam
17	2		Exam-2		
18	2		Text Data Mining	Lecture	Exam
19	2		Bagging and Boosting	Lecture	Exam
20	2		Data Mining World Wide Web	Lecture	Exam
21	2		Social Media Data Mining	Lecture	Exam
22	2		Integration in Data Mining	Lecture	Exam
23-28	2		Visualizations	Lecture	Exam
29	2		Applications of Data Mining	Lecture	
30	2		Exam-3		

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)

***Data Mining Concepts and Techniques
Third Edition,***

	<p><i>Jiawei Han Micheline Kamber Jian Pei,</i></p> <p><i>Elsevier, 2011</i></p>
<p><i>Main references (sources)</i></p>	<ul style="list-style-type: none"> • <i>Jiawei Han, Micheline Kamber, Jian Pei, Data Mining: Concepts and Techniques, Third Edition, Morgan Kaufmann Publishers, 2012.</i> • <i>Charu C. Aggarwal, Data Mining: The Textbook, Springer, 2015.</i>
<p><i>Recommended books and references (scientific journals, reports...)</i></p>	
<p><i>Electronic References, Websites</i></p>	

Course Description Form

1. Course Name:	
<i>Data Security</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
<i>2025–2026</i>	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>4 hours per week / 6 units</i>	
7. Course administrator's name (mention all, if more than one name)	
<i>Name: Prof. Dr. Ali Adil Yassin</i> <i>Email: Ali.Yassin@uobasrah.edu.iq</i>	
8. Course Objectives	
Course Objectives	<i>In this course you will learn the inner workings of cryptographic systems and how to use them properly in real-world applications.</i>

	<ul style="list-style-type: none"> • <i>Describe some basic concepts of encryption</i> • <i>Describe cryptography and its uses in cybersecurity</i> • <i>Description of hash and digital signature</i> • <i>Describe the concept and use of digital certificates</i> • <i>Teaching students the basic concepts of cybersecurity, best practices, and c.</i> • <i>Analytical Skills Cryptography learners need a strong understanding of mathematical principles, such as linear algebra, number theory, and combinatorics. Learners apply these principles when designing and decrypting strong cryptographic systems</i>
9. Teaching and Learning Strategies	
<i>Strategy</i>	<ul style="list-style-type: none"> • <i>The Data Security courses listed to learn student in protecting sensitive information. They cover topics like cryptography, risk management, and encryption technologies, essential for safeguarding data integrity.</i> • <i>Giving the student an opportunity to explain a small part of the class to his classmates to enhance his self-confidence.</i> • <i>We depend on theoretical lectures as well as lab of data security.</i> • <i>Providing the student with primary and secondary topics related to data security.</i>

	<ul style="list-style-type: none"> • <i>Programming theoretical topics related to data security into computer programs.</i> • <i>Requiring the student to use JavaScript programs related to theoretical vocabulary.</i>
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10. Course Structure

<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
<i>1 - 2</i>	<i>6</i>	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Introduction to cryptography</i> • <i>Private-key encryption</i> • <i>Principle of Kerchhoff</i> • <i>Scenarios of attacks</i> • <i>Introduction to public key</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam</i>
<i>3 - 4</i>	<i>6</i>	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Application of cryptography</i> • <i>Classical ciphers: Caesar, Shift cipher, monoalphabetic cipher, Vigenere cipher, auto key cipher</i> • <i>Hill cipher</i> • <i>Playfair cipher</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam</i>
<i>5 - 7</i>	<i>6</i>	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Private-key cryptosystems</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-</i>

			<ul style="list-style-type: none"> • <i>Permutation-substitution networks</i> • <i>Feistel networks</i> • <i>Data encryption standard (DES)</i> • <i>DES structur</i> 		<i>class assignments + conducting a practical exam</i>
8 - 9	6	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Advanced Encryption Standard (AES)</i> • <i>Work of AES</i> • <i>Security of AES</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam</i>
10 - 12	6	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Message authentication codes And it's applications</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam</i>
13 - 15	6	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Applied hash functions like SHA-1, SHA-2....</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam</i>
16 - 18	6	<i>Practical exercise</i>	<ul style="list-style-type: none"> • <i>Public key cryptosystems Hybrid encryption</i> • <i>RSA cipher</i> 	<i>Lectures(Theoretical + Practical)</i>	<i>conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam</i>

