Academic Program Description Form

University name: University Tikrit

College/Institute: College Education for girls

Scientific Department: Department Geography

Name of academic or professional program: Bachelors

Final Certificate Name: Bachelor's in Geography

Academic system: annual

Description preparation date: 18/9/2024

Date of filling the file: 18/9/2024

the signature : **the signature :**

Name of the Head of Department: A.Mr. Salam Saud Hussein Name of Scientific Assistant: A.Dr. Ashraf Jamal Mahmoud

the date: **the date :**

File checked by:

Quality Assurance and University Performance Division

Name of the Director of the Quality Assurance and University Performance Division: M sahahd Khaled Hamid

the date:

the signature

Dean's approval

1. Program Vision
The vision of the Geography Department is centered around: Preparing scientifically and educationally qualified female teachers in order to raise righteous generations that can bear the burdens of building our beloved country, in addition to building the graduate's personality in an integrated manner to provide her with the knowledge and skills to confront and solve difficulties in the

field of scientific research that contributes to the progress of society. . The Geography Department contributes to the process of preparing and developing human resources and preparing teaching staff to support middle and secondary schools to serve the scientific and educational process and achieve the goals of higher education and the goals of colleges of education in light of the central philosophy of the state and serving civil society and holding many conferences, seminars and workshops, whether in person or (online) electronically remotely. And conducting a group of discussion groups, workshops, courses and seminars.

2. Program message

The Department of Geography is one of the departments of the College of Education for Girls. It is one of the new departments in the college; it was established in the academic year (2016-2017). The initial study period is four years. This department awards a bachelor's degree to its graduates.
To enable her to work in the field of teaching in secondary education, in the subject of geography.

3. Program objectives

The objectives of the Geography Department are divided into three types: cognitive and scientific objectives at the theoretical and applied levels, value objectives at the national and human levels, and skill objectives at all levels of building the capabilities and capacities of the graduates and members of the Geography Department. In addition to the objectives mentioned above, there are other objectives such as: -

1. Preparing and developing female students and expanding their sensory, intellectual and scientific awareness of all geographical subjects, whether natural or human, in a way that qualifies them for teaching and scientific research in the institutions of the Ministry of Education and other ministries that can benefit from the geographical experiences of students graduating from the department.
2. Enabling female students to rely in their practical lives on applying scientific methods in dealing with life problems and situations by relying on field studies in analysis and study, especially in the fields and research studies that serve and benefit society.
3. Also, preparing and developing the scientific sense of some distinguished female students in order to keep pace with their scientific studies, including submitting them for postgraduate studies through urging and encouraging them to be the basic foundation, providing academic institutions with this expertise and the need of the geography departments in the Iraqi governorates as instructors who serve in their various fields and according to their scientific specializations.
4. Building and preparing scientifically, professionally and culturally the students and graduates of the Geography Department and enabling them to master and know the facts and theoretical concepts related to the science of geography.
5- Qualifying students and graduates of the Geography Department, for the purpose of their understanding of the basic principles that qualify them to teach in educational institutions and contribute to scientific research in all specializations of geographical knowledge.
6. Developing beneficial behaviors and values among students in a manner that is consistent with Arab and Islamic values and the principles of other heavenly religions, in order to develop them to the highest levels of moral, intellectual, and human maturity..

4. Program accreditation
both .

5. Other external influences
Tikrit University-Ministry of Higher Education and Scientific Research

6. Program Structure				
comments	**percentage**	**Study unit**	**Number of courses**	**Program Structure**
	100	**112**	**56**	Institutional Requirements
	100	**112**	**56**	College Requirements
	100	**112**	**56**	Department Requirements
				Summer training
	100	**112**	**56**	Other

*Notes may include whether the course is basic or optional.

7. Description and structure of the program As listed in Table (7) below:

Table (7) shows the development and review of curricula.

T	Section	Stage	Number of materials	Names of materials for the stage	Course material code	Number of units	Number of hours per week For the academic year 2023-2024
1	Geography	The first	13	Meteorology and Climatology	106GWC	4	2
2				Maps and remote sensing	101GC	4	3
3				Geography of Africa and Australia	108GGAA	4	2
4				Earth's surface morphology	109GGe	4	2
5				Dry regions	111GDR	4	2
6				Biogeography	112GBI	4	2
7				Foundations of education	102G FE	4	2
8				Educational Psychology	107G EP	4	2
9				Arabic	105G AL	4	2
10				History of the ancient Arab homeland	110GAHI	4	2

11				Human rights and democracy	103GHRD	2	2
12				English language	113GEL	2	2
13				Computer principles	104GCS	3	2
						47	27
1	Geography	Second	14	applied climatology	211GAC	4	2
2				Earth's surface morphology	215G Geo	4	2
3				Eurasia	216GGeE	4	2
4				Population Geography	217G PG	4	2
5				Secondary Education and Educational Administration	218GSE	4	2
6				developmental psychology	222G GrP	4	2
7				Geographical techniques	221G GT	4	2
8				History of the Arab Islamic State	219GHIAS	4	2
9				English language	223G EL	2	2
10				Development and planning	226GG DP	4	2
11				Oil and energy	227GG OE	4	2
12				Thematic cartography	228G TMS	4	2
13				rural geography	229GRG	4	2
14				Baath Party Crimes	304 GVD	4	2
						46	28
1	Geography	Third	14	Geography of the Americas	333GNRG	4	2
2				Industry Geography	39GMGR	4	2
3				Agricultural Geography	332GGA	4	2
4				Urban Geography	337G MHIAH	4	2
5				Natural resources	336G TM	4	2
6				Statistics and Modeling	331GGI	4	2
7				Curricula and teaching methods	338G PGEG	4	2
8				Educational guidance and mental health	43GTG	4	2
9				History of Iraq and the modern Arab world	40GSG	4	2
10				Detailed climate	330GGA	4	2
11				Tourism geography	334GGS	4	2
12				Geographical research methods	334GGS	4	2
13				Soil geography	330GGA	4	2
14				English language	331GGI	2	2
						54	28
1	Geography	Fourth	14	Geography of Iraq	454GSO	4	2
2				geography of politics	452G ISG	4	2
3				Environmental Geography	452G ISG	4	2
4				Geography of the Arab world	453GRP	4	2
5				geographer thought	449G ME	4	2
6				Geography of transport and trade	445G PG	4	2
7				Graduation research	449G ME	4	2
8				Measurement and evaluation	457GGS	4	2
9				Teaching applications	336G TM	4	2
10				Geographic Information Systems	444GG I	4	2
11				English language	457GGS	2	2
12				Social Geography	453GRP	4	2
13				Geography of seas and oceans	445G PG	4	2
14				Geography of services	456GSG	4	2
						54	28

comes of the program

ent 1

.Required program outcomes, teaching, learning and assessment methods

-Cognitive objectives

The student will be able to gain a scientific and objective understanding of the philosophy of studying physical geography.
And humanity In climate, geomorphology, population, agriculture, transportation, etc. from
Various geographical branches.
A2- That the student is able to embody the images of her geographical studies in the fields of her knowledge.
Diverse geography.
A3 That the student is familiar with all the natural and human geographical specializations mentioned, and their most prominent descriptive and analytical data according to the objective study therein.
A4- That the student is familiar with all geographical schools and pioneers of geographical thought, both ancient and modern.
A5- The student should be familiar with all the geographical fields studied and what is related to them.
A6- That the student learns modern technical skills in studying geography.

ent 2

B - Program specific skill objectives

B1 - That the student is able to master the methods of teaching, measuring and evaluating the scientific material.
B2 - That the student is able to choose the appropriate teaching method for each scientific subject, so that it is presented in an interesting way.
for3-That the student is able to solve problems related to students' understanding of the scientific material by using the theories of educational psychology.
And modern teaching methods Which facilitates the study and teaching of geography..

ent 3

Required program outcomes, teaching, learning and assessment methods

1-Cognitive objectives

1That the student is able to have a scientific and objective understanding of the philosophy of studying physical and human geography in climate, geomorphology, population, agriculture, transportation, etc.
From various geographical branches.
A2- That the student is able to embody the images of her geographical studies in the various fields of her geographical knowledge.
A3- That the student is familiar with all the natural and human geographical specializations mentioned, and their most prominent descriptive and analytical data according to the objective study therein.
A4- That the student is familiar with all geographical schools and pioneers of geographical thought, both ancient and modern.
A5- The student should be familiar with all the geographical fields studied and what is related to them.
A6- That the student learns modern technical skills in studying geography.

B - Program specific skill objectives

B1 - That the student is able to master the methods of teaching, measuring and evaluating the scientific material.
B2 - That the student is able to choose the appropriate teaching method for each scientific subject, so that it is presented in an interesting way.
B3 - That the student is able to solve problems related to students' understanding of the scientific material by using the theories of educational psychology.
Modern teaching methods facilitate the study and teaching of geography.

Teaching and learning methods M:-

-Standard method / lecturing
-Text method.
-Descriptive, analytical and inductive method.
- Problem solving method.

Evaluation methods:-

-Formative assessment (daily exams, class discussion, homework and follow-up, class assessment).
-Diagnostic assessment (semester and final exams to issue judgments of success and failure)

C- Emotional and value goals.

A1- Raising the student to know and understand geography, and highlighting its position among other sciences.
A2- Identifying the role of geography and its current and future dimensions
A3- Developing the creative abilities of the student in the field of scientific research and its development.

Teaching and learning methods:- Do not rely on traditional teaching methods for emotional objectives, because they are value objectives that cannot be taught like cognitive objectives. Therefore, the following is relied upon:

		1- The student should be a good role model for those around him. 2- Forming a general category of good values. 3- Providing psychological motivation to achieve emotional goals. Evaluation methods:- Affective goals are not assessed through traditional tests, but rather by observing the student's behavior, interviewing her, discussing her, and following up on her relationship. In the educational environment, it provides a cumulative record of its representation of emotional and value-based goals..
ent 4		Evaluation methods -Oral and written tests, individual and group, theoretical and practical. -Direct observation of the student's performance in the areas of dialogue, intellectual and scientific communication, and working in a spirit of Team within the classroom and college and university environment. -Assigning students to prepare scientific research to test their ability to think, draw conclusions and solve problems.
ent 5		Learning outcomes: - ductive (deductive) method oblem solving method. e repeated the training courses and seminars to provide female students with the ability to communicate with society, the ability to engage in fruitful dialogue, and solve educational problems using scientific methods. -Classroom interaction and exchange of opinions between the student and the teacher to raise learning difficulties and discuss their solutions.
ategie		
es and	methods adopted in implementing the program in general.	
f the p	rogram in general.	

ement /Skills f any	**Specialization**		**Academic Rank**
	private	general	
	Cartography and Information Systems	Human Geography	A.M.D. Salam Saud Hussein Daoud
	Population Geography	Human Geography	Asst. Prof. Dr. Adel Taha Shalal Fandy
	Resource Geography	Physical Geography	Asst. Prof. Dr. Abdul Haq Nayef Mahmoud
	Cartography and Information Systems	Human Geography	Dr. Farah Abdul Qader Faleh Rahim
	Geomorphology	Physical Geography	Asst. Prof. Dr. Raja Khalil Ahmed
	Urban Geography	Human Geography	Dr. Rawida Fouad Abdullah
	Urban Geography	Human Geography	Dr. Fatima Ibrahim Tauma Hajij
	Geomorphology	Physical Geography	Dr. Ali Abdullah Musa
	Cartography	Physical Geography	Dr. Abdul Rahman Abdul Karim Yahya
	Public libraries	Libraries	Ms. Hoda Ne'ama Hamad
	Geography teaching methods	Educational and	Ms. Amna Ali Ahmed Sharqi

		psychological sciences	
	Islamic history	date	millimeter. Nadra Hailan Yacoub
	Agricultural Geography	Human Geography	M.M. Hamid Sakhir Nazal Gigi
	Desertification	Physical Geography	M.M. Mohamed Salam Youssef Mahmoud
	Population Geography	Human Geography	Dr. Rawida Saad Jaber
	Cartography	Physical Geography	M.M. Hoda Nasser Najm Abdullah
	Population Geography	Human Geography	M.M. Zainab Safaa Bandar
	Population Geography	Human Geography	M.M. Israa Mazen Hamid

Professional development
Orientation of new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institutional and departmental levels.
Professional development for faculty members
Briefly describes the plan and arrangements for academic and professional development of faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance Criteria
(Setting regulations related to joining the college or institute, whether central admission or other mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program Development Plan

Program Skills Chart															
Required learning outcomes of the program															
Values				Skills				Knowledge				Essential or optional?	Course name	Course code	Year/Level
A4	A3	A2	A1	B4	B3	B2	B1	A4	A3	A2	A1				

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

Course Description Form

1. Course name:
Geographic Information Systems
2. Course code
444GG I
3. Semester/Year
2025-2024
4. Date this description was prepared
9/18/2024
5. Available forms of attendance
In-person lectures
6. Number of study hours (total) / Number of units (total)
60 hours / 4 units
7. Name of the course supervisor (if more than one name is mentioned)
Name: Dr. Farah Abdul Qader Faleh Rahim Al-Najdi Email: farah.falih.872@tu.edu.iq
8. Course objectives

• Documenting the student's ability in geographic information systems and introducing the student to geographic systems and their uses in geography.. • Introducing the student to some geographical systems and drawing up an integrated strategy to analyze them and increase the student's ability to apply geographical information systems.. • Developing students' abilities in spatial analysis methods in geographic information systems. And qualifying specialists in the fields of geographic information systems, remote sensing and their applications through a scientific curriculum that combines theoretical and applied aspects according to the actual needs of the labor market. • Training employees in private and academic governmental institutions working in related fields and enabling their capabilities through organizing and implementing training courses in the fields of geographic information systems, remote sensing and their applications. • Contribute to enhancing the use of GIS and remote sensing technologies and their applications for various purposes in the Arabian Gulf region.	Subject objectives
D9. Teaching and learning strategies	
- In-person lectures. - Using geographical techniques to ask students	Strategy

questions. - Using brainstorming to develop skills among students. - Discussion method for the details of the lecture topic inside the classroom. - Weekly duties	

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	In-person lectures	Elements, components, functions and benefits of geographic information systems	Chapter One: The Concept and Development of Geographic Information Systems	2	October
In-person tests	In-person lectures	Data Fitting in Linear and Area Model	Chapter Two: Data Structure and Representation Methods in Geographic Information Systems	2	October
TestIn attendance	Lectures Presence	Metadata	Triangle network data structure	2	October
In-person tests	In-person lectures	Spatial data; Non-spatial data; Temporal data	Chapter Three: Types of data and information and their sources in geographic information systems	2	November
In-person tests	In-person lectures	Linear data sources; Area data sources; Triangle data sources	Spatial data sources in GIS	2	November
In-person tests	In-person lectures	Primary sources Secondary sources Maps of all kinds Aerial photos	Spatial data sources in GIS	2	November
In-person tests	In-person lectures	Satellite images global cosmic order	Spatial data sources in GIS	2	November
In-person tests	In-person lectures	Field and field studies and time data sources	Non-spatial data sources	2	December
In-person tests	In-person lectures	- Concept of spatial and descriptive data entry - Evaluation criteria	Chapter Four: Entering spatial and descriptive data into geographic information systems	2	December
In-person tests	In-person lectures	- Entering spatial data using a numbering	Methods of entering spatial data into the computer	2	December

		device - Direct on-screen numbering method			
In-person tests	In-person lectures	- geodatabase concept - The purpose of the geodatabase	Chapter Five: Geographic Database	2	December
In-person tests	In-person lectures	The need for a geographic database in geographic information systems	Geodatabase Design Requirements	2	December
In-person tests	In-person lectures	geodatabase stages	geodatabase design	2	December
In-person tests	In-person lectures	Descriptive tables-Data	Components of a geodatabase	2	January
In-person tests	In-person lectures	Hierarchical structure of geodatabase	Geodatabase structure	2	January
Spring break from14/1/2024to25/1/2024					
In-person tests	In-person lectures	Relational tabular structure of geodatabase	Geodatabase network structure	2	February
In-person tests	In-person lectures	Spatial analysis of linear data	Chapter Six: Spatial Analysis of Data in Geographic Information Systems	2	February
In-person tests	In-person lectures	Types of topological matching	Topological matching	2	February
In-person tests	In-person lectures	Digital Elevation Model and its Applications	Spatial analysis in the surveying system (cellular)	2	March
In-person tests	In-person lectures	applied	Digital Elevation Model Construction Methods	2	March
In-person tests	In-person lectures	regular network structure	Regular mesh structure and irregular triangle mesh	2	March
In-person tests	In-person lectures	Data extrapolation from digital elevation model	Irregular triangle network structure	2	March
In-person tests	In-person lectures	Practical - Applied	Chapter Seven: Practical Applications in Geographic Information Systems	2	March
In-person tests	In-person lectures		Re-read and review	2	April
In-person tests	In-person lectures		Re-read and review	2	April
In-person tests	In-person lectures		Re-read and review	2	April
In-person	In-person		Re-read and	2	April

tests	**lectures**		**review**		
In-person tests	**In-person lectures**		**Re-read and review**	**2**	**Metis**
In-person tests	**In-person lectures**		**Re-read and review**	**2**	**Mays**
In-person tests	**In-person lectures**		**Re-read and review**	**2**	**Mays**
Final exams					**25/May**

11. Course Evaluation
The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc. 50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam Allocating 5 points for daily attendance in in-person lectures, daily exams and reports. 50 marks for the end-of-year exam, so that the final total score is (100).

