
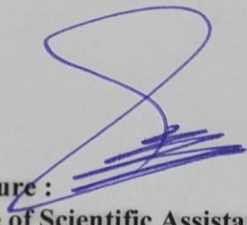


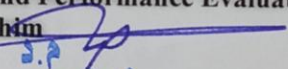
University Name : Tikrit University
College : Institute : College of Education For Pure Science
Scientific Department : Department of Computers
Name of Academic or Professional Program : Bachelors of Computers
Academic System : Annual

Description Preparation Date : The Beginning of 2025-2026 Academic Year
Date of Filling the File: 23:12:2025


Sinigure : 
Name of Department Head :
Asst. prof. Musa Abdullah Hameed
Date : 23:12:2025

Sinigure : 
Name of Scientific Assistance :
Prof. Dr Muhammad Ahmed Jassim
Date : 23:12:2025

أ.د. محمد أحمد جاسم
معاون العميد للشؤون العلمية
كلية التربية للعلوم الصرفة
جامعة تكريت

Check the File By :
Quality Assurance and Performance Evaluation Division :
Dr. Safa Khalil Ibrahim 
Date: 23:12:2025
The signature صفا خليل ابراهيم

Authentication of Dean


Professor Doctor
Ali Abdul Majeed Shihab
College of Education
for Pure Sciences

1. Program Vision

To provide a realistic work environment for computer science graduates so that they are qualified to use the latest algorithms and computer hardware, as well as to provide the practical environment with competent programmers capable of programming and generating computer programs and systems.

The goal of the Computer Science Department program is to be a local and regional leader in teaching computer applications and scientific research methodology. This is achieved through graduates who possess the skills and knowledge necessary to keep pace with the latest developments in the field of information technology, smart systems, and wireless communication networks, which enhance and support the possibility of building a society with digital and graphical specifications.

The Computer Science Department aims to be active, pioneering, and distinguished in the field of digital systems and modern information technology, relying on an advanced academic education system based on smart knowledge, knowledge engineering, and artificial intelligence algorithms. It is based on the principles of modern algorithm technology in terms of professional and intellectual development and strengthening the skills of graduate students in particular, and the possibility of enhancing and employing their energies in solving problems and preparing logical design plans and appropriate decision-making mechanisms in this regard. The interests and priorities of the Computer Science Department include developing graduates in several intellectual and scientific fields, such as artificial intelligence systems, expert systems, and improved genetic programming algorithms, and working to provide an academic and educational environment that contributes to the development of scientific research methodology. which are used in graduation projects and in the practical environment in which academic graduates of the Computer Science Department of the Faculty of Pure Sciences will be employed.

2. Program Mission

One of the fundamental responsibilities referred to by the Dean of the Faculty of Pure Sciences and the Head of the Computer Science Department is to prepare a clear study of the Computer Science Department program at the Faculty of Pure Sciences and define its mission, which is one of the scientific and educational programs that aims to provide competent teaching staff with the ability to teach at the state level in terms of the public and private sectors, which represent the private sector, and to provide cadres with the characteristics of learning and teaching in the field of scientific knowledge and the use of computer skills. The public and private sectors, which represent the private sector, and to provide cadres with the characteristics of learning and teaching in the field of scientific knowledge and the use of computer skills, smart communication systems, and digital knowledge engineering. It should be noted that the computer science program has the potential to provide a number of professors and competent teachers in accordance with scientific and educational trends to work in the educational environment (primary, middle, and preparatory), as well as working to provide graduates of the department who are qualified to work in all logical and scientific fields within the scope of the computer science department, as is the case in applied programs such as schools, high schools, and public and private universities.

We note that one of the priorities of the Computer Science Department's mission is to obtain academic accreditation from the Iraqi National Council for Program Accreditation for Educational Colleges. The **department's mission** is to prepare graduates with high professional computer skills and equip them with high-quality smart and digital teaching skills. This is achieved by providing the basic stages of the model descriptive program so that it is equipped with everything that university students need in terms of teaching and learning resources. **The ultimate mission** of the department is to provide high-quality education and an educational environment with appropriate specifications in the field **of computing**.

3. Program Objectives

The objectives of the academic program are based on the vision and mission of the department and include the following:

Objectives

1. To equip distinguished teaching staff with the educational and computer skills required for employment in a good working environment.
2. Find solutions to the weaknesses of both the private and public sectors by developing a mechanism for designing scientific research and joint studies between them.
3. Providing mechanisms for research and scientific cooperation with state departments and institutions

4.

Work to link the principles of vision, mission, and objectives within the perspective of the University of Tikrit.

5.

Implementing files related to the Quality Assurance and Academic Accreditation Division in line with the global progress of the university and the college.

6.

Work on developing postgraduate programs to prepare academics with advanced scientific competencies in various fields of computing as well as in educational specializations.

7.

Increase educational and scientific awareness in various computer systems by giving lectures, seminars, and educational workshops, and providing scientific educational activities through the Planning and Follow-up Division at the Faculty of Pure Sciences, which aims to develop a valid scientific academic educational environment in the service of state institutions.

8.

Promoting the values of integrity and educational responsibility in all aspects of higher education and scientific research

4. Programmatic accreditation:

Supporting students' ability to understand the mechanics of computers in all their branches. Providing computer teachers at various levels who are able to keep pace with developments in this field through:

1

- Excelling in the ability to analyze computer problems and identify the mechanisms of good and appropriate programming requirements in order to find the appropriate solution. This is done by enabling students to acquire theoretical and basic algorithms in all areas and applications of computers in its various branches.

2

- The ability to design and implement computer systems and artificial intelligence systems to achieve the desired goals. This increases the university student's acquisition of scientific experience within this scientific, academic, and educational perspective.

3

- The ability to explain in detail the steps for finding model solutions to problems faced by programmers in their workplace using artificial intelligence algorithms, expert systems, and another computer specializations within this field.

4

- Commitment to professional ethics in the use of computer applications in various scientific and ethical fields and contexts, which plays a major role in upholding the honor of the scientific profession, particularly among university professors and educators.

5

- Making decisions based on the study of software analysis and understanding logical design mechanisms in line with the requirements of computer system analysts and designers.

6

- The student's ability to understand and comprehend the mechanism of solving specialized problems through the use of programming languages and finding the ideal solution.

7

- Working on developing students' skills in designing intelligent systems based on problem analysis, designing optimal solution steps, and implementing them using application programs and software simulation programs in order to prepare a comprehensive feasibility study in this regard.

8

- Work on acquiring and increasing the student's knowledge in terms of using and implementing software systems through understanding how computers work.

5. Other external influences:

1. By holding educational and academic conferences for students.
2. Providing workshops and scientific seminars at the classroom level or throughout the academic year.
3. Preparing educational scientific discussion sessions for teachers
4. Working on the importance of activating the role of scientific and research seminars for students of the Computer Science Department

Notes	Unit of study	Number of courses	Program Structure
	12	6	Institutional Requirements
	18	6	Faculty Requirements
	84	20	Department Requirements
	Completed	1	Summer Training
			Other

* Notes can include whether the course is core or optional.

7. Program Description				
Credit Hours		Course Name	Course Code	Level
Lab	Theoretical			
	2	Mathematics	TU101CsMA	Stage 1
2	2	Logic Design	TU102CsLD	Stage 1
2	2	Programming Structure	TU1CsSP1	Stage 1
2	2	Computer Organization	TU104CsCO	Stage 1
	2	Discrete Structure	TU109CsDS	Stage 1
	1	Fundamentals of Education	TU105CsFE	Stage 1
	1	Democracy and Human Rights	TU1CsHR8	Stage 1
	1	Arabic Language	TU107CsAL	Stage 1
	1	English Language	TU1CsEN9	Stage 1
	2	Educational Psychology	TU108CsDP	Stage 1

8. Expected Learning Outcomes of the Program	
Knowledge	
1.	The ability of students to study knowledge and logic and understand the steps of computer principles.
2.	The ability of students to use and perform tasks related to simulating digital computer applications.
3.	The ability of students to understand programming steps and their implementation using digital computers.
4.	The student's ability to understand digital communication systems and their compatibility with the latest developments in terms of knowledge and digital technology in the field of digital networks and communications.

5.

The ability of students to understand the term "operating systems" as it relates to the field of computer science.

6.

The ability of students to understand the term databases and the concept of data mining, as well as the ability to understand the implementation of numerical analysis algorithms and operations research methods that help students find ideal solutions related to this field.

7.

The ability of students to apply their skills in practice within academic, educational, and private institutions through employment in teaching with a clear educational, academic, and ethical approach.

8.

The ability of students to understand the basic principles of educational and computer science curricula, in addition to those related to the principles of mathematics and physics, which serve to refine the scientific and cognitive skills of academic students.

Skills

Memorization and analysis skills

Students must possess programming skills characterized by objectivity and accuracy in the field of computers and their various applications.

Students must have skills that enable them to manage information systems and operating systems with high efficiency.

Students must demonstrate their ability to prepare scientific research in accordance with the standards of scientific research methodology and educational planning.

Scientific skills

Enabling students to study the dimensions of the problem and find the appropriate solution using programming algorithms that contribute to finding scientific solutions to these problems in a logical and clear programming manner by analyzing the causes of the problem and then designing the program, which in turn helps in implementing the main steps of the algorithms used in finding appropriate solutions and implementing implementation, testing, and maintenance procedures step by step in order to increase the reliability and documentation of the software path concept in this regard.

Students must demonstrate skills in applying and implementing educational and psychological standards within educational institutions in order to maintain the academic level of the educational institution.

Students must have the skills to apply and implement mechanisms for designing, building, and managing information communication networks.

Students must demonstrate their ability to understand the mechanisms of threats that affect communication data protection systems.