19 - 21	6	Practical exercise	<ul style="list-style-type: none"> • Digital signature schemes • Security of digital signature schemes • RSA digital signature 	Lectures(Theoretical + Practical)	conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam
22 - 24	6	Practical exercise	<ul style="list-style-type: none"> • Schnorr digital signature • Identification protocols 	Lectures(Theoretical + Practical)	conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam
24 - 26	6	Practical exercise	<ul style="list-style-type: none"> • Secure authentication protocols • Mutual authentication 	Lectures(Theoretical + Practical)	conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam
27- 30	6	Practical exercise	<ul style="list-style-type: none"> • Asymmetric Encryption Methods • RC4 algorithm 	Lectures(Theoretical + Practical)	conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam

11.Course Evaluation

conducting the midterm exam and additional e exam: 20

class participation: 5

grading a number of in-class assignments:5

conducting a practical exam and Lab. : 15

12.Learning and Teaching Resources

<p><i>Required textbooks (curricular books, if any)</i></p>	<p><i>A Handbook of Applied Cryptography by Alfred J. Menezes, Paul C. Van Oorschot and Scott A. Vanstone, CRC Press Series on Discrete Mathematics and Its Applications</i></p> <p><i>Oded Goldreich, Springer-Verlag 1998</i></p> <p><i>Modern Cryptography, Probabilistic Proofs and Pseudorandomness</i></p>
<p><i>Main references (sources)</i></p>	<p><i>cryptography : theory and practice, 4th edition, Douglas r. Stinson, Maura B. Paterson, CRC press, 2019</i></p>
<p><i>Recommended books and references (scientific journals, reports...)</i></p>	<p><i>We recommend relying in the future on the book of the late Professor Dr. Iyad Ibrahim Abdel Sada (may God have mercy on him) as a primary reference, especially since he has modern scientific material in the Arabic language in the field of information security</i></p>
<p><i>13. Electronic References, Websites</i></p>	<p><i>https://www.ccs.neu.edu/home/wichs/class/crypto-fall15/index.html</i></p> <p><i>https://faculty.uobasrah.edu.iq/faculty/360/teaching</i></p>

Course Description Form

1. Course Name:	
<i>Measurement and evaluation</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2026–2025	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Zainab J. Abduljuleel Email: zainab.abduljuleel@uobasrah.edu.iq <input type="checkbox"/>	
8. Course Objectives	

<i>Course Objectives</i>			<ul style="list-style-type: none">• <i>The student should distinguish between scientific theory and bureaucratic theory</i>• <i>That the student applies what he has learned when dealing with students</i>• <i>That the student be able to predict and explain some of the behaviors issued by students</i>		
9. Teaching and Learning Strategies					
<i>Strategy</i>			<ul style="list-style-type: none">• <i>Educational strategy, collaborative concept planning.</i>• <i>Brainstorming strategy</i> 3- <i>Education Strategy Discussion Series</i>		
10. Course Structure					
<i>Week</i>	<i>Hours</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluation method</i>
<i>1</i>	<i>2hours</i>			<i>1-</i>	<i>Weekly</i>
<i>2</i>	<i>2hours</i>			<i>Explainin</i>	

3	2hours	1-Learn about	The concept of	The	
4	2hours	the concept of	measurement and		monthly
5	2hours	measurement	evaluation	Scientific	daily,
6	2hours	and		Material	written
7	2hours	evaluation	Types of metrics	in detail	exams,
8	2hours	2- Identify		in	and
9	2hours	the types of		a lecture.	the
10	2hours	standards	General principles	2- Writin	end
11	2hours	3- Identify	in evaluation	g reports	-of-year
12	2hours	the general		on main	exam
13	2hours	principles of	Evaluation in	topics	
14	2hours	evaluation	the		
15	2hours	4- Get to	educational		
		know the	process		
		calendar in			
		Educational	Measurement		
		process	and		
		4- Identify	evaluation		
		the purposes	purposes		
		of			
		measurement	The importance		
		and	of measurement		
		evaluation	and evaluation		
		5-			
		Recognizing	Achievement		
		the	tests		
		importance of			
		measurement	Oral and essay		