12. Learning and teaching resources	
All the books prescribed for the subject, especially the modern ones.	Required textbooks (methodology if any)
1- I wrote Geographic Information Systems (Fundamentals and Applications) by Ali Abdul Abbas Al-Azzawi,2009 University of Mosul.	Main References (Sources)
I recommend relying on modern sources, including the book Geographic Information Systems As well as all the studies Applied And scientific research published in academic scientific journals And applied Which is related to the vocabulary of the material.	Recommended supporting books and references (scientific journals, reports...)
All studies published on the Internet that are related to vocabulary Geographic information systems. https://kgug.org/2	Electronic references, websites

Course Description Form

1. Course name	
Statistics and Modeling	
2. Course code	
331 GGI	
3. Semester/Year	
2025- 2024	
4. Date this description was prepared	
9/18/2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / Number of units (total)	
60Hour / 4 units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Dr. Farah Abdul Qader Faleh Rahim Al-NajdiEmail: farah.falih872@tu.edu.iq	
8. Course objectives	
By studying this course, the student will be able to design frequency tables in various fields of geography, and master the application of measures of central tendency. He will also be able to distinguish between geographical statistical methods, and be able to use them in geographical studies. To reach scientific conclusions that can be compared and tested.	Subject objectives
9. Teaching and learning strategies	
It is done teaching The decision on road throw Lectures Interspersed with Episodes discussion And offers Visible And exercises Scientific And the process.	Strategy

10. Course Structure					
Evaluation method	**Learning method**	**Name of the unit or topic**	**Required learning outcomes**	**Watches**	**The week**
In-person tests	**In-person lectures**	**The concept of geographical statistics, its nature, objectives and methods**	**The concept of geographical statistics, its nature, objectives and methods**	2	September3
In-person tests	**In-person lectures**	**theoretical**	**Introduction to Quantitative Method in Geography**	2	September 4
In-person tests	**In-person lectures**	**theoretical**	**The quantitative revolution in geography**	2	October1
In-person tests	**In-person lectures**	**Theoretical - Applied**	**Using the quantitative method in geographical research**	2	October2
In-person tests	**In-person lectures**	**theoretical**	**Factors of the development of the quantitative method in geography**	2	October3
In-person tests	**In-person lectures**	**theoretical**	**Advantages of quantitative approach in geography**	2	October4
In-person tests	**In-person lectures**	**Theoretical and applied**	**Statistical data**	2	November1
In-person tests	**In-person lectures**	**theoretical**	**Statistical community**	2	November2
In-person tests	**In-person lectures**	**theoretical**	**Types of geographic data**	2	November3
In-person tests	**In-person lectures**	**theoretical**	**Types of geographic data**	2	November4
In-person tests	**In-person lectures**	**Theoretical and applied**	**Quantitative data classification**	2	December1
In-person tests	**In-person lectures**	**theoretical**	**Statistical samples**	2	December 2
In-person tests	**In-person lectures**	**theoretical**	**Types of statistical samples**	2	December3
In-person tests	**In-person lectures**	**theoretical**	**Types of statistical samples**	2	December4
In-person tests	**In-person lectures**	**Theoretical and applied**	**Sample testing steps**	2	January1
Spring break from1/14/2025to 1/25/2025					
In-person tests	**In-person lectures**	**applied**	**Statistical tables**	2	January4
In-person tests	**In-person lectures**	**Theoretical and applied**	**Frequency tables**	**2**	**February 1**

In-person tests	**In-person lectures**	**Theoretical and applied**	**Measures of central tendency**	2	February2
In-person tests	**In-person lectures**	**Theoretical and applied**	**Grouped and ungrouped arithmetic mean**	2	February 3
In-person tests	**In-person lectures**	**applied**	**The medium and the mode**	2	February 4
In-person tests	**In-person lectures**	**Theoretical and applied**	**Dispersion measures**	2	March 1
In-person tests	**In-person lectures**	**Theoretical and applied**	**Range and mean deviation**	2	March 2
In-person tests	**In-person lectures**	**Theoretical and applied**	**Variance and standard deviation**	2	March 3
In-person tests	**In-person lectures**	**Theoretical and applied**	**Statistical distributions**	2	March 4
In-person tests	**In-person lectures**	**Theoretical and applied**	**The closest neighbor**	2	April1
In-person tests	**In-person lectures**	**applied**	**The closest neighbor**	2	April 2
In-person tests	**In-person lectures**	**Theoretical and applied**	**chi square**	2	April3
In-person tests	**In-person lectures**	**applied**	**chi square**	2	April4
In-person tests	**In-person lectures**	**applied**	**Time series**	2	Mays 1
Testsimmanence	**Lecturesth eimmanenc e**	**applied**	**Roman chains**	2	Mays 2
			Final exams	___	Mays3,4

11. Course Evaluation
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam
12. Learning and teaching resources

Lectures in Geographic Statistics, Saeed Fadhel Ahmed, University of Diyala, College of Education for Humanities, 2020.	Required textbooks (methodology if any)

Quantitative Methods in Geography, Fathi Abdel Aziz Abu Rady, Dar Al-Ma'rifah University, Beirut Arab University, 2000.	Main References (Sources)
-ResearchStudentsPostgraduate studies onQuantitative and statistical methods. ResearchInstructorsaroundGeographic statistics and its applications.	Recommended supporting books and references (scientific journals, reports...)
nothing	Electronic references, websites

Course description form

1. Course name	
Transportation geography	
2. Course code	
GMHIAH 337	
3. Semester/year	
2024- 2025	
4. The date this description was prepared	
18/9/2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / number of units (total)	
601 hour/4 units	
7. Name of the course administrator (if more than one name is mentioned)	
the name. Dr.. Farah Abdul Qadir Falih - Email:Farah.falih872@tu.edu.iq	
8. Course objectives	
A- Developing students' ability to understand the characteristics of subject problemsTransportIts causes and treatments within the real environment . B- Providing students with the knowledge and ideas to identify the most important sources for obtaining geographical dataTransportIncluding the data available at the MinistryTransport And transportationIn addition to books and references related to the subject.	Objectives of the study subject

C- Enabling students to understand the basic rules of the subjectTransportAnd activating its role in its development on the ground.	
9. Teaching and learning strategies	
- Using brainstorming to develop skills. - Discussion method in the daily lectureInside the classroom.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
In-person tests	In-person lectures	Introducing the characteristics and features of car transportation	Car transportation and its characteristics	2	1
In-person tests	In-person lectures	Introducing the characteristics of railway transport in the world	Rail transport and features	2	2
In-person tests	In-person lectures	Explaining the nature and importance of water transport (river and sea)	Water transport (river and sea)	2	3
In-person tests	In-person lectures	Statement of the characteristics and features of air transport	Air transportation and its characteristics	2	4
In-person tests	In-person lectures	Knowledge of the most prominent maritime canals of economic and transport importance in the world	Marine canals in the world	2	5
In-person	In-person lectures	Explaining the economic,	Suez Canal	2	7

tests		locational and strategic importance of the Suez Canal in the Arab Republic of Egypt			
In-person tests	In-person lectures	Revealing the nature of the geostrategic, transportation, and economic importance of the Panama Canal in Central America	Panama Canal	2	8
In-person tests	In-person lectures	Knowing the types of straits spread around the world and their relationship to the economic activities of countries in the world	Straits and their types	2	9
In-person tests	In-person lectures	Introducing students to the nature of natural harbors and their distinction from ports	Natural harbors	2	10
In-person tests	In-person lectures	Identify the most prominent natural harbors and their transportation importance in the world	Halving natural harbors	2	11
In-person tests	In-person lectures	Explaining the importance of air routes and their routes spread	Airways and their routes	2	12

		throughout the world			
In-person tests	In-person lectures	Canals in the relationship between transport activity and the agricultural aspect	Transport and agricultural activity	2	13
In-person tests	In-person lectures	Knowing the role of transportation as a means of transportation in the field of industrial activity	Transport and industrial activity	2	14
In-person tests	In-person lectures	Introducing students to the patterns and importance of the main lines of blame and their role in developing the transportation aspect	The main shipping lines in the world	2	15
In-person tests	In-person lectures	Identifying the nature of navigation and its transportation importance in the Pacific Ocean	Navigation in the Pacific Ocean	2	16
In-person tests	In-person lectures	Identify the nature of navigation and its transportation importance in the Indian Ocean	Navigation in the Indian Ocean	2	17
In-person tests	In-person lectures	Explaining the transport and economic importance of navigation in the Atlantic Ocean	Navigation in the Atlantic Ocean	2	18

In-person tests	In-person lectures	Explaining to students the importance of navigation in the Panama Canal from the economic and transportation aspects	Navigation of the Panama Canal	2	19
In-person tests	In-person lectures	The impact of navigation in the Suez Canal on commercial, industrial and agricultural activity there.	Navigation in the Suez Canal	2	20
In-person tests	In-person lectures	Identify the role of navigation on the Danube River and its relationship with economic and commercial activities with its neighboring countries	Navigation on the Danube River	2	21
In-person tests	In-person lectures	Introducing the importance of international trade	International Trade	2	22
In-person tests	In-person lectures	Knowing the role and contribution of international trade at the economic and industrial levels in the world	The importance of international trade	2	23
In-person tests	In-person lectures	Identify the nature of the existing relationship between international trade and its impact on	International trade and economic development	2	24

		economic development			
In-person tests	In-person lectures	Identify the nature of the existing relationship between international trade and its impact on industrial development	Trade and industrial development	2	25
In-person tests	In-person lectures	Introducing students to the patterns of water and land transportation in the world and their relationship to the growth and development of the population, their output, and their economic activity (agricultural and industrial)	Water and land transportation in the world	2	26
In-person tests	In-person lectures	Identify patterns of transportation systems in the world	Transportation systems and their types	2	27
In-person tests	In-person lectures	Knowing the nature of transportation by the aforementioned means of delivering goods and various services	Container shipping	2	28
In-	In-person	Explaining the	Modes of	2	29

person tests	lectures	types of means of transportation for commercial ships and their relationship to the transportation process in the world	transport by commercial ships		
In-person tests	In-person lectures	Identify the types of transport ships for different activities of countries in the world	Transport ships (oil, gas, fishing, warships)	2	30

11. Course evaluation	
50 marks for the annual endeavor, 25 marks for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed among daily exams or reports 50 marks for end-of-year exam	
12. Learning and teaching resources	
-Sabri Fares Al-Hiti, Saleh Falih Hassan, Geography of Cities, Dar Al-Kutub for Printing and Publishing, University of Mosul, 2000.	Required textbooks (methodology, if any)
- The methodological book (City Geography), written by Prof. Dr. Bashir Ibrahim Al-Taif and Dr. Salah Dawoud Salman, 2017.	Main references (sources)
1- Abdel Razzaq Abbas Hussein, Geography of Cities, 2006. 2- Haider Abdul Razzaq Kammouna, City Planning, 1st edition, House of General Cultural Affairs, Baghdad, 2007.	Recommended supporting books and references (scientific journals, reports...)

3- Salah Dawoud, The Phenomenon of Transgression in Cities, Al-Ustad Magazine, Issue 1, Ibn Rushd College of Education, 2007.	
https://apps.who.int/iris/bitstream/handle/10665/329429/9789240006119-ara.pdf	Electronic references, Internet sites

Course description form

1. Course name	
Geopolitics	
2. Course code	
GMHIAH 337	
3. Semester/year	
2023- 2024	
4. The date this description was prepared	
2/20/2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / number of units (total)	
601 hour/4 units	
7. Name of the course administrator (if more than one name is mentioned)	
the name:a. M. Dr.. Adel Taha ShalalEmail:adel.taha@tu.edu.iq	
8. Course objectives	
A- Developing students' ability to understand the characteristics of subject problemsTransportIts causes and treatments within the real environment . B- Providing students with the knowledge and ideas to identify the most important sources of obtaining datathegeographyPoliticalIncluding the available datainBooks and references related to the subject.	Objectives of the study subject

C- Enabling students to understand the basic rules of the subjectGeopoliticsAnd activating its role in its development on the ground.	
9. Teaching and learning strategies	
- Using brainstorming to develop skills. **- Discussion method in the daily lectureInside the classroom.**	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
In-person tests	In-person lectures	The concept of geopolitics	Introducing the objectives of geopolitics	2	1
In-person tests	In-person lectures	The emergence and development of geopolitics	Introducing the most important developments targeted by geopolitics in the world	2	2
In-person tests	In-person lectures	Geopolitics and geopolitics	Explaining the comparisons between geopolitics and political geography	2	3
In-person tests	In-person lectures	The theoretical and practical importance of studying political geography	Analysis of the natural environment affecting the internal and external political life of countries	2	4
In-person tests	In-person lectures	Research methods in political geography	Introducing the types of curricula adopted by political	2	5

			geography		
In-person tests	In-person lectures	Power analysis approach or analytical approach	Introducing the importance of the aforementioned approach to the state's strength and military superiority	2	7
In-person tests	In-person lectures	The concept of power in geopolitics	Knowing the elements of power in the state (land, population, and authority)	2	8
In-person tests	In-person lectures	Concept of power	Introducing the importance of power and its contribution to decision-making	2	9
In-person tests	In-person lectures	Patterns of power in the international community	Revealing patterns of power in the international community, as well as unilateral, coalition, and global power	2	10
In-person tests	In-person lectures	Locational characteristics from a geopolitical perspective	Statement of the analysis of the functional aspects of political regions in applied political geography	2	11
In-person tests	In-person lectures	Spatial features	Revealing the importance of space in political geography and	2	12

			its importance to the political value of the state		
In-person tests	In-person lectures	Topographical character	Revealing the role of topographical and physiographic elements (terrain, climate, and natural resources) in determining the strength of the state	2	13
In-person tests	In-person lectures	Biogeographical foundations	Introducing the most important biogeographical factors such as climate, natural vegetation, and water resources in determining the strength of the state	2	14
In-person tests	In-person lectures	Natural plant	Introducing the importance of plant resources in the economic construction of the state	2	15
In-person tests	In-person lectures	gross domestic product	Explaining the importance of gross domestic product in the strength of the state and its economic outcomes	2	16

In-person tests	In-person lectures	agricultural resources	The importance of agricultural resources in determining the power of the state according to geopolitical approaches	2	17
In-person tests	In-person lectures	Arab food security	Revealing the value of food security and the ability of the state or political region to achieve self-sufficiency in the population's food requirements	2	18
In-person tests	In-person lectures	Agricultural supply capacities	Introducing the importance of available agricultural resource capacities in achieving Arab national food security and self-sufficiency for many of its agricultural and food requirements.	2	19
In-person tests	In-person lectures	Analysis of the food problem (population growth and national income)	Explaining the relationship between population growth and national income, what is known as general	2	20

			economic density or national income density		
In-person tests	In-person lectures	Arab food regions	Introducing the patterns of Arab food regions (high nutrition, moderate nutrition, and poor nutrition)	2	21
In-person tests	In-person lectures	Current map of Arab food security	The importance of the current map of Arab food security as an essential element for measuring the components of balanced food in the country	2	22
In-person tests	In-person lectures	Future features of Arab food security	Statement settledandA summary of the future of the food economy in Arab countries	2	23
In-person tests	In-person lectures	Strategic minerals	Identifying energy minerals at the center of the political economic conflict in the world	2	24
In-person tests	In-person lectures	Globalisation	Knowledge of the phenomenon of globalization in the development of contemporary international policies	2	25
In-	In-person	Population growth	Introducing the	2	26

person tests	lectures		concept of population from the perspective of political geography as producers and consumers who rule and are ruled by the people		
In-person tests	In-person lectures	Human development in the perspective of sustainable development (the case of the Arab world)	Revealing the importance and role of human development in developing the human element, human capital, human resources, and social development	2	27
In-person tests	In-person lectures	The reality of human development in the Arab world (Human Development Guide)	Introducing the Human Development Index as one of the basic components or foundations of the population, such as education, health, and income	2	28
In-person tests	In-person lectures	Frontiers and borders	Explaining the comparisons between the concepts of frontiers and borders and their	2	29

			impact on the state's policy and its foreign relations		
In-person tests	In-person lectures	Methods for determining territorial waters	How to determine territorial waters and methods of measuring them between countries in the world	2	30

11. Course evaluation	
50 marks for the annual endeavor, 25 marks for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed among daily exams or reports 50 marks for end-of-year exam	
12. Learning and teaching resources	
- Muhammad Azhar Saeed Al-Samman,thegeographyPolitics from a twenty-first century perspective , Al-Yazouri Library,Jordan Amman, 2000.	Required textbooks (methodology, if any)
-The Geopolitical Weight of the Arab Red Sea Countries, written by Muhammad Azhar Saeed Al-Samman,1989	Main references (sources)
1. Muhammad Safi al-Din Abu al-Ezz, The Balance of Power in the Mediterranean Region, Beirut, 1979. **2. Nassif Jassim Al-Muttalabi, The Foreign Presence in the Mediterranean Region and its Impact on Arab National Security, Baghdad, 1987.**	Recommended supporting books and references (scientific journals, reports...)

https://apps.who.int/iris/bitstream/handle/10665/329429/9789240006119-ara.pdf	Electronic references, Internet sites

model a description The decision

1. Course name	
Detailed climate	
2. Course code	
GGA 330	
3. Semester/Year	
4. Date this description was prepared	
5. Available forms of attendance	
Lectures immanence	
6. Number of study hours (total) / Number of units (total)	
60 hours / 4 units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name:**M.M. Hoda Nasser Najm** Email:huda.n.najim@tu.edu.iq	
8. Course objectives	
1- It aims to introduce students to detailed climatology, its various fields, research methods, and to know the differences between it and the local, average, and global climate. **2- This course aims to cover the most important basic pillars of this science and to**	Goals The material Academic

identify the change in climate elements and climate phenomena on a small scale. **3- Introducing students to the effect of the Earth's surface features on climate at a very precise level in centimeters.** **4- Introducing students to the differences between rural and urban climates.** **5 - Introducing students to methods of adaptation and mitigation of the severity and extremism of climate and its various elements.** **6- Developing students' ability to understand the characteristics of climate problems.**	

9. Teaching and learning strategies	
- Using brainstorming to develop skills. **- Discussion method in the daily lecture inside the classroom.**	Strategy

10. Course Structure

road Evaluation	road Learning	name Unity or the topic	Outputs Learning Required	Watches	The week
Testsimmanence	Lecturesimmanence	Chapter One / Introduction to Climatology	Understand the concept of detailed climate and its importance	2	1September
Testsimmanence	Lecturesimmanence	Objectives of climate geography and methods of research in it	Identify the objectives of climate geography, and know the methods of research in it	2	2September

TestsMy presence And	Lecturesimmanence	Chapter Two / The Atmosphere	Learn about the atmosphere, the features and importance of each layer.	2	1October
TestspresenceYes	LecturespresenceYes	Climate elements, means and methods of measuring them,	Climate elements, means and methods of measuring them,	2	2October
Online tests	E-lectures	Solar radiation, atmospheric pressure, temperature	Solar radiation, atmospheric pressure, temperature	2	3October
Online tests	E-lectures	rain, wind	rain, wind	2	4October
Online tests	E-lectures	weather phenomena	Identifying weather phenomena	2	1November
TestspresenceYes	LecturespresenceYes	Factors controlling detailed climate	Identify the factors controlling the detailed climate	2	2November
TestspresenceYes	LecturespresenceYes	Regulatory conditions for establishing a surface weather station	Learn about the regulatory requirements for establishing a surface weather station	2	3November
TestspresenceYes	LecturespresenceYes	The difference between	Learn the difference between synoptic,	2	4November

		the Sino-climatic, climatic and automatic stations	climatic and automatic stations		
TestspresenceYes	LecturespresenceYes	Degree of confidence in weather station measurements	Identify the degree of confidence in meteorological station measurements	2	1December
TestspresenceYes	LecturespresenceYes	Classification of observational errors and inaccuracy of their data	Identify the classification of observational errors and the inaccuracy of their data	2	2December
TestspresenceYes	LecturespresenceYes	Characteristics and features of the monitoring center, the monitoring method followed, and detailed climate research methods	Identify the characteristics and features of the monitoring center, the monitoring method used, and the methods of research in the detailed climate.	2	3December
TestspresenceYes	LecturespresenceYes	Stepwise and roving monitoring	Learn about stepwise and roving monitoring	2	4December

			processes.		
					Spring break from 01/05/2024 to 01/18/2024
TestspresenceYes	LecturespresenceYes	Surface effects on the adjacent air layer / soil types / soil color	Identify the effects of the surface on the surrounding air layer / soil types / soil color	2	1January
TestspresenceYes	LecturespresenceYes	soil climate	Learn about soil climate	2	1February
TestspresenceYes	LecturespresenceYes	soil climate	Learn about soil climate	2	2February
TestspresenceYes	LecturespresenceYes	1- Soil temperature	Learn soil temperature	2	3February
TestspresenceYes	LecturespresenceYes	Thermal conductivity laws and thermal properties of soils	Learn about the laws of thermal conductivity and the thermal properties of soils.	2	4February
TestspresenceYes	LecturespresenceYes	Variation of soil temperature with depth	Identify the variation of soil temperature with depth.	2	1March
TestspresenceYes	LecturespresenceYes	Daily and seasonal variations of soil temperature	Identify daily and seasonal variations in soil temperature.	2	2March
Testspres	Lecturesprese	soil temperature	Learn about soil temperature	2	3March

enceYes	nceYes	adjustment	modification		
Testspres enceYes	Lecturespresenceyes	2- Soil moisture	Identify soil moisture	2	4March
Testspres enceYes	Lecturespresenceyes	Highland and rugged climate	Learn about the climate of highlands and rugged areas	2	1Mays
Testspres enceYes	Lecturespresenceyes	Valley climate	Learn about the climate of valleys	2	2Mays
			Final exams		4.3Mays