Students must demonstrate their ability to understand the algorithms of intelligent systems, machine learning, and fuzzy logic, which

Students must possess programming skills characterized by objectivity and accuracy in the field of computers and their various applications.

Students must have skills that enable them to manage information systems and operating systems with high efficiency.

Students must demonstrate their ability to prepare scientific research in accordance with the standards of scientific research methodology and educational planning.

<p>Students must demonstrate skills in applying and implementing educational and psychological standards within educational institutions in order to maintain the academic level of the educational institution.</p> <p>Students must have the skills to apply and implement mechanisms for designing, building, and managing information communication networks.</p> <p>Students must demonstrate their ability to understand the mechanisms of threats that affect communication data protection systems.</p> <p>Students must demonstrate their ability to understand the algorithms of intelligent systems, machine learning, and fuzzy logic.</p>	
<p>Values</p>	
<p>Learning Outcome Statement 4</p>	<p>Graduates should be characterized by what is known as academic and educational professional ethics between the academic staff and the entity with which they deal, whether at the level of students, employees, or citizens, with high professional ethics that contribute to the development of the concept of credibility and transparency in dealing with each other and participation and success in their professional lives through teamwork.</p>
<p>Learning Outcome Statement 5</p>	<p>Empowering students' ability to understand the mechanism of implementing parallel processes related to digital operating systems</p>

9. Teaching and learning strategies:

Deliver educational lectures within educational institutions. Use teaching methods in science labs to help students gain practical skills related to this area dividing students into groups, with each group performing the assigned school tasks E-learning, which includes the conducting electronic video lectures, which are done through:

1

- Creating electronic classes to inform students of their daily preparatory assignments and announce the dates of daily and monthly exams, as well as lectures by teaching staff

2

- Providing students with the basics and additional topics related to previous educational outcomes for scientific problem-solving skills.

3

- Finding model solutions to a set of scientific questions and examples by the teaching staff.

4

- Conducting visits to the computer science department laboratories by the department's teaching staff.

10. Evaluation methods:

- Follow quality system approaches in accordance with high-quality education standards.

- Conducting daily and monthly exams by having teaching staff give questions as part of preparatory homework assignments.

- Allocating so-called participation grades for questions among students in order to generate scientific competition in this regard.

- The teaching staff assigns specific grades for homework assignments.

- The teaching staff conducts theoretical tests for students.

- The teaching staff conducts practical tests for students.

- The teaching staff prepares reports and projects for students

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11. The teaching staff

The teaching staff members

Faculty Preparation		Specialization		Scientific title	Certificate	Name	
Lecturer	Agent	Private	General				
	angel	Artificial Intelligence	Computer Science	Assistant Professor	PhD	Musa Abdullah Hamid	.1
	angel	Applied Mathematics	Mathematics	Professor	PhD	Ghassan Ezz El-Din Aref	.2
	angel	Data Analysis	Statistics	Assistant Professor	PhD	Qasim Nasser Hussein	.3
	angel	Informatics and Communications	Computer Science	Assistant Professor	Master's	Hakam Iyad Saleh	.4
	angel	Software Engineering	Computer Science	Assistant Professor	PhD	Khaled Khales Ibrahim	.5
	angel	Teaching Methods	Psychology	Lecturer	PhD	Mais Amer Hashem	.6
	angel	Information Systems	Computer Science	Lecturer	Master's	Anas Ibrahim Mohammed	.7
	angel	Information Technology	Computer Science	Lecturer	Master's	Yasser Khalaf Hussein	.8
	angel	Artificial Intelligence	Computer Science	Lecturer	Master's	Ali Mahmoud Khalaf	.9
	angel	Software Engineering	Computer Science	Lecturer	Master's	Laith Ibrahim Saleh	.10
	angel	Broadcasting	Computer Science	Assistant Lecturer	Master's	Ahmed Mahdi Saleh	.11
	angel	Teaching Methods	Geography	Assistant Lecturer	Master's	Mohammed Saleh Khalaf	.12

	angel	Financial Accounting	Media	Assistant Lecturer	Master's	Enam Hassani Mohammed	.13
	angel	Data Mining		Assistant Lecturer	Master's	Lubna Laith Ismail	.14
	angel	Auditing	Accounting	Assistant Lecturer	Master's	Ahmed Iyad Saleh	.15
	angel	Business Administration	Accounting	Assistant Lecturer	Master's	Baydaa Mohammed Ahmed	.16
	angel	Business Administration	Accounting	Assistant Lecturer	Master's	Mazen Khalil Nouri	.17
	angel	محاسبة كلفة وإدارية	Computer Science	Assistant Professor	Master's	Taha Azzawi Mohammed	.18

Professional development for teaching staff members

The Professional Development Department plays an important role in facilitating the academic and professional development of faculty members within the college or department. The following is a brief description of the plan and arrangements for faculty development in areas such as teaching and learning strategies, assessment of learning outcomes, and professional development:

Teaching and Learning Strategies:

- 1- The department organizes workshops, seminars, and training courses that focus on effective teaching and learning strategies.
- 2- The department encourages the use of technology in the classroom and provides support for integrating educational technologies into teaching practices.

Assessment of Learning Outcomes:

- 1- The department provides guidance and resources on designing assessments that align with learning outcomes and program objectives.
- 2- Faculty members receive training on various assessment methods.

Professional Development:

- 1- The department facilitates continuing professional development opportunities for faculty members.
- 2- The department organizes conferences, seminars, and guest lectures featuring lecturers in various academic disciplines.
- 3- Faculty members are encouraged to attend external professional development events.

Mentoring and Peer Collaboration:

- 1- The department promotes a culture of mentoring and collaboration among faculty members.
- 2- The department facilitates mentoring programs where experienced faculty members guide and support their colleagues, especially new faculty members.

12. Acceptance criteria.

For morning classes: Students are admitted according to the so-called central admission system in accordance with the instructions of the Ministry of Higher Education and Scientific Research.

For evening classes: Students are accepted through direct application to the college by submitting the required legal documents in accordance with the instructions of the Ministry of Higher Education and Scientific Research

13. The most important sources of information about the program

The college's official website, the university's academic guide, the university or college or department library, and electronic communication channels

14. Program Development Plan:

The program development plan includes the establishment of specialized laboratories equipped with the latest educational technologies, enabling students to understand the practical aspects related to the theoretical curriculum, as well as the development of educational and academic curricula in line with the requirements of the modern era.

The following are the main pillars of the program development plan

1- Needs assessment mechanism:

- Conducting a comprehensive needs assessment to identify weaknesses in the academic landscape.
- Analyzing labor market trends in line with current and future employment requirements. Faculty development mechanism.
- Conduct workshops to develop the professional reality of the teaching staff.

2- Use of illustrative and educational tools that develop the skills of teaching staff
Infrastructure allocation mechanism by Provision of financial, technological, and human resources to support the academic program.

3- Providing classrooms, scientific libraries, and scientific laboratories

Follow-up and evaluation mechanism:

-Develop a detailed follow-up plan that includes mechanisms for analysis, design, implementation, testing, and final evaluation, which will positively reflect on the development of the teaching staff concept and the teaching staff development implementation plan.

- Use advanced statistical methods to enhance areas for improvement and positive decision-making processes that support the ability to strengthen the academic teaching staff.

Values				Skills				Knowledge				Course Name	Course Code	Year /Level
4ج	3ج	2ج	1ج	4ب	3ب	2ب	1ب	4ا	3ا	2ا	1ا			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Mathematics	TU101CsMA	First stage 2026-2025
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Logic design	TU102CsLD	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Programming structure	TU1CsSP1	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Computer organization	TU104CsCO	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Discrete structure	TU109CsDS	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Fundamentals of Education	TU105CsFE	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Democracy and Human rights	TU1CsHR8	

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Arabic language	TU107CsAL	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	English language	TU1CsEN9	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Educational Psychology	TU108CsDP	

*Please tick the boxes corresponding to the individual learning outcomes of the programmer being assessed

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

1- Course name
Programming Structure
2- Course code
TU1CsSP1
3- Semester / year
2025 / 2026
4- Date this description was prepared
1/12/2025
5- Available attendance forms
Day

6- Number of study hours (total) / number of units (total)	
Number of hours: 2 theoretical + 2 practical (weekly) 4*30 weeks = total of 120 hours per year	
7- Name of the course administrator (if more than one name is mentioned)	
Assistant prof: Musa Abdulla Hameed	musa.a.hameed@tu.edu.iq
Lecturer. Yasser Khalaf Hussein	yasserahusain@tu.edu.iq
Assistant Lecturer Ali Mahmood Khalaf	ali.mahmood@tu.edu.iq
8- Course objectives	
Objectives of the study subject	<p>1-To introduce students to the fundamental principles and concepts of programming.</p> <p>2-To familiarize students with the syntax and structure of the C++ programming language.</p> <p>3- .To develop students' problem-solving skills and algorithmic thinking.</p> <p>4- .To enable students to design, implement, and test programs using C++ to solve computational problems.</p> <p>5- To provide students with hands-on experience in programming through practical exercises, assignments, and projects.</p> <p>6- To promote the use of modular programming techniques for creating reusable and maintainable code.</p> <p>7- .To enhance students' ability to debug and troubleshoot programs effectively.</p> <p>8- .To develop students' communication skills in expressing programming concepts and solutions clearly and effectively.</p> <p>9. To prepare students for advanced programming courses and real-world software development scenarios.</p>
9- Teaching and learning strategies	
Strategy	<p>.1Lectures: The instructor will deliver lectures to introduce and explain programming concepts, C++ syntax, and problem-solving techniques. This will provide students with a solid theoretical foundation.</p> <p>.2Interactive Discussions: Engaging students in interactive discussions allows them</p>

to ask questions, seek clarifications, and participate actively in the learning process. Discussions can include reviewing code examples, discussing programming best practices, and exploring real-world applications of programming concepts.

3. Laboratory Sessions: Laboratory sessions are dedicated practical sessions where students apply the concepts learned in lectures to hands-on programming exercises

10- Course Structure

Week	Hours	Name of the unit or topic	Required learning outcomes	Learning method	Evaluation method
First	4	Introduction to Computer Science, Computers Components, Binary and Info Representation Using Operating System, Creating Files and Folders, Writing Text)	Explain fundamental concepts of computer science, Understand binary systems and information representation	Lecture	Daily and monthly exams, assignments and reporting
Second	4	Algorithms Design and Writing pseudocode, Difference among (Text Editor, Word Processor, Code Editor and IDE)	Explain the concept of algorithms, Design simple algorithms, Write clear and structured pseudocode	Lecture	Daily and monthly exams, assignments and reporting
Third	4	Algorithms design and Drawing Flowchart, Drawing (Darg and drop) Flowcharts	Explain the purpose of algorithms and flowcharts, Identify and use standard flowchart symbols	Lecture	Daily and monthly exams, assignments and reporting
Fourth	4	Introduction to Programming Languages (History, Categories, Main Differences) and, Introduction to Programming in C++ (Program	Describe the history and evolution of programming languages, Compare programming languages based on key characteristics	Lecture	Daily and monthly exams, assignments and reporting

		Structure and Coding Environment),			
Fifth	4	Variables, Datatypes, Output, and Input, Running Examples on Variables, Datatypes, Output, and Input	Identify and use common data types, Use output statements, Use input statements	Lecture	Daily and monthly exams, assignments and reporting
Sixth	4	Operations (Arithmetic and Assignment) and Math Functions, Running Examples on Operations (Arithmetic and Assignment) and Math Functions	Explain arithmetic operators, Use built-in mathematical functions, Debug common errors	Lecture	Daily and monthly exams, assignments and reporting
Seventh	4	Operations (Comparison and Logical), Running Examples on Operations (Comparison and Logical)	Explain comparison (relational) operators, Differentiate between comparison and logical operations	Lecture	Daily and monthly exams, assignments and reporting
Eighth	4	Flow Control (if – else), Running Examples on Flow Control (if – else)	Explain the concept of flow control, Write conditional expressions	Lecture	Daily and monthly exams, assignments and reporting
Ninth	4	Flow Control (switch – case), Running Examples on Flow Control (switch – case)	Describe the syntax and structure, identify appropriate scenarios	Lecture	Daily and monthly exams, assignments and reporting
Tenth	4	Loops (counter and cumulative variables)	Explain the concept of loops, Write loop-based programs	Lecture	Daily and monthly exams, assignments and reporting
Eleventh	4	Running Examples on Uncountable Loops	Differentiate between while and do-while, Design loop conditions	Lecture	Daily and monthly exams, assignments and reporting
Twelfth	4	Nested Loops	Explain the concept of nested loops, write programs that use nested loops	Lecture	Daily and monthly exams,

					assignments and reporting
Thirteenth	4	Nested Loops	Explain the concept of nested loops, write programs that use nested loops	Lecture	Daily and monthly exams, assignments and reporting
Fourteenth	4	Running Examples on Nested Loops	Explain how nested loops execute, Predict program output	Lecture	Daily and monthly exams, assignments and reporting
Fifteenth	4	Running Examples on Nested Loops	Explain how nested loops execute, Predict program output	Lecture	Daily and monthly exams, assignments and reporting
Sixteenth	4	Array	Explain Array	Lecture	Daily and monthly exams, assignments and reporting
Seventeenth	4	One Dimension array	Declare and initialize one-dimensional arrays, Access and modify array elements	Lecture	Daily and monthly exams, assignments and reporting
Eighteenth	4	Running one dimension array	Implementation running one dimension array	Lecture	Daily and monthly exams, assignments and reporting
Nineteenth	4	One Dimension array	Sorting 1D	Lecture	Daily and monthly exams, assignments and reporting
Twentieth	4	Two-dimension array	Declare and initialize one-dimensional arrays, Access and modify array elements	Lecture	Daily and monthly exams, assignments and reporting
Twenty-one	4	Running two-dimension array	Implementation running two-dimension array	Lecture	Daily and monthly exams, assignments and reporting
Twenty-Two	4	Two Dimension array	Sorting 2D, string	Lecture	Daily and monthly exams,

					assignments and reporting
Twenty-Three	4	Functions	Explain the concept and purpose of functions, Identify the components of a function	Lecture	Daily and monthly exams, assignments and reporting
Twenty-Four	4	Running Examples on Functions	Run and test function-based programs, Modify existing function examples	Lecture	Daily and monthly exams, assignments and reporting
Twenty-Five	4	Functions	Explain the concept and purpose of functions, Identify the components of a function	Lecture	Daily and monthly exams, assignments and reporting
Twenty-Six	4	Running Examples on Functions	Run and test function-based programs, Modify existing function examples	Lecture	Daily and monthly exams, assignments and reporting
Twenty-Seven	4	Functions	Explain the concept and purpose of functions, Identify the components of a function	Lecture	Daily and monthly exams, assignments and reporting
Twenty-eight	4	building a TikTacToe Game	Apply programming fundamentals, Design game logic	Lecture	Daily and monthly exams, assignments and reporting
Twenty-nine	4	building a TikTacToe Game	Implement conditional statements and loops, Develop and use functions	Lecture	Daily and monthly exams, assignments and reporting
Thirty	4	building a TikTacToe Game	Implement conditional statements and loops, Develop and use functions	Lecture	Daily and monthly exams, assignments and reporting

11- Course Evaluation

core for daily exams: 5, score for assignments and reports: 10, score for monthly exams: 35
Final exam score: 50

12- learning and Teaching Resources

Stroustrup, Bjarne - Programming_ principles and practice using C++-Addison-Wesley (2015)

Olsson, Mikael - C++20 Quick syntax reference: a pocket guide to the language, apis, and library

1. Course Name:

Educational Psychology

2. Course Code:

TU108CsDP

3. Semester / Year:

2024/2025

4. Description Preparation Date:

1/12/2024

5. Available Attendance Forms:

Attendance Study: day

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

2 Hours weekly :(30 weeks yearly- 60 Hours per year)

Number of hours: 2 theoretical (weekly)2*30 weeks = total of 60 hours per year

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

Name: Dr.Mays Amer Hashim Email: mays.a.hashim@tu.edu.iq

8. Course Objectives

Course Objectives

- The student will learn about the concept of educational psychology and its areas of interest and study
- The student will understand the meaning of memory, its nature and its role in teaching.
- The student will learn about the importance of motivation in the field of educational psychology.
- The student will learn about the meaning of transfer of learning effect and its educational applications.
- The students will learn about the concept of classroom learning and its importance in education
- The students will learn about the difference between learning, education and teaching
- The students will learn about the factors affecting classroom learning
- The students will learn about the different learning methods (auditory, visual, kinetic)
- The students will learn about the appropriate teaching strategies to take into account individual differences
- The students will learn about effective classroom management strategies.

9. Teaching and Learning Strategies

Strategy

- Lecture method.
- Skill in creating mini research projects.
- Giving examples and modern applications to enhance understanding.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
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1	2	Understand the meaning of educational psychology	Educational Psychology and its Development	Presentation lecture and discussion	Asking and answering questions from the student
2-4	6	The student should be able to formulate behavioral objectives and formulate a question that achieves the objective.	Educational aims	Presentation lecture and discussion	Asking and answering questions from the student
5		-	First exam of the first semester	Presentation lecture and discussion	Asking and answering questions from the student
6	2	Learn about memory and its theories	Memory its theories and its role in teaching	Presentation lecture and discussion	Asking and answering questions from the student
7	2	Learn about memory and its theories	Memory its theories and its role in teaching	Presentation lecture and discussion	Asking and answering questions from the student
8-9	4	Learn about forgetting and its theories	forgetfulness	Presentation lecture and discussion	Asking and answering questions from the student

10-11	4	Recognizing the transfer of learning	Transfer of learning effect	Presentation lecture and discussion	Asking and answering questions from the student
12	-	-	Second exam of the first semester	-	-
13-15	6	Identify the role of motivation in the learning process	Motivation	Presentation lecture and discussion	Asking and answering questions from the student
16-18	6	Learn the meaning of the concept of creative and scientific thinking	Concepts and their relationship to creative and scientific thinking	Presentation lecture and discussion	Asking and answering questions from the student
19-20	4	Learn the meaning of feedback	Feedback	Presentation lecture and discussion	Asking and answering questions from the student
21	2	-	First exam of the second semester	-	-
22-24	6	Learn about educational theories	Education Theories	Presentation lecture and discussion	Asking and answering questions from the student

25-26	4	Identifying factors affecting learning	Factors affecting learning	Presentation lecture and discussion	Asking and answering questions from the student
27-28	4	Recognizing individual differences	Individual differences and their impact on learning	Presentation lecture and discussion	Asking and answering questions from the student
29	2	-	Second exam of the second semester	-	-
30-31	4	Identify skills and habits	Skills and Habits and How to Acquire Them	Presentation lecture and discussion	Asking and answering questions from the student
32	2	Understand the meaning of learning types	Types of learning	Presentation lecture and discussion	Asking and answering questions from the student

11.Course Evaluation

Daily exams, assignments and reports: 10 points, monthly exams: 40 points, final exam: 50 points

12.Learning and Teaching Resources

Fundamentals of Educational Psychology

13.Main references (sources)

- Educational Psychology
- Cognitive Psychology
- Thinking Without Limits.

The most important books and sources on educational psychology

- Reliable websites.
- Websites of libraries in some Iraqi and Arab universities.

1. Course Name:

Fundamentals of Education

2. Course Code:

TU105CsFE

3. Semester / Year:

**Annual system
For the academic year 2025-2026**

4. Description Preparation Date:

1:12:2025

5. Available Attendance Forms:

The actual daily

6. Number of Credit Hours (Total) / Number of Units (Total)	
(30) hours yearly totally, 1 theoretical hour per week	
Number of hours: 1 theoretical (weekly)1*30 weeks = total of 30 hours per year	
7. Course administrator's name (mention all, if more than one name)	
Enaam Hassani Mohamed , enaam.hassani@tu.edu.iq	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> • The student understands the meaning of education, its goals and principles, and that education is the primary means of achieving the state's philosophy • He also learns about the principles of primitive education. • The student differentiates between education and teaching and understands the relationship between education, technology and the environment. • Make the student feel the value of ancient civilizations that played a prominent role in the progress of societies and highlight the achievements of some scholars in this field. • Recognizes the importance of the family in society, and its role in building individuals with integrated personalities in all aspects. • The student understands that education is the basis for the economic process and development. • The student learns about modern education and secondary education in Iraq.
A- Cognitive goals	<p>A1- That the student gets to know the meaning of education, its concept, goals, necessities, and the educational theories that address it.</p> <p>A2- That the student becomes familiar with the historical basis of education in ancient civilizations.</p> <p>A3- That the student recognizes the stages of development of the concept of education over time.</p> <p>A4- The student should know the concept of education in ancient Western societies, European education before the Renaissance.</p> <p>A5- That the student learns about the role of civilization and development in education.</p> <p>A6- That the student learns about the development of Arab-Islamic education and contemporary education.</p> <p>A7- That the student becomes familiar with the social, economic, scientific and national basis by addressing topics related to family, culture, environment, moral education and linking education to the economic return of education, planning and development.</p> <p>A8- That the student becomes familiar with the concept of science and the steps of scientific research.</p> <p>A9- That the student learns about the role of school and home in developing the national conscience.</p>
B- Skills goals	B1 - The student must have the ability to work within the educational and professional work team (educational work skill).

	<p>B2 - That the student uses positive thinking and employs the knowledge he has received.</p> <p>B3 - The student must have the ability to communicate with parties outside the university and train with them.</p> <p>B4- That the student be able to learn and master the teaching profession.</p> <p>B5- The student must be able to possess the skill of dialogue and discussion.</p> <p>B6- The student must have the ability to manage and lead the class.</p>
C- Emotional goals	<p>C1- The student should appreciate the importance of education in building the individual's personality.</p> <p>C2- That the student realizes the importance of the family.</p> <p>C3- That the student realizes the importance of religious education, especially Islamic education.</p> <p>C4- That the student realizes the importance of the relationship between family members and the role of education in that.</p> <p>C5- The student should appreciate the importance of society.</p> <p>C6- The student should value the relationship between education, science and technology.</p>

9. Teaching and Learning Strategies

Strategy	<ul style="list-style-type: none"> • Lecture strategy • Discussion strategy • Group work strategy • Brainstorming strategy • Reciprocal teaching strategy • problem solving strategy
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	2	The student to know the meaning of education, its duties, and the nature of the educational process	Introduction to education, the meaning of education, elements of education, Definition of education, duties of education	Presentation, Lecture and Questioning	Evaluating the student according to an oral test
3	1	The student to become familiar with the functions and objectives of education	The most important educational goals, types of education	Presentation, lecture and discussion	Evaluation by daily written exam

4	1	The student to distinguish the difference between education and teaching, the student should become familiar with the most important modern educational theories and how to apply them in the teaching process.	The difference between education and teaching, the most important modern educational theories, how to apply them in the teaching process	Presentation, discussion, brainstorming	Evaluation by electronic test
5-6	2	The student to become familiar with the historical basis of education and education in ancient Western societies and civilizations, and development in education.	The historical basis of education, primitive education (its goals, types, content, and characteristics), Education in some ancient civilizations, education in the Mesopotamian civilization, ancient schools and their cultural message, education in the Nile Valley civilization	Presentation, Lecture, Discussion and Interrogation	Evaluation by oral examination, with electronic assignment
7	1	The student should be familiar with the historical basis of education, such as European education, and distinguish between them and note the development in education.	Chinese education and Confucianism, Greek education (Spartan education, Athenian education),	Presentation, Lecture, Discussion, Reciprocal Teaching	Evaluation by oral examination, with an activity to prepare a joint report (group activity (in-person and online))
8	1	The student acquires teaching skills.	Receive a report	Teamwork, Reciprocal Teaching	evaluation based on the student's preparation of a joint report and how to present it
9-10	2	For the student to become familiar with learning and teaching in the Arab-Islamic education stage	The philosophy of Arab education, the stages of Islamic education (the stage of Islamic preaching, the stage of prosperity and progress, the stage of decline and dissolution), Educational institutions and institutes among Muslims, women's education in Islam, teachers in Islam, conditions that must be met by a teacher,	Presentation, discussion, brainstorming	Evaluation by written exam, activity or online assignment

			general features of Arabic education.		
11	1	For the student to become familiar with the figures of Islamic educational thought and their educational opinions, and to appreciate their role in the development of education	The most famous figures of Islamic educational thought (Ibn Sina, Ibn Khaldun, Al-Ghazali, Jabir Ibn Haiyan)	Presentation, Lecture, Discussion	Oral examination evaluation
12	1	The student gets to know the social basis of education	The educational role of the family, the role of the family in the educational process, the impact of the comprehensive cultural system of the family on raising the child, the role of the family in educational problems	Presentation, Lecture, Discussion	Oral examination evaluation
13	1	The student gets to know culture, its classifications and characteristics, and its relationship to education	Definition of culture, classifications of culture, characteristics of culture, the relationship between culture and education, the importance of studying culture for the teacher	Presentation, Lecture, Discussion	Evaluation based on electronic activity
14	1	The student to become familiar with environmental education	Environmental education goals and objectives, environmental education and curricula, Islamic trends in environmental protection,	Presentation, Lecture, Discussion	Oral examination evaluation
15	1		Monthly exam		Final assessment by written exam
16	1	The student should learn about moral education and understand its importance.	The concept of moral education, the importance of morals in Islam, ethics in the philosophy of Islamic education, Islamic methods in developing moral values.	Presentation, discussion, brainstorming	Evaluation by written exam

17	1	To learn about the economic basis of education and its relationship to development.	Education is an economic process Quantitative aspect, qualitative aspect, time aspect, quantitative waste, qualitative waste, relationship of education to development	Presentation, Lecture, Discussion, Problem Solving	Electronic activity or assignment
18-19	2	To learn about the scientific basis of education and its relationship to the technological revolution.	Scientific and technological progress, science and its characteristics, the positive aspect of scientific thinking, the theoretical aspect of scientific thinking, Stages of the scientific research method, the relationship of education to the technological revolution, The impact of the technological revolution on education	Presentation, Lecture, Discussion, Problem Solving	Oral examination evaluation
20-21	2	To become familiar with the national and national foundations of education.	Education, national unity and patriotism, The philosophy of education and its goals in Iraq	Presentation, Lecture, Discussion	Evaluation by written examination
22	1	To become familiar with the concept of modern education	Modern education, aspects and principles of modern education	Presentation, Lecture, Discussion	Oral examination evaluation
23	1	To become acquainted with the major figures of Western educational thought.	Maccarino, John Dewey	Presentation, Lecture, Discussion	Oral examination evaluation, With an activity to prepare a single report (individual activity (in-person and electronic))
24-27	4	That the student can learn and master the teaching profession. The student must be able to possess the skill of dialogue and discussion, the skill of class management and leadership.	The student submits a report on one of the topics of the foundations of education, and the student plays the role of the teacher, presenting it to the students, which is finally discussed and evaluated.	Presentation and discussion	Making a report, oral evaluation
28	1		Monthly exam		Final assessment by written exam
29-30	2	To learn about the characteristics of secondary education in Iraq.	Its concept, organization, student, teacher, Registration, educational activity, social organization,	Presentation and discussion	Oral examination evaluation

			educational administration		
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11. Course Evaluation

The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, written and monthly exams, electronic and in-person activities, reports, etc

12. Learning and Teaching Resources

Required textbooks (methodology)	Vocabulary prescribed by the university within the sector
Main references (sources)	The book “Foundations and Principles of Education” (written by Faisal Abd Munshid) Basics in Education book (written by Khalif Youssef Tarawneh)
Recommended supporting books and references (scientific journals, reports....)	Principles of Education book (Ahmed Haqqi Al-Hilli, Nouri Abbas Abdullah) Fundamentals of Education (Ahmed Abdo Khairuddin)
Electronic references, Internet sites	اصول التربية والتعليم - مكتبة نور http://mktba.net/library.php?id=13197

13. Course development plan

- Developing the educational content by deleting, adding or replacing it with the aim of enriching the content of the material with modern information. The development also includes activities and questions in terms of diversity in assessment methods.
- Adding the topic of the impact of the technological revolution on education.
- Updating the topic of characteristics of secondary education in Iraq

14. Course Name:

Principles of Computer Organization

15. Course Code:

TU104CsCO

16. Semester / Year:

Annual system

For the academic year 2025-2026

17. Description Preparation Date:

1-12-2025

18. Available Attendance Forms:

daily

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

FOUR HOURS WEEKLY, 4*30 week= 120 HOURS YEARLY
Number of hours: 2 theoretical + 2 practical (weekly) 4*30 weeks = total of 120
hours per year

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

Ast.prof. AL- HAKM AYAD ALLAWIE

alhakam.a.allawie@tu.edu.iq

Lect. KHALID KHALIS IBRAHIM

khalid.kh.ibrahim@tu.edu.iq

AHMED AYAD ALLAWIE

ahmed.ayad@tu.edu.iq

21. Course Objectives

Course Objectives	Understanding the Basic Components: The module aims to familiarize students with the fundamental components of computer systems, including the CPU (Central Processing Unit), memory, input/output devices, and storage devices. Students should gain an understanding of the purpose and functionality of each component
B- Cognitive goals	Understand the basic components of computer systems, including the CPU, memory, input/output devices, and storage devices. Demonstrate knowledge of different system architectures and their impact on computer performance.
B- Skills goals	<p>1. Active Learning:</p> <ul style="list-style-type: none"> • Actively engage with the material by reading, taking notes, and asking questions. • Participate in discussions, group activities, and practical exercises. • Seek opportunities for hands-on practice and application of concepts through exercises, projects, and real-world examples.
C- Emotional goals	<ul style="list-style-type: none"> • Allocate dedicated study time for each subject to ensure consistent progress and understanding. • Break down the learning material into manageable chunks and create a study schedule. • Avoid procrastination and maintain discipline in adhering to the study plan.

22. Teaching and Learning Strategies

Strategy	
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- Lecture strategy
- Discussion strategy
- Group work strategy
- Brainstorming strategy
- Reciprocal teaching strategy
- problem solving strategy

23. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2		Introduction: Computer	Basic Components of Computer Systems:	Presentation, Lecture and Questioning	Evaluating the student according to an oral test
3-4		Computer Functions	CPU (Central Processing Unit)	Presentation, lecture and discussion	Evaluation by daily written exam
5-6		Introduction of Computer System Components	Memory (Primary and Secondary)	Presentation, discussion, brainstorming	Evaluation by electronic test
7-8		Computer System Components: Processor Components	Input/Output Devices	Presentation, Lecture, Discussion and Interrogation	Evaluation by oral examination, with electronic assignment
9-10		Computer System Components: Internal Memory (RAM and ROM)	Storage Devices	Presentation, Lecture, Discussion, Reciprocal Teaching	Evaluation by oral examination, with an activity to prepare a joint report (group activity (in-person and online))
11-12		Computer System Components: Storage Devices (secondary storage)	System Architecture:	Teamwork, Reciprocal Teaching	evaluation based on the student's preparation of a joint report and how to present it
13-14		Internal Hardware Computer Components: Power supply, Computer case, Internal cables	Instruction Sets	Presentation, discussion, brainstorming	Evaluation by written exam, activity or online assignment
15-16		Introduction of External Hardware Computer Components - Input Devices	Data Representation	Presentation, Lecture, Discussion	Oral examination evaluation
17-18		External Hardware Computer	Memory Hierarchy	Presentation, Lecture, Discussion	Oral examination evaluation

		Components - Output Devices			
19-20		Introduction of System Software	Caches and Cache Organization	Presentation, Lecture, Discussion	Evaluation based on electronic activity
21-22		Computer Software - Operating Systems	Processor Design: [6 hours]	Presentation, Lecture, Discussion	Oral examination evaluation
23-24		Computer Software - Utility Programs	Control Unit Design		Final assessment by written exam
25-26		Application Software – M.S. Word	Arithmetic Logic Units (ALUs)	Presentation, discussion, brainstorming	Evaluation by written exam
27-28		Application Software – M.S. Excel	Pipelining and its Challenges	Presentation, Lecture, Discussion, Problem Solving	Electronic activity or assignment
29		Application Software – M.S. PowerPoint	Parallel Processing and Multi-core Processors	Presentation, Lecture, Discussion, Problem Solving	Oral examination evaluation
30		exam	exam	exam	exam

24.

The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, written and monthly exams, electronic and in-person activities, reports, etc

25. Learning and Teaching Resources

Required textbooks (methodology)	Vocabulary prescribed by the university within the sector
Main references (sources)	<ol style="list-style-type: none"> 1. Computer Organization and Design: The Hardware/Software Interface" by David A. Patterson and John L. Hennessy. 2. "Computer Organization and Architecture: Designing for Performance" by William Stallings. "Operating System Concepts" by Abraham Silberschatz, Peter B. Galvin, and Greg Gagne
Recommended supporting books and references (scientific journals, reports....)	<ol style="list-style-type: none"> 1. "Structured Computer Organization" by Andrew S. Tanenbaum and Todd Austin. 2. "Operating Systems: Internals and Design Principles" by William Stallings. "Exploring Microsoft Office 2019" by Mary Anne Poatsy, Keith Mulbery, Cynthia Krebs, and Lynn Hogan.
Electronic references, Internet sites	https://ccms.tu.edu.iq/csd/electronic-lectures/409-stage1-8.html

Course development plan

Developing the computer organization by extract the idea of computer architecture of enriching the content of the material with modern information. The development also includes activities and questions in terms of diversity in assessment methods.

- Adding the topic of the impact of the technological revolution on computer organization.
- Updating the topic of computer organization characteristics in Iraq universities .

26. Course Name:

Discrete Structure

27. Course Code:

TU109CsDS

28. Semester / Year:

**Annual system
For the academic year 2025-2026**

29. Description Preparation Date:

1-12-2025

30. Available Attendance Forms:

daily

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

2 hours weekly, 2*30 week yearly = 60 hours(total)

Number of hours: 2 theoretical (weekly)*30 weeks = total of 60 hours per year

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

Assit prof. Qasim Nasir Husain

qasim11@tu.edu.iq

Lect. Mazin khalil Nouri

mazin.khali@tu.edu.iq

Baida mohammed ahmed

ahmed.m.baida@tu.edu.iq

33. Course Objectives

Course Objectives

- 1- Discrete structures provides the mathematical foundations for many courses including data structures and algorithm, Compilers, Automata theory and formal languages, operating systems theory and many other subjects.
- 2- Discrete structures are the abstract mathematical structures used to represent discrete object and relations lies between those objects.

C- Cognitive goals

- 3- Knowing the models of discrete structures and how to create them.
- 4- Developing students' ability to deal with transformations and their applications in constructing structures.
- 5- Giving the student the necessary experience to deal with the relations and applications

B- Skills goals

- 1 Building skills to analyze and solve some important issues and the approximate time to solve them. -
- 2 Build skills on how to choose the appropriate solutions for some issues and designate the best algorithms to solve them

C- Emotional goals

- 6- Students' realization of the basic concepts of discrete structure, such as mathematics logic, graphs.
- 7- Knowing the models of discrete structures and how to create them.

34. Teaching and Learning Strategies

Strategy

- The teacher gives detailed theoretical lectures
- The teacher requests periodic reports on the basic topics of the subject
- The student is also assigned to self-read and to give the student a certain period to inquire and discuss the topics he has read.
- Solve practical examples

Evaluation modalities

- 1-Daily exams with practical and scientific questions.
- 2- Participation scores for difficult competition questions among students.
- 3- Setting grades for homework and the reports assigned to them

35. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2		Mathematical logic	Basic Components of Computer Systems:	Presentation, Lecture and Questioning	Evaluating the student according to an oral test
3-4		Logical operators	CPU (Central Processing Unit)	Presentation, lecture and discussion	Evaluation by daily written exam
5-6		Logical operators	Memory (Primary and Secondary)	Presentation, discussion, brainstorming	Evaluation by electronic test
7-8		Logical Equivalences, Compound Propositions Classification:	Input/Output Devices	Presentation, Lecture, Discussion and Interrogation	Evaluation by oral examination, with electronic assignment
9-10		Examples, Set of theory, Properties of set	Storage Devices	Presentation, Lecture, Discussion, Reciprocal Teaching	Evaluation by oral examination, with an activity to prepare a joint report (group activity (in-person and online))
11-12		Sets of Number, Sets and elements, subsets	System Architecture:	Teamwork, Reciprocal Teaching	evaluation based on the student's preparation of a joint report and how to present it
13-14		Mid Exam	Instruction Sets	Presentation, discussion, brainstorming	Evaluation by written exam, activity or online assignment
15-16		Set's Algebra,	Data Representation	Presentation, Lecture, Discussion	Oral examination evaluation
17-18		Set's Algebra with examples	Memory Hierarchy	Presentation, Lecture, Discussion	Oral examination evaluation
19-20		relations	Caches and Cache Organization	Presentation, Lecture, Discussion	Evaluation based on electronic activity
21-22		Properties of relations	Processor Design: [6 hours]	Presentation, Lecture, Discussion	Oral examination evaluation
23-24		Properties of relations with examples	Control Unit Design		Final assessment by written exam
25-26		Review of Functions	Arithmetic Logic Units (ALUs)	Presentation, discussion, brainstorming	Evaluation by written exam
27-28		Types of Functions	Pipelining and its Challenges	Presentation, Lecture,	Electronic activity or assignment

				Discussion, Problem Solving	
29		mathematics functions	Parallel Processing and Multi-core Processors	Presentation, Lecture, Discussion, Problem Solving	Oral examination evaluation
30		exam	exam	exam	exam

36.

The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, written and monthly exams, electronic and in-person activities, reports, etc.

37. Learning and Teaching Resources

Required textbooks (methodology)	Vocabulary prescribed by the university within the sector
Main references (sources)	Theory and problems of Discrete mathematics, by Seymour Lipschutz & Marc Lars Lipson, Schaum's Outline Series, third edition 2007 Discrete Mathematics and Its Applications, Seventh Edition, Kenneth H. Rosen, AT&T Laboratories, 2012
Recommended supporting books and references (scientific journals, reports....)	<ul style="list-style-type: none"> • Mathematical foundation of computer science, Y.N. Singh, 2005 • Discrete structures, Amin Witno, Revision Notes and Problems 2006, www.witno.com Discrete mathematical structures for computer science by Bernard Kolman & Robert C. Busby
Electronic references, Internet site	http://en.wikibooks.org/wiki/Discrete_mathematics/Set_theory

Course development plan

Developing the discrete mathematics algorithm by content by analyzing the concept of idea with the aim of enriching the content of the material with modern information. The development also includes activities and questions in terms of diversity in assessment methods.

- Adding the topic of the impact of the technological revolution on education.
- Updating the topic of characteristics of secondary education in Iraq

38. Course Name:	Mathematics
39. Course Code:	TU101CsMA
40. Semester / Year:	Annual system For the academic year 2025-2026
41. Description Preparation Date:	1-12-2025
42. Available Attendance Forms:	daily
43. Number of Credit Hours (Total) / Number of Units (Total)	Two hours weekly, 2*30 week yearly=60hours yearly Number of hours: 2 theoretical (weekly)2*30 weeks = total of 60 hours per year
44. Course administrator's name (mention all, if more than one name)	Prof: Ghasn Aiz Aldeen Arif ghassanarif@tu.edu.iq Taha Azzawi Mohammed taha.a.mohammed10504@tu.edu.iq Lubna laith Lubnalaith94@tu.edu.iq
45. Course Objectives	
Course Objectiv	By studying differential calculus, students learn how to calculate derivatives and understand the concept of a derivative as the instantaneous rate of change of a

	function. Students can apply the concepts of calculus to solve practical problems, analyze the behavior of functions, determine critical points, least and largest values of functions, and estimate changes of variable quantities.
D- Cognitive goals	1. Deep understanding of concepts: Students are expected to gain a deep understanding of basic concepts in differential calculus. Students should be able to understand the concept of a derivative and its meaning as the rate of change of a function, as well as the concept of inverse differential and integration of functions.
B- Skills goals	1. Analytical Thinking: By studying differential calculus, students are expected to develop abilities in analytical thinking and mathematical reasoning. They should be able to analyze mathematical problems and draw conclusions based on learned mathematical concepts and tools.
C- Emotional goals	Students should have the ability to apply the concepts of differential calculus in other fields such as science, engineering, and economics. They learn how to represent real phenomena by functions and use differential calculus to analyze these phenomena and derive practical results

46. Teaching and Learning Strategies

Strategy	<ul style="list-style-type: none"> The teacher gives detailed theoretical lectures The teacher requests periodic reports on the basic topics of the subject The student is also assigned to self-read and to give the student a certain period to inquire and discuss the topics he has read. Solve practical examples <p>Evaluation modalities</p> <p>1-Daily exams with practical and scientific questions.</p> <p>2- Participation scores for difficult competition questions among students.</p> <p>3- Setting grades for homework and the reports assigned to them</p>
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47. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2		Introduction to function, domain, range Inverse functions, even and odd function	Basic Components of Computer Systems:	Presentation, Lecture and Questioning	Evaluating the student according to an oral test
3-4		Graph the functions	CPU (Central Processing Unit)	Presentation, lecture and discussion	Evaluation by daily written exam
5-6		Limits and continuous	Memory (Primary and Secondary)	Presentation, discussion, brainstorming	Evaluation by electronic test
7-8		Exponential Functions, Logarithm Functions, Trigonometry	Input/Output Devices	Presentation, Lecture, Discussion and Interrogation	Evaluation by oral examination, with electronic assignment

		ric functions.			
9-10		Derivatives, Rules of differentiation, Applications of Derivatives	Storage Devices	Presentation, Lecture, Discussion, Reciprocal Teaching	Evaluation by oral examination, with an activity to prepare a joint report (group activity (in-person and online))
11-12		The mean value theorem	System Architecture:	Teamwork, Reciprocal Teaching	evaluation based on the student's preparation of a joint report and how to present it
13-14		Mid-term exam	Instruction Sets	Presentation, discussion, brainstorming	Evaluation by written exam, activity or online assignment
15-16		The derivative and extrema	Data Representation	Presentation, Lecture, Discussion	Oral examination evaluation
17-18		Derivatives of Exponential Functions, Logarithm Functions	Memory Hierarchy	Presentation, Lecture, Discussion	Oral examination evaluation
19-20		Derivatives of Trigonometric functions, Derivatives of inverse functions	Caches and Cache Organization	Presentation, Lecture, Discussion	Evaluation based on electronic activity
21-22		Integration	Processor Design: [6 hours]	Presentation, Lecture, Discussion	Oral examination evaluation
23-24		The mean value theorem for integrals	Control Unit Design		Final assessment by written exam
25-26		basic application of integration	Arithmetic Logic Units (ALUs)	Presentation, discussion, brainstorming	Evaluation by written exam

27-28		Area , volume	Pipelining and its Challenges	Presentation, Lecture, Discussion, Problem Solving	Electronic activity or assignment
29		Arc length	Parallel Processing and Multi-core Processors	Presentation, Lecture, Discussion, Problem Solving	Oral examination evaluation
30		exam	exam	exam	Exam

48.

grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, written and monthly exams, electronic and in-person activities, reports, etc.

49. Learning and Teaching Resources

Required textbooks (methodology)	Vocabulary prescribed by the university within the sector
Main references (sources)	<ol style="list-style-type: none"> 1. Courant, R., John, F., Blank, A. A., & Solomon, A. (1965). <i>Introduction to calculus and analysis</i> (Vol. 1). New York: Interscience Publishers. 2. Tall, D. (1996). Functions and calculus. <i>International handbook of mathematics education, 1</i>, 289-325. 3. Tall, D. (1996). Functions and calculus. <i>International handbook of mathematics education, 1</i>, 289-. 4. Marsden, J., & Weinstein, A. (1985). <i>Calculus I</i>. Springer Science & Business Media. 5. <i>Thomas' Calculus</i>, Early Transcendental, 12th ed. <p>Calculus and Analytic Geometric, Durfee. W.H ,1971 New York (3).</p>
Recommended supporting books and references (scientific journals, reports....)	Grossman, Stanley I. <i>Calculus</i> . Academic Press, 2014
Electronic references, Internet sites	https://books.google.iq/books?hl=ar&lr=&id=0aziBQAAQBAJ&oi=fnd&pg=PP1&dq=calculus+book&ots=a1k4tINdCZ&sig=tmAQQ_yHi9mTDBLcx-qi7hy9uo8&redir_esc=y#v=onepage&q=calculus%20book&f=false

Course development plan

Developing the educational content by deleting, adding or replacing it with the aim of enriching the content of the material with modern information. The development also includes activities and questions in terms of diversity in assessment methods.

- Adding the topic of the impact of the technological revolution on calculus.
- Updating the topic of characteristics of secondary education in Iraq about mathematics strategy

1. Course name
Logical Design
2. Course code/
TU102CsLD
3. Semester/Year
2025/2026
4. Date of preparation of this description
1/12/2025
5. Available attendance formats
Daily
6. Number of study hours (total) / Number of units (total)
Number of hours: 2 theoretical + 2 practical (weekly) 4*30 weeks yearly = total of 120 hours per year
7. Name of the course coordinator (if more than one name is mentioned)
Lect. Anas Ibrahim Muhammad anas.ibrahim@tu.edu.iq
Mustafa Abdul Majeed Shehab Mustafa_shihab86@tu.edu.iq
Laith Ibrahim Saleh laith.ibrahim2@tu.edu.iq

8. Course objectives	
Objectives of the course Values	Teach students the theoretical and practical skills of logical design and how to design electronic logic circuits

	<p>and represent them using a calculator and, in practice, using a board.</p> <p>Introduce students to the science of logic design.</p> <p>Introduce students to the use of computers and electronic boards to design electronic logic circuits</p> <p>Cognitive objectives –</p> <p>Explain logical design in detail</p> <p>Design electronic logic circuits.</p> <p>Apply theoretical material in practice using electronic circuit simulation software.</p> <p>Skill objectives for the course. -</p> <p>- Graduates should be able to think scientifically and practically</p> <p>Be able to solve problems and think creatively</p> <p>Be able to work as part of a team and design electronic circuits using computer simulation software.</p>
9. Teaching and learning strategies	

Strategy	Lectures, student discussions, and asking and discussing questions with students. Discussion strategy Teamwork strategy Brainstorming strategy Exchange teaching strategy Presentation and discussion methods. Presentation method. Use of appropriate teaching aids. - Laboratory activities
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Assessment methods

Conducting theoretical and scientific tests / daily / monthly / final -

Questions and oral tests -

Student attendance.

Homework assignments. -

Report writing. -

Direct assessment. -

Emotional and value-based objectives -

Enabling students to use computers confidently and without hesitation.

To demonstrate the importance of computers to students in the field of education and learning and their applications in different aspects of life.

life.

Students should complete their homework effectively. -

Students will participate in computer activities willingly. -

Teaching and learning methods

Dialogue and discussion method.

Presentation method.

Assessment methods

Homework assignments. -

Practical computer-based tests.

Direct assessment. Student attendance. -
General and transferable skills Other
skills related to employability and
personal development
Be able to keep up with developments in
Windows releases. -
Be able to install programs. -
Be able to develop oneself using other
technologies in different fields. -
Be able to teach computer science in
secondary schools.

10. Course Structure					
Week	Hour	Required learning outcomes	Unit Name or Topic	Learning Method	Evaluation method
First	4	Chapter One/Systems Preparation/	Decimal numbers/Binary numbers/Fractions Binary/Fractions Numbers/Weights/Sixteenth/ Eighth / Conversions	Method of dialogue and discussion	Daily and monthly exams, assignment, and reports
Second	4	Chapter Two/ Mathematical operations Preparation	Addition and subtraction of numbers using several methods	Dialogue method and discussion and use	Daily and monthly exams, assignment, and reports
				and discussion Appropriate e for the vision therapist	Daily and monthly exams, assignment, and reports
Third	4	Third semester/ Mathematical operations For numbers	Learning Complements of Numbers and their use by subtraction	Dialogue method and discussion and brainstorming Mental	Daily and monthly exams, assignment, and reports
Fourth	4	Semester Third/Prepared Without Weights	code, Parity code, seven segment Knowledge of setting codes BCD, Excess-3, Gray	Method of dialogue and discussion	Daily and monthly exams, assignment, and reports

Fifth	4	Chapter Four/ Arduino	Definition of Arduino and its components Basic	Method of dialogue and Discussion and brainstorm Mental	Daily and monthly exams, assignment, and reports
Sixth	4	Introduction to programming for Arduino	Basic keys for programming Arduino and its environment Environment	Method of dialogue and discussion and the use of	Daily and monthly exams,
				Appropriat e teaching methods suitable for the vision memory	
Seventh	4	Project programming Arduino	Project programming Arduino	Method of dialogue and discussion	Daily and monthly exams,
Eighth	4	Simplified project	Programming the display screen Using Arduino	Dialogue method and discussion	Daily and monthly exams,

Ninth	4	Chapter 5/ Polynomial algebra	Understanding logic gates Truth Tables	Dialogue Method and Discussion	Daily and monthly exams,
Tenth	4	Polynomial algebra laws	Knowing how to use the laws in abbreviated form equations	Dialogue method and discussion	Daily and monthly exams,
Eleventh	4	Nand Nor gate	Gate conversion/use Nand and Nor gates in Abbreviation	Method of dialogue and discussion	Daily and monthly exams,
Twelfth	4	Semester Sixth/Laws Demorcan	Use of Demorcan Laws in abbreviations	Method of Dialogue and discussion	Daily and monthly exams,
Thirteenth	4	Semester Sixth SOP/POS	Truth table/addition Multiplication/Division Totals	Method of Dialogue	Daily and monthly exams,

Fourteen	4	Karnov Map	Learn how to use Karnov Map In short	Dialogue method and discussion	Daily and monthly exams, assignment and reports
Fifteenth	4	Monthly exam	Monthly exam	Method of dialogue and discussion	Daily and monthly exams,
Sixteenth	4	Karnov Map	Building a logical system Brief	Method of dialogue and discussion	Daily and monthly exams,
Seventeen	4	Chapter 7/ Full Adder	Addition using half & full adders	Dialogue method and discussion	Daily and monthly exams,
Eighteenth	4	Chapter 7/ Full subtractor	Half & full subtractor	Method of dialogue and discussion	Daily and monthly exams,
Nineteenth	4	Use of comparisons	Use of logic gates to compare numbers	Dialogue method and discussion	Daily and monthly exams,

Twenty	4	Using MUX/DE	and setting conversions using logic gates / Mux, De-Mux	Dialogue method and discussion	Daily and monthly exams,
Twenty-first	4	Chapter 8/ Flip Flop	Knowing the types of flip flops	Conversation on methods and Discussion	Daily and monthly exams
Twenty-second	4	Chapter 8/ Flip Flop	and its logical cycles	Method of dialogue and Discussion	Daily and monthly exams,
Twenty-third	4	Shift Register	Learn about its types	Dialogue method and discussion	Daily and monthly exams,
Twenty-fourth	4	Shift Register	and its logic circuits	Dialogue method and discussion	Daily and monthly exams,
Twenty-fifth	4	Chapter Ninth Meters COUNTER	Learn about their types	Method of dialogue and discussion	Daily and monthly exams,
Twenty-sixth	4	Counters	and how to construct them	Dialogue method and discussion	Daily and monthly exams,

Twenty-seventh	4	Counters Design	and their logic circuits	Dialogue method and discussion	Daily and monthly exams,
Twenty-eighth	4	Memory/Chapter Tenth	Learning about types of RAM memory	Method of dialogue and discussion	Daily and monthly exams,
Nineteenth	4	Memory. Design	Learning types of memory ROM / and how they are constructed	Method of dialogue and discussion	Daily and monthly exams,
Thirty	4	Monthly exam	Monthly exam	Dialogue method and discussion	Tests

11. Course Assessment

Daily exam score: 5, Assignments and reports score: 10, Monthly exam score: 35

Final exam grade: 50

12. Learning and teaching resources

Required textbooks (methodology, if available)

Digital Logic Fundamentals (Thomas L. Floyd)

Main references (sources)

Digital Logic and Computer Design by M. Morris Mano))

<p>Recommended books and references</p> <p>Scientific journals, reports</p> <p>B Electronic references, websites Internet sites</p>	<p>Translator Fundamentals of Logic and Computer Design</p> <p>Matlab Sinolink and Arduino / Arduino Programming</p> <p>for logical design by Ahmed Al-Zahran</p> <p>https://www.arduino.cc/en/main/boards</p> <p>Become an Arduino expert in 10 days/ Engineering Village</p>
<p>Course Development Plan:</p> <p>Introduction to Arduino and its applications, Introduction of new material from the curriculum for the above subject</p> <p>Programming simple projects using Arduino</p> <p>With up-to-date information, the development also includes questions, diagrams, and examples included in the material</p> <p>Developing approved assessment methods such as electronic exams, as well as activities and reports and assignments</p> <p>individual or shared electronic activities. Use electronic materials for electronic devices to build logical design systems</p> <p>Introducing students to Arduino electronic materials used in programming</p> <p>Use electronic boards containing logic gates in the practical part</p>	
<p>Course development plan</p>	
<p>The purpose of this module is to develop students' controlling system ability by focusing on the key skills of reading, to encourage students to become independent learners and to introduce them to strategies and skills to enable them to cope with the demands, both academic and cultural, of undergraduate study in an logic gate and fuzzy logic</p>	

50. Course Name:	
English Language	
51. Course Code:	
TU1CsEN9	
52. Semester / Year:	
Annual system For the academic year 2025-2026	
53. Description Preparation Date:	
1-12-2025	
54. Available Attendance Forms:	
daily	
55. Number of Credit Hours (Total) / Number of Units (Total)	
Number of hours: 1 theoretical (weekly)1*30 weeks yearly = total of 30 hours per year /	
56. Course administrator's name (mention all, if more than one name)	
Wassan Amer Taha wassan.a.taha@tu.edu.iq	
57. Course Objectives	
Course Objectives	<ol style="list-style-type: none"> 1. To enable the students to communicate effectively and appropriately in real life situation. 2- To develop and integrate the use of the four language skills i.e., Reading, Listening, Speaking and Writing. 3. To use English effectively for study purpose across the curriculum. 4. The ability to understand meaning of words, phrases and sentences in context.
E- Cognitive goals	<p>The ability to write English correctly and master the Mechanics of writing; the use of correct punctuation marks and capital letters.</p> <p>7- To acquire the ability to use a suitable dictionary to understand labels, simple notices and written instructions.</p>
B- Skills goals	Teaching students how to communicate each other in English by using the four skills: speaking, listening, reading and writing. The use of different examples from the everyday life, dialogues, conversations and the weekly compositions are useful for more development
C- Emotional goals	<p>Demonstrate through face-to-face conversations comprehension of simple words and phrases used in common everyday context.</p> <p>2.. Knowing the basic rules of the English language.</p>

3- Familiarity with the four English language skills: listening, reading, speaking and writing.

58. Teaching and Learning Strategies

Strategy

- The teacher gives detailed theoretical lectures
- The teacher requests periodic reports on the basic topics of the subject
- The student is also assigned to self-read and to give the student a certain period to inquire and discuss the topics he has read.
- Solve practical examples

Evaluation modalities

- 1-Daily exams with practical and scientific questions.
- 2- Participation scores for difficult competition questions among students.
- 3- Setting grades for homework and the reports assigned to them

59. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2		An introduction to English language.	Verb, subject	Presentation, Lecture and Questioning	Evaluating the student according to an oral test
3-4		<u>Unit (1) Hello</u> am/ are/ is, my/your · This is ... • How are you? • Good morning!	What's this in English? • Numbers • Plurals	Presentation, lecture and discussion	Evaluation by daily written exam
5-6		<u>Unit (2) Your World</u> Countries • he/she/ they, his/her • Where's he from?	fantastic/ awful/ beautiful · Numbers 11-30	Presentation, discussion, brainstorming	Evaluation by electronic test
7-8		<u>Unit (3) All about You</u> Jobs • am/are/ is • Negatives and questions	• Personal information • Social expressions	Presentation, Lecture, Discussion and Interrogation	Evaluation by oral examination, with electronic assignment
9-10		<u>Unit (4) Family and Friends</u> our/their • Possessive 's	• The family • has/have • The alphabet.	Presentation, Lecture, Discussion, Reciprocal Teaching	Evaluation by oral examination, with an activity to prepare a joint report (group activity (in-person and online))
11-12		<u>Unit (5) The Way I live</u> Sports/ Food/ Drinks • Present Simple - I/you/ we/ they • a/an.	Languages and nationalities • Numbers and prices	Teamwork, Reciprocal Teaching	evaluation based on the student's preparation of a joint report and how to present it

13-14		<u>Unit (6) Every day the time</u> • Present Simple- he/she ·	always/sometimes/never Words that go together • Days of week.	Presentation, discussion, brainstorming	Evaluation by written exam, activity or online assignment
15-16		<u>Unit (7) My favorites</u> Question words • me/him/us/them • this/that	Adjectives • Can I.?	Presentation, Lecture, Discussion	Oral examination evaluation
17-18		<u>Unit (8) Where I live</u> Rooms and furniture	• There is/ are • Prepositions • Directions	Presentation, Lecture, Discussion	Oral examination evaluation
19-20		<u>Unit (9) Times past</u> Saying years • was/were born • Past Simple -	irregular verbs • have/do/go • When's your birthday?	Presentation, Lecture, Discussion	Evaluation based on electronic activity
21-22		<u>Unit (10) We had a great time!</u> Past Simple - regular and irregular ·	Questions and negatives • Sport and leisure • Going sightseeing	Presentation, Lecture, Discussion	Oral examination evaluation
23-24		<u>Unit (11) I can do that!</u> can/can't ·	Adverbs • Adjective + noun • Everyday problems.	Presentation, Lecture, Discussion	Final assessment by written exam
25-26		<u>Unit (12) Please and thank you</u> I'd like - some/any	• In a restaurant • Signs all around.	Presentation, discussion, brainstorming	Evaluation by written exam
27-28		<u>Unit (13) Here and now</u> Colors and clothes	• Present Continuous • Opposite verbs • What's the matter?	Presentation, Lecture, Discussion, Problem Solving	Electronic activity or assignment
29		<u>Unit (14) It's time to go!</u> Future plans • Grammar revision	Vocabulary revision • Social expressions.	Presentation, Lecture, Discussion, Problem Solving	Oral examination evaluation
30		exam	Exam	exam	Exam

60.					
The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, written and monthly exams, electronic and in-person activities, reports, etc.					
61. Learning and Teaching Resources					
Required textbooks (methodology)		1- Oxford Headway plus for Beginners.			
Main references (sources)		New Headway English Course (2002) by Julia Starr Kedde			
Recommended supporting books and references (scientific journals, reports....)		English for Everyone			
Electronic references, Internet sites		https://www.unionlearn.org.uk/english-and-maths-learning-resources-and-tools			
Course development plan					
The purpose of this module is to develop students' linguistic ability by focusing on the key skills of reading, writing, speaking and listening, to encourage students to become independent learners and to introduce them to strategies and skills to enable them to cope with the demands, both academic and cultural, of undergraduate study in an English-speaking environment					

62. Course Name:	
Democracy and Human Rights	
63. Course Code:	
TU1CsHR8	
64. Semester / Year:	
Annual system For the academic year 2025-2026	
65. Description Preparation Date:	
1-12-2025	
66. Available Attendance Forms:	
daily	
67. Number of Credit Hours (Total) / Number of Units (Total)	
Number of hours: 1 theoretical (weekly)1*30 weeks yearly = total of 30 hours per year	
68. Course administrator's name (mention all, if more than one name)	
Mohammed Saleh Khalaf mohammed.byiji@tu.edu.iq	
69. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> • The ability to understand the basic concept of democracy. • The ability to understand the historical origins of the two concepts. • Recognizing the sources characteristics and features of democracy.
F- Cognitive goals	<ul style="list-style-type: none"> • Gaining insight into democracy in Islam. <p>Understanding the impact of technological development</p>
B- Skills goals	The teaching and learning strategy was designed to ensure that students acquire comprehensive knowledge covering the course curriculum thereby achieving
C- Emotional goals	the main objective of the program- enabling students to grasp and understand the fundamental concepts of human rights and democracy as well as to become familiar with the sources safeguards and international conventions related to these concepts this knowledge aims to be utilized in addressing negative phenomena within society and in maintaining social stability and peace.
70. Teaching and Learning Strategies	
Strategy	<ul style="list-style-type: none"> • The teacher gives detailed theoretical lectures • The teacher requests periodic reports on the basic topics of the subject • The student is also assigned to self-read and to give the student a certain period to inquire and discuss the topics he has read. • Solve practical examples <p>Evaluation modalities</p> <p>1-Daily exams with practical and scientific questions.</p> <p>2- Participation scores for difficult competition questions among students.</p> <p>3- Setting grades for homework and the reports assigned to them</p>

71. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2		Human rights in ancient civilizations		Presentation, Lecture and Questioning	Evaluating the student according to an oral test
3-4		Human rights in ancient civilizations		Presentation, lecture and discussion	Evaluation by daily written exam
5-6		Universal Declaration of Human Rights		Presentation, discussion, brainstorming	Evaluation by electronic test
7-8		Universal Declaration of Human Rights		Presentation, Lecture, Discussion and Interrogation	Evaluation by oral examination, with electronic assignment
9-10		Human Rights Resources		Presentation, Lecture, Discussion, Reciprocal Teaching	Evaluation by oral examination, with an activity to prepare a joint report (group activity (in-person and online))
11-12		Human Rights Resources		Teamwork, Reciprocal Teaching	evaluation based on the student's preparation of a joint report and how to present it
13-14		Human rights guarantee		Presentation, discussion, brainstorming	Evaluation by written exam, activity or online assignment
15-16		Human rights guarantee		Presentation, Lecture, Discussion	Oral examination evaluation
17-18		Definition of crimes committed against the former regime		Presentation, Lecture, Discussion	Oral examination evaluation
19-20		The most important crimes that the Supreme Criminal Court considered Environmental pollution crimes		Presentation, Lecture, Discussion	Evaluation based on electronic activity
21-22		Consolidating the idea of genocide that was presented to the people of the center and the south		Presentation, Lecture, Discussion	Oral examination evaluation
23-24		Definition of crimes according to each of the sciences		Presentation, Lecture, Discussion	Final assessment by written exam

25-26		Definition of crimes according to each of the sciences		Presentation, discussion, brainstorming	Evaluation by written exam
27-28		Definition of crimes according to each of the sciences		Presentation, Lecture, Discussion, Problem Solving	Electronic activity or assignment
29		Definition of crimes according to each of the sciences		Presentation, Lecture, Discussion, Problem Solving	Oral examination evaluation
30		exam	exam	exam	exam

72.

The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, written and monthly exams, electronic and in-person activities, reports, etc.

73. Learning and Teaching Resources

Required textbooks (methodology)

Main references (sources)

Curriculum published on the website of the Ministry of Education

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

Electronic references, Internet sites

Course development plan

The purpose of this module is to develop students' human right ability by focusing on the key skills of reading, writing to encourage students to become independent learners and to introduce them to strategies and skills to enable them to cope with the demands, both academic and cultural, of undergraduate study in Human rights guarantee

9. Teaching and Learning Strategies

- Developing literary taste and the ability to analyze poetry and taste art.	Strategy
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10. Course Structure

Evaluation Method	Learning method	Unit Name or Subject	Required Learning Outcomes	Watches	The week
First Semester					
Classroom Performance and Exams	Standard Text Method	Definition as a term of Islamic literature		3	October Week One
Classroom Performance and Exams	Standard Text Method	Islam's position on poetry. The position of the Holy Quran towards poets and poets. The attitude of the Prophet Muhammad (peace be upon him) towards poetry and poets.		3	Second week
Classroom Performance and Exams	Standard Text Method	The impact of the Holy Quran on poetry		3	Week Three
Classroom Performance and Exams	Standard Text Method	Artistic characteristics of Islamic poetry		3	Week Four
Classroom Performance and Exams	Standard Text Method	A detailed study of the life of Hassan bin Thabit (may God be pleased with him) and his poetry		3	November First week
Classroom Performance and Exams	Standard Text Method	Analysis of the poem of Hassan bin Thabit (may God be pleased with him) Dalia (Prophet of Atana after Yas)		3	Second week
First Month Exam					Week Three

Classroom Performance and Exams	Standard Text Method	A detailed study of the poet Abdullah bin Rawaha (may God be pleased with him) and his poetry		3	Week Four
Classroom Performance and Exams	Standard Text Method	A detailed study of the poet Ka'b bin Malik (may God be pleased with him) and his poetry		3	December Week One
Classroom Performance and Exams	Standard Text Method	The Impact of Islam on Traditional Poetic Purposes		3	Second week
Classroom Performance and Exams	Standard Text Method	The Poetry of Islamic Conquests - Its Features and Poets with Practical Examples		3	Week Three
Classroom Performance and Exams	Standard Text Method	Prose in the Era of Early Islam First-Rhetoric		3	Week Four
Classroom Performance and Exams	Standard Text Method	II. Writing or Letters		3	January Week One
Second Month Exam					Second week
Wills					
Second Semester					
Classroom Performance and Exams	Standard Text Method	Defining the term literature in the Umayyad era		3	Week Three
Classroom Performance and Exams	Standard Text Method	Umayyad Poetry Environments		3	Week Four
Classroom Performance and Exams	Standard Text Method	The Art of Contradictions - Concept, Origin and Development		3	February the first week
Classroom Performance and Exams	Standard Text Method	A detailed study of the life and poetry of Al-Akhtal		3	February Second week
Classroom Performance and Exams	Standard Text Method	A detailed study of Al-Farazdaq's life and poetry		3	Week Three

Classroom Performance and Exams	Standard Text Method	A detailed study of the life and poetry of the poet Jarir		3	Week Four
First month exam					March First Week
Classroom Performance and Exams	Standard Text Method	Political Poetry - Concept, Origin and Development		3	Second week
Classroom Performance and Exams	Standard Text Method	The poetry of the Umayyad Party and its artistic features		3	Week Three
Classroom Performance and Exams	Standard Text Method	Shia Party Poetry and Artistic Features		3	Week Four
Classroom Performance and Exams	Standard Text Method	The poetry of the Kharijite Party and its artistic features		3	April First Week
Classroom Performance and Exams	Standard Text Method	Al-Zubairi Party's poetry and artistic features		3	Second week
Classroom Performance and Exams	Standard Text Method	Ghazal Poetry and its Types in the Umayyad Era		3	Week Three
Second Month Exam					Week Four
		Prose in the Umayyad Era and its Most Prominent Artistic and Objective Characteristics		2	May the first, second and third week
		Final Exams			

11. Course Evaluation

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

12. Learning and Teaching Resources

<ul style="list-style-type: none">- Al-Amali in Islamic Literature: Ibtisam Marhoun Al-Saffar	Required Textbooks (Methodology, if any)
<ul style="list-style-type: none">- History of Arabic Literature in the Islamic Era: Shawqi Deif	Main Reference(s)
<ul style="list-style-type: none">- Development and Renewal in Umayyad Poetry: Shawki Deif.- Studies in Islamic Literature: Sami Makki Al-Ani.- Islam and Poetry: Sami Makki Al-Ani.	Recommended books and supporting references (scientific journals, reports...)
	References, Websites