		<i>and evaluation</i>	<i>Objective tests</i>		
		<i>6- Learn about achievement tests</i>	<i>Performance tests</i>		
		<i>7-Learn about the oral test and...</i>	<i>Building achievement tests</i>		
<i>Offday</i>					
<i>16</i>	<i>2hours</i>				
<i>17</i>	<i>2hours</i>	<i>And the pans</i>	<i>Steps to build the</i>		
<i>18</i>	<i>2hours</i>	<i>8-Learning</i>	<i>test</i>		
<i>19</i>	<i>2hours</i>	<i>about tests</i>			
<i>20</i>	<i>2hours</i>	<i>Objectivity</i>	<i>First semester</i>		
<i>21</i>	<i>2hours</i>	<i>9- Getting to</i>	<i>exam</i>		
<i>22</i>	<i>2hours</i>	<i>know the tests</i>			
<i>23</i>	<i>2hours</i>		<i>Test function</i>		
<i>24</i>	<i>2hours</i>	<i>Performativity</i>			
<i>25</i>	<i>2hours</i>	<i>10- Identify</i>	<i>Determine</i>		
<i>26</i>	<i>2hours</i>	<i>the building</i>	<i>teaching</i>		
<i>27</i>	<i>2hours</i>	<i>Achievement</i>	<i>objectives</i>		
<i>28</i>	<i>2hours</i>	<i>tests</i>			
<i>29</i>	<i>2hours</i>	<i>11- Identify</i>	<i>Specifications</i>		
<i>30</i>	<i>2hours</i>	<i>the steps of building the test</i>	<i>table numbers</i>		
		<i>12- Identify the selection function</i>	<i>Mid-year exam</i>		

		<p><i>13- Identify the definition</i></p> <p><i>Teaching objectives</i></p> <p><i>14- Identify the numbers in Table A</i></p> <p><i>Specifications</i></p> <p><i>16-Learn about building a specifications table</i></p> <p><i>17- Identify the characteristics the test</i></p> <p><i>18- Recognizing honesty</i></p> <p><i>19- Identify stability</i></p> <p><i>20- Learn about</i></p>	<p><i>Build a specifications table</i></p> <p><i>Characteristics of a good test</i></p> <p><i>Honesty and its types</i></p> <p><i>Test stability</i></p> <p><i>Methods for calculating stability</i></p> <p><i>exam</i></p> <p><i>REPETITION</i></p>		
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		<i>calculation methods Consistency 21- Recognizing re the test 22- Image recognition Equivalent 23- Identify segmentation Midterm 24- Identify the influencing factors With consistency 25-Learn about analysis specialist 26- Identifying the means Testing 27- Identify the note</i>	<i>Equivalent images Half split method Constantly influencing factors statistical analysis Test methods Second semester exam Observation and its types Ladders of appreciation Deliver the descriptive</i>		
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		<i>And its types</i> <i>28-Learn</i> <i>about the</i> <i>rating lists</i> <i>29-Learn</i> <i>about the</i> <i>ladders of</i> <i>appreciation</i> <i>30-Learn</i> <i>about the</i> <i>statement</i> <i>ladder</i> <i>Descriptive</i>	<i>statement</i> <i>End of year</i> <i>exams</i>		
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11.Course Evaluation

Distribution is as follows: 25 marks for monthly and daily exams for the first semester. 25 marks for monthly and daily exams for the second semester. 50 marks for final exams

12.Learning and Teaching Resources

<i>Required textbooks (curricular books, if any)</i>	<i>Abu Alam, please Mahmoud (1987):</i> <i>Measurement and evaluation of</i> <i>collection,</i> <i>Dar Al Qanq</i>
<i>Main references (sources)</i>	<i>Al-Zaher, Zakaria Mohamed and</i> <i>Others) 1999</i>

	<p><i>: The principles of measurement and evaluation in education, i 1, Culture Library for Publishing and Distribution, Amman</i></p>
<p><i>Recommended books and references (scientific journals, reports...)</i></p>	<p><i>Al-Zaher, Zakaria Mohamed and Others) 1999 : The principles of measurement and evaluation in education, i 1, Culture Library for Publishing and Distribution, Amman</i></p>
<p><i>Electronic References, Websites</i></p>	