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
Microclimate / Ali Hassan Musa Local climate / Fadhel Baqer Al-Hasani	Books The reporter Required(methodology that I found it)
- The methodical book, The Microclimate / Ali Hassan Musa	the reviewer President(Sources)
All modern Arab and foreign climate sources in the field of detailed climate	Books References chock that Recommended With it(Magazines Scientific, reports...)
https://apps.who.int/iris/bitstream/handle/10665/329429/9789240006119-ara.pdf	the reviewer Electronic, Websites The Internet

model a description The decision

1. Course name
Water resources
2. Course code
GMHIAH 337
3. Semester/Year
2024- 2025
4. Date this description was prepared
9/18/2024
5. Available forms of attendance
Lectures immanence
6. Number of study hours (total) / Number of units (total)
60 hours / 4 units
7. Name of the course supervisor (if more than one name is mentioned)
the name :. **Assistant Lecturer, Mohamed Salam Youssef** Email:mohammed.yousif819@tu.edu.iq
8. Course objectives

1. It aims to introduce students to water resources science, its various fields and research methods. 2. Introducing students to water resources and their types 3. Introducing students to the geographical distribution of each water resource. 4. Introducing students to the problems facing water resources, and how to maintain and preserve these resources. 5. Introduce students to non-conventional water resources. 6. Teaching students to measure the amount of rainfall on an area 7. Teaching students to measure the amount of water flowing and volume in lands and valleys	Goals The material Academic

8. Teaching students to measure evaporation from lakes 9. Teaching students about groundwater	

9. Teaching and learning strategies

- Using brainstorming to develop skills. **- Discussion method in the daily lecture inside the classroom.**	Strategy

10. Course Structure

road Evaluation	road Learning	name Unity or the topic	Outputs Learning Required	Watches	The week
Oral exam, research work	**The lecture**	**The origin, importance and properties of water**	**Learn about the theories that deal with the origin of water, and study its properties.**	**2**	**the first**
Oral exam, research work	**Power point lecture**	**Hydrological cycle**	**Explaining the elements of the hydrological cycle, the factors affecting it, and its importance**	**2**	**the second**
Oral exam, research work, and assigning students to apply mathematical equations.	**Lecture and application of mathematical equations.**	**Shedding**	**Definition of precipitation, the factors affecting it, its effect on the continuity of the day and its discharge, and methods of measuring it on areas.**	**2**	**the third**
Oral exam. Research.	**PowerPoint lecture.**	**Seas and oceans**	**Learn about the Earth's oceans, the physical and chemical properties of sea and ocean water, and learn about the**	**2**	**Fourth**

			movement of sea and ocean water.		
Oral exam. Research.	Presentation and discussion.	surface water movement	Introducing students to the types of surface water movement in seas and oceans.	2	Fifth
Oral exam. Research	Presentation and discussion.	Surface water	Surface runoff measurement methods	2	Sixth
Oral exam. Research	PowerPoint lecture.	groundwater	Introducing students to the origin and properties of groundwater.	2	Seventh

Spring break from 01/05/2025 to 01/18/2025

Oral exam. Research	Presentation and discussion.	Rivers	Introducing students to the importance of rivers, how they are formed, and their drainage patterns.	2	The eighth
Oral exam. Research	a lecture	Lakes	Teaching students about the characteristics of freshwater lakes and their geographical distribution. In addition to teaching students about the characteristics of saltwater lakes and their geographical distribution.	2	Ninth
Oral exam. Research	Presentation and discussion.	The marshes	Knowing the marshes as a water resource and identifying their importance and the problems they face,	2	tenth

			with a special study of the marshes of Iraq.		
Oral exam. Research	**a lecture**	**Non-conventional water resources**	**Study the types of non-traditional water resources, their importance, and ways to obtain them pure.**	**2**	**eleventh**
Oral exam. Research	**a lecture**	**Water resources problems, water resources maintenance .**	**Exposure to the problems facing water resources. And how to maintain water resources from the problems they face.**	**2**	**twelfth**
Oral exam. Research	**Presentation and discussion.**	**Water resources in the Arab world**	**Identifying water resources in the Arab world.**	**2**	**thirteenth**
Oral exam. Research	**PowerPoint lecture.**	**Water resources in Iraq**	**Identifying water resources in Iraq.**	**2**	**fourteenth**

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
Geography of Water Resources - Hassan Abu Samour	Books The reporter Required(methodology that I found it)
Geography of Water Resources Safaa Rasham Al-Asadi Geography of Water Resources - Hassan Abu Samour	the reviewer President(Sources)

1. **Joudah Fathi Al-Turkmani, Geography of Water Resources, 1st ed., Saudi House for Publishing and Distribution, 2005.** 2. **Muhammad Khamis Al-Zouka, Water Geography, Dar Al-Ma'rifah University, Alexandria, 1998.** 3. **Salam Hatem Ahmed Al-Jabouri, Natural Resources, 2nd ed., Dalir Office, Bab Al-Muadham, 2016.**	Books References chock that Recommended With it(Magazines Scientific, reports...)
https://www.alarabimag.com/books/21091-	the reviewer Electronic, Websites The Internet

Course Description Form

1. Course name
Soil geography / The third stage
2. Course code
330GGA
3. Semester/Year
2024- 2025
4. Date this description was prepared
9/18/2024
5. Available forms of attendance
In-person lectures
6. Number of study hours (total) / Number of units (total)
60Hour / 4 units
7. Name of the course supervisor (if more than one name is mentioned)
The name. Assistant Lecturer. Mohammed Salam Yousif emailmohammed.yousif819@tu.edu.iq
8. Course objectives

A- Developing students' ability to understand the characteristics of soil, its types and places of distribution within the world and continents. B- Providing students with knowledge and ideas to identify the most important sources of obtaining soil geographical data and information, including those related to the data available at the Ministry of Agriculture, as well as books, references and research regarding the material. C- Enabling students to understand the basic rules of soil material and activate its role in its development on the ground.	Subject objectives

9. Teaching and learning strategies

- Using brainstorming to develop skills. **- Discussion method in daily lecture Inside the classroom.**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watch es	The week
In-person tests	**In-person lectures**	**Chapter One / Geography of soil, its importance**	**Understand the concept of soil geography and its importance**	2	September5
In-person tests	**In-person lectures**	**Goals Soil geographyand methods of searching in it**	**Get to know Goals Soil geography, and know ledge Ways to search it**	2	September18
In-person tests	**In-person lectures**	**Chapter Two /Identify organic ingredients**	**Identifying organic ingredients**	2	October26
In-person tests	**In-person lectures**	**soil water**	**Identify soil water**	2	October1
In-person tests	**In-person lectures**	**Mother rock material**	**Learn about the effect of the mother rock material**	2	October9
In-person tests	**In-person lectures**	**the chapter The second is the impact of climate factors.**	**Identify the impact of climate factors**	2	October18
In-person tests	**In-person lectures**	**The effect of plants and animals**	**Learn about the impact of plants and animals**	2	November1
In-person tests	**In-person lectures**	**terrain**	**Terrain recognition**	2	November8
In-person tests	**In-person lectures**	**erosion factor**	**Identify the effect of erosion factor**	2	November15

In-person tests	**In-person lectures**	**The effect of running water**	**Get to know The effect of running water**	2	November24
In-person tests	**In-person lectures**	**The effect of wind factor and wind erosion and its role in soil transport**	**Identify the effect of wind, wind erosion and soil transport.**	2	December1
In-person tests	**In-person lectures**	**Time factor**	**Identify the effect of time factor**	2	December 8
In-person tests	**In-person lectures**	**Human factor**	**Recognizing the human factor**	2	December15
In-person tests	**In-person lectures**	**Soil forms**	**Identify soil types**	2	December22
In-person tests	**In-person lectures**	**soil texture**	**soil texture recognition**	2	January1
Spring break from5/1/2025 to18/1/2025					
In-person tests	**In-person lectures**	**Soil composition**	**Learn about soil composition**	2	January26
In-person tests	**In-person lectures**	**Soil thickness**	**Identify soil thickness**	**2**	**February7**
In-person tests	**In-person lectures**	**Chapter 1third/For the color of the soil**	**Identifying soil colors**	2	February14
In-person tests	**In-person lectures**	**Chapter 1third/Soil porosity**	**Identify soil porosity**	2	February 12
In-person tests	**In-person lectures**	**Features Chemical**	**Get to know features Chemical**	2	February 82
In-person tests	**In-person lectures**	**soil fertility**	**Identify soil fertility**	2	March 6
In-person tests	**In-person lectures**	**Chapter A For the fourth/Soil acidity and salinity**	**Identify soil acidity and salinity**	2	March 13
In-person tests	**In-person lectures**	**On the zonal soils**	**Identifying zonal soils**	2	March 20
In-person tests	**In-person lectures**	**Non-zonal soils**	**Identifying non-zonal soils**	2	March 27

In-person tests	**In-person lectures**	**Soil maintenance**	**Learn about soil conservation**	2	April3
=	=	=	**Eid Al Fitr holiday**	2	April 10
In-person tests	**In-person lectures**	**Chapter AFor the fifth/Agricultural courses**	**Identify agricultural cycles**	2	April 17
In-person tests	**In-person lectures**	**slope gradient**	**Identify the slope gradient**	2	April24
In-person tests	**In-person lectures**	**Contour farming**	**Contour farming knowledge**	2	April 31
			Final exams	___	Mays4-5

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
- D. Safaa Majeed Al-Muzaffar Soil Geography	Required textbooks (methodology if any)
-Kamal Sheikh Hassan Biogeography and Soil,2011	Main References (Sources)
1-Soil Geography by Professor Dr. Kazem Shanta Saad .	Recommended supporting books and references (scientific journals, reports...)
https://www.researchgate.net/publication/332766418_jghrafyt_altrbt_talyf_alastadh_aldktwr_kazm_shnth_sd_jamt_mysan_klyt_altrbyt	Electronic references, websites

1. Program Vision
Remember to see the program as stated in the university's prospectus and website.

2. Program message
Remember RQuestionThe program is as mentioned in the university brochure and website.

3. Program objectives
General phrases describing what is intendedThe programOr the institution to achieve it.

4. Program accreditation
DoThe programIs the program accredited? And from which authority?

5. Other external influences
Is there a sponsor? Forprogram?

6. Program Structure				
comments	**percentage**	**Study unit**	**Number of courses**	**Program Structure**
				Institutional Requirements
				College Requirements
				Department Requirements
				Summer training
				Other

*Notes may include whether the course is basic or optional.

7. Program Description			
Credit hours	**Course name**	**Course code**	**Year/Level**

practical	**theoretical**			

8. Expected learning outcomes of the program	
Knowledge	
Learning Outcome Statement 1	Learning Outcomes 1
Skills	
Learning Outcome Statement 2	Learning Outcomes 2
Learning Outcome Statement 3	Learning Outcomes 3
Values	
Learning Outcome Statement 4	Learning Outcomes 4
Learning Outcome Statement 5	Learning Outcomes 5
9. Teaching and learning strategies	
Teaching and learning strategies and methods adopted in implementing the programme in general.	
10. Evaluation methods	
Implementing it in all stages of the program in general.	
11. Faculty	
Faculty members	

Faculty preparation		**Requirements/Skills (if any)**	**Specialization**		**Academic Rank**
lecturer	angel		private	general	

Professional development
Orientation of new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institutional and departmental levels.
Professional development for faculty members

Briefly describes the plan and arrangements for academic and professional development of faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance Criteria
(Setting regulations related to joining the college or institute, whether central admission or other mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program Development Plan

Program Skills Chart															
Required learning outcomes of the program															
Values				Skills				Knowledge				Essential or optional?	Course name	Course code	Year/Level
A4	A3	A2	A1	B4	B3	B2	B1	A4	A3	A2	A1				

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

Course Description Form

1. Course name
Geography of Iraq
2. Course code
454 GSO
3. Semester/Year
2024-2025
4. Date this description was prepared
18 /9 /2024
5. Available forms of attendance
In-person lectures
6. Number of study hours (total) / Number of units (total)
60 hours / 4 units
7. Name of the course supervisor (if more than one name is mentioned)
Name: M.M. Mohamed Salam Youssef Email: mohammed.yousif819@tu.edu.iq
8. Course objectives

• **Introducing students toContent of the geography of Iraq, including location, sections, surface, importance, climate, resources and population** • Empowerment Students fee map Iraq And signature Places Cities On it • **Ease of collecting the data and information they need in the future when preparing any research on a topic related to a specific aspect of Iraq's components, whether natural or human.**	Subject objectives
9. Teaching and learning strategies	
- In-person lectures. - Use the method of asking questions to students. - Using brainstorming to develop skills. - Discussion method for the details of the lecture topic inside the classroom. - Weekly duties	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	**In-person lectures**	**Geographical location of Iraq**	**Get to know the geographical**	**2**	**3 September**

			location of Iraq		
In-person tests	In-person lectures	The historical, economic, political and strategic importance of Iraq	Learn about the importance of Iraq's geography	2	4 September
TestIn attendance	LecturesPresence	Iraq's surface topography	Knowing the topography of Iraq	2	1 October
In-person tests	In-person lectures	Iraq climate	Knowing the climate of Iraq	2	2 October
In-person tests	In-person lectures	Types of climate in Iraq	Knowing the types of climate in Iraq	2	3 October
In-person tests	In-person lectures	The impact of climate on agricultural production in Iraq	Definition of climate impacts on agricultural production	2	4October
In-person tests	In-person lectures	Soil in Iraq	Knowledge of soil and its properties	2	1 October second
In-person tests	In-person lectures	Natural plants in Iraq	Identify the types of natural plants in Iraq	2	2 November
In-person tests	In-person lectures	People of Iraq	Learn about the population of Iraq	2	3 November
In-person tests	In-person lectures	Iraqi society patterns	Knowing the different patterns of Iraqi society	2	4 November
In-person tests	In-person lectures	Migration, its causes and means of treatment	Identifying the causes of migration and knowing how to treat it	2	1 December
In-person tests	In-person lectures	Social construction in rural Iraq	Identifying the social structure in rural Iraq	2	2 December
In-person tests	In-person lectures	Cultural development in Iraq	Knowing the cultural developments taking place in Iraq	2	3December
In-person tests	In-person lectures	Health development in Iraq	Knowing the health developments in Iraq	2	4 December

In-person tests	**In-person lectures**	**Social development in Iraq**	**Knowing the social developments taking place in Iraq**	**2**	**1 January**
Spring break from5/1/2025 to18/1/2025					
In-person tests	**In-person lectures**	**Economic Development - Agriculture**	**Identifying agricultural activity and its impact on development**	**2**	**4 January**
In-person tests	**In-person lectures**	**- Water resources**	**Introduction to Iraq's water resources**	**2**	**February 1**
In-person tests	**In-person lectures**	**Livestock**	**Introduction to Iraq's animal wealth**	**2**	**February 2**
In-person tests	**In-person lectures**	**Mineral wealth**	**Introduction to Iraq's mineral wealth**	**2**	**February 3**
In-person tests	**In-person lectures**	**Industry in Iraq**	**Know the industries in Iraq**	**2**	**February 4**
In-person tests	**In-person lectures**	**Characteristics of industry in Iraq**	**Identify industry characteristics**	**2**	**March1**
In-person tests	**In-person lectures**	**Iraq's industrial potential**	**Knowing Iraq's industrial potential**	**2**	**March2**
In-person tests	**In-person lectures**	**Industry at the present time, its types and distribution**	**Knowledge of modern industries, their types and distribution**	**2**	**March3**
In-person tests	**In-person lectures**	**Trade in Iraq**	**Learn about the prevailing trade in Iraq**	**2**	**March4**
In-person tests	**In-person lectures**	**Iraq's internal trade**	**Knowledge of Iraq's internal trade**	**2**	**April1**
In-person tests	**In-person lectures**	**Iraq's foreign trade**	**Knowledge of Iraq's foreign trade**	**2**	**April2**
In-person tests	**In-person lectures**	**Transportation methods in Iraq**	**View transportation methods in Iraq**	**2**	**April3**
In-person tests	**In-person lectures**	**Roads in Iraq**	**Getting to know the roads in Iraq**	**2**	**April4**

In-person tests	**In-person lectures**	**Waterways in Iraq**	**Getting to know the waterways in Iraq**	**2**	**Mays1**
In-person tests	**In-person lectures**	**Air routes in Iraq**	**Learn about air routes in Iraq**	**2**	**Mays2**
Final exams					**Mays3.4**

11. Course Evaluation	
The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc. 50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam Allocating 5 points for daily attendance in in-person lectures, daily exams and reports. 50 marks for the end-of-year exam, so that the final total score is (100).	
12. Learning and teaching resources	
All the books prescribed for the subject, especially the modern ones. - Nouri Khalil Al-Barazi, Sakkar Al-Ani's speech, Geography of Iraq, Dar Al-Kutub for Printing and Publishing, University of Baghdad, 1985.	Required textbooks (methodology if any)
-Geography of Iraq - its natural framework - its economic activity - its human aspect by Professor Dr. Abbas Al-Saadi - The textbook (Geography of Iraq)	Main References (Sources)
I recommend relying on modern sources, including the book "Lessons in Geography - Iraq - the Arab World - the World."A-Dr. Ali Al-Mayah and others. In addition to all academic studies and scientific research published in academic scientific journals that are related to the subject's vocabulary. - Nouri Khalil Al-Barazi, Sakkar Al-Ani's speech, Geography of Iraq, Dar Al-Kutub for Printing and Publishing, University of Baghdad, 1985.	Recommended supporting books and references (scientific journals, reports...)
All studies published on the Internet that are related to geographical termsIraq	Electronic references, websites

1. Program vision
Remember to see the program as stated in the university prospectus and website.

2. Program message
Remember tAskThe program is as stated in the university's bulletin and website.

3. Program objectives
General statements that describe what he intendsthe programOr the institution achieves it.

4. Programmatic accreditation
Dothe programHave program accreditation? From which side?

5. Other external influences
Is there a sponsor? Ofprogram?

6. Program structure

comments	percentage	Study unit	Number of courses	Program structure
				Enterprise requirements
				College requirements
				Department requirements

				summer training
				Other

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

7. Program description				
Credit hours		**Name of the course or course**	**Course or course code**	**Year/level**
practical	**theoretical**			

8. Expected learning outcomes of the program	
Knowledge	
Statement of learning outcomes 1	Learning outcomes 1
Skills	
Statement of learning outcomes 2	Learning outcomes 2
Statement of learning outcomes 3	Learning outcomes 3
Value	
Statement of learning outcomes 4	Learning outcomes 4
Statement of learning outcomes 5	Learning outcomes 5
9. Teaching and learning strategies	
Teaching and learning strategies and methods adopted in implementing the program in general.	
10. Evaluation methods	
Implementing it in all stages of the program in general.	
11. The teaching staff	
Faculty members	

Preparing the teaching staff		**Requirements/skills (if any)**	**Specialization**		**Scientific rank**
lecturer	angel		private	general	

Professional development
Orienting new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institution and department levels.
Professional development for faculty members
Briefly describe the academic and professional development plan and arrangements for faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance criterion
(Developing regulations related to admission to the college or institute, whether central admission or others mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program development plan

Program skills chart															
Learning outcomes required from the programme															
Value				Skills				Knowledge				Essential or optional?	Course Name	Course Code	Year/level
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				

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

Course description form

1. Course name
Computer
2. Course code
104 GCS
3. Semester/year
2025 – 2024
.4The date this description was prepared
2024 / 9 / 18
.5Available forms of attendance
In-person lectures
.6Number of study hours (total) / number of units (total(
60hours / 3 units
.7Name of the course administrator (if more than one name is mentioned(
Name: Dr. Abdul Rahman Abdul Karim Yahya Jassim Email: abdulrahman.yahya@tu.edu.iq
.8Course objectives

	Subject objectives
1- Providing the Ministry of Education with specialized staff in teaching computer science in secondary schools.	
2- Enabling female students to master aspects of spatial analysis of geographical factors affecting spatial variation	
3- Enhancing female students' awareness of the horizons of diverse geographical culture, cultural and scientific in this specialization.	
4- Enhancing the ability to interact with modern developments in geography through geographic technology	
5- Providing graduates with the ability to deal with students by teaching geography according to the modern curriculum based on geographic technology represented by geographic information systems and remote sensing	

9. Teaching and learning strategies

Strategy - Oral and written tests, individual and group, theoretical and practical. - Direct observation of the student's performance in the areas of dialogue, intellectual and scientific communication, and teamwork within the classroom and the college and university environment. Assigning students to prepare scientific research to test their ability to think, infer and solve problems.	

Credit hours		Course name	Course code	Academic stage
practical	theoretical			
30	60	Computer		First Stage
4	8		Computer Basics	
2	4		Computer Concept	
2	4		Computer Generations	
3	6		Types of Computers	
3	6		Computer Features	
2	4		MS Office	
2	4		MS Word	

11. Course Evaluation
The grade is distributed as follows: 1- Exam No. 2 in the first course (20 points(2- Exam No. 2 in the second course (20 points(3- Reliance on class participation (5 points(4- Homework (5 points(5- Final exam for the academic year (50%(

12. Learning and teaching resources	
Windows system, Microsoft Office	Required textbooks (methodology if any)
	Main references (sources)
	Recommended supporting books and references (scientific journals, reports...)
Link to the program on the Internet, and its applications in similar universities.	Electronic references, Internet sites

Course description form

1. Course name	
Geographical research methods	
2. Course code	
GGS 334	
3. Semester/year	
2024 /2025	
4. The date this description was prepared	
18 / 9 / 2024	
5. Available forms of attendance	
My presence	
6. Number of study hours (total) / number of units (total)	
Number of hours: 60 / Number of units: 4	
7. Name of the course administrator (if more than one name is mentioned)	
Name: M. Huda Neama Hamad Email:h_hamad@tu.edu.iq	
8. Course objectives	
Teaching the student how to conduct scientific research step by step • Identify geographical scientific research methods and choose the appropriate one • Introducing the student to how to write and record various research sources • Access to the most important geographical sources, ancient and modern	Objectives of the study subject
9. Teaching and learning strategies	
Lectures	Strategy: Class lectures in an interactive manner

Course structure .10					
Evaluation method	Teaching method	Name of the unit/topic	Required learning outcomes	hours	the week
Class performance and exams	Standard method	Introducing human intellectual production in general	Identify the forms of scientific intellectual production	2	September 3
Class performance and exams	Standard method	Definitions of scientific research terms	Identify the most important scientific research terms	2	September 4
Class performance and exams	Standard method	History of scientific research	Giving an idea about the stages of systematic scientific research	2	October 1
Class performance and exams	Standard method	Fields of scientific research		2	October 2
Class performance and exams	Standard method	Thought and thinking	Identify the meaning of thought and thinking and what is related to them	2	October 3
Class performance and exams	Standard method	Classification of sciences	Learn about the types of science	2	October 4
Class performance and exams	Standard method	Stages of research preparation	Start preparing for the search	2	November 1
Class performan	Standard method	Problem selection stage	Identify the first stage	2	November 2

ce and exams					
= = =	= = =	Wide critical readings	Learn about the second stage		November 3
Class performance and exams	Standard methodH	The stage of designing the research plan and formulating hypotheses	How to design the plan	2	November 4
Class performance and exams	Standard method	Research justifications	= = =	2	December 1
Class performance and exams	Standard method	Elements of the research plan: formulating the title and problem	= = =	2	December 2
Class performance and exams	Standard method	Formulating goals and importance	= = =	2	December 3
Class performance and exams	Standard method	The stage of collecting information and how to record it	Learn about ways to collect informatio n	2	December 4
= = =	= = =	= = =	= = =		January 1
			Spring break		January 2 and 3
	Standard method	Structural theoretical method	Data collection		January 4
Class performance and exams	methodstandardstandard	Statistical and field method	Data collection	2	February/1
Class performance and exams	Standard method	The process of analyzing and presenting information	How to analyze and display data	2	February 2
Class	Standard	Types of	Learn	2	February3

performance and exams	method Text method	sources	about dividing sources		
Class performance and exams	Standard method	Paper sources	Identify the types of paper sources	2	February4
Class performance and exams	Standard method	= = = = =	= = =	2	February 4
Class performance and exams	Standard method	Non-paper sources	Identify the types of non-paper and electronic sources	2	March1
Class performance and exams	Standard method	= = = = = =		2	March2
Class performance and exams	Standard method	Types of geographical curricula	Learn about geographical research methods	2	March3
writing a report	Standard method	= = =	= = =	2	April 1
Class performance and exams	Standard method	Writing a research draft	How to write a draft	2	April 2
Class performance and exams	Standard method	Bleach the research and produce it in its final form	How to produce the research in its final form	2	April 3
Class performance and exams	Standard method	Final output requirements	= = =	2	April 4
	Use clippings	Evaluation of some ancient	Identify some	2	May 1

		geographical sources	important geographical sources		
	= = =	Evaluation of some library resources		2	mais 2

11. Course evaluation	
Score distribution out of 100: First semester: 25 marks: written + daily preparation Second semester: 25 marks: written + daily preparation Final exam: 50 marks: written	
12. Learning and teaching resources	
Binding prepared by the subject teacher + a book on geographical research methods / by Muhammad Azhar Saeed Al-Sammak	Required textbooks (methodology, if any)
Wajih Mahjoub / Scientific research methods Amer Kandilji/Scientific research methods and use of information sources	Main references (sources)
All available in libraries and on the net	Recommended supporting books and references (scientific journals, reports...)
Everything is available on specialized scientific websites	Electronic references, Internet sites

1. Program vision
Remember to see the program as stated in the university prospectus and website.

2. Program message
Remember tAskThe program is as stated in the university's bulletin and website.

3. Program objectives
General statements that describe what he intendsthe programOr the institution achieves it.

4. Programmatic accreditation
Dothe programHave program accreditation? From which side?

5. Other external influences
Is there a sponsor? Ofprogram?

6. Program structure				
comments	**percentage**	**Study unit**	**Number of courses**	**Program structure**
				Enterprise requirements
				College requirements
				Department requirements

				summer training
				Other

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

7. Program description				
Credit hours		**Name of the course or course**	**Course or course code**	**Year/level**
practical	**theoretical**			

8. Expected learning outcomes of the program	
Knowledge	
Statement of learning outcomes 1	Learning outcomes 1
Skills	
Statement of learning outcomes 2	Learning outcomes 2
Statement of learning outcomes 3	Learning outcomes 3
Value	
Statement of learning outcomes 4	Learning outcomes 4
Statement of learning outcomes 5	Learning outcomes 5
9. Teaching and learning strategies	
Teaching and learning strategies and methods adopted in implementing the program in general.	
10. Evaluation methods	

Implementing it in all stages of the program in general.
11. The teaching staff
Faculty members

Preparing the teaching staff		**Requirements/skills (if any)**	**Specialization**		**Scientific rank**
lecturer	angel		private	general	

Professional development
Orienting new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institution and department levels.
Professional development for faculty members
Briefly describe the academic and professional development plan and arrangements for faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance criterion
(Developing regulations related to admission to the college or institute, whether central admission or others mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program development plan

Program skills chart															
Learning outcomes required from the programme															
Value				Skills				Knowledge				Essential or optional?	Course Name	Course Code	Year/level
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				

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

Course description form

1. Course name
Geography of Iraq
2. Course code
454 GSO
3. Semester/year
2024-2025
4. The date this description was prepared
18/9/2024
5. Available forms of attendance
In-person lectures
6. Number of study hours (total) / number of units (total)
60 hours / 4 units
7. Name of the course administrator (if more than one name is mentioned)
Name: M.D. Fatima Ibrahim Tohme Email: Fatimah.tuamah471@tu.edu.iq
8. Course objectives

Objectives of the study subject	• **Introducing students toContent of the geography of Iraq, including location, sections, surface, importance, climate, resources, and population.** • **Enable the students fee a map Iraq And signature Places the cities on her** • **Ease of collecting the data and information they need in the future when preparing any research on a topic related to a specific aspect of Iraq's components, whether natural or human.**
9. Teaching and learning strategies	
The strategy	**- In-person lectures.** **- Use the method of asking questions to students.** **- Using brainstorming to develop students' skills.**

- Discussion method for details of the lecture topic in the classroom. - Weekly duties	

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
In-person tests	In-person lectures	The geographical location of Iraq	Identify the geographical location of Iraq	2	3September
In-person tests	In-person lectures	The historical, economic, political and strategic importance of Iraq	Learn about the importance of Iraq's geography	2	4September
In-person tests	In-person lectures	Surface topography of Iraq	Knowledge of Iraq's topography	2	1October
In-person tests	In-person lectures	Climate of Iraq	Knowledge of the climate of Iraq	2	2October
In-person tests	In-person lectures	Types of climate in Iraq	Knowing the types of climate in Iraq	2	3October
In-person tests	In-person lectures	The impact of climate on agricultural production in Iraq	Introducing the effects of climate on agricultural production	2	4October
In-person tests	In-person lectures	Soil in Iraq	Knowledge of soil and its characteristics	2	1 November
In-person tests	In-person lectures	Natural plant in Iraq	Identifying the types of natural plants in Iraq	2	2 November
In-person tests	In-person lectures	Population of Iraq	Learn about the details of the population of Iraq	2	3 November
In-person tests	In-person lectures	Patterns of Iraqi society	Knowing the different patterns of Iraqi society	2	4 November
In-person tests	In-person lectures	Migration, its causes, and means of treatment	Identify the causes of migration and find out ways to treat them	2	1December

In-person tests	In-person lectures	Social construction in the Iraqi countryside	Identifying the social structure in rural Iraq	2	2December
In-person tests	In-person lectures	Cultural development in Iraq	Knowledge of cultural developments taking place in Iraq	2	3December
In-person tests	In-person lectures	Health development in Iraq	Knowledge of health developments taking place in Iraq	2	4December
In-person tests	In-person lectures	Social development in Iraq	Knowledge of social developments taking place in Iraq	2	5 December
Spring break from 5/1/2025 to 18/1/2025					
In-person tests	In-person lectures	Economic development - agriculture	Identify agricultural activity and its impact on development	2	3January
In-person tests	In-person lectures	- Water Resources	Introducing Iraq's water resources	2	4January
In-person tests	In-person lectures	Livestock	Introducing Iraq's livestock	2	1 February
In-person tests	In-person lectures	Mineral wealth	Introducing Iraq's mineral resources	2	2 February
In-person tests	In-person lectures	Industry in Iraq	Knowledge of existing industries in Iraq	2	3 February
In-person tests	In-person lectures	Characteristics of industry in Iraq	Identify the characteristics of the industry	2	4 February
In-person tests	In-person lectures	Iraq's industrial potential	Knowing Iraq's industrial potential	2	1 March
In-person tests	In-person lectures	The industry at present, its types and distribution	Knowledge of modern industries, their types	2	2 March

			and distribution		
In-person tests	In-person lectures	Trade in Iraq	Identify the prevailing trade in Iraq	2	3 March
In-person tests	In-person lectures	Iraq's internal trade	Knowledge of Iraq's internal trade	2	4 March
In-person tests	In-person lectures	Iraq's foreign trade	Knowledge of Iraq's foreign trade	2	5 March
In-person tests	In-person lectures	Transportation routes in Iraq	Access to transportation routes in Iraq	2	1 April
In-person tests	In-person lectures	Land roads in Iraq	Getting to know the land roads in Iraq	2	2 April
In-person tests	In-person lectures	Waterways in Iraq	Getting to know the waterways in Iraq	2	3 April
In-person tests	In-person lectures	Air routes in Iraq	Getting to know the air routes in Iraq	2	4 April
final exams					Mays1,2

11. Course evaluation	
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc. 50 marks for the annual endeavor, 25 marks for each semester, divided as follows: 20 marks for the written exam Allocating 5 marks for daily attendance in in-person lectures and between daily exams and reports. 50 marks for the end-of-year exam, so the final total score is (100)	
12. Learning and teaching resources	
All books prescribed for the subject, especially modern ones - Nouri Khalil Al-Barazi, Khattab Sakkar Al-Ani, The Geography of Iraq, Dar Al-Kutub for Printing and Publishing, University of Baghdad, 1985.	Required textbooks (methodology, if any)
-The geography of Iraq - its natural framework - its economic activity - its human side, by Professor Dr. Abbas Al-Saadi - The methodological book (Geography of Iraq)	Main references (sources)
I recommend adopting modern sources, including the book Lessons in Geography - Iraq - The Arab World - The Worlda-Dr.. Ali Al-Mayah and others. In addition to all academic studies and scientific research published in academic scientific journals that are related to the vocabulary of the subject. - Nouri Khalil Al-Barazi, Khattab Sakkar Al-Ani, The Geography of Iraq, Dar Al-Kutub for Printing and Publishing, University of Baghdad, 1985.	Recommended supporting books and references (scientific journals, reports...)
All studies published on websites that are related to geographical vocabularyIraq https://apps.who.int/iris/bitstream/handle/10665/329429/9789240006119-ara.pdf	Electronic references, Internet sites

1. Program vision
Remember to see the program as stated in the university prospectus and website.

2. Program message
Remember tAskThe program is as stated in the university's bulletin and website.

3. Program objectives
General statements that describe what he intendsthe programOr the institution achieves it.

4. Programmatic accreditation
Dothe programHave program accreditation? From which side?

5. Other external influences
Is there a sponsor? Ofprogram?

6. Program structure				
comments	**percentage**	**Study unit**	**Number of courses**	**Program structure**
				Enterprise requirements
				College requirements
				Department requirements
				summer

				training
				Other

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

7. Program description				
Credit hours		**Name of the course or course**	**Course or course code**	**Year/level**
practical	**theoretical**			

8. Expected learning outcomes of the program	
Knowledge	
Statement of learning outcomes 1	Learning outcomes 1
Skills	
Statement of learning outcomes 2	Learning outcomes 2
Statement of learning outcomes 3	Learning outcomes 3
Value	
Statement of learning outcomes 4	Learning outcomes 4
Statement of learning outcomes 5	Learning outcomes 5
9. Teaching and learning strategies	
Teaching and learning strategies and methods adopted in implementing the program in general.	
10. Evaluation methods	
Implementing it in all stages of the program in general.	
11. The teaching staff	

Faculty members					
Preparing the teaching staff		**Requirements/skills (if any)**	**Specialization**		**Scientific rank**
lecturer	angel		private	general	

Professional development
Orienting new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institution and department levels.
Professional development for faculty members
Briefly describe the academic and professional development plan and arrangements for faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance criterion
(Developing regulations related to admission to the college or institute, whether central admission or others mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program development plan

Program skills chart															
Learning outcomes required from the programme															
Value				Skills				Knowledge				Essential or optional?	Course Name	Course Code	Year/level
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				

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

Course description form

1. Course name
Development and planning
2. Course code
226 GGDP
3. Semester/year
2024-2025
4. The date this description was prepared
18/9/2024
5. Available forms of attendance
In-person lectures
6. Number of study hours (total) / number of units (total)
60 hours / 4 units

7. Name of the course administrator (if more than one name is mentioned)

Name: M.D. Fatima Ibrahim Tohme

Email: Fatimah.tuamah471@tu.edu.iq

8. Course objectives

Objectives of the study subject	• identification Students on Concept Development And planning,And its role Geographic in Planning For development Regional. • Enable Students in to understand practical Planning And its impact in Development And knowledge Planning Regional And urban. • Working to help students acquire sufficient knowledge of everything surrounding the concept of development and planning to enable them to easily collect the data and information they need in the future when preparing any research on the subject of development and planning.

9. Teaching and learning strategies

The strategy	- In-person lectures. - Use the method of asking questions to students. - Using brainstorming to develop students' skills. - Discussion method for details of the lecture topic in the classroom. - Weekly duties

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
In-person tests	In-person lectures	Development-Its concept-Its traditional and modern vision	Knowledge of development, its concept, and its traditional and modern vision	2	3September
In-person tests	In-person lectures	Development principles and goals	Knowledge of development principles and goals	2	4September
In-person tests	In-person lectures	Difficulties facing development	Identify the difficulties facing development	2	1 October
In-person tests	In-person lectures	Obstacles to economic development	Knowing the obstacles to economic development	2	2 October
In-person	In-person lectures	Economic backwardness	Know the concept of economic	2	3 October

tests			backwardness		
In-person tests	In-person lectures	Factors of interest in the issue of underdevelopment	Identify the factors of interest in the issue of underdevelopment	2	4 October
In-person tests	In-person lectures	Criteria for economic backwardness	Know the criteria for economic backwardness	2	1 November
In-person tests	In-person lectures	Characteristics of economic backwardness/structural features	Knowledge of the features of economic backwardness/structural features	2	2 November
In-person tests	In-person lectures	Characteristics of economic backwardness/phenotypic features	Knowing the characteristics of economic backwardness/phenomenological features	2	3 November
In-person tests	In-person lectures	Theories of economic backwardness	Learn about the theories of economic backwardness	2	4 November
In-person tests	In-person lectures	Economic development requirements	Know what economic development requires	2	1December
In-person tests	In-person lectures	The role of the state in light of economic transformations in light of the development of economic thought	Learn about the role of the state in light of economic transformations in light of the development of economic thought	2	2December
In-person tests	In-person lectures	Justifications for state intervention in economic activity	Knowing the reasons and justifications for state intervention in economic activity	2	3December
In-person tests	In-person lectures	Planning concept	Know the concept of planning	2	4December
In-person tests	In-person lectures	Planning motives	Know the motives for planning	2	5 December
pring break from 5/1/2025 to 18/1/2025					
In-person tests	In-person lectures	Planning objectives	Identify the planning objectives	2	3 January
In-person tests	In-person lectures	Basic principles (characteristics) of planning.	Identify the basic principles (characteristics) of planning.	2	4 January
In-	In-person	Planning	Identify the elements or	2	1 February

person tests	lectures	elements or components	components of planning		
In-person tests	In-person lectures	Types of planning	Learn about the types of planning	2	2 February
In-person tests	In-person lectures	Natural layout	Know what natural planning is	2	3 February
In-person tests	In-person lectures	Human planning	Know what human planning is	2	4 February
In-person tests	In-person lectures	Planning stages	Learn about the planning stages	2	1 March
In-person tests	In-person lectures	Planning by level or size	Knowledge of layout by level or size	2	2 March
In-person tests	In-person lectures	Planning in developed countries	Learn about planning in developed countries	2	3 March
In-person tests	In-person lectures	Planning in developing countries	Knowledge of planning in developing countries	2	4 March
In-person tests	In-person lectures	Planning theories Classical planning theories	Learn about planning theories	2	5 March
In-person tests	In-person lectures	Planning theories Modern planning theories	Learn about planning theories	2	1 April
In-person tests	In-person lectures	Problems and difficulties facing the planning process	Identify the problems and difficulties facing the planning process	2	2 April
In-person tests	In-person lectures	Difficulties resulting from people in the planning process	Knowing the difficulties of planning resulting from people	2	3 April
In-person tests	In-person lectures	Planning difficulties resulting from the complexity of the planning process itself	Knowing the difficulties of planning resulting from the complexity of the planning process itself	2	4 April
final exams					2,1 Mays

11. Course evaluation	
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc. 50 marks for the annual endeavor, 25 marks for each semester, divided as follows: 20 marks for the written exam Allocating 5 marks for daily attendance in in-person lectures and between daily exams and reports. 50 marks for the end-of-year exam, so the final total score is (100)	
12. Learning and teaching resources	
All books prescribed for the subject, especially modern ones	Required textbooks (methodology, if any)
1- Development Geography Book (Concepts - Theories - Application) by Dr. Muhammad Dalf Ahmed and others, 2008 AD. 2- Othman Muhammad Ghoneim, Introduction to Regional Development Planning, 2009 AD.	Main references (sources)
I recommend adopting modern sources, including the book Development Geography. In addition to all academic studies and scientific research published in academic scientific journals that are related to the vocabulary of the subject.	Recommended supporting books and references (scientific journals, reports...)
All studies published on websites that are related to the vocabulary of development geography And planning	Electronic references, Internet sites

1. Course Name		
Geographical techniques		
2. Course Code		
221 G GT		
3. Semester/Year		
2024-2025		
4. Date of preparation of this description		
18/9/2024		
5. Available Attendance Forms		
Face-to-face lectures		
6. Number of credit hours (total) / number of units (total)		
60 hours / 4 units		
7. Course administrator's name (if more than one name is mentioned)		
Name: **Assistant lecturer** . Huda Nasser Najm Email:huda.n.najim@tu.edu.iq		
8. Course Objectives		
Course Objectives	Introducing students to geographical techniques in terms of foundations and principles, their importance, types, functions and characteristics Developing skills for software used in geographic techniques Introducing students to the scientific applications of geographical techniques Teaching students the practical uses of geographic techniques Providing students with the skills of using geographical techniques in the departments	

	of natural and human geography

9. Teaching and learning strategies	
Strategy	- The use of brainstorming in the development of skills. - The method of discussion in the daily lecture inside the classroom.

10. Course Structure

The week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
September1	**2**	Learn about the concept ofGPS, its advantages and functions	GPS System	**Face-to-face lectures**	**Attendance tests**
Sep 2	**2**	Learn about the sections of the system and how it works	GPS	**Face-to-face lectures**	**Attendance tests**
October 1	**2**	Identify the process of receiving information and determine the coordinates on the ground	How GPS works	**Face-to-face lectures**	**Attendance tests**
October2	**2**	Identify fixed and mobile observations	Practical monitoring methods of the system	**Face-to-face lectures**	**Attendance tests**
October 3	**2**	Identify the	RS remote	**Face-to-**	**Attendance**

		concept of remote sensing and its basic elements	sensing	**face lectures**	**tests**	
October 4	**2**	Student Definition **A brief history of remote sensing**	**A brief history of remote sensing**	**Face-to-face lectures**	**Attendance tests**	
November 1	**2**	Student Definition **of Electromagnetic Radiation**	**Electromagnetic radiation**	**Face-to-face lectures**	**Attendance tests**	
November 2	**2**	Student Definition **of Electromagnetic Radiation Reactions**	**Electromagnetic radiation reactions**	**Face-to-face lectures**	**Attendance tests**	
November 3	**2**	Student definition of **electromagneti c radiation emission from earth surface materials**	**Emission of electromagneti c radiation from the materials of the earth's surface**	**Face-to-face lectures**	**Attendance tests**	
November 4	**2**	Student **Definition of Electromagnetic Radiation Interactions in Microwaves**	**Electromagnetic radiation reactions in microwaves**	**Face-to-face lectures**	**Attendance tests**	
December 1	**2**	Student Definition **Remote Sensors**	**Remote Sensors**	**Face-to-face lectures**	**Attendance tests**	

December 2	**2**	Introducing **the student to the means of carrying remote sensing**	**Remote sensing carrying means**	**Face-to-face lectures**	**Attendance tests**	
December3	**2**	Student Definition **of Remote Sensing Applications**	**Remote Sensing Applications**	**Face-to-face lectures**	**Attendance tests**	
December 4	**2**	Identify passive and passive sensing systems	Types of remote sensing	**Face-to-face lectures**	**Attendance tests**	
January 1	**2**	Identify the stages of passing rays and spectral reflections	Ray transmission path	**Face-to-face lectures**	**Attendance tests**	
Spring break from 5/1/2025 to 18/1/2025						
January 2	2	Identify the extent and benefit from it in studies	Remote sensing features	**Face-to-face lectures**	**Attendance tests**	
February 1	**2**	Identify the means of sensing and classification of satellites	Satellites	**Face-to-face lectures**	**Attendance tests**	
February 2	2	Identify the cause of satellite visuals and interpret their color gradations	Digital Images	**Face-to-face lectures**	**Attendance tests**	
February 3	2	Identify the definition of aerial photographs	Aerial photos	**Face-to-face**	**Attendance**	

		and their types		**lectures**	**tests**
February 4	2	Recognize the meaning of mosaic and its uses	Mosaic	**Face-to-face lectures**	**Attendance tests**
March 1	2	Identify the most important stages of interpretation and analysis of aerial photographs	Interpretation of aerial photographs	**Face-to-face lectures**	**Attendance tests**
March 2	2	Identify the approved foundations for satellite visual analysis	Interpretation of satellite visualizations	**Face-to-face lectures**	**Attendance tests**
March 3	2	Comparison of aerial and visual images in terms of features and use	Aerial and satellite visual images	**Face-to-face lectures**	**Attendance tests**
March 4	2	**RecognizeDEM, DTMand TIN**	**Three-dimensional models**	**Face-to-face lectures**	**Attendance tests**
April 1	2	**Learn the steps to apply the digital model**	**DEM Model**	**Face-to-face lectures**	**Attendance tests**
April 2	2	**Identify the most important applications of models and the extent of their benefit**	**Uses of three-dimensional models**	**Face-to-face lectures**	**Attendance tests**
April 3	2	**Introducing the student to what GIS is**	**What is GIS?**	**Face-to-face lectures**	**Attendance tests**

April 4	2	**Introducing the student to a brief history of geographic information systems**	**A brief history of GIS**	**Face-to-face lectures**	**Attendance tests**
Mays 1	2	**Introducing the student to the relationship of GIS with other sciences**	**The relationship of geographic information systems with other sciences**	**Face-to-face lectures**	**Attendance tests**
Mays 2	2	**Introduce the student to the advantages of GIS**	**Advantages of GIS**	**Face-to-face lectures**	**Attendance tests**
Mace 3.4	___	**Final Exams**			

11. Course Evaluation	
50 degrees for the annual quest by 25 degrees for each semester and divided as follows: 20 marks for the written exam 5 daily grades distributed between daily exams or reports 50 marks for the end-of-year exam	
12. Learning and Teaching Resources	
Required textbooks (methodology, if any)	Dr. Iyad Ashour Al-Tai Dr. Thaer Mazhar Al-Azzawi Modern technologies in the geography
Key references (sources)	Books, letters, theses and periodicals related to geographical techniques Information Network and Internet

Recommended books and references (scientific journals, reports...)	There isn't any
Electronic References, Websites	There isn't any

Course Description Form

1. Course Name	
Geography of the Americas	
2. Course Code	
33 GNRG	
3. Semester/Year	
2024/2025.	
4. Date of preparation of this description	
2024/9/18	
5. Available Attendance Forms	
Face-to-face lectures	
6. Number of credit hours (total) / number of units (total)	
60 hours / 4 units	
7. Course administrator's name (if more than one name is mentioned)	
Name: **Assistant lecturer** . Zainab Safaa Bandar ..zainab.bandar337@tu.edu.iq	
8. Course Objectives	
Course Objectives	- Identify the basic concepts in the America -Identify the origins of the two continents a development –Recognition of surface features and water -Learn about plant life, soils and climatic re - Identify the characteristics of the populati two continents and the activity of the pasto

	Metals - Identify the elected geographical regions New World Learn why South America is called Latin
9. Teaching and learning strategies	
Strategy	- The use of brainstorming in the developm - The method of discussion in the daily lect

10. Course Structure

The week	Hours	Required Learning Outcomes	Unit or subject name	Learni metho
September5	**2**	Identify the natural position of the continent in terms of area, location and geological structure	North America Geographical Framework	**Face-t lecture**
Sep 4	**2**	Identify the most important clear chains and topographic surface features	Topography in North America	**Face-t lecture**
October 1	**2**	Identify the temperature and rain situation in North America	Climate in North America	**Face-t lecture**
October2	**2**	Identify the types of soils that prevail and their	Soil in North America	**Face-t lecture**

		concentration places		
October 3	**2**	Identify the agricultural regions and the most important economic crops	Economic situation	**Face-t lecture**
October 4	**2**	Learn about the prevalent industries and industrial regions in North America	Economic situation	**Face-t lecture**
November 1	**2**	Learn about North America's mineral wealth	Economic situation	**Face-t lecture**
November 2	**2**	Learn about the Mississippi River Road and car routes	Transportation Routes in North America	**Face-t lecture**
November 3	**2**	Learn about North American settlement since its discovery	The human situation in North America	**Face-t lecture**
November 4	**2**	Recognize the human composition (American Indians, early immigrants, American Negroes)	Human condition	**Face-t lecture**
December 1	**2**	Identify the change in population	Population density and distribution	**Face-t lecture**

		numbers and distribution by population structure		
December 2	**2**	The concept and nature of the geographical region	Geographical regions of North America	**Face-to lecture**
December3	**2**	Identify the region in terms of location and agricultural and industrial activity	Middle Atlantic Region	**Face-to lecture**
December 4	**2**	To learn about the region in terms of location and agricultural and industrial activity	Appalachian Province	**Face-to lecture**
January 1	**2**	To learn about the region in terms of location and agricultural and industrial activity	Southern Region	**Face-to lecture**
Spring break from 2024/1/18الي2024/1/5				
January 4	2	**identify the term Latin America, its geographical boundaries, area and reason for the name,**	**Definition of Latin America and geographical structure**	**F l**
February 1	**2**	**identify the sections of the surface and the percentage they make up**	**Structure and topography**	**F l**

February 2	2	**Identify the conditions of heat and rain in summer and winter**	**Weather and climate**	**F l**
February 3	2	**Identify the types of soils and their relationship to the spread of natural plants**	**Soil and natural vegetation**	**F l**
February 4	2	**Getting to know the indigenous people of the continent Amerindians**	**Human conditions**	**F l**
March 1	2	**Identify the mixed population of whites and Negroes**	**Human conditions**	**F l**
March 2	2	**Identify agriculture and its economic importance**	**Natural resources**	**F l**
March 3	2	**Identify metals and their economic impact**	**Mineral wealth**	**F l**
March 4	2	**Learn about the industries prevailing on the continent**	**Industry**	**F l**
April 1	2	**Identify all kinds of transport routes on the continent**	**Transportation**	**F l**
April 2	2	**Identify the diversity of trade in terms of exports and imports**	**trade**	**F l**
April 3	2	**Identify the distribution of geographical regions in Latin America**	**Geographical regions of Latin America**	**F l**
April 4	2	**Identify the region in terms of population and agricultural and industrial activities**	**Central America Region**	**F l**
Mays 1	2	**Identify the region in terms of population and agricultural and industrial activities**	**Mexico**	**F l**

Mays 2	2	**Identify the region in terms of population and agricultural and industrial activities**	**Colombia**	**F l**
Mace 3.4	___	**Final Exams**		

11. Course Evaluation	
50 degrees for the annual quest by 25 degrees for each semester and divided as follows: 20 marks for the written exam 5 daily grades distributed between daily exams or reports 50 marks for the end-of-year exam	
12. Learning and Teaching Resources	
Required textbooks (methodology, if any)	Dr. Muhammad Hamid Al-Taie, University of Baghdad, Dr. Ali Hussein Al-Shalash, University of Basra, Dr. Wafiq Hussein Al-Khashab, University of Baghdad, Geography of the New World (Americas) 1980
Key references (sources)	There isn't any
Recommended books and references (scientific journals, reports...)	There isn't any
Electronic References, Websites	There isn't any

Course description form

1. Course name					
Educational guidance and mental health					
2. Course code					
GTG 43					
3. Semester/year					
2024/2025					
4. The date this description was prepared					
18 / 9 / 2024					
5. Available forms of attendance					
My presence					
6. Number of study hours (total) / number of units (total)					
Number of hours: 60 / Number of units: 4					
7. Name of the course administrator (if more than one name is mentioned)					
Name: M. Huda Neamah Hamad Email:h_hamad@tu.edu.iq					
8. Course objectives					
Building a teacher guide for schools Learn about the principles and methods of counseling Adopting the scientific trend in educational guidance based on scientific theories			Objectives of the study subject		
9. Teaching and learning strategies					
Lectures			Strategy: Class lectures in an interactive manner		
10. Course structure					
Evaluation method	**Learning method**	**Name of the unit or topic**	**Required learning outcomes**	**hours**	**the week**
In-person tests	In-person lectures	Guidance and guidance	Identify the meaning of educational guidance and	2	September 3

			guidance		
= = =	= = =	Stages of guidance	= = =	2	September 4
= = =	= = =	Objectives of guidance and counseling	= = =	2	October 1
= = =	===	Principles of educational guidance and guidance	= = =	2	October 2
= = =	= = =	The relationship between counseling and other sciences	Identify the areas and methods of counseling	2	October 3
= = =	= = =	The problem of academic delay	Identify the problems that guidance addresses	2	October 4
= = =	= = =	The problem of cheating in achievement tests		2	November
= = =	= = =	Exam anxiety problem		2	November 2
= = =	= = =	The problem of poor academic achievement			November 3
= = =	= = =	Philosophical, psychological and social foundations	Learn about the basics of guidance and counselling	2	November 4
= = =	= = =	What is the theory? Why are there so many?	Identify the most important counseling theories	2	December 1
= = =	===	Psychoanalytic theory	= = =	2	December 2
= = =	= = =	The goal of psychoanalytic treatment and the role of the counselor	= = =	2	December 3
= = =	= = =	Behavioral theory	= = =	2	December 4
===	= = =	Self theory	= = =	2	January 1
vacation	Vacation	vacation	vacation		January 2 and 3 spring break

In-person tests	In-person lectures	Methods of collecting information/building the form	Learn how to design a guide information form	2	January 4
= = =	= = =	Types of information	= = =	2	February 1
===	= = =	the interview	Learn how to conduct an interview	2	February 2
= = =	= = =	Note	How to conduct an observation	2	February 3
= = =	= = =	Tests and standards	Learn about tests and standards	2	February 4
		Case Study	= = =	2	March 1
		Anecdotal and cumulative record	= = =	2	March 2
In-person tests	In-person lectures	Preparing the teacher and educational guide	= = =	2	March 3
===	= = =	Parents councils	= = =	2	March 4
= = =	= = =	Mental health science/its goals	Learn about mental health science	2	April 1
= = =	= = =	Mental illness	Definition of mental illness	2	April 2
= = =	= = =	Some growth problems	The impact of developmental problems on counseling	2	April 3
= = =	= = =	Psychological crises	What are psychological crises?	2	April 4
= = =	= = =	Psychological disorders	===	2	May 1
= = =	= = =	Compatibility and adaptation	= = =	2	mais 2
					May 3 and 4 final exams

11. Course evaluation	
Score distribution out of 100: First semester: 25 marks: written + daily preparation Second semester: 25 marks: written + daily preparation Final exam: 50 marks: written	
12. Learning and teaching resources	
Guidance and mental health are mandatory / prepared by a committee of specialists	Required textbooks (methodology, if any)
The book of psychological and educational guidance between theory and practice / Abdel Fattah Muhammad Al-Khawaja Psychological guidance and counselling, written by Kamila Farkh	Main references (sources)
Journal of Educational and Psychological Sciences	Recommended supporting books and references (scientific journals, reports...)
Everything is available on specialized scientific websites	Electronic references, Internet sites

.Authentication of Mr. Al-AmiDr

Model Description

1. Name of the judge	
Geographic Eurasia	
2. Decision of the resolution	
216 GG	
3. Chapter / year	
2024/2023	
4. Date set up this description	
2024/9/18	
5. Availability available	
Litectural lectures	
6. Number of hours of study (macro) / number of units (total)	
60 hours / 4 units	
7. The name of the judge judge (if more than the name of the prohibited)	
Name:زينب E-mail: zainab.bandar337@tu.edu.iq0 صفاء بندر	
8. Objectives of the judiciary	
Goals of the course	A. Developing the student's ability to understand the material to acquire students' knowledge and ideas to obtain them in respect of sources and references of the Uruisia. Their and its request to understand the basics of the agroes of the agrace and their applications on the ground
9. Selecting education and learning	
The strategy	- discussing the lecture of the cup to develop skills. - Explain the discussion in the lecture of the annual cup

within the hallway.	

10. Government					
Method of evaluation	Method of learning	Name of the unit or the subject	Learning outputs required	Hours	The week
Ability to attend	Litectic lectures	Chapter I / Geographical Location Features of Asia Continue	Identify the characteristics of the geographical location	2	September 3
Ability to attend	Litectic lectures	The objectives of the continent's Asia and its infrastructure	Identify old blocks, mountain chains, grand diverse, climate, residents and departments of Asia	2	September 4
Ability to attend	Litectic lectures	Gems	Getting to the jewels	2	October 1
Ability to attend	Litectic lectures	Republican Pakistan	Natural recognition of the Republic of Pakistan	2	October 2
Ability to attend	Litectic lectures	Economic situation and economic activity	Identify the economic and economic situation of economic	2	October 3
Ability to attend	Litectic lectures	The Southeast of Southeast States	Identifying the countries of the multinational countries of Southeast Asia (Burma and Side)	2	October 4
Ability to attend	Litectic lectures	Natural support and economic situation	Identify the natural outer and economic situation	2	November 1
Ability to attend	Litectic lectures	Status of the population and religious beliefs	Identify the population and percentages	2	November 2
Ability to attend	Litectic lectures	Agricultural products and livestock	Definition of the most important agricultural and livestock products	2	November 3

			for its states		
Ability to attend	Litectic lectures	The East Asia Diamond Countries	Definition of the popular state	2	November 4
Ability to attend	Litectic lectures	But a natural	Identify the natural components and surface	2	December 1
Ability to attend	Litectic lectures	Popular State climate	Dating on its climate	2	December 2
Ability to attend	Litectic lectures	The climate of Asia continent	Learn about climatic conditions in the Netherlands	2	December 3
Ability to attend	Litectic lectures	Factors influenced by the Asia continent	Identify the worker on the continent of Asia	2	December 4
Ability to attend	Litectic lectures	Canadian body	The next-up selection	2	January 1
Spring vacation from 2024/1/5to2024/1/18					
Ability to attend	Litectic lectures	Temperature	Identify the types of the eternity of the ease	2	January 4
Ability to attend	Litectic lectures	Natural eyes	Identify natural plants	**2**	February 1
Ability to attend	Litectic lectures	Residents of Asia	Identify the thin Asia	2	February 2
Ability to attend	Litectic lectures	Most importantly in the heart of Asia	The selection of newcomers	2	February 3
Ability to attend	Litectic lectures	Republican India	Identifying the Republic of India	2	February 4
Ability to attend	Litectic lectures	Japan	Learn the Japanese state	2	March 1

Ability to attend	Litectic lectures	Burma	Identify the State of Burma and its characteristics	2	March 2
Ability to attend	Litectic lectures	Origin of the label	Identify assets and reassure label	2	March 3
Ability to attend	Litectic lectures	The characteristics of the site are characterized by	Identify the profit of geography location	2	March 4
Ability to attend	Litectic lectures	Electronic installation	Identify the floor of the Earth's surface	2	Nissan 1
Ability to attend	Litectic lectures	Easy Arab	Identify the plains and religions in migrants	2	Nissan 2
Ability to attend	Litectic lectures	Middle concepts	Definition of the ears to which they reached	2	Nissan 3
Ability to attend	Litectic lectures	Now it t	Determine the day of the rivers in the Cub of Europe	2	Nissan 4
Ability to attend	Litectic lectures	Circus Circus Cub / Lattan Climate	Climate recognition of the barrel of Europe	2	Miss 1
Ability to attend	Litectic lectures	Soil / plants / red kingdom	Find out the trial and plants in the Kingdom of Spain	2	Miss 2
			Finals finals	___	Mes 3,4

11. Rule of judge
50 degree for the kitchen is a real degree 25 degree per chapter and Callati section: 20 degree for the 11-model exam distribution of a family distribution between daily examinations or stories 50 degrees last year
12.Clothes and learning

Books of the scientific study of the Asia and Europe.	The specific books (the methodology found)
- Grandpa of Wrathia Orania neighbors / d. Qusay Hassan.	Home References (Sources)
1 Abdul Razaq Abbas Hussein, Geographic Co., 2006 2006 Hyderabil Abdul Razak Soune, Town Planning, I 1, Dar Al-Affairs Cultural Affairs, Baghdad, 2007.3 Salah Dawood, Phenomenon of Override in Cities, The Massager of the Professor 1, Faculty of Education Ibn Rushd, 2007.	The new bulk books and references in the scientific journals, reports ...)
https://www.firasabdabduljabar.com/2022/10/blogpost_17.html	Electronic References, Locations Site

Authentication by Mr. Al-Ami Dr

Course description form

1. Name of the judge	
Biotaxonomy	
2. Resolution code	
112 GB	
3. Semester/year	
2024/2025	
4. The date this description was prepared	
2024/9/18	
5. For availability available	
In-person lectures	
6. Number of study hours (total) / number of units (total)	
60 hours / 4 units	
7. The name of the judge (if more than the name of the prohibited person)	
Name: M.M. Zainab Safaa Bandar Email: zainab.bandar337@tu.edu.iq	
8. Objectives of the judiciary	
1- To differentiate between biogeography and other geographical sciences. 2- To attract students to the level of variation and difference in the common field they share, and the level of its spread, and to clarify The relative degree between plants and animals. 3- Students' ability to discuss it and explain the importance of interest in studies related to specialized and vital health studies.	Objectives of the study subject
9. Choosing teaching and learning	
- Ask the students to familiarize themselves with the natural and biological subjects of the biogeographic	The strategy

subject and the foundations on which the study is based. - Trying to link the vocabulary of the academic subject for students of the student body. - Method of discussion in the year's lecture within the academic university.	

10. System of government

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Ability to attend	In-person lectures	Biogeography and its relationship to other sciences	Geographical definition and its topics	2	November 1
Ability to attend	In-person lectures	Its importance is to shed light on living organisms	decorative	2	November 2
Ability to attend	In-person lectures	They worship the living	The spread of neighborhoods	2	November 3
Ability to attend	In-person lectures	Types of natural obstacles to spread	Identify the most important natural obstacles to spread	2	November 4
Ability to attend	In-person lectures	Fragmented sub-regions	Know how to form living areas	2	December 1
Ability to attend	In-person lectures	The size of the living area	Identify the sizes of living areas	2	December 2
Ability to attend	In-person lectures	Distribution of living organisms (fixed x non-fixed distribution)	Know the target area in the area	2	December3
Ability to attend	In-person lectures	Basic plant groups pose and composition	Introduction to plant classification	2	December 4
Ability to attend	In-person lectures	Climatic factors	Identify the relationship between the environment and living organisms	2	January 1

Ability to attend	In-person lectures	The effect of light on living organisms and plants	Knowing the effect of light on living organisms	2	January 4
Ability to attend	In-person lectures	Thermal accumulation and its relationship to plant growth	Know the temperature of your living space	2	February 1
Ability to attend	In-person lectures	The effect of humidity on plants and animals	Know the percentage of humidity and air	2	February 1
Ability to attend	In-person lectures	The effect of gases on the living body	Air	2	February 2
Ability to attend	In-person lectures	The effect of wind on alien organisms	Wind	2	February2
Ability to attend	In-person lectures	Allocation of chemical and chemical soils for plants	Knowledge of traffic isolation	2	
Spring break from 2024/3/1to2024/3/8.					
Ability to attend	In-person lectures	Plants that live in limestone soils	Distinguish the chemical composition of soil	2	February 4
Ability to attend	In-person lectures	Determined and sandy soils	Knowing the types of plants according to the types of soil	**2**	March 1
Ability to attend	In-person lectures	Geomorpholo gical focus affecting Earth's surface forms	Knowing hate	2	March 2
Ability to attend	In-person lectures	Adjusting contour lines and football slopes	Selection at the regression level	2	March 3

Ability to attend	In-person lectures	Plant relations	Vital relationships	2	March 4
Ability to attend	In-person lectures	Intrusion and sponsor	Knowing the types of vital relationships	2	April 1
Ability to attend	In-person lectures	Competition between diverse organisms and animals	Mechanical mechanical relationships	2	April 2
Ability to attend	In-person lectures	Relationships between living organisms	Identify vital relationships	2	April 3
Ability to attend	In-person lectures	Marine and ecological environment	Knowledge of the biological environments in the regional land	2	April 4
Ability to attend	In-person lectures	A panel of aquatic and environmental influences on living organisms	Identify salinity	2	Miss 1
Ability to attend	In-person lectures	The coastal and lower coastal areas	Knowledge of life in disciplines and oceans	2	Miss 2
Ability to attend	In-person lectures	Plants used in stagnant water	Learn about life in continental waters	2	
Ability to attend	In-person lectures	Population distribution	Good reward	2	
Ability to attend	In-person lectures	Distributive distribution	Animal distribution	2	
Ability to attend	In-person lectures	Subtropical regions	Identify semi-natural areas	2	
			Final finals	___	Mays 3,4

11. Judge's evaluation	
50 marks for realistic cuisine, 25 marks for each chapter and section, as follows: 20 marks for the written exam, 5 marks for the daily, distributed among daily exams or stories, 50 marks for the end-of-year exam.	
12. Learning and teaching resources	
Studies in geology	Specific books (methodology found)
Abu Samour, Biogeography Hassan Abu Samour, Geographic Department 1995, University of Jordan, first edition,	Main references (sources)
All essential modern Arab and foreign elements in the geographical field of life	Supporting books and references that cuts (scientific journals, reports...)
adel.taha@tu.edu.iq	Electronic references, Internet sites

Course Description Form

1. Course name	
Industrial Geography / The third stage	
2. Course code	
39GMGR	
3. Semester/Year	
2024/2025	
4. Date this description was prepared	
2024/9/18	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / Number of units (total)	
60Hour / 4 units	
7. Name of the course supervisor (if more than one name is mentioned)	
esraa.hamid326@tu.edu.iq الايميل	
8. Course objectives	
Subject objectives	A-Preparing teaching staff who are well aware of the importance of industry, its branches and its factors of progress.. for-Placing graduates within the general framework of the economic development of society to play an effective role in it C-Preparing cadres capable of better understanding environmental conditions and their problems, especially in terms of the relationship between industry and the

environment.	

9. Teaching and learning strategies	
- Using brainstorming to develop skills. - Discussion method in daily lectureInside the classroom.	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	**In-person lectures**	**Chapter One /Industry concept**	**Industry concept**	2	September3
In-person tests	**In-person lectures**	**Definition of industrial geography**	**Learn about the most important definitions of industrial geography**	2	September 4
In-person tests	**In-person lectures**	**The importance of industrial geography**	**Understand the importance of industrial geography**	2	October1
In-person tests	**In-person lectures**	**Research Methods in Industrial Geography**	**Learn about research methods in industrial geography**	2	October2
In-person tests	**In-person lectures**	**Industrial localization factors**	**Identifying the factors of industrial localization**	2	October3

In-person tests	**In-person lectures**	**Standards used in the industry**	**Identify the most important criteria used in industrial geography**	2	October4
In-person tests	**In-person lectures**	**Data sources**	**Identify the most important data sources in industrial geography**	2	November1
In-person tests	**In-person lectures**	**Chapter Two / Industrial Activity Concepts**	**Learn about the most important concepts related to industrial activity**	2	November2
In-person tests	**In-person lectures**	**Extractive industries**	**Identify the most important extractive industries**	2	November3
In-person tests	**In-person lectures**	**Manufacturing industries**	**The most important transformation industries with high economic returns**	2	November4
In-person tests	**In-person lectures**	**Industrial growth**	**Recognizing the importance of industrial growth and development**	2	December1
In-person tests	**In-person lectures**	**Industrial development**	**Identify the most important means of using industrial development**	2	December 2
In-person tests	**In-person lectures**	**Manufacturing**	**Recognizing the importance of manufacturing in all fields and types of industries**	2	December3

In-person tests	**In-person lectures**	**Industrial structure**	**Recognizing the importance of industrial structure for all industries**	2	December4
In-person tests	**In-person lectures**	**Elements Industrial**	**Location and site requirements**	2	January1
Spring break from 5/1/2024to 18/1/2024					
In-person tests	**In-person lectures**	**Chapter Three / The Origin of Industry**	**Learn about the emergence of different industries**	2	January4
In-person tests	**In-person lectures**	**Industry developme nt**	**The development in the field of various industries**	**2**	**February1**
In-person tests	**In-person lectures**	**Industrial activity classificati on**	**Identify the most important industrial classifications and activities**	2	February2
In-person tests	**In-person lectures**	**Factors of the establishm ent of industry**	**Identify the most important factors that lead to the establishment of industries**	2	February 3
In-person tests	**In-person lectures**	**Natural factors (climatic and surface)**	**Climatic factors that lead to the establishment of industry**	2	February 4
In-person tests	**In-person lectures**	**Economic factors**	**The most important economic factors that contribute to the establishment and development of industry**	2	March 1
In-person tests	**In-person lectures**	**theDemogr aphic**	**Identify the most important**	2	March 2

		factors	**demographic factors that lead to the establishment of various industries**		
In-person tests	**In-person lectures**	**Chapter Four/Industrial Site Theories**	**Learn about the most important theories of industrial sites**	2	March 3
In-person tests	**In-person lectures**	**Industrial site patterns**	**Classification of different types of industrial sites**	2	March 4
In-person tests	**In-person lectures**	**Chapter Five / Industrial Site Policies**	**Learn about the most important policies for industrial sites**	2	April1
In-person tests	**Lectures are in person.**	**Problems facing industries**	**Identify the most important problems facing all industries**	2	April 2
In-person tests	**In-person lectures**	**problem Capital**	**Identifying capital problems in industries**	2	April 3
In-person tests	**In-person lectures**	**Narrow space and industrial sites**	**The problem of space congestion and distribution of different industries**	2	April4
In-person tests	**In-person lectures**	**Industrial pollution**	**Identify the most important industrial pollutants released by all industries**	2	Mays 1
In-person	**In-person**	**Fieldwork in**	**Recognizing the importance of**	2	Mays 2

tests	**lectures**	**Industrial Studies**	**field work and collecting information about all industries**		
			Final exams	___	Mays3,4

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
- D.Mohammed Al Samak,And Abbas Al-Tamimi,Industry Geography,University of Mosul,1987	Required textbooks (methodology if any)
-Dr. Mohamed Asmak, Industrial Geography from a Contemporary Perspective	Main References (Sources)
1-Fundamentals of scientific research, its methods and areas in industrial geography CompositionATo Assistant Professor Dr. Rahman Rabbat Hussain .	Recommended supporting books and references (scientific journals, reports...)
Fundamentals of scientific research, its methods and areas in industrial geography| Al-Qadisiyah Journal For Humanities Sciences (qu.edu.iq)	Electronic references, websites

The File is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Assist. Lect. Shahad Khaled Hamed

Date:
Signature:

Approval of the Dean

Course Description Form

1. Course Name: **General Geography, first stage**
2. Course Code: **32fxolu**
3. Semester / Year: 2024-2025
4. Description Preparation Date**2024/9/18**
5. Available Attendance Forms: **In-person lectures**
6. Number of Credit Hours (Total) / Number of Units (Total): **60 hours | 4 units**
7. Course administrator's name (mention all, if more than one name)
Name: M.M. Israa Mazen Hamid Email :esraa.hamid326@tu.edu.iq
8. Course Objectives

Course Objectives	Developing students' ability to understand the origins of geographical phenomena and address their problems. *For students to become familiar with geography

	scientists and the most important theories about the origin of the universe *For students to differentiate between geography and other sciences related to it.

9. Teaching and Learning Strategies

Strategy	**-In-person lectures.** **- Asking questions during lectures** **- Discussion method in the daily lecture in the classroom** **and skills-Using brainstorming to develop abilities**

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
September 3	2	Identify the concept of geography	Chapter One| Geography and its importance	In-person lectures	In-person tests
September 4	2	Identify the goals of geography and know the methods of researching them	Objectives of geography and methods of research therein	In-person lectures	In-person tests
October 1	2	Study of physical geography	Chapter Two | Branches of Geography	In-person lectures	In-person tests
October2	2	Learn about the concept of human geography	Its sections and types	In-person lectures	In-person tests

October3	2	Study the concept of a map	Their types and importance	In-person lectures	In-person tests
October 4	2	Learn about the concept of weather and climate	Chapter Three| Weather and climate elements	In-person lectures	In-person tests
November 1	2	Surface recognition	Know the factors affecting the surface	In-person lectures	In-person tests
November 2	2	Learn about the climate	Study of climate elements	In-person lectures	In-person tests
November 3	2	Learn about soil and its types	Capter Fourh | Definition of soil	In-person lectures	In-person tests
November 4	2	Earth's shape and movement	Types of movements	In-person lectures	In-person tests
December 1	2	Study of soil uses	Human uses and uses	In-person lectures	In-person tests
December 2	2	Learn about water resources	Its geographical distribution	In-person lectures	In-person tests
December 3	2	Study of sources of water resources	to save it	In-person lectures	In-person tests
December 4	2	Identify the measurements of river courses	Chapter Five: Measuring river courses	In-person lectures	In-person tests
January 1	2	Study of geographical phenomena	Problems and solutions	In-person lectures	In-person tests
Spring Break from 1/8/2025to 1/3/2025					
January 4	2	Identify the ground terrain situation	Chapter Six| Geographic information	In-person lectures	In-person tests

			systems methods		
February 1	2	Study the problems facing the environment	**Chapter Seven| Pollution and earthquakes**	In-person lectures	In-person tests
February 2	2	Weathering concept	Chapter Eight| Types of weathering	In-person lectures	In-person tests
February 3	2	Rocks, their concept and types	Types of rocks	In-person lectures	In-person tests
February 4	2	Agriculture and its types	Chapter Nine | Factors affecting agriculture	In-person lectures	In-person tests
March 1	2	Agricultural production patterns	Agricultural production patterns	In-person lectures	In-person tests
March 2	2	Industry concept Its sections	Chapter Ten | Factors affecting the industry	In-person lectures	In-person tests
March 3	2	Study of population geography	Chapter Eleven | Areas of population geography	In-person lectures	In-person tests
March 4	2	Population geography	Chapter Twelve | Elements of state power	In-person lectures	In-person tests
April 1	2	Identify dams and reservoirs	Types of dams	In-person lectures	In-person tests
April 2	2	Identify natural phenomena	Mountains, plains, plateaus	In-person lectures	In-person tests
April 3	2	Erosion, transportation and sedimentation processes	Its types and importance	In-person lectures	In-person tests

April 4	2	Earth covers	Its types	In-person lectures	In-person tests
May 1	2	Earthquakes and volcanoes	Its types and causes	In-person lectures	In-person tests
May 2	2		General Review	General Review	_____
May 3,4	___		final exams	_____	____

11. Course Evaluation

50 marks for the annual endeavor, 25 marks for each semester, divided as follows:

20 marks for the written exam

5 marks per day, distributed among daily exams or reports

50 marks for end-of-year exam

12. Learning and Teaching Sources

Required textbooks (curricular books, if any)	• Ahmed Ali Ismail, General Geography Kutub for Printing and Publishing, Unive Baghdad, 1996.
Main references (sources)	The methodological book (General Geograp written by Muhammad Sobhi, 2000..
Recommended books and references (scientific journal, reports	Jawda Hassanein, General Geography, Arab Renaissance House, University of Baghdad, 2000 AD.
Electronic References, Websites	All websites for subject vocabulary related to geography

Mr. Al-Ami's approvalD

Course Description Form

1. Course name	
Population Geography	
2. Course code	
GPG 217	
3. Semester/Year	
2024- 2025	
4. Date this description was prepared	
/ /2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / Number of units (total)	
60Hour / 4 units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Prof. Dr. Adel Taha ShalalEmail:adel.taha@tu.edu.iq	
8. Course objectives	
A-Introducing students to the methods of using characteristics, means, rates, and geographical research on human phenomena and those specific to population geography in order to develop future plans for them. for-Developing students' ability to	Subject objectives

understand the elements and characteristics of the population C-Developing students' ability and training them to use statistical methods and means and linking them to statistical programs	

9. Teaching and learning strategies

-In-person lectures **-Using brainstorming to develop skills.** **- Discussion method in daily lectureInside the classroom.**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	In-person lectures	Definition of demography	Introduction to Demography	2	1
In-person tests	In-person lectures	Understand the concept of demography	demography concept	2	2
In-person tests	In-person lectures	Understand the importance of population studies	The importance of population studies	2	3
In-person tests	In-person lectures	Get to knowPopulation Data Sources	Knowing the sources of demographic data	2	4
In-person tests	In-person lectures	Learn about population growth theories	Population growth theories	2	5
In-person tests	In-person lectures	Study of population characteristics	Population characteristics and composition	2	7
In-person tests	In-person lectures	Identify the types of population structure	Age and gender structure of the population	2	8

In-person tests	In-person lectures	Knowing the population distribution between urban and rural areas	Environmental distribution of population	2	9
In-person tests	In-person lectures	Study of the optimal population size	optimal population size	2	10
In-person tests	In-person lectures	Knowing the world population growth and its future effects	world population growth	2	11
In-person tests	In-person lectures	Learn about the importance of the population pyramid	population pyramid	2	12
In-person tests	In-person lectures	Understand the importance of the geographical distribution of the world's population	Geographical distribution of population	2	13
In-person tests	In-person lectures	knowledgeFactors affecting population distribution and density	Factors affecting population distribution and density	2	14
In-person tests	In-person lectures	Study of the elements of population changes	Elements of population change	2	15
In-person tests	In-person lectures	The importance of population fertility and its relationship to population growth	Population fertility	2	16
In-person tests	In-person lectures		Spring break from 14/1/2024 to 25/1/2024	2	17
In-	In-person	Study of mortality	Deaths	2	18

person tests	lectures	and its effect on population size variation			
In-person tests	In-person lectures	Study of migration and its impact on population growth	Immigration	2	19
In-person tests	In-person lectures	Knowing the types of measurements and their types	Population fertility rate	2	20
In-person tests	In-person lectures	Knowing the raw birth parameters	Birth scale	2	21
In-person tests	In-person lectures	Knowing the raw migration metrics	Migration Scale	2	22
In-person tests	In-person lectures	Study of marriage and its impact on population fertility	Marriage	2	23
In-person tests	In-person lectures	World Population and Development Study	Population and Development	2	24
In-person tests	In-person lectures	The importance of quail and their relationship to food	Population and its relationship to food	2	25
In-person tests	In-person lectures	Knowledge of development and fertility	Development and fertility	2	26
In-person tests	In-person lectures	Study of development and its importance and education in society	Education and Development	2	27
In-person tests	In-person lectures	Study of development and health services in the community	Development and health services	2	28
In-person	In-person lectures	The impact of development on	Economic development and	2	29

tests		economic development in society	progress		
In-person tests	In-person lectures	Knowing population policies and their importance in society	Population policies	2	30

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
-Fathi Muhammad Abu Ayana, Population Geography, 5th ed., Dar Al Nahda Al Arabiya for Printing and Publishing, Beirut, 200, p. 229.	Required textbooks (methodology if any)
- Taha Hammadi Al-Hadith, The Methodological Book of Population Geography.	Main References (Sources)
All modern population sources, including Arab and foreign, in the field of population science and geography.	Recommended supporting books and references (scientific journals, reports...)
All related websitesIt is concerned with the geography of population.	Electronic references, websites

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Assist. Lect. Shahad Khaled Hamed

Date:
Signature:

Approval of the Dean

Course Description Form

1. Course Name: **Rural geography The second phase**
2. Course Code: **229GRG**
3. Semester / Year: 2024-2025
4. Description Preparation Date**2024/9/18**
5. Available Attendance Forms: **In-person lectures**
6. Number of Credit Hours (Total) / Number of Units (Total): **60 hours | 4 units**
7. Course administrator's name (mention all, if more than one name)
Name: M.M. Israa Mazen Hamid Email :esraa.hamid326@tu.edu.iq
8. Course Objectives

Course Objectives	*The student gets to know the concept of rural geography and its*Enhancing students' ability to understand rural geography by revealing the most important

	problems and knowing how to address them • *Enhancing students' ability to understand the differences between rural geography and other branches of geography and the extent of their connection.

9. Teaching and Learning Strategies

Strategy	**- In-person lectures.** **-Asking questions during lectures** **- Discussion method in the daily lecture in the classroom** **-Using brainstorming to develop abilities and skills**).

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
September 3	2	Concept of the term rura	Chapter One: The concept of rural geography	In-person lectures	In-person tests
September 4	2	The beginnings of interest in the countryside	Basic concerns at the beginning of rural geography	In-person lectures	In-person tests
October 1	2	Identify the most important reasons that gave rural studies such effective importance	The reasons that gave effective importance to rural studies	In-person lectures	In-person tests
October2	2	Areas of development of interest in rural geography	How interest in rural geography developed	In-person lectures	In-person tests

October3	2	The concept of rural geography	Rural geography objectives	In-person lectures	In-person tests
October 4	2	Studying the relationship between rural geography and its relationship with other branches of geography	The most important basic relationships between rural geography and other branches The most important basic relationships between rural geography and other branches	In-person lectures	In-person tests
November 1	2	The nature and characteristics of rural society	The reasons that gave effective importance to rural studies	In-person lectures	\ In-person tests
November 2	2	Knowing the most important foundations for classifying rural society	Chapter Two | Basis for classifying rural society	In-person lectures	In-person tests
November 3	2	Forms of rural communities	Problems of rural society	In-person lectures	In-person tests
November 4	2	Knowing the most important factors affecting rural settlements and their distribution	Knowing the most important factors affecting rural settlements and their distribution	In-person lectures	In-person lectures
December 1	2	Environmental and geographical distribution of rural settlements	Chapter Three | Environmental distribution of the countryside	In-person lectures	In-person lectures In-person lectures
December 2	2	Morphology of rural settlement	Chapter Four | The phenology of rural settlements and the factors affecting them	In-person lectures	In-person lectures In-person lectures

December 3	2	Morphological elements of a rural settlement	Morphology of the rural dwelling	In-person lectures	In-person lectures In-person lectures
December 4	2	The impact of urban centers on rural areas and their relationship	Five Chapter | The impact of urban centers on the countryside	In-person lectures	In-person lectures In-person lectures
January 1	2	Regional relations between the city and the countryside	Models of regional relations between the city and the countryside	In-person lectures	lectures In-person lectures
Spring Break from 1/18/2025to 1/5/2025					
January 4	2	The foundations of distinction between the village and the city	Chapter Six | Distinction between village and city residents	In-person lectures	lectures In-person lectures
February 1	2	**Identify the economic basis of cities**	**Chapter Seven | The economic basis of cities**	In-person lectures	lectures In-person lectures
February 2	2	Get to know the city's residents	Chapter Eight | the citizens	In-person lectures	lectures In-person lectures
February 3	2	Identify the characteristics and composition of the city's population	Characteristics and composition of the city's population	In-person lectures	lectures In-person lectures
February 4	2	Uses and purposes of rural settlements	Chapter Nine| Types of uses for rural settlements	In-person lectures	lectures In-person lectures
March 1	2	Identify the problems of rural society and their causes	Chapter Ten| Rural problems and their types	In-person lectures	lectures In-person lectures

March 2	2	Identifying the morphology of the Arab Islamic city	Chapter Eleven | Morphology of the Arab-Islamic city	In-person lectures	lectures In-person lectures
March 3	2	Getting to know the city of Haya and the stages of its development	Learn about the most important industries that the city of Hit is famous fo	In-person lectures	lectures In-person lectures
March 4	2	Getting to know a modern city and the stages of its development	Stages of a modern city and its development	In-person lectures	lectures In-person lectures
April 1	2	Chapter Twelve| The regional relationship of the city of Hit	Twelve| The regional relationship of the city of Hit	In-person lectures	lectures In-person lectures
April 2	2	The regional relationship between the city and its countryside	relationship between the city and its countryside	In-person lectures	lectures In-person lectures
April 3	2	Study the spatial relationship and measure the degree of its effectiveness	Knowing the types of spatial relationships	In-person lectures	lectures In-person lectures
April 4	2	itRecognizing the importance of economic relations between the countryside and the city	The importance of the industrial relationship and its connection between the countryside and the city	In-person lectures	lectures In-person lectures
May 1	2	Population relations and their importance	Population migration towards other regions	In-person lectures	lectures In-person lectures
May 2	2			Method of solving problems	_____

May 3,4	___			exams final	——

11. Course Evaluation

50 marks for the annual endeavor, 25 marks for each semester, divided as follows:

20 marks for the written exam

5 marks per day, distributed among daily exams or reports

50 marks for end-of-year exam

12. Learning and Teaching Sources

Required textbooks (curricular books, if any)	- All books prescribed for the subject, modern ones
Main references (sources)	-The methodological book (Rural Geograph written by Mazen Abdul Rahman Al-Hiti, Co Education for the Human Sciences, Anbar University, Amman, 1st edition, 2007
Recommended books and references (scientific journal, reports	1-Abdul Razzaq Abbas Hussein, Geography of Urban Affairs, 2006. 2- Salah Daoud, The Phenomenon of Overtaking in Cities, Al-Ustad Magazine, Issue 1, College of Education, Ibn Rushd, 2007. I recommend adopting modern sources, including the book Rural Geography, as well as all academic studies and published scientific research related to the vocabulary of the subject.
Electronic References, Websites	[- All studies published on websites related to rural geography

Course Description Form

1. Course name	
Seas and oceans	
2. Course code	
G PG445	
3. Semester/Year	
2024 -2025	
4. Date this description was prepared	
Theoretical and practical in-person lectures	
6. Number of study hours (total) / Number of units (total)	
60Hour / 4 units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Dr. Ali Abdullah Musa Khalaf Al-JubouriEmail Ali.Mousa@tu.edu.iq	
8. Course objectives	
Subject objectives	**numbers Researchers Specialists in area material Seas and oceans. -1** **Contribution in to treat Problems that facing Students in to learn material Seas and oceans And guide them Orientation Professional Correct. -2** **practice on Use network Information International in Access to the reviewer And information Required. -3**

Ability on Dealing with Indexes Libraries And indexes Bibliography To get on the reviewer And sources Required.	

9. Teaching and learning strategies

Using brainstorming to develop skills. -1 Use collective thinking to produce correct information. -2 Rise Students Prepared by The lecture And display it on their colleagues then to open door Discussion. -3 Assignment The student Using network Information In a way Positive verification Interest From it. -4 training The student on Usage Correct For references.	Strategy

10. Course Structure

Evaluation method	Learning method	Required learning outcomes	Watches	The week
Tests	**In-person lectures**	**Get to know the students**	3	1
Tests	**In-person lectures**	**Introducing students to the importance of oceans and seas** **Grading and testing system**	3	2
In-person tests	**In-person lectures And practical**	**Learn about the concept of oceanography and its development, and what are the sources of information in on-site investigation.**	3	3
Homework	**Lectures**	**The concept of geography of seas and oceans**	3	4
Homework	**Lectures**		3	5

		Theories of the origin of seas and oceans		
Homework	**Lectures**	**The theory of contraction and asteroids**	3	6
Homework	**Lectures**	**Moon drift theory - continental drift theory**	3	7
Homework	**Lectures**	**theorytectonic plates**	3	8
Homework	**Lectures**	**Theory Aocean floor spreading**	3	9
Homework	**Lectures**	**Spatial distribution of seas**	3	10
Homework	**Lectures**	**Spatial distribution of oceans**	3	11
Homework	**Lectures**	**Spatial distribution of bays**	3	12
Homework	**Lectures**	**Spatial distribution of straits**	3	13
Homework	**Lectures**	**Water movement in the seas**	3	14
Homework	**Lectures**	**Water movement in the oceans**	3	15
Homework	**Lectures**	**Waves, tides and ocean currents**	3	16
spring break				
			3	
Homework	**Lectures**	**Classification of seas and oceans based on salinity**	3	17
Homework	**Lectures**	**Classification of seas and oceans based on geographical location**	3	18
Homework	**Lectures**	**The importance and types of modern seas**	3	19
Homework	**Lectures**	**The importance of seas**	3	20

		and oceans and the vastness of their water cover		
Homework	**Lectures**	**Properties Physical / Temperature / Density / Color /**	3	21
Homework	**Lectures**	**Chemical Properties / Water / Seas / Oceans**	3	22
Homework	**Lectures**	**The importance of seas and oceans in the movement of human races**	3	23
Homework	**Lectures**	**Ocean waves/currents**	3	24
Homework	**Lectures**	**Coasts / Coast Classification**	3	25
Homework	**Lectures**	**Positive topographic phenomena of sea and ocean floors**	3	26
Homework	**Lectures**	**Negative topographic phenomena of sea and ocean floors**	3	27
Homework	**Lectures**	**Coastal geomorphological phenomena**	3	28
		Final exams		29

11. Course Evaluation
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam
12. Learning and teaching resources

Mahdi Al-Sahaf. Seas and Oceans -1 **Quality Hassanein Quality-Seas and oceans**	Main References (Sources)
All sources related to seas and oceans and foreign research in this field -1	Recommended supporting books and references...)
International scientific sites such as:Research GateTo be able to download reliable international scientific research on the subject of seas and oceans 1-	Electronic references, websites

Course Description Form

1. Course name	
Geomorphology is the science of the Earth's surface shapes.	
2. Course code	
109GGe	
3. Semester/Year	
2024 -2025	
4. Date this description was prepared	
Theoretical and practical in-person lectures	
6. Number of study hours (total) / Number of units (total)	
60Hour / 4 units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Asst. Prof. Dr. Raja Khalil Ahmed Al-JubouriEmail Raja.Khalil@tu.edu.iq	
8. Course objectives	
1- Enabling students to recognize the relationship between geomorphology, its history and development. **2- Enabling students to know the impact of geomorphological factors and processes on the Earth's topography and its formation.** **3- Introducing the student to the importance of the Earth's surface shapes**	Subject objectives

and the possibility of investing in and applying them. **4- Enabling students to distinguish between processes.** **Geomorphology Internal and external** **What are its effects?**	
9. Teaching and learning strategies	
- Using brainstorming to develop skills. **- Discussion method in daily lecture Inside the classroom - using scientific videos and illustrations to explain the most important geomorphological phenomena.** **-Field work through field visits and laboratory**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
Tests	**In-person lectures**	**Student recognition**	**Get to know the students**	3	1
Tests	**In-person lectures**	**Vocabulary, most important sources, definition of the examination system and distribution of grades**	**Introducing students to the most important scientific sources in the field of geomorphology** **Grading and testing system**	3	2
In-person tests	**In-person lectures And practical**	**The concept and definition of geomorphology, its topics and methodolo**	**Understanding the concept of geomorphology**	3	3

		gy			
In-person tests	**In-person lecturesAnd practical**	**The origin of geomorphology, its importance and its most prominent scientists Its relationship with other sciences**	**Learn about the relationship between geometry and other sciences**	3	4
In-person tests	**In-person lecturesAnd practical**	**History of the development of geomorphology**	**Learn about the history of your development in the science of gemmology. The most important fields. The ten basic concepts of the science of gemmology.**	3	5
In-person tests	**In-person lecturesAnd practical**	**The universe and the solar system**	**Learn about the concept of the universe and the solar system**	3	6
In-person tests	**In-person lecturesAnd practical**	**Earth and its components**	**Learn about the Earth and its composition**	3	7
In-person tests	**In-person lecturesAnd practical**	**Landforms, rocks and their types**	**Learn about landforms and their types** **Rocks, their composition, and their types**	3	8
In-person tests	**In-person lecturesAnd work**	**internal processes of the earth**	**Identify the types of internal ground operations**	3	9
In-person	**In-person**		**Understanding**	3	10

tests	**lecturesAnd work**	**Earthquakes and volcanoes, their concept, types and causes**	**the concept of earthquakes, volcanoes, their causes, types and distribution**		
In-person tests	**In-person lectures And work**	**Weathering, soil and rock fragment movement**	**Learn about weathering And the movement of crumbs**	3	12
In-person tests	**In-person lecturesAnd work**	**Winds and deserts The role of drought and wind in nature**	**Understand the concept of winds, deserts and their problems**	3	13
In-person tests	**In-person lecturesAnd work**	**Desertification phenomenon and methods of sand dune stabilization**	**Identifying and treating desertification**	3	14
In-person tests	**In-person lecturesAnd work**	**Running water and its work**	**Learn about running water and its operation.**	3	15
In-person tests	**In-person lecturesAnd work**	**Groundwater and its work**	**Understand the concept of groundwater and its function**	3	16
spring break 2025/3/1-2025/3/8					
In-person tests	**In-person lecturesAnd work**	**Landforms resulting from groundwater**	**Identify the most important landforms of groundwater**	3	17
In-person tests	**In-person lecturesAnd practical**	**Seas and coasts**	**Understand the concept of coasts and seas**	**3**	**18**
In-person tests	**In-person lecturesAnd practical**	**Geomorphic structural work of the seas**	**Get to knowAFor the construction work of the seas**	3	19
In-person tests	**In-person lecturesAnd practical**	**The structural work of marine organisms and coral**	**Learn about construction work**	3	20

		reefs			
In-person tests	In-person lecturesAnd practical	Ice and refrigerators	Understand the concept of ice and refrigerators	3	21
In-person tests	In-person lectures And practical	Glacial geomorphological forms	Identify the most important forms of glaciers	3	22
In-person tests	In-person lectures And practical	Different geomorphological environments	Identify the most important geomorphological environments	3	23
In-person tests	In-person lectures And practical	Geomorphological regions of the world	Learn about the geomorphological regions of the world	3	24
In-person tests	In-person lecturesAnd practical	Structural geomorphology	Learn about morphotectonics	3	25
In-person tests	In-person lecturesAnd practical	Applied Geophysics	Learn about the most important applied projects	3	26
In-person tests	In-person lectures And practical	In the field of mining, oil and groundwater	Learn about the importance of geothermal energy in mining, oil and groundwater.	3	27
In-person tests	In-person lectures And practical	The role of geomorphology in the construction of roads, irrigation, dams and reservoirs	Get to knowThe relationship betweenGemor and road projects, irrigation, dams and reservoirs	3	28
In-person tests	In-person lectures And practical	The role of geomorphology in improving and refining rivers	Understand the relationship between geography and river drainage	3	29
In-person tests	In-person lectures And practical	The role of geomorphology in military movements, natural resources and the	Recognizing the importance of geoscience in the military aspect and the search for, exploitation of, and preservation of	3	30

		environment	**natural resources.**		
Testsimmanence	**Lectures theimmanence** And practical	**Geomorphology of reservoirs**	**Learn about reservoir geomorphology and its importance**	3	31
			Final exams	__	

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks for the daily course, distributed between daily exams, practical work, or reports. 50 marks final exam	
12. Learning and teaching resources	
Primary source **Geomorphology, Prof. Adnan Al-Naqqash and Prof. Mahdi Al-Sahaf**	Main References (Sources)
Hassan Sayed Ahmed Abu El-EneinN (Principles of Geomorphology). /Secondary source - **Saad Jassim Mohammed, Yassin Dahi Awad, Fundamentals of Geomorphology** - **Secondary sourceY**	Recommended supporting books and references...)
https://books4arab.me/%D9%83%D8%AA%D8%A7%D8%A8-%D8%A7%D9%84%D8%AC%D9%8A%D9%88%D9%85%D9%88%D8%B1%D9%81%D9%88%D9	Electronic references, websites

%84%D9%88%D8%AC%D9%8A%D8%A7-%D8%B9%D9%84%D9%85-%D8%A3%D8%B4%D9%83%D8%A7%D9 %84-%D8%B3%D8%B7%D8%AD-%D8%A7%D9%84/	

Course Description Form

1. Course name	
Environment and pollution	
2. Course code	
G ISO 452	
3. Semester/Year	
2024- 2025	
4. Date this description was prepared	
18 /9/2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / Number of units (total)	
60hour /4Units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Dr. Rowaida Fouad Abdullah **Email:** rfouad@tu.edu.iq	
8. Course objectives	
1-TDocument CapabilityStudentsin Environment and pollution. **2- Introducing the student to the environment and its pollution.** **3- Introducing the student to some of the methods of environmental pollution and drawing up an integrated strategy to analyze them.** **4- Increase the student's ability to develop**	Subject objectives

solutions to environmental problems. **5- Developing the student's abilities in spatial analysis methods in studying the environment and pollution.**	
9. Teaching and learning strategies	
- Using brainstorming to develop skills. **- Discussion method in daily lectureInside the classroom.**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	In-person lectures	Definition of ecology	Understand the concept of ecology	2	September3
In-person tests	In-person lectures	Environment Sections	Learn about the environmental departments	2	September 4
In-person tests	In-person lectures	Biotic elements	Get to knowBiotic elements	2	October1
In-person tests	In-person lectures	Abiotic environment elements	Get to knowAbiotic environment elements	2	October2
In-person tests	In-person lectures	human systems or human environment	Get to knowhuman systems or human environment	2	October3
In-person tests	In-person lectures	Systemsnaturalor the environmentNatural	Get to knowSystemsnaturalor the environmentnaturalAnd	2	October4
In-person tests	In-person lectures	The relationship between geography and ecology	Get to knowThe relationship between geography and ecology	2	November1
In-person tests	In-person lectures	ecosystem balance	Get to knowecosystem balance	2	November2
In-person tests	In-person lectures	Eco-Schools	Get to knowEco-Schools	2	November3
In-person	In-person	Man in the	Get to knowMan	2	November4

tests	**lectures**	**face of environmental challenges**	**in the face of environmental challenges**		
In-person tests	**In-person lectures**	**Environmental problem concept**	**Get to knowEnvironmental problem concept**	2	December1
In-person tests	**In-person lectures**	**Causes of environmental problems**	**Get to knowCauses of environmental problems**	2	December 2
In-person tests	**In-person lectures**	**Classification of environmental problems**	**Get to knowClassification of environmental problems**	2	December3
In-person tests	**In-person lectures**	**Pollution concept**	**Get to knowPollution concept**	2	December4
Spring break from5/1/2025 to18/1/2025					
In-person tests	**In-person lectures**	**A brief history of pollution**	**Get to knowHistory of pollution**	2	January3
In-person tests	**In-person lectures**	**Spread of pollution**	**Get to knowSpread of pollution**	2	January4
In-person tests	**In-person lectures**	**Pollution Control Developments**	**Get to knowPollution Control Developments**	**2**	February1
In-person tests	**In-person lectures**	**Sources of pollution**	**Get to knowSources of pollution**	2	February2
In-person tests	**In-person lectures**	**Pollution sections**	**Get to knowPollution sections**	2	February 3
In-person tests	**In-person lectures**	**Stages of pollution**	**Get to knowStages of pollution**	2	February 4
In-person tests	**In-person lectures**	**Types of pollutants**	**Get to knowTypes of pollutants**	2	March 1
In-person tests	**In-person lectures**	**Environmental Protection in United Nations International Law**	**Get to knowEnvironmental Protection Laws in United Nations International Law**	2	March 2
In-person tests	**In-person lectures**	**The most important**	**Get to knowThe most important**	2	March 3

		international organizations for environmental protection	**international organizations for environmental protection**		
In-person tests	**In-person lectures**	**Air pollution problem and sources of air pollution**	**Get to knowAir pollution problem and sources of air pollution**	2	March 4
In-person tests	**In-person lectures**	**Treating air pollution**	**Get to knowTreating air pollution**	2	April1
In-person tests	**In-person lectures**	**Water pollutionandSources of water pollution**	**Get to knowWater pollutionandSources of water pollution**	2	April 2
In-person tests	**In-person lectures**	**Water pollution treatment**	**Get to knowWater pollution treatment**	2	April3
In-person tests	**In-person lectures**	**Desertification problem, its degrees and manifestations**	**Get to knowDesertification problem, its degrees and manifestations**	2	April4
In-person tests	**In-person lectures**	**Factors affecting desertification**	**Get to knowFactors affecting desertification**	2	Mays 1
Testsimmanence	**Lecturestheimmanence**	**Treating desertification**	**Get to knowTreating desertification**	2	Mays 2
			Final exams	___	Mays3,4

11. Course Evaluation

50 points for annual pursuit, 25 points for each semester, divided as follows:

20 marks for the written exam

5 marks per day, distributed between daily exams or reports.

50 marks final exam	
12. Learning and teaching resources	
-Environmental Science and Pollution. Prof. Dr. Hussein Al-Saadi. **- Basics of Environmental Science. Prof. Ibrahim Abdel Rahman.**	Required textbooks (methodology if any)
- Man, the environment and contemporary environmental problems Dr. Essam Abbas Babiker Karar **- Environmental Geography and Pollution Dr. Abbas Zgheir Mohsen Al-Mariani**	Main References (Sources)
- Watching TV programmes and video reports about the environment and pollution. **- Identifying the studies and research conducted by graduate students and lecturers in the field of environment and pollution.**	Recommended supporting books and references (scientific journals, reports...)
nothing	Electronic references, websites

Course Description Form

1. Course name	
Urban Geography	
2. Course code	
GMHIAH 337	
3. Semester/Year	
2024- 2025	
4. Date this description was prepared	
18/9 /2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / Number of units (total)	
60hour /4Units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Dr. Rowaida Fouad Abdullah **Email: rfouad@tu.edu.iq**	
8. Course objectives	
A- Developing students' ability to understand the characteristics of urban problems, their causes and solutions within a real-world environment. B- Providing students with the knowledge and ideas to identify the most important sources of obtaining geographical data on cities, including data available from the Ministry of Housing and	Subject objectives

the Central Agency for Statistics, in addition to books and references related to the subject. C- Enabling students to understand the basic rules of cities and activating their role in developing them on the ground.	

9. Teaching and learning strategies

- Using brainstorming to develop skills. **- Discussion method in daily lectureInside the classroom.**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	**In-person lectures**	**Chapter One / Urban Geography, Its Importance**	**Learn about the concept of urban geography and its importance**	2	September3
In-person tests	**In-person lectures**	**GoalsUrban Geographyand methods of searching in it**	**Get to knowGoalsUrban Geography, andknowledgeWays to search it**	2	September 4
In-person tests	**In-person lectures**	**Chapter Two / The City and Urban Development, the Foundations of Distinguishing the City from the Village**	**Get to knowCity and urban development,And knowledgeThe basis for distinguishing the city from the village**	2	October1
In-person tests	**In-person lectures**	**urbanization, urbanism**	**Understanding my conceptsUrbanization And urban**	2	October2
In-person tests	**In-person lectures**	**Location and position**	**Understanding my conceptsthelocationAndLocation**	2	October3

			and the difference between them		
In-person tests	**In-person lectures**	**Chapter Three / The Internal Structure of the City and Its Theories, The Theory of Concentric Circles**	**Get to knowThe internal structure of the city and its theories,andconcentric circle theory**	2	October4
In-person tests	**In-person lectures**	**concentric circle theory**	**Get to knowconcentric circle theory**	2	November1
In-person tests	**In-person lectures**	**Sector theory, multiple nuclei theory**	**Get to knowsector theoryandmultiple nuclei theory**	2	November2
In-person tests	**In-person lectures**	**Controls of the internal structure of cities and the factors affecting them**	**Get to knowControls of the internal structure of cities and the factors affecting them**	2	November3
In-person tests	**In-person lectures**	**Chapter Four / City Land Uses**	**Get to knowCity land uses**	2	November4
In-person tests	**In-person lectures**	**Commercial zoning methods, other commercial use patterns**	**Get to knowMethods of determining the commercial area And knowledgeOther commercial uses**	2	December1
In-person tests	**In-person lectures**	**Industrial job**	**Get to knowIndustrial job**	2	December 2
In-person tests	**In-person lectures**	**Residential function**	**Get to knowResidential function**	2	December3
In-person tests	**In-person lectures**	**Recreational function**	**Get to knowRecreational function**	2	December4
Spring break from5/1/2025 to18/1/2025					
In-person tests	**In-person lectures**	**Chapter Five / Classification of Cities**	**Get to knowCities classification**	2	January3

In-person tests	**In-person lectures**	**Job classification**	**Get to knowJob classification**	2	January4
In-person tests	**In-person lectures**	**Chapter 6 / City Sizes**	**Get to knowCity sizes**	2	February 1
In-person tests	**In-person lectures**	**Chapter Seven / The Economic Basis of Cities**	**Get to knowThe economic basis of cities**	2	February2
In-person tests	**In-person lectures**	**Chapter Eight / The City People**	**Get to knowCity dwellers**	2	February 3
In-person tests	**In-person lectures**	**Characteristics and composition of the city's population**	**Get to knowCharacteristics and composition of the city's population**	2	February 4
In-person tests	**In-person lectures**	**Chapter Nine / Central Places Theory**	**Get to knowcentral place theory**	2	March 1
In-person tests	**In-person lectures**	**Chapter 10/ City problems, pollution, water supply in cities**	**Get to knowCity problems, pollution, urban water supply**	2	March 2
In-person tests	**In-person lectures**	**Chapter Eleven / Morphology of the City**	**Get to knowCity Morphology**	2	March 3
In-person tests	**In-person lectures**	**Morphological stages of the Arab-Islamic city**	**Get to knowMorphological stages of the Arab-Islamic city**	2	March 4
In-person tests	**In-person lectures**	**Baghdad city and its stages of development**	**Get to knowBaghdad city and its stages of development**	2	April1
In-person tests	**In-person lectures**	**Jeddah city and its stages of development**	**Get to knowJeddah city and its stages of development**	2	April 2
In-person tests	**In-person lectures**	**Chapter Twelve / The Relationship between the Region of Medina and its Region**	**Get to knowThe relationship between the city and its region**	2	April3
In-person tests	**In-person lectures**	**The regional relationship**	**Get to knowThe regional**	2	April4

		between the city and the countryside	**relationship between the city and the countryside**		
In-person tests	**In-person lectures**	**suburbs and urban outskirts**	**Get to knowsuburbs and urban outskirts**	2	Mays1
Testsimm anence	**Lecturesthe immanence**	**Reasons for the emergence of suburbs**	**Get to knowReasons for the emergence of suburbs**	2	Mays2
			Final exams	__	Mays3,4

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
-Sabri Faris Al-Hiti, Saleh Falih Hassan, Geography of Cities, Dar Al-Kutub for Printing and Publishing, University of Mosul, 2000.	Required textbooks (methodology if any)
- The textbook (Urban Geography) written by Prof. Dr. Bashir Ibrahim Al-Tayef and Prof. Dr. Salah Daoud Salman, 2017	Main References (Sources)
1- Abdul Razzaq Abbas Hussein, Geography of Cities, 2006. **2- Haider Abdul Razzaq Kamouna, Urban Planning, 1st ed., General Cultural Affairs House, Baghdad, 2007.** **3- Salah Daoud, The Phenomenon of Encroachment in Cities, Al-Ustadh Magazine, Issue 1, Ibn Rushd College of Education, 2007.**	Recommended supporting books and references (scientific journals, reports...)
https://apps.who.int/iris/bitstream/handle/10665/329429/9789240006119-ara.pdf	Electronic references, websites

Course Description Form

1. Course name	
Geography of services	
2. Course code	
GSG 456	
3. Semester/Year	
2024- 2025	
4. Date this description was prepared	
18 /9/2024	
5. Available forms of attendance	
In-person lectures	
6. Number of study hours (total) / Number of units (total)	
60hour /4Units	
7. Name of the course supervisor (if more than one name is mentioned)	
the name: Dr. Rowaida Fouad Abdullah	**Email: rfouad@tu.edu.iq**
8. Course objectives	
1- Identifying the importance of the service sector and its relationship to geography by students and revealing the basic justifications for studying it. 2- Preparing scientific cadres specialized in studying this sector, understanding its problems, and qualifying them to carry out this scientific role.	Subject objectives

3- Developing students' abilities and enhancing their scientific capabilities to delve into the study of this vital sector to achieve the general benefit of the complex. 4- Urging researchers and academics to pay attention to this scientific branch and give it more importance in study and research..	

9. Teaching and learning strategies	
- Using brainstorming to develop skills. **- Discussion method in daily lectureInside the classroom.**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	In-person lectures	Geography of Services - Concept and Importance	Understand the concept of service geography and its importance	2	September 3
In-person tests	In-person lectures	Geography and Services Study	Learn about geography and study services	2	September4
In-person tests	In-person lectures	Services and city geography	Understand the relationship between services and urban geography	2	October1
In-person tests	In-person lectures	Evolution of the concept of services	Learn about the development of the concept of services	2	October2
In-person tests	In-person lectures	The importance of services in cities and urban centers	Recognizing the importance of services in cities and urban centers	2	October3
In-person tests	In-person lectures	The nature of urban services in cities	Identify the nature of urban services in cities	2	October4
In-person tests	In-person lectures	Services classification	Learn about the classification of services	2	November 1
In-person	In-person	Localization of services	Identifying the localization of	2	November 2

tests	**lectures**		**services**		
In-person tests	**In-person lectures**	**Service planning**	**Learn about service planning**	2	November 3
In-person tests	**In-person lectures**	**Spatial levels of service planning**	**Identifying the spatial levels of service planning**	2	November 4
In-person tests	**In-person lectures**	**Service Planning Methodology**	**Learn about service planning methodology**	2	December1
In-person tests	**In-person lectures**	**Service planning stages**	**Learn about the stages of service planning**	2	December 2
In-person tests	**In-person lectures**	**Problems hindering service planning**	**Identifying problems hindering service planning**	2	December3
In-person tests	**In-person lectures**	**Service characteristics and evaluation**	**Identify and evaluate service characteristics**	2	December4
Spring break from5/1/2025 to18/1/2025					
In-person tests	**In-person lectures**	**The importance of characteristics in service signature**	**Understand the importance of attributes in service signatures**	2	January3
In-person tests	**In-person lectures**	**Service localization patterns and components**	**Identifying service localization patterns and their components**	2	January4
In-person tests	**In-person lectures**	**Earth systems (natural) and their relationship to the city and service provision**	**Identifying the Earth's (natural) systems and their relationship to the city and the provision of services**	**2**	**February1**
In-person tests	**In-person lectures**	**Human systems and their relationship to the city and service provision**	**Identify human systems and their relationship to the city and service provision.**	2	February2
In-person tests	**In-person lectures**	**Basic services map (concept - objectives - importance)**	**Learn about the basic services map (concept - objectives - importance)**	2	February 3
In-person tests	**In-person lectures**	**Service Planning Standards**	**Get to knowService Planning Standards**	2	February 4
In-	**In-**	**Basic**	**Get to knowBasic**	2	March 1

person tests	**person lectures**	**foundations for setting urban planning standards**	**foundations for setting urban planning standards**		
In-person tests	**In-person lectures**	**Conditions for preparing urban planning standards**	**Learn about the conditions for preparing urban planning standards**	2	March 2
In-person tests	**In-person lectures**	**Factors affecting the determination of urban planning standards**	**Identify the factors affecting the determination of urban planning standards**	2	March 3
In-person tests	**In-person lectures**	**Services and sustainable development**	**Get to knowServices and sustainable development**	2	March 4
In-person tests	**In-person lectures**	**Urban development and service delivery**	**Get to knowUrban development and service delivery**	2	April1
In-person tests	**In-person lectures**	**Urban Service Delivery Standards in Iraq**	**Identifying the standards for providing urban services in Iraq**	2	April 2
In-person tests	**In-person lectures**	**Some concepts of spatial organization of services**	**Learn some concepts of spatial organization of services**	2	April3
In-person tests	**In-person lectures**	**Community Services**	**Learn about community services**	2	April4
In-person tests	**In-person lectures**	**Health services - and recreational services**	**Learn about health services and recreational services**	2	Mays 1
Testsim manence	**Lectures theimma nence**	**Infrastructure Services**	**Learn about infrastructure services**	2	Mays 2
			Final exams	___	Mays3,4

11. Course Evaluation

50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
- Geography of Services / Dr. Fouad Ghadhban - 2013 **-Geography of services Foundations and concepts / Dr. Mazen Abdel Rahman-2013**	Required textbooks (methodology if any)
- Geography of Services / Dr. Bashir Ibrahim Al-Tayef and others **- Geography of Services / Dr. Khaled Mohammed bin Amur**	Main References (Sources)
-ResearchStudentsPostgraduate studies on services. ResearchInstructorsAbout Services.	Recommended supporting books and references (scientific journals, reports...)
nothing	Electronic references, websites

1. Name of the course
2 Headquarters Code 21
3rd Semester / Year 2024
4 Date of preparation of this description 2024/3/1
5 Available Attendance Forms In-person Lectures
6. Total number of study hours) / 60 hours Number of units (total) 4
60 hours / 4 units
7. Name of the course administrator if more than one name is mentioned.
Email: nabera.hu.edu.iq Name: M.M. Nadra Helan Yaqoub
8 Course objectives

Developing students' ability to understand what teaches • The biography of the Prophet and its various aspects, and knowing the differences between it and the circumstances and the differences in historical sources. This course aims to cover the most important pillars of... • The political aspect of this science and the recognition of the change in the invasions and raids during the era of prophecy Introducing students to methods of adaptation and mitigation • From the severity and extremism of the apostates	Objectives of the study subject

And teaching and learning strategies

Using brainstorming to develop skills _ Discussion method in the daily lecture inside the hall. _	Strategy

10. Course structure

road Evaluation	Learning method	Learning outcomes: Name of the unit or topic	required	Watches	week

Inside the hall.	

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week
Attendance tests	In-person lectures	Chapter One / Introduction to life Messenger (PBUH)	Identify the concept of the Prophet's biography	2	September 3
Attendance tests	In-person lectures	Birth of the Prophet (PBUH)	Learn about the lineage and ancestors of the Messenger (PBUH)	2	September 4
Attendance tests	In-person lectures	Chapter Two / The New Arab Islamic State	Learn about the prophetic mission		October 2 1
Attendance tests	In-person lectures	The prophetic mission	The origin of the Messenger (PBUH)		October 22
Attendance tests	In-person lectures	Includes immