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: 2024 -2025

File filling date: 2024 -2025

The Signature:

Name of scientific assistant: Prof. Dr.

Abdul Sattar Jaber

Date:

The signature :

Name of Department Head: Prof. Dr.

Hamed Ali Abdel Assadi

Date :

Check the file from

Division of Quality Assurance and University Performance

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

Dr. Assist. Prof. Dr. Hayder Baqer Abdullah

The date: 2024 -2025

The signature:

Authentication of the Dean

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	**50**	**178**	----	**Basic course**
College requirements	no	----	----	----
Department requirements	no	----	----	----
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	
2025-2024/ first	------	Logical design	Theoretical	Practical
2025-2024/ first	------	Structured programming	Theoretical	Practical
2025-2024/ first	------	Mathematics	Theoretical	———
2025-2024/ first	------	Computer techniques and organization	Theoretical	Practical
2025-2024/ first	------	Discrete structures	Theoretical	———
2025-2024/ first	------	Educational psychology	Theoretical	———
2025-2024/ first	------	Foundations of education	Theoretical	———
2025-2024/ first	------	Human rights and democracy	Theoretical	———

2025-2024/ first	------	Arabic	Theoretical	———
2025-2024/ first	------	English	Theoretical	———
2025-2024/ Second	------	Numerical Analysis	Theoretical	Practical
2025-2024/ Second	------	Microprocessors and assembly language	Theoretical	Practical
2025-2024/ Second	------	System Analysis and Database Design	Theoretical	Practical
2025-2024/ Second	------	Data Structured	Theoretical	Practical
2025-2024/ Second	------	Computational Theory	Theoretical	———
2025-2024/ Second	------	Object-Oriented Programming	Theoretical	Practical
2025-2024/ Second	------	Methodologies of Scientific Research	Theoretical	———
2025-2024/ Second	------	Administration and Supervision	Theoretical	———
2025-2024/ Second	------	Growth Psycology	Theoretical	———

2025-2024/ Second	------	Arabic	Theoretical	———
2025-2024/ Second	------	English	Theoretical	———
2025-2024/ Second	------	Baath Party crimes	Theoretical	———
2025-2024/ Third	------	Software Engineering	Theoretical	———
2025-2024/ Third	------	Compiler Design	Theoretical	Practical
2025-2024/ Third	------	Visual Basic Programming	Theoretical	Practical
2025-2024/ Third	------	Computer Graphics and Multimedia	Theoretical	Practical
2025-2024/ Third	------	Computer Architecture	Theoretical	———
2025-2024/ Third	------	Artificial Intelligence	Theoretical	Practical
2025-2024/ Third	------	Curricula and Methods of Teaching	Theoretical	———
2025-2024/ Third	------	Advising and Psychological Health	Theoretical	———

2025-2024/ Fourth	------	Computer and Data Security	Theoretical	Practical
2025-2024/ Fourth	------	Operating Systems	Theoretical	Practical
2025-2024/ Fourth	------	Communication & Computer Networks	Theoretical	Practical
2025-2024/ Fourth	------	Data Mining	Theoretical	———
2025-2024/ Fourth	------	Web Design	Theoretical	Practical
2025-2024/ Fourth	------	Measure and Evaluations	Theoretical	———
2025-2024/ Fourth	------	Practical Education (Observation and	Theoretical	———
2025-2024/ Fourth	------	Research Project	Theoretical	———

8- Expected learning outcomes of the programmed	
Knowledge	
A. Cognitive goals	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. 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. A3- Application, enabling the student to apply the scientific concepts he has studied on the ground, that is, in practical life 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. A5- Installation: Enabling the student to create

	unconventional and previously unused software and technologies for information A6- Evaluation: enabling the student to evaluate and evaluate the available software and information technologies
Skills	
B- The program's 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.
Value	
	Developing students' abilities to share ideas is an essential skill for their success in computer science. By sharing their ideas, students can: □ 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: 1. Creating a safe environment for expressing opinions Computer Science professors must create a safe environment in which students can express their opinions without fear of ridicule or criticism. 2. .Encouraging discussion and debate Discussion and debate can be encouraged in class by asking open-ended questions and motivating students to exchange ideas. 3. Using interactive educational techniques Interactive educational techniques, such as discussion groups and brainstorming, can be used to develop students' abilities to share ideas. 4. Providing opportunities for teamwork

	Opportunities for teamwork can be provided through group projects and practical experiences. 5. Providing students with the opportunity to give presentations Students can be given the opportunity to give presentations to explain their ideas and projects. 6. Assess students on their ability to share ideas Students can be assessed on their ability to share ideas through tasks that require them to express their opinions and explain their ideas. 7. Providing opportunities for students to participate in conferences and workshops 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. Encouraging students to publish their research Students can be encouraged to publish their research in scientific journals and websites. 9. Use social media to share ideas Social media can be used to share ideas with other students

	and experts in the field of computer science. 10. Providing opportunities for students to communicate with graduates of the Computer Science Department 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.

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.

Teaching and learning methods in the department:

1. Lectures;

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

2. Discussion

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.

3. Peer teaching

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.

4. Practical work

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.

5. Education based on technical resources

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		Requirements special skills (If any)		Preparing the teaching staff	
	private	General			temporal	Permanent employee
Professor	networks	Computer and communications engineering	---	---	---	Permanent employee
Professor	Systems and information	computer science	---	---	---	Permanent employee
Assistant Professor	Computer application techniques	computer science	---	---	---	Permanent employee
Assistant Professor	Applied computer technology	computer science	---	---	---	Permanent employee
Assistant Professor	Network security	computer science	---	---	---	Permanent employee
Assistant Professor	Islamic history	history	---	---	---	Permanent employee
Teacher	Artificial	computer	---	---	---	Permanent

	intelligence	science				employee
Teacher	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
assistant teacher	Computer security	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.

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.

Curriculum skills chart

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

required from the programme Learning outcomes																			
General and qualifying transferable skills (other skills related to employability and personal development(				Emotional and value goals				objectives Skills the of programme				Cognitive objectives				Basic Or optional	Course Name	Course Code	Year /level
D4	**D3**	**D2**	**D1**	**C4**	**C3**	**C2**	**C1**	**B4**	**B3**	**B2**	**B 1**	**A4**	**A3**	**A2**	**A1**				
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○	○	○	●	○	○	●	●	○	●	●	●	○	●	●	●	Basic	Educational	
○	○	○	○	●	●	●	●	○	●	●	●	○	●	●	●	Basic	English	
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●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Basic	Databases	
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○	○	○	○	●	●	●	●	○	●	●	●	○	●	●	●	Basic	Translators	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Basic	Artificial	
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●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Basic	Software	
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○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Basic	research	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Basic	Practical	

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

Course Description Form

1. Course Name:
Structured Programming
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Zaid Ameen Abdujabbar ***Email:*** *zaid.ameen@uobasrah.edu.iq*
8. Course Objectives

Course Objectives	• *Study the principles of algorithms, flowcharts, and how to*

	solve the problem. ***• Learn programming concepts including program structure, data types, arithmetic expression, logical expression, statement, and functions.*** ***• 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.***

9. Teaching and Learning Strategies

Strategy Discussion Teamwork	***• Providing the student with basic and secondary topics related to algorithms and flow charts*** ***• Finding solutions to mathematical, numerical and applied problems and converting them into computer programs*** ***• Requiring the student to study computer programs related to theoretical vocabulary***

10.Course Structure

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

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**	**Control**	**Lectures**	**Exams**

		statement with selection	**structures (Selection). Switch case Statement**	**and Lab**	
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**	**Applications in arrays: search**	**Lectures and Lab**	**Exams**

		and sort operations within arrays	and sort		
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

11.Course Evaluation	
Score distribution: **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)** **Final exam 50% (15 marks for the final Lab exam and 35 marks for the final theoretical exam)**	
12.Learning and Teaching Resources	
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:
Logic Design
2. **Course Code:**
3. **Semester / Year:**
Annual
4. **Description Preparation Date:**
2025-2024
5. **Available Attendance Forms:**
Actual presence
6. **Number of Credit Hours (Total) / Number of Units (Total):**
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: Mohammed Salah Hashim **Email: moh.salah@uobasrah.edu.iq**
8. Course Objectives

Course Objectives	**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 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: ***1. Giving the student a balanced coverage of logical design.*** ***2. Combinational logic circuit design.***

9. Teaching and Learning Strategies

Strategy	• ***Educational strategy, collaborative concept planning.*** • ***Brainstorming education strategy.*** • ***Education Strategy Notes Series*** • ***Applying the theoretical aspect in practical laboratories by carrying out some*** • ***important scientific experiments that consolidate the information given in the*** • ***Theoretical aspect.*** • ***Using lectures by speaking to students and using Power Point slides and the blackboard***

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 Digital Systems**	**1- Presenting the theoretical**	**✓Homework assignments ✓Daily exams ✓Reports ✓Monthly**

2	**2**	**The student should know numerical systems**	**Number Systems**	**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-**	**exams ✓Mid-term exam ✓final exam**
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**	**There 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**		

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
Computer Techniques and Organization
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025−2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
7. ***Course administrator's name (mention all, if more than one name)***
Name: Hend Muslim Jasim Mohammed ***Email: Hend.jasim@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	***To highlight the major topics student computer study as introductory course. Students engaged to learn basic knowled required to develop their sk***

	showing their eligibility to perce advanced steps of their educati progress and to continue. T course merges and integrates t different fields of the futu taught materials in advance. covers the knowledge needed fr the very theoretical to the practi and applicable tools they invoke get along their interests computer learning sessions.

9. Teaching and Learning Strategies

Strategy	

10. Course Structure

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

		mputer organization and rchitecture 1: Input unit, tput 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**

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)	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** 4. **Ubuntu الدليل العملي في استخدام**

	5. **concepts of programming languages الوسائط المتعددة الرقمية** 1. **Digital Multimedia** 6. **مهارات الحاسوب المتقدمة**
Recommended books and references (scientific journals, reports...)	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** 4. **Ubuntu الدليل العملي في استخدام** 5. **concepts of programming languages الوسائط المتعددة الرقمية** 6. **Digital Multimedia** 7. **مهارات الحاسوب المتقدمة** 8.
Electronic References, Websites	

Course Description Form

1. Course Name:
Discrete Structure
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025-2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: Name: Rana Jassim Mohammed ***Email: rana.mohammed@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	***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.

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 &**			**Monthly exams**

		Definition, Model of function			
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,**			**✓Reports**

		Introduction			
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

Required textbooks (curricular books, if any)	
Main references (sources)	***Rosen, Kenneth. Discrete Mathematics and Its Applications 7th edition.***

	McGraw-Hill Science, 2011.
Recommended books and references (scientific journals, reports...)	***Todd Feil, Joan Krone, "Essential Discrete Mathematics", Prentice Hall, 2003.***
Electronic References, Websites	

Course Description Form

1. Course Name:
Foundations of education
2. **Course Code:**
3. **Semester / Year:**
Annual
4. **Description Preparation Date:**
2025-2024
5. **Available Attendance Forms:**
Actual presence
6. **Number of Credit Hours (Total) / Number of Units (Total):**
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: noor kate abbas **Email:** noor.k.abbas@uobasrah.edu.iq
8. Course Objectives

Course Objectives	**Course Objectives**

9. Teaching and Learning Strategies	
Strategy	

10.Course Structure					
Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
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**

		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).			
4	**2**	**: This section might explore the various methodologies and approaches used in education, such as traditional instruction, constructivist learning, inquiry-based learning, and experiential learning.**	**Forms of Education**		**Reports**
5	**2**	**: This segment would trace the historical evolution of education, examining its development through different eras, such as ancient civilizations,**	**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**	**Spartan**		**Monthly**

		delve into the educational system and practices of ancient Sparta, focusing on its emphasis on physical fitness, military training, and obedience.	**Education:**		**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:	
Educational psychology	
2. Course Code:	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2024	
5. Available Attendance Forms:	
Actual presence	
6. Number of Credit Hours (Total) / Number of Units (Total):	
2 hours per week / 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Ashwaq Jabbar Hammoud Email: :ashwaq.jabar@uobasrah.edu.iq	
8. Course Objectives	
Course Objectives	• The educational psychology course aims to gain theoretical knowledge

	to 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.

9. Teaching and Learning Strategies

Strategy ***Discussion*** ***Teamwork***	***1- Explaining the scientific material in detail and accurately during the lecture*** ***2- Writing reports on main topics*** ***3- Open discussions***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1	**2**	***-Cognitive objectives*** ***-I understand behavior*** ***B- Predicting behavior.*** ***Prediction is the next stage***	**Educational psychology**	***The lecturer gives detailed theoretical lectures***	***Assign grades to the homework assignments and reports assigned to them***

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

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

		B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior		*theoretical lectures*	*of the year exam.*
6	*2*	*-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior*	*Sample, psychological research*	*The lecturer gives detailed theoretical lectures*	*Assign grades to the homework assignments and reports assigned to them*
7	*2*	*-Cognitive objectives*	*tools, and characteristics*	*The lecturer*	*Weekly, monthly,*

		-I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior	*of scales*	*gives detailed theoretical lectures*	*daily exams and the end of the year exam.*
8	*2*	*-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior*	*Questionnaire and interview*	*The lecturer gives detailed theoretical lectures*	*Assign grades to the homework assignments and reports assigned to them*

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

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

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

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

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

		behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior		***lectures***	***and reports assigned to them***
19	***2***	***-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior***	***To define inclinations, trends, and values***	***The lecturer gives detailed theoretical lectures***	***Weekly, monthly, daily exams and the end of the year exam.***
20	***2***	***-Cognitive objectives -I understand***	***Definition of intelligence, theories of***	***The lecturer gives***	***Assign grades to the***

		behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior	***intelligence, methods of research into intelligence, types of intelligence tests***	***detailed theoretical lectures***	***homework assignments and reports assigned to them***
21	***2***	***-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior***	***Mental abilities: attention and perception***	***The lecturer gives detailed theoretical lectures***	***Weekly, monthly, daily exams and the end of the year exam.***
22	***2***	***-Cognitive***	***Mental***	***The***	***Assign***

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

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

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

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

		of understanding behavior C- Controlling human behavior			
30	***2***	***-Cognitive objectives -I understand behavior B- Predicting behavior. Prediction is the next stage of understanding behavior C- Controlling human behavior***	***Compatibility indicators and the importance of mental health***	***The lecturer gives detailed theoretical lectures***	***Assign grades to the homework assignments and reports assigned to them Weekly, monthly, daily exams and the end of the year exam.***
11.Course Evaluation					
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:
Mathematical
2. *Course Code:*
3. *Semester / Year:*
Annual
4. *Description Preparation Date:*
2025-2024
5. *Available Attendance Forms:*
Actual presence
6. *Number of Credit Hours (Total) / Number of Units (Total):*
3 hours per week / 6 units
7. *Course administrator's name (mention all, if more than one name)*
Name: Msc. Zahraa Adnan Jameel ***Email: zahraa.adnan@uobasrah.edu.iq***
8. Course Objectives
• *Introducing the student to the basic principles of calculus, which are include in all fields of mathematics, and its applications are included in engineering applications and all departments of science.* • *Acquiring mental skills and thinking in mathematics.* • *Introducing students to the importance of mathematics.*
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,**	**Theoretical**	**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:
Democracy and Human Rights
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025-2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
1 hour per week / 2 units
7. Course administrator's name (mention all, if more than one name)
Name: Name: Zainab Hamza Abbas ***Email: : ceps.lect.067@avicenna.uobasrah.edu.iq***
8. Course Objectives

Course Objectives ***Explaining human rights, their importance, and the extent of their impact on humans in particular and on society in general***	• ***What are the necessary rights of the*** • ***Asan*** • ***and how are the heavenly laws recommended for them?*** • ***Explaining the most important rights*** • ***guaranteed by Islam to humans.***

	• ***Human rights across ancient civilizations.....***

9. Teaching and Learning Strategies	
Strategy Dialogue and discussion	***The learning strategy involves the students' participation with the teacher in presenting many questions 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.***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
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**	**Human rights in**	**Dialogue**	**✓Reports**

		and express their opinions	civilization Egyptian	and discussion	
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**

Course Description Form

1. Course Name:
English Language
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025-2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
1 hour per week / 2 units
7. Course administrator's name (mention all, if more than one name)
Name: Ahmed Kadhim Shanan ***Email: ahmed.shanan@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• ***Enabling students to improve listening, speaking, writing, and reading skills.*** • ***Acquiring self-learning skills for the language***
9. Teaching and Learning Strategies	

Strategy	• ***Presentations*** • ***Listen to video clips through display screens*** • ***Adopting the method of discussion with stude through translation of clips and conversation***

10. Course Structure

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

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

27 *28* *29* *30*	*1* *1* *1* *1*		***Relative Clauses 2 Exercises*** ***Relative Clauses 3 Exercises*** ***Passive 1: Exercises*** ***Passive 2: Exercises***		

11.Course Evaluation

homework

Monthly exams

Mid-year and final-year exams

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	• ENGLISH. GRAMMAR. ***IN*** USE. ***Fifth Edition. Raymond Murphy.*** • ***Basic English Grammer By ANNE SEATON***
Main references (sources)	• ***Essential-English BY C.E. ECKERSLEY*** • ***English Vocabulary in Use: Vocabulary Reference and Practice: with Answers***
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Arabic Language
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
1 hours per week / 2 units
7. Course administrator's name (mention all, if more than one name)
Name: Ragaad Ahmed ***Email: ragadahmmad1996@gmail.com***
8. Course Objectives

Course Objectives	• ***The student should be able to use the language correctly in writing and in communicating with others.***

	• ***Developing the student's literary taste so that he understands the aesthetic aspects of speech styles, meanings, and images.***

9. Teaching and Learning Strategies

Strategy	***Dialogue strategy*** ***Discussion strategy***

10.Course Structure

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

6 7 8 9 1 10 11 12 13 14 15 16 17 18 19 20 21 22 23		**Kan and her sisters, and if and her sisters, nor does it negate sex** **Identify their concepts, types and provisions** **Recognizing their concepts, types, direct object, and types of absolute object** **How to differentiate between the hamzat al-wasl and the hamzat al-qat`** **Introduction to literature, its importance and function** **Theatrical lyric** **Educational representation** **A theoretical introduction to ancient poetry** **The poem I wish my poetry was a model** **An example of his**	**Initiation copies** **The subject and the deputy subject** **The direct object and the absolute object** **Number and its provisions** **How to write hamza** **Literature and texts** **Elements of literature** **Hair types** **Examples of ancient poetry**	**them.** **Theoretical lecture + methods of presentation, dialogue and discussion**	

24		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		
32		An example of his poetry	jeweler 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	

	to data structures ***3- The student should describe the steps for solving the program*** ***4- The student explains the different methods of solving using different graphic structures*** ***5- The student practically applies different graphic structures***
9. Teaching and Learning Strategies	
Strategy	***1- Preparing teaching staff for the purpose of qualifying them to teach computer science in schools and institutes affiliated with the Ministry of Education*** ***2- Developing students' mental mathematical abilities so that they keep pace with the paths and levels of technical and scientific development in the world*** ***3- A field link between intellectual and sports nutrition through scientific knowledge and its reflection on the student's field behavior*** ***4- Explaining in theoretical and practical form the interconnection and marriage between the computer and the rest of the scientific branches*** ***5- Preparing teaching staff for the purpose of qualifying them to teach computer science in schools and institutes affiliated with the Ministry of Education***

10.Course Structure

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

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**	**Lecture and practical application**	**Discussion and exams**

			details **-function calling**		
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 theoretical + 2 practical**	**For the student to practically apply different graphic structures**	**-Examples on use string functions**	**Lecture and practical application**	**Discussion and exams**

9	**3 theoretical + 2 practical**	**For the student to practically apply different graphic structures**	**Structure definition** **-Structures arrays**	**Lecture and practical application**	**Discussion and exams**
10	**3 theoretical + 2 practical**	**For the student to practically apply different graphic structures**	**Pointers** **-Address of operator (&)** **Deference - operator(*)**	**Lecture and practical application**	**Discussion and exams**
11	**3 theoretical + 2 practical**	**For the student to practically apply different graphic structures**	**Pointers and arrays**	**Lecture and practical application**	**Discussion and exams**
12	**3 theoretical + 2 practical**	**For the student to practically apply different graphic structures**	**-Linked list** **-Types of linked lists** **-Linked list implementation in c++**	**Lecture and practical application**	**Discussion and exams**

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**	**Lecture and practical application**	**Discussion and exams**

			stacks -push operation -pop operation -top operation		
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 practical	For the student to practically apply different graphic structures	Queue -Basic operations on queue -Program	Lecture and practical application	Discussion and exams
20	3 theoretical + 2	For the student to practically apply different	Sorting -Bubble sort	Lecture and practical	Discussion and exams

	practical	graphic structures	-Selection sort -Insertion sort	application	
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 practica**	**For the student to practically apply different graphic**	**Exam**	**Lecture and practical applicatio**	**Discussion and exams**

	l	**structures**		**n**	

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,**
Recommended books and references (scientific journals, reports...)	**Data structures and Algorithm Analysis in C++** **ark Allen Weiss , Florida International University , 2014**
Electronic References, Websites	

Course Description Form

1. Course Name:
Object oriented programing
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Ammar Asaad Mohammed ***Email: ammar.asaad@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	***Study the basic concepts of entity programming and identify the basics***

	of object programming work and how to take advantage of them and facilitate the reuse of code. ***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.***

9. Teaching and Learning Strategies

Strategy	• ***Applying the theoretical aspect in practical laboratories by carrying out some*** • ***important scientific experiments that consolidate the information given in the*** • ***Using lectures by speaking to students and using Power Point slides and the blackboard***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1		***Learn about the concept of***	***What is a Java program,***	***Displaying it on a***	***Homework***

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

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

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

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

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

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

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

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

				the theoretical material in the laboratories	*Exams - Mid-term*
22		*Learn about the concept of Exception*	*User-defined Exception*	*Displaying it on a display screen.* *2- Applying the theoretical material in the laboratories*	*Homework assignments* *Daily - exams* *Exams - Mid-term*
23		*Learn about the concept of Exception*	*User-defined Exception*	*Displaying it on a display screen.* *2- Applying the theoretical material in the laboratories*	*Homework assignments* *Daily - exams* *Exams - Mid-term*
24		*Learn about*	*Creating*	*Displaying*	*Homewo*

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

				material in the laboratories	Mid-term
27		Learn about the concept of GUI and how to create programs	graphic user interfaces 3	Displaying it on a display screen. 2- Applying the theoretical material in the laboratories	Homework assignments Daily exams Exams - Mid-term
28		Learn about the concept of GUI and how to create programs	graphic user interfaces 4	Displaying it on a display screen. 2- Applying the theoretical material in the laboratories	Homework assignments Daily exams Exams - Mid-term
29		Learn about the concept of GUI and how	graphic user interfaces 5	Displaying it on a display	Homework assignme

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

12.Learning and Teaching Resources

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 JavaTM**
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Microcomputers and assembly language
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025−2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: ghazwan Abdulnabi al-ali ***Email: ghazwan.alali@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	***This course aims to understand the basics of programming, architecture and processor interaction for general students who have prior knowledge in both computer hardware and software and understand the main components and working principles of the 8088 microprocessor.***

9. Teaching and Learning Strategies	
Strategy	• ***Educational strategy, collaborative concept planning.*** • ***Brainstorming education strategy.*** • ***Education Strategy Notes Series*** • ***Applying the theoretical aspect in practical laboratories by carrying out some*** • ***important scientific experiments that consolidate the information given in thetheoretical aspect.*** • ***Using lectures by speaking to students and using Power Point slides and the blackboard***

10. Course Structure

Week	*Hours*	*Required Learning Outcomes*	*Unit or subject name*	*Learning method*	*Evaluation method*
1 - 2	**4**	**Knowledge about microprocessing**	**Introduction to Microcomputer**	**1. Lectures. 2. In – Class Questions and Discussions. 3. Connection between Theory and Application. 4. Extracurricular Activities. 5. Seminars. 6. In-and Out-Class oral conservations. 7. Reports,**	**✓Homework assignments ✓ Daily exams ✓ Monthly exams ✓ Mid-term and final exam**
3 - 4	**4**	**Knowledge of general microcomputer system architecture**	**General Architecture of Microcomputer system**		

5 - 7	**6**	**Knowledge of 8088 microprocessors**	**Introductio 8088n Microprocessor**	**Presentations, and Posters.**	
8 - 9	**6**	**Knowledge of memory address and data organization**	**Memory address space and data organizatio n**		
10 - 12	**6**	**Knowledge of Segment & Data Registers(General purpose Registers)**	**Segment & Data Registers(G eneral purpose Registers)**		
13 - 15	**6**	**Learn assembly language programming**	**Assembly Language Programmi ng**		
16 - 18	**6**	**Implementing structures in assembly language**	**Implementi ng Control Structures in Assembly**		

			Language		
19 - 21	**10**	**Implementing arrays and stack loops in assembly language**	**Arrays, Loop and stack in assembly Language**		
22 - 24	**6**	**Learn machine language coding methods + interrupt procedures**	**Machine Language Coding+ Interrupt Routines**		
25 - 30	**6**	**Basic knowledge about principles and techniques the Arduino.**	**Basic knowledge about principles and techniques the Arduino.**		

1. Course Evaluation
Semester exam score 50 and final exam score 50 **The semester score is 15 marks for the practical exam and 35 marks for the theoretical exam**
2. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**Rafael C. Gonzalez & Richard E. Wood, "Digital Image Processing", 2/E, Prentice-Hall 2001**
Main references (sources)	**Intel® 64 and IA-32 Architectures Software Developer's Manual Volume 2 (2A, 2B, 2C & 2D): Instruction Set Reference, A-Z**
Recommended books and references (scientific journals, reports...)	**)88 - 8086 microprocessor software application and design/avtar singh**
Electronic References, Websites	**None**

Course Description Form

1. Course Name:
Numerical analysis.
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Takia Ahmed Jawad Al-Griffi. ***Email: takia.ahmed@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• ***Enabling the student to solve problems related to numerical***

	analysis. ***• Enable the student to benefit from the material in scientific applications.*** ***• Familiarity with designing and writing programs related to numerical analysis.*** ***• Familiarity with designing, writing, and developing algorithms related to theoretical subjects.*** ***• Enable the student to work in a group to solve problems associated with numerical analysis programs.***
9. Teaching and Learning Strategies	
Strategy	***1- Educational strategy, collaborative concept planning.*** ***2- Brainstorming education strategy.*** ***3-Education Strategy of Notes Series.***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1 2 3 4 5 6 7 8 9	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.**

10 11 12 13 14 15 vacation 16 17 18 19 19 20 21 22 23 24 25 26 27 28 29 30				**mathematical problems.** **3- The student's familiarity with designing, writing, and developing algorithms related to the theoretical subject.** **4- Enabling the student to solve problems related to 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).**
Recommended books and	**Hildbrand D. B. (introduction of**

references (scientific journals, reports...)	**.numerical analysis)** **Froberg C. E. (introduction of numerical . analysis)** **Burden (numerical analysis).**
Electronic References, Websites	https://zlibrary-asia.se/ /https://www.researchgate.net

Course Description Form

1. Course Name:
Database and system analysis
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: doaa alrubaye ***Email: duaa93@gmail.com***
8. Course Objectives

Course Objectives	***The goal of studying databases is to offer introduction to database manageme systems, with an emphasis on how***

	organize, maintain, and retri information - efficiently and effectively from a database management system.
9. Teaching and Learning Strategies	
Strategy	***A- Cognitive objectives:*** ***• 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*** ***B- Skills objectives for the course:*** ***• Familiarity with designing and developing programs related databases*** ***• Familiarity with writing and developing algorithms related t 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*** ***Teaching and learning methods*** ***• Providing the student with basic and secondary topics relate 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

Week	*Hours*	*Required Learning Outcomes*	*Unit or subject name*	*Learning method*	*Evaluation method*
1 - 2	**4**	**ntroduction to Access 010, the first types of access objects, basic database concepts, opening a database, components of a database, what are ccounts, sayings and keys? What are lationships? Designing a Database, Tips on Choosing Different ypes, Differentiating the Database, Its atabase, Modifying It, nd 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.**	**Data Models**	**Lectures**	**Exams**

		mport and export data			
5 - 7	6	eate tables and protect r-specific data, create es of queries, such as ect query, create a ery in Design view, w the query, edit a ery, work with ltiple related tables, rk with query atasheets, 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 r-specific forms, eate controls that play text, numbers, d dates, choose fonts, ors, and other corative touches, add nts, 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	rmalizing and normalizing database	Normalization of Database	Lectures	Exams

		tables	Tables, De-normalization		
12 - 13	4	troduction to defining SQL commands	Introduction to SQL, Data Definition Commands	Lectures	Exams
14 - 16	6	owse data types, eate table structures, QL constraints, SQL indexes	Data Types, Creating Table Structures, SQL Constraints, SQL Indexes	Lectures	Exams
17-18	4	hat are the data ocessing commands and their application	Data Manipulation Commands	Lectures	Exams
19	2	plain the concepts of gical 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 bles, add primary and reign key mappings,	Advanced Data Updates, Copying Parts of Tables, Adding	Lectures	Exams

		d delete a table from the database	Primary and Foreign Key Designations, Deleting a Table from the Database		
23-24	4	plain aggregation nctions and data aggregation	Aggregate Functions, Grouping Data	Lectures	Exams
25-26	4	plain operations on relational groups	Relational Set Operators	Lectures	Exams
27-28	4		SQL Join Operators	Lectures	Exams
29-30	4	scussing projects and viewing 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. Introducti to Database Concepts and Microsoft Acc 20**
Electronic References, Websites	

Course Description Form

1. Course Name:
Computational Theory
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
3 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: mushtaq adulmutalib hasson Email: mushtaq.husson@uobasrah.edu.iq
8. Course Objectives

Course Objectives	This course emphasizes computabil and computational complexity theo

	Topics include regular and conte free languages, decidable a undecidable problems, reducibil recursive function theory, time a space measures on computati completeness, hierarchy theorer inherently complex problems,
9. Teaching and Learning Strategies	
Strategy	***Providing the student with prim and secondary topics related computational theory design.***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
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.**
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:
Scientific research method
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: entesar barges talal **Email:**
8. Course Objectives

Course Objectives	• Introducing the student to scientific methods for writing scientific research

	• *The student studies - theoretically - the steps that must be taken to write scientific theses.* • *Applying this study practically to a brief research.*

9. Teaching and Learning Strategies	
Strategy	*Providing the student with basic and secondary top related to the research.*

10.Course Structure

Week	*Hours*	*Required Learning Outcomes*	*Unit or subject name*	*Learning method*	*Evaluation method*
1-3	**2**	**Learn research methodology tools**	**Introduction to the scientific research method: science, its goals, scientific knowledge, scientific theory.**	**Lectures and dissuasion**	**Exams**
4-7	**2**	**Learn research methodology tools**	**General concepts of the scientific method: goals, assumptions, scientific hypothesis, scientific method, elements of scientific research.**	**Lectures and dissuasion**	**Exams**
8-10	**2**	**Learn research methodology tools**	**General concepts of the scientific method: goals, assumptions, scientific**	**Lectures and dissuasion**	**Exams**

			hypothesis, scientific method, elements of scientific research.		
11-14	**2**	**Learn research methodology tools**	**Research problem: its sources, importance, objectives, research plan, procedures.**	**Lectures and dissuasion**	**Exams**
15-19	**2**	**Learn research methodology tools**	**Use of references, library, classification, scientific documentation**	**Lectures and dissuasion**	**Exams**
20-22	**2**	**Learn research methodology tools**	**Scientific research tools: observation, interview, questionnaire, and test.**	**Lectures and dissuasion**	**Exams**
23-24	**2**	**Learn research methodology tools**	**Sample: selection, types, sample size.**	**Lectures and dissuasion**	**Exams**
25-26	**2**	**Learn research methodology tools**	**Research methods: historical research method, importance, collecting sources, criticism**	**Lectures and dissuasion**	**Exams**
27	**2**	**Learn research methodology tools**	**Systems analysis approach: types, steps.**	**Lectures and dissuasion**	**Exams**
28	**2**	**Learn research methodology tools**	**Descriptive research method: importance, types.**	**Lectures and dissuasion**	**Exams**
29	**2**	**Learn research methodology tools**	**Experimental research methodology: importance, experimental control, experimental designs.**	**Lectures and dissuasion**	**Exams**

29	**2**	**Learn research methodology tools**	**Writing scientific research: title, writing style, research components**	**Lectures and dissuasion**	**Exams**
30	**2**	**Learn research methodology tools**	**Scientific research institutions in Iraq: obstacles to scientific research, the reality of scientific research.**	**Lectures and dissuasion**	**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)	**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. **7- Methodological patterns and their applications. D. Anwar Hussein Abdel Rahman and Dr. Adnan Haqqi, Baghdad, 2007.** **8- Conceptual and theoretical foundations. Dr.. Anwar Hussein Abdel Rahman and Dr. Adnan Haqqi, 2008.** **8- Kirk. R. Experimental Design, California, 2005.**
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Arabic Language
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
1 hours per week / 2 units
7. Course administrator's name (mention all, if more than one name)
Name: Ragaad Ahmed ***Email: ragadahmmad1996@gmail.com***
8. Course Objectives

Course Objectives	• ***The student should be able to use the language correctly in writing and in communicating with others.***

	• ***Developing the student's literary taste so that he understands the aesthetic aspects of speech styles, meanings, and images.***

9. Teaching and Learning Strategies

Strategy	***Dialogue strategy*** ***Discussion strategy***

10.Course Structure

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

6 7 8 9 1 10 11 12 13 14 15 16 17 18 19 20 21 22 23		**Kan and her sisters, and if and her sisters, nor does it negate sex** **Identify their concepts, types and provisions** **Recognizing their concepts, types, direct object, and types of absolute object** **How to differentiate between the hamzat al-wasl and the hamzat al-qat`** **Introduction to literature, its importance and function** **Theatrical lyric** **Educational representation** **A theoretical introduction to ancient poetry** **The poem I wish my poetry was a model** **An example of his**	**Initiation copies** **The subject and the deputy subject** **The direct object and the absolute object** **Number and its provisions** **How to write hamza** **Literature and texts** **Elements of literature** **Hair types** **Examples of ancient poetry**	**them.** **Theoretical lecture + methods of presentation, dialogue and discussion**	

24		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		
32		An example of his poetry	jeweler 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:
Developmental psychology
2. **Course Code:**
3. **Semester / Year:**
Annual
4. **Description Preparation Date:**
2025-2024
5. **Available Attendance Forms:**
Actual presence
6. **Number of Credit Hours (Total) / Number of Units (Total):**
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Zainab Jamil Abdel Jalil **E-mail : zainab.abduljuleel@uobasrah.edu.iq**
8. Course Objectives

Course objectives **Explaining the concept of psychology, its importance, and the extent of its impact on the individual in particular and on society in**	**• For the student to become familiar with the concept of developmental psychology, its importance and goals** **• That the student be able to explain and predict some of the behaviors that the student will exhibit in the future according to the**

general. The student should apply what he has learned by dealing with students according to the nature of the age stage.	***nature of the age stage***

9. Teaching and Learning Strategies	
Strategy	• ***The learning strategy involves students' participation with the teacher in presenting many questions*** • ***Psychological and educational information that is important to humans and discuss it directly with students,*** • ***And express their opinions about this psychological information and how important it is to them.***

10. Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1 - 2	**2**	**Knowledge about microprocessing**	**Developmental psychology ((overview The origins and development of developmental psychology**	**1. Lectures. 2. In – Class Questions and Discussions. 3. Connection between Theory and Application. 4. Extracurricular Activities. 5. Seminars.**	**✓Homework assignments ✓ Daily exams ✓ Monthly exams ✓ Mid-term and final exam**

			Some basic concepts in growth **The importance of developmental psychology from an applied perspective** **And theory** **The importance of developmental psychology for society** **The importance of developmental psychology for educators and teachers** **Factors affecting growth, represented by internal and external factors** **The environment and its impact on growth**	**6. In-and Out-Class oral conservations.** **7. Reports, Presentations, and Posters.**	

			Genetics and its effect on growth **Research methods in developmental psychology** **Experimental and experimental approach** **General laws of developmental psychology** **Developmental theories Erikson and Piaget's theory** **(Childhood (early** **Childhood (middle) stage**		

			childhood (late) stage **(adolescence (early** **adolescence ((middle** **(adolescence (late** **Old age** **Premature aging** **Premature aging** **Middle old age** **Late old age** **Educational applications of the curriculum**		

1. Course Evaluation	
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	
2. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	**Muhammad Imad Al-Din Ismail (2006) The Child from Conception to Adulthood, Part 1_ .Part 2, Kuwait, Dar Al-Qalam .**
Main references (sources)	**Hamed Zahran (2007), Developmental Psychology, Cairo World of Books**
Recommended books and references (scientific journals, reports...)	**Muhammad Jamil Mansour and Farouk Abdel Salam (2006), Growth from childhood to adolescence, Jeddah, Tihama**
Electronic References, Websites	

Course Description Form

1. Course Name:
English Language
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
1 hour per week / 2 units
7. Course administrator's name (mention all, if more than one name)
Name: Ahmed Kadhim Shanan ***Email: ahmed.shanan@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• **Enabling students to improve listening, speaking, writing, and reading skills.**

	• **Acquiring self-learning skills for the language**

9. Teaching and Learning Strategies

Strategy	• **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: Exercis**	**Lecture**	**Exams**
3-4	**1**		**Types of Past Tenses: Exercises**	**Lecture**	**Exams**
5-6	**1**		**Future Tense: Exercises**	**Lecture**	**Exams**
7-8	**1**		**Articles and nouns: (a/an and th**	**Lecture**	**Exams**
9-10	**1**		**Countable and uncountable: Exercises**	**Lecture**	**Exams**
11-12	**1**		**Singular and Plural Nouns: Exercises**	**Lecture**	**Exams**
13-14	**1**		**Adjectives and adverbs: Exercise**	**Lecture**	**Exams**
15-16	**1**		**Comparative 1, 2, 3: Exercises**	**Lecture**	**Exams**
17-18	**1**		**Conjunction: Exercises**	**Lecture**	**Exams**
19-20	**1**		**Prepositions: Exercises**	**Lecture**	**Exams**
21-22	**1**		**Modals 1: Exercises**	**Lecture**	**Exams**
23-24	**1**		**Questions: Exercises**	**Lecture**	**Exams**
25-26	**1**		**Auxiliary Verbs: Exercises**	**Lecture**	**Exams**
27-28	**1**		**Relative Clauses: Exercises**	**Lecture**	**Exams**
29-30	**1**				

			Passive: Exercises		

11.Course Evaluation	
homework ***Monthly exams*** ***Mid-year and final-year exams***	
12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	• ENGLISH. GRAMMAR. ***IN*** USE. ***Fifth Edition. Raymond Murphy.*** • ***Basic English Grammer By ANNE SEATON***
Main references (sources)	• ***Essential-English BY C.E. ECKERSLEY*** • ***English Vocabulary in Use: Vocabulary Reference and Practice: with Answers***
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Educational administration and supervision
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
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.***

	2- That students become familiar with the theories of educational administration *3- That students become aware of administrative patterns* *4- That students realize the role of educational administration in achieving the goals of the educational process* *5- That students become familiar with educational leadership styles.* *6- That students become familiar with the concept of educational supervision.*

9. Teaching and Learning Strategies

Strategy	*-Lectures/discussions/brainstorming/writing reports*

10.Course Structure

Week	*Hours*	*Required Learning Outcomes*	*Unit or subject name*	*Learning method*	*Evaluation method*
1-4 *5-8*	*2 H*	*- That students realize the importance of educational administration and its role in*	*1- Administration and education administration* *- nature of the administration*	*-Lectures/ iscussions/ ainstorming/ iting reports*	*:Tests -* *Preliminary (pre-tests)* *- Structural (daily*

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

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

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 References, Websites	

Course Description Form

1. Course Name:
Baath Party crimes
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
1 hours per week / 2 units
7. Course administrator's name (mention all, if more than one name)
Name: noor kate abbas ***Email:*** ***noor.k.abbas@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• ***Learn about the government system in Iraq*** • ***The most important violations committe***

	by the previous regime against the Iraqi people • ***The most important violations against international law that the previous regim was subjected to***

9. Teaching and Learning Strategies

Strategy	***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.***

10.Course Structure

Week	*Hours*	*Required Learning Outcomes*	*Unit or subject name*	*Learning method*	*Evaluation method*
1	**1**	• **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 violations against**	**Baath Party crimes**	**Lecture - interrogation method**	**The quarterly exam in addition to daily participation and attendance**

		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 - interrogation method	The quarterly exam in addition to daily

					participation and attendance
11-13	1	The second stage (1968-1978)	Chapter Two	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
14	1	The third stage (1978-2003)	Chapter Two	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance

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 - interrogation method	The quarterly exam in addition to daily

					participation and attendance
20-22	1	Social, political and religious violations	Chapter Three	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance
23-25	1	Violation of party pluralism	Chapter fourth	Lecture - interrogation method	The quarterly exam in addition to daily participation and attendance

26	1	**Methods used in torture**	**Chapter four**	**Lecture - interrogation method**	**The quarterly exam in addition to daily participation and attendance**
27 – 30	1	**Practices followed in suppressing the Shaabani uprising**	**Chapter five**	**Lecture - interrogation method**	**The quarterly exam in addition to daily participation and attendance**
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 0f Baath Party crimes**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Artificial Intelligence
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Zakariya A. Oraibi ***Email: zakaria_au@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• ***Learning the essentials of Artificial Intelligence.*** • ***Learning the programming language of Prolog.***

	• *Incentivize students to use AI tools to solve problems.*

9. Teaching and Learning Strategies	
Strategy	• *Students will lea the basics 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.*

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 Implement ation*
6	*2*		*First Order Logic – Part 1*	*In Class*	*Homework*
7	*2*		*Recursive Rules in*	*Lab*	*Direct Implement*

			Prolog		***ation***
8	***2***	***-***	***First Order Logic Part 2 -***	***In Class***	***Quiz***
9	***2***		***Backtracking and Queries in Prolog***	***Lab***	***Direct Implement ation***
10	***2***		***Solving Problems by Search***	***In Class***	***Homework***
11	***2***		***Arithmetic Operations in Prolog – Part 1***	***Lab***	***Direct Implement ation***
12	***2***		***Arithmetic Operations in Prolog – Part 2***	***Lab***	***Direct Implement ation***
13	***2***		***Using Python to Solve Different AI Problems***	***In Class***	***Homework***
14	***2***		***Generative Adversarial Neural Networks (GANs): Introduction***	***In Class***	***Quiz***

15	*2*		*GANs Applications*	*Yes*	*Direct Implement ation*
16	*2*		*Adversarial Search*	*In Class*	*Homework*
17	*2*		*Depth and Breadth First Search in Prolog*	*Lab*	*Direct Implement ation*
18	*2*		*A* Algorithm in Prolog*	*In Class*	*Quiz*
19	*2*		*Constrained Satisfaction Problems*	*Lab*	*Direct Implement ation*
20	*2*		*List in Prolog – Part 1*	*In Class*	*Quiz*
21	*2*		*Planning*	*In Class*	*Homework*
22	*2*		*List in Prolog – Part 2*	*Lab*	*Direct Implement ation*
23	*2*		*Uncertainty and Probabilistic Reasoning*	*In Class*	*Homework*
24	*2*		*List in Prolog – Part 3*	*Lab*	*Direct Implement*

					ation
25	***2***		***Natural Language Processing***	***In Class***	***Quiz***
26	***2***		***Learning Probabilistic Models***	***In Class***	***Quiz***
27	***2***		***Reinforcement Learning***	***In Class***	***Homework***
28	***2***		***Constraint Logic Problems (CLP) in Prolog***	***Lab***	***Direct Implement ation***
29	***2***		***Image Synthesis with GANs***	***Lab***	
30			***Image Translation with GANs***	***Lab***	***Direct Implement ation***

11.Course Evaluation

Term Tests: 30%

Laboratory: 15%

Quizzes: 5%

Final Exam: 50%

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	***Artificial Intelligence A Modern Approach: 3rd Edition***

	Deep Learning: by Ian Goodfellow, Yoshua Bengio, and Aaron Courville
Main references (sources)	- ***N/A***
Recommended books and references (scientific journals, reports...)	- ***Generative Deep Learning*** - ***Advanced Deep Learning with Keras.***
Electronic References, Websites	- ***Coursera.org/*** - ***https://online.stanford.edu/programs/artificial-intelligence-professional-program***

Course Description Form

1. Course Name:
Visual Programming VB.NET
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025−2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
7. ***Course administrator's name (mention all, if more than one name)***
Name: Abdulla J. Y. ***Email: abdullajas@uobasrah.edu.iq***
8. Course Objectives

Master programming using VB.NET. ***Develop graphical applications.*** ***Connect applications to databases.*** ***Apply object-oriented programming***	***Learn input/output operations.*** ***Understand basic programming concepts within Windows.*** ***Recognize the properties of***

(OOP) in software development. *Study the principles of programming with Visual Basic .NET.*	*programming files in Visual Basic .NET.* *Understand programming language communication*

9. Teaching and Learning Strategies	
Strategy	*Interactive Lectures: Provide theoretical concepts in interactive classes.* *Practical Application: Lab sessions to practice concepts taught in lectures.* *Projects: Programming tasks for practical implementation, either individually or in groups.*

10.Course Structure

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

		other programming languages.			
5-10	***12***	***Understanding and handling messages with Basic syntax in a Windows environment***	***Message processing***	***Theoretical Lectures***	***Daly Exam***
11-14	***8***	***Introduction to Visual Basic programming, focusing on input and output operations***	***What is Visual basic***	***Theoretical Lectures***	***Exam***
15-20	***10***	***Understanding function building and loops, their components, and operations***	***Functions and Looping***	***Theoretical Lectures***	***Daly Exam***
21-22	***4***	***How to manage arrays***	***arrays***	***Theoretical Lectures***	***Daly Exam***

23-25	*6*	*Managing menus and resources*	*Menus and Resources*	*Theoretical Lectures*	*Exam*
25-30	*10*	*Handling files and databases*	*Files and database*	*Theoretical Lectures*	*Daly Exam*

11.Course Evaluation
Monthly Exams: 25 points *Applied Projects: 10 points* *Lab Exercises: 15 points (weekly)*

12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	• *Programming Microsoft Visual Basic 2005 by Francesco Balena, 2006* • *Microsoft Visual Basic 2005 Step by Step by Michuel Alvarson*
Recommended books and references (scientific journals, reports...)	*Scientific journals and reports relevant to VB.NET programming.*
Electronic References, Websites	*Microsoft Learn* *Coursera VB.NET Programming Specialization*

Course Description Form

1. Course Name:
compilers
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: mushtaq adulmutalib hasson Email: mushtaq.husson@uobasrah.edu.iq
8. Course Objectives

	The main purpose of the course is to teach

Course Objectives	***students the phases of the language translator and their theoretical understanding, then simulate each phase practically in the laboratory.***
9. Teaching and Learning Strategies	
Strategy	• ***Providing the student with primary and secondary topics related to translator design.*** • ***Translating topics and theoretical vocabulary related to translators into computer programs.*** • ***Requiring the student to use computer programs related to theoretical vocabulary***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1	***4***		***Introduction to compiler***	***Lecture***	***Exam***
2	***4***		***Lexical***	***Lecture***	***Exam***

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

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

25	*4*		*Intermediate representation*	*Lecture*	*Exam*
26	*4*		*Semantic Rules &Semantic trees*	*Lecture*	*Exam*
27	*4*		*LRN notation*	*Lecture*	*Exam*
28	*4*		*Three Address Code*	*Lecture*	*Exam*
29	*4*		*Quadruples and Triples*	*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)	*Compilers: Principles, Techniques, and Tools (2ndEdition) Alfred V. Aho, Monica S. Lam, Ravi Sethi,Jeffrey D. Ullman*
Main references (sources)	*Brown, P.J. Writing Interactive*

	Compilers and Interpreters ISBN 047127609X Useful practical advice, not much theory
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Computer architecture
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
3 hours per week / 5 units
7. Course administrator's name (mention all, if more than one name)
Name: Zainab Ali Khalaf ***Email: zainab.khalaf@uobasrah.edu.iq***
8. Course Objectives

	• ***A general introduction to computer***

Course Objectives	***architecture, which the course includes*** ***• Architectural study of each of the following?*** ***• The structure of instruction sets*** ***• Memory hierarchy*** ***• Healer***
9. Teaching and Learning Strategies	
Strategy	***• Power point*** ***• Daily duties*** ***• discussion*** ***• Daily tests*** ***• A monthly exam at the end of the year***
10.Course Structure	

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1-3	***3***	***• General definition,*** ***• The purpose of digital***	***Introduction & Overview***	***Lecture***	***Exam***

		computation and introduction to computer architecture, ***• Organization of the central processing unit and its parts, introduction and overview***			
4-9	***3***	***Addition and subtraction algorithms*** ***• • Multiplication algorithms*** ***• • Booth multiplication algorithms*** ***• • An algorithm for dividing calculations on common fixed points and its design***	***Algorithm and design of the common fixed points arithmetic operations***	***Lecture***	***Exam***

10	*3*		*Exam*	*Lecture*	*Exam*
11-14	*3*	• • *Transmission design* • • *General purpose register* • • *Arithmetic logic unit implementation unit*	*Execution Unit*	*Lecture*	*Exam*
15-20	*3*	• • *Secondary memory* ••*Cache memory* ••*Virtual memory* • • *Main memory memory hierarchy*	*Memory Hierarchy*	*Lecture*	*Exam*
21	*3*		*Exam*	*Lecture*	*Exam*
22-	*3*		*Asynchronous*	*Lecture*	*Exam*

30			***Pipeline***		

11.Course Evaluation
30% exams ***20% (assignments, tests, and discussions)*** ***50% final exam***

12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	***Fundamentals of Computer Organization and Architecture, 7thed. (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***
Electronic References, Websites	

Course Description Form

1. Course Name:
Computer Graphics
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025−2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
7. ***Course administrator's name (mention all, if more than one name)***
Name: Nada Ali Noori ***Email: nada.ali@uobasrah.edu.iq***
8. Course Objectives
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 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

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

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

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

Course Description Form

1. Course Name:
Software Engineering
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
3 hours per week / 5 units
7. Course administrator's name (mention all, if more than one name)
Name: Eman Thabet Khalid ***Email: eman.alasadi@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• 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. • 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 exist system and make changes to it.

9. Teaching and Learning Strategies

Strategy	

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1 ***2*** ***3*** ***4*** ***5***	***2 hours every week***	***Understanding the Fundamentals Of software***	***software and What is the difference between software engineering and ,computer science software process***	***Laptop, Screen to present the lecture slides, White board for elaboration***	***Interactive discussions during lecture, Every week quiz, and***

6 *7* *8* *9* *10* *11* *12* *13* *14* *15*		*engineering , also, the the concepts of* *Different* *Methods are* *Utilized to* *Develop software* *Projects*	*,Code of Ethics Computer-Based System Engineering and Systems Emergent,Engineering properties* *Reliability System ,relationships components and Component types* *Software Processes , Generic software process models* *Formal systems Extreme ,development programming, Spiral development, Spiral model of the software The ,process, requirements engineering process,* *System evolution, Automated process support (CASE), Case*		*3-to-4exams throughout* *the year*

16			*technology, CASE classification*		
17					
18			*First Semester Exam*		
19			*Project Managements ,*		
20			*Software project management, Software*		
21			*management distinctions,*		
22			*Project planning*		
23			*process, Project plan structure, Activity*		
24			*organization,*		
25			*Bar charts and activity networks, Task*		
26			*durations and dependencies, Activity network, Activity timeline, Staff allocation*		
27			*Software Requirements,Require*		
28			*ments engineering, 'What is a requirement*		

29			*Non-functional requirement types, Requirements measures, User requirements,* *Problems with natural language, ,Requirement Requirements Engineering Processes,* *Requirements Engineering Processes, The requirements engineering process, Feasibility studies*		

11.Course Evaluation

10 marks- regular Quizzes all over the year.

5 marks attendance and daily interaction,

Exam1 out of 45

Exam2 out of 45

Project out of 45

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	• *Software Engineering eighth*

Main references (sources)	***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 Hill 1997.*** • ***Somerville , " Software Engineering " 5 TH , Addison Wesley 1996***
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Teaching curricula and methods
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
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:	

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.	***• For the student to become familiar with the concept of the subject matter, curricula and general teaching methods*** ***• That the student be able to understand the concept of science and education and what is the appropriate method for each teaching method***
9. Teaching and Learning Strategies	
Strategy	• ***The learning strategy is based on students' participation with the teacher in presenting many questions*** • ***Important psychological, educational and academic information about appropriate curricula and teaching methods for learning and discussing them directly with students.*** • ***Expressing their opinions about this information and how important it is to them.***

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

10.Course Structure

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

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

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

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

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

29			*according to the tasks assigned to the student, such as:* *daily setting,* *Oral, monthly or written tests and reports...etc*		

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)	*Teaching curricula and methods.* *Majid Ayoub Al-Qasi, 2018, first edition* *Amjad Publishing and Printing House*
Main references (sources)	*Modern curricula and teaching methods, Mohsen Ali Attia, 2013* *Dar Al-Manhaj for Publishing and Distribution*

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

Course Description Form

1. Course Name:
Counseling and mental health
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Nour Abbas Kazem ***Email: noor.kadhum@uobasrah.edu.iq***
8. Course Objectives

	• ***The computer student learns the***

Course Objectives: ***The student remembers the information given in the course*** ***The student understands the course topics and related objectives***	***importance of guidance*** ***• Psychological and mental health in daily life*** ***• How to employ this knowledge in confronting situations*** ***• Daily life in the field of education and family*** ***• It makes College of Education students feel valuable and important*** ***• Counseling and mental health in their dealings with school students after graduation and practicing their specializations*** ***• As teachers in primary, middle and middle schools***
9. Teaching and Learning Strategies	
Strategy	• ***The student should be able to apply what he has learned to solve problems in the practical field*** • ***The student should be able to analyze and arrange information to benefit***

	from it in solving problems to obtain correct results • ***The student understands himself, his environment, and how to deal with others*** • ***The student must have ideas about the course material and know how to devise appropriate solutions to it***

10.Course Structure

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

5+4 7+6 9+8		***enjoys mental health, and introducing them to the goals of mental health and its importance.***	***psychological counseling*** ***Guidance objectives*** ***Educational guidance curricula*** ***Characteristics of the educational guide*** ***Indicative methods*** ***1- The role of the teacher in the guidance process*** ***2- Problems that occur in schools and the role of guidance in***		

11+10 13+12 14-17			***solving them*** ***3- Academic delay and bullying among students*** ***1- The role of the teacher in the counseling process*** ***2- Problems that occur in schools and the role of guidance in solving them*** ***3- Academic delay*** ***4- Bullying among students*** ***1- Dropping***		

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

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

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

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

Course Description Form

1. Course Name:
Data Security
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
4 hours per week / 6 units
7. Course administrator's name (mention all, if more than one name)
Name: Prof. Dr. Ali Adil Yassin Email: Ali.Yassin@uobasrah.edu.iq
8. Course Objectives

Course Objectives	In this course you will learn the inner workings of cryptographic systems and how to use them

	properly in real-world applications. • ***Describe some basic concepts of encryption*** • ***Describe cryptography and its uses in cybersecurity*** • ***Description of hash and digital signature*** • ***Describe the concept and use of digital certificates*** • ***Teaching students the basic concepts of cybersecurity, best practices, and c.*** • ***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***
9. Teaching and Learning Strategies	
Strategy	• ***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.*** • ***Giving the student an opportunity to explain a small part of the class to his classmates to enhance his self-confidence.*** • ***We depend on theoretical lectures as well as lab of data security.*** • ***Providing the student with primary and secondary***

	topics related to data security. • ***Programming theoretical topics related to data security into computer programs.*** • ***Requiring the student to use JavaScript programs related to theoretical vocabulary.***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1 - 2	***6***	***Practical exercise***	• ***Introduction to cryptography*** • ***Private-key encryption*** • ***Principle of Kerchhoff*** • ***Scenarios of attacks*** • ***Introduction to public key***	***Lectures(Theoretical + Practical)***	***conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam***
3 - 4	***6***	***Practical exercise***	• ***Application of cryptography*** • ***Classical ciphers: Caeser, Shift cipher, monoalphabetic cipher, Vigenere cipher, auto key cipher*** • ***Hill cipher*** • ***Playfair cipher***	***Lectures(Theoretical +Practical)***	***conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam***
5 - 7	***6***	***Practical exercise***	• ***Private-key cryptosystems***	***Lectures(Theoretical +Practical***	***conducting the Midterm exam + class participation***

			• *Permutation-substitution networks* • *Feistel networks* • *Data encryption standard (DES)* • *DES structur*	*)*	*+ grading a number of in-class assignments + conducting a practical exam*
8 - 9	*6*	*Practical exercise*	• *Advanced Encryption Standard (AES)* • *Work of AES* • *Security of AES*	*Lectures(Theoretical +Practical)*	*conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam*
10 - 12	*6*	*Practical exercise*	• *Message authentication codes And it's applications*	*Lectures(Theoretical +Practical)*	*conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam*
13 - 15	*6*	*Practical exercise*	• *Applied hash functions like SHA-1, SHA-2….*	*Lectures(Theoretical +Practical)*	*conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam*
16 - 18	*6*	*Practical exercise*	• *Public key cryptosystems Hybrid encryption* • *RSA cipher*	*Lectures(Theoretical +Practical)*	*conducting the Midterm exam + class participation + grading a number of in-class assignments + conducting a practical exam*

19 - 21	*6*	*Practical exercise*	• *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*	• *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*	• *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*	• *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

Required textbooks (curricular books, if any)	***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*** ***Oded Goldreich ,Springer-Verlag 1998 M,odern Cryptography, Probabilistic Proofs and Pseudorandomnes***
Main references (sources)	***cryptography : theory and practice, 4th edition, Douglas r. Stinson, Maura B. Paterson, CRC press, 2019***
Recommended books and references (scientific journals, reports...)	***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***
13. Electronic References, Websites	***https://www.ccs.neu.edu/home/wichs/class/crypto-fall15/index.html*** ***https://faculty.uobasrah.edu.iq/faculty/360/teaching***

Course Description Form

1. Course Name:
Communication and Computer Networks
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025−2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
7. ***Course administrator's name (mention all, if more than one name)***
Name: Husam Aakef Abdulmalik ***Email: hussam.akif@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	• *-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.* • *-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*

9. Teaching and Learning Strategies

Strategy	• *Presentation,* • *practical training* • *and discussion*

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 methods of connecting networks***	***Networks Topology***	***Lectures+practical experiments***	***Discussion + Exams***

5-7	*4*	*Understanding the mechanism of sending data through the OSI layered model*	*Layered Architecture, The OSI Model (7 Layers)*	*Lectures+practical experiments*	*Discussion + Exams*
8-10	*4*	*Know the most important protocols operating in each layer and the function of each*	*The TCP/IP Protocol Suite, SMTP, HTTP, FTP, NFS, SNMP, DNS,DHCP, MIME, Telnet, RPC, iSCSI, TCP, UDP, IP, ICMP, ARP, RARP, CSMA/CD,*	*Lectures+practical experiments*	*Discussion + Exams*
11-12	*4*	*Lerning network layer functions and addressing using IP addresses*	*Network Layer and IP Addressing*	*Lectures+practical experiments*	*Discussion + Exams*
13-14	*4*	*Knowing the mechanism of dividing the network into subnetworks*	*Subnetting*	*Lectures+practical experiments*	*Discussion + Exams*
15-16	*4*	*Understanding routing methods and protocols and*	*Routing and routing table*	*Lectures+practical experiments*	*Discussion + Exams*

		how routers work			
17	***4***	***Learning the functions of the data link layer***	***Data Link Layer***	***Lectures+practical experiments***	***Discussion + Exams***
18-20	***4***	***Learning the types of errors, ways to detect them, and some ways to correct them***	***Error detection and correction , Type of Errors***	***Lectures+practical experiments***	***Discussion + Exams***
21	***4***	***Learning of the functions of the physical layer***	***Physical Layer***	***Lectures+practical experiments***	***Discussion + Exams***
22-23	***4***	***Learning the types of digital and analogue signals and the difference between them***	***Analog and Digital Signals***	***Lectures+practical experiments***	***Discussion + Exams***
24-25	***4***	***Learning digital transmission and methods of converting data into digital signals***	***Digital Transmission, Encoding (Digital-to_Digital , Analog-to-Digital)***	***Lectures+practical experiments***	***Discussion + Exams***
26-27	***4***	***Learning analogue transmission and methods***	***Analog Transmission, Encoding (Digital-***	***Lectures+practical experiments***	***Discussion + Exams***

		of converting data into analogue signals	*to_Analog , Analog-to-Analog)*		
30-28	*4*	*Learning multiplexes, their types, and how they work*	*Multiplexing*	*Lectures+practical experiments*	*Discussion + Exams*

11.Course Evaluation

Daily exams 10%

Monthly theoretical exams 70%

Monthly practical exams 20%

12.Learning and Teaching Resources

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

Course Description Form

1. Course Name:
Web Design
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr.Mohammed Abdulridha Hussain ***Email:*** ***Mohammed.abdulridha@uobasrah.edu.iq***
8. Course Objectives

Course Objectives	***Teaching students programming skills and***

	tools for web design and Internet programming
9. Teaching and Learning Strategies	
Strategy	***Client-side script (HTML, CSS, Java script)*** ***Server-side script (PHP) and MySQL database***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1		***Introduction Internet Programming***	***Introduction Internet Programming***	***Lecture / LAB***	***Exam***
2		***HTML***	***HTML***	***Lecture / LAB***	***Exam***
3		***HTML Table***	***HTML Table***	***Lecture / LAB***	***Exam***
4		***HTML Form***	***HTML Form***	***Lecture / LAB***	***Exam***
5		***HTML Frame***	***HTML Frame***	***Lecture / LAB***	***Exam***

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

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

Course Description Form

1. Course Name:
Data Mining
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Mustafa Salah Khalefa ***Email: mustafa.khalefa@uobasrah.edu.iq***
8. Course Objectives

• ***Course Objectives:*** • ***The student will be familiar with the basic***	• ***Give an overview of data mining, its applications, basic issues, and tasks.*** • ***Identifying the important tasks of***

• *Concepts of data mining.* • *The student knows the types of databases and how to process their data.* • *Increase the student's knowledge of data mining tasks and techniques.* • *Classification methods.*	*descriptive and predictive data mining and how to apply them practically.* • *Types of databases and how to save data*
9. Teaching and Learning Strategies	
Strategy	• *Presentation of theoretical material, whether through dialogue, interaction, or display on a display screen.* • *Assignments and exercises.* • *Assigning the student to prepare weekly reports.*

10.Course Structure

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

1	2		Introduction to Data mining	Session, Lecture	Exam
2	2		Knowing data and types of dat	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 Cleani	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	Lecture	Exam

17	2		Classification Exam-2		
18	2			Lecture	Exam
19	2		Text Data Mining	Lecture	Exam
20	2		Bagging and Boosting Data Mining World Wide Web	Lecture	Exam
21	2			Lecture	Exam
22	2		Social Media Data Mining	Lecture	Exam
23-28	2		Integration in Data Mining 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, Jiawei Han Micheline Kamber Jian Pei, Elsevier, 2011***

Main references (sources)	• ***Jiawei Han, Micheline Kamber, Jian Pei, Data Mining: Concepts and Techniques, Third Edition, Morgan Kaufmann Publishers, 2012.*** • ***Charu C. Aggarwal, Data Mining: The Textbook, Springer, 2015.***
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Operating System
2. ***Course Code:***
3. ***Semester / Year:***
Annual
4. ***Description Preparation Date:***
2025−2024
5. ***Available Attendance Forms:***
Actual presence
6. ***Number of Credit Hours (Total) / Number of Units (Total):***
4 hours per week / 6 units
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	***How OS provides the interface between hardware and applications...*** ***Theoretical aspects of OS and***

	practical using JAVA language..... ***.....***

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***	***Introduction & Background*** • ***Introduction to operating system, Application software, System software, Machine language, Microprogramming, Physical devices*** • ***History of Operating Systems, Introduction to Unix, MS-DOS and Windows***	***Attendance***	***Exam***

3-7 *7-11*		*Presentation*	***Operating System Structure*** • ***Process management, Memory management, File management, I/O system management, Secondary storage management, Networking*** ***System protection, Operating system services*** • ***OS layered approach, OS/2 layer structure, Virtual machines*** • ***System design goals, Mechanisms and policies, Operating system implementation, System generation*** ***Process Concepts*** • ***The process concept, Program vs process*** • ***Process creation, Process control block, Process table, Shell, Operation on processes*** • ***Kernel/kernel mode*** • ***System calls, Types of systems calls*** • ***Interrupts, Interrupt***		

12 - 15 *15 - 18*			*processing, Types of Interrupts* *Memory Management* • *Memory, memory hierarchy, Process loading and swapping, Memory management, Memory allocation methods, Single partition allocation* • *Storage management strategies, Fetch strategies, Placement strategies, Replacement strategies, Variable partition with compaction,* • *Non contiguous memory allocation: Paging vs Segmentation, Simple paging, Implementation of paging, Simple segmentation, Segment addressing,* *Virtual Memory* • *Virtual memory, Mechanism of virtual memory, Address translation, Page fault,* • *Page replacement, Page*		

21 - 22			*replacement algorithm, FIFO, Belady's anomaly, Optimal LRU, Random page replacement, LFU, MFU, Non-used recently page replacement algorithm* • *Paging Mechanism, Additional techniques, Memory protection and sharing, MS-DOS Memory management, Windows memory management, Unix memory management*		
22 - 24			*Process Management* • *Context Switch, Process states, Process states 4transitions, Process life cycle, Five state process model, Unix process state transition diagram*		
24 - 26			• *Scheduler, Scheduling algorithm, Objectives of Scheduling, Criteria for scheduling, CPU-bound vs I/O-bound processes* • *Types of Scheduling, Process scheduling queues*		

27 - 28 *28 - 29* *30*			• *FCFS, SJF, Priority, Round Robin, Multilevel feedback queues scheduling* • *BSD Unix scheduling, Multiple processor scheduling* • *Threads, Thread support Solaris* *Threads & Multitasking* • *Multitasking, Threads* • *Types of threads, Kernel threads, User level threads* • *Multithreading model, One to One Model, Many to One Model, Many to Many Model* • *Solaris 2 threads, Windows 2000 threads, Linux threads, Java threads* *Concurrent Processes* • *Concurrent processes, Resources, Race condition* • *Critical section, Mutual Exclusion, Deadlock* *Inter-process communication* • *Pipes, Semaphores, use of semaphore for critical section*		

			problem, Monitors, Signals, Message passing, use of messages for synchronization, Shared memory, Object linking & embedding		

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)	***Operating system concepts by Abraham S., Peter B., Grec G.***
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	***Operating system principles Modern operating systems***

Course Description Form

1. Course Name:
Measurement and evaluation
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Maha saddam abd ***Email: maha.saddam@uobasrah.edu.iq***
8. Course Objectives

	• ***The student should distinguish***

Course Objectives	***between scientific theory and bureaucratic theory*** • ***That the student applies what he has learned when dealing with students*** • ***That the student be able to predict and explain some of the behaviors issued by students***
9. Teaching and Learning Strategies	
Strategy	• ***Educational strategy, collaborative concept planning.*** • ***Brainstorming strategy 3-Education Strategy Discussion Series***

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
1 ***2***	***2hours*** ***2hours***	***1-Learn about***	***The concept of***	***1-Explainin***	***Weekly***

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

		evaluation	*Objective tests*		
		6- Learn about achievement tests	*Performance tests*		
		7-Learn about the oral test and...	*Building achievement tests*		
Offday					
16	*2hours*	*And the pans*	*Steps to build the test*		
17	*2hours*	*8-Learning about tests*			
18	*2hours*	*Objectivity*	*First semester exam*		
19	*2hours*	*9- Getting to know the tests*			
20	*2hours*		*Test function*		
21	*2hours*	*Performativity*			
22	*2hours*	*10- Identify the building Achievement tests*	*Determine teaching objectives*		
23	*2hours*				
24	*2hours*	*11- Identify the steps of building the test*	*Specifications table numbers*		
25	*2hours*				
26	*2hours*		*Mid-year exam*		
27	*2hours*	*12- Identify the selection function*			
28	*2hours*	*13- Identify*			
29	*2hours*				
30	*2hours*				

		the definition *Teaching objectives* *14- Identify the numbers in Table A* *Specifications* *16-Learn about building a specifications table* *17- Identify the characteristics the test* *18- Recognizing honesty* *19- Identify stability* *20- Learn about calculation methods*	*Build a specifications table* *Characteristics of a good test* *Honesty and its types* *Test stability* *Methods for calculating stability* *exam* *REPETITON* *Equivalent images*		

		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* *And its types* *28-Learn*	*Half split method* *Constantly influencing factors* *statistical analysis* *Test methods* *Second semester exam* *Observation and its types* *Ladders of appreciation* *Deliver the descriptive statement*		

		about the rating lists 29-Learn about the ladders of appreciation 30-Learn about the statement ladder Descriptive	***End of year exams***		

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)	***Abu Alam, please Mahmoud (1987): Measurement and evaluation of collection, Dar Al Qanq***
Main references (sources)	***Al-Zaher, Zakaria Mohamed and Others) 1999 : The principles of***

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

Course Description Form

1. Course Name: :
Practical education
2. Course Code:
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2024
5. Available Attendance Forms:
Actual presence
6. Number of Credit Hours (Total) / Number of Units (Total):
2 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Name: Zainab Hamza Abbas Email: : ceps.lect.067@avicenna.uobasrah.edu.iq
8. Course Objectives

Allow the applied student to apply the theories and principles of learning that he has acquired	Course objectives Explaining the importance of the student's practice applying the theories

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

	that helps them remove the tensions that they experience in the field of practical education.

10.Course Structure

Week	***Hours***	***Required Learning Outcomes***	***Unit or subject name***	***Learning method***	***Evaluation method***
the first	***2***	***Students discuss and express their opinions***	***The concept of practical education***	***Dialogue and discussion***	***Share***
the second	***2***	***Students discuss and express their opinions***	***The purpose of practical education***	***Dialogue and discussion***	***Share***
the third	***2***	***Students discuss and express their opinions***	***The problems and difficulties faced Applied student***	***Dialogue and discussion***	***Share***

The fourth	*2*	*Students discuss and express their opinions*	*Rules and ethics of the teaching profession*	*Dialogue and discussion*	*-*
The fifth	*2*	*Students discuss and express their opinions*	*Sources of ethics in the teaching profession*	*Dialogue and discussion*	*-*
The sexth	*2*	*Students discuss and express their opinions*	*Ethical values, ethics and the principles derived from them*	*Dialogue and discussion*	*-*
Seventh	*2*	*Students discuss and express their opinions*	*Student responsibilities and duties Applied*	*Dialogue and discussion*	*-*
The eight	*2*	*Students discuss and*	*Good teaching*	*Dialogue and*	*-*

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

The thirteenth	*2*	*Students discuss and express their opinions*	*Ingredients for teacher success Class management*	*Dialogue and discussion*	*-*
Fourteenth	*2*	*Students discuss and express their opinions*	*Class questions and their purpose*	*Dialogue and discussion*	*-*
Fifteenth	*2*	*Students discuss and express their opinions*	*View and apply*	*Dialogue and discussion*	*-*

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)	*Mandatory practical education*

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