Course Description Form

1. Course Name: :	
<i>Practical education</i>	
2. Course Code:	
3. Semester / Year:	
<i>Annual</i>	
4. Description Preparation Date:	
2026–2025	
5. Available Attendance Forms:	
<i>Actual presence</i>	
6. Number of Credit Hours (Total) / Number of Units (Total):	
<i>2 hours per week / 4 units</i>	
7. Course administrator's name (mention all, if more than one name)	
Name: Name: Zainab Hamza Abbas Email: : ceps.lect.o67@avicenna.uobasrah.edu.iq	
8. Course Objectives	
<i>Allow the applied student to apply the theories and principles of learning that he has acquired</i>	Course objectives

<p><i>throughout his studies in order to prove his ability to perform his educational role in the educational field.</i></p> <p><i>* The applied student acquires skills related to his field of specialization and becomes acquainted with a set of models of general teaching methods</i></p> <p><i>* Developing the observation skills of the applied student</i></p>	<p><i>Explaining the importance of the student's practice applying the theories and principles of classroom education</i></p> <p><i>Practicing student skills on a group of students</i></p>
<p>9. Teaching and Learning Strategies</p>	
<p><i>Strategy</i></p> <p><i>Dialogue and discussion</i></p>	<p><i>The learning strategy involves the students' participation with the teacher in presenting many questions</i></p> <p><i>The ideas, skills and theories that the student must practice in a realistic manner</i></p> <p><i>On the students in order to make his work successful in the field of application, and creating a mini application for students</i></p>

			<i>that helps them remove the tensions that they experience in the field of practical education.</i>		
10.Course Structure					
<i>Week</i>	<i>H ou rs</i>	<i>Required Learning Outcomes</i>	<i>Unit or subject name</i>	<i>Learning method</i>	<i>Evaluatio n method</i>
<i>the first</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>The concept of practical education</i>	<i>Dialogue and discussio n</i>	<i>Share</i>
<i>the seco nd</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>The purpose of practical education</i>	<i>Dialogue and discussio n</i>	<i>Share</i>
<i>the third</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>The problems and difficulties faced Applied student</i>	<i>Dialogue and discussio n</i>	<i>Share</i>

<i>The fourth</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>Rules and ethics of the teaching profession</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>The fifth</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>Sources of ethics in the teaching profession</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>The sixth</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>Ethical values, ethics and the principles derived from them</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>Seventh</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>Student responsibilities and duties Applied</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>The eighth</i>	<i>2</i>	<i>Students discuss and</i>	<i>Good teaching</i>	<i>Dialogue and</i>	<i>-</i>

		<i>express their opinions</i>		<i>discussion</i>	
<i>The Ninth</i>	2	<i>Students discuss and express their opinions</i>	<i>The concept of classroom management</i>	<i>Dialogue and discussion</i>	-
<i>The tenth</i>	2	<i>Students discuss and express their opinions</i>	<i>Objectives and importance of classroom management</i>	<i>Dialogue and discussion</i>	-
<i>The eleventh</i>	2	<i>Students discuss and express their opinionss</i>	<i>Classroom problems and ways to address them</i>	<i>Dialogue and discussion</i>	-
<i>The twelfths</i>	2	<i>Students discuss and express their opinions</i>	<i>Factors affecting management Safiya</i>	<i>Dialogue and discussion</i>	-

<i>The thirteenth</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>Ingredients for teacher success</i> <i>Class management</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>Fourteenth</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>Class questions and their purpose</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>Fifteenth</i>	<i>2</i>	<i>Students discuss and express their opinions</i>	<i>View and apply</i>	<i>Dialogue and discussion</i>	<i>-</i>
<i>11.Course Evaluation</i>					
<i>Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc</i>					
<i>12.Learning and Teaching Resources</i>					
<i>Required textbooks (curricular books, if any)</i>			<i>Mandatory practical education</i>		

<i>Main references (sources)</i>	<p><i>The Holy Qur'an - the Noble Prophet's</i></p> <p><i>Sunnah</i></p>
<i>Recommended books and references (scientific journals, reports...)</i>	<i>Practical Education / Tawfiq Marhi</i>
<i>Electronic References, Websites</i>	<p><i>Plateforme pédagogique de l'Université</i></p> <p><i>Sétif2</i></p> <p><i>https://cte.univ-setif2.dz › moodle › mod ›</i></p> <p><i>book › view</i></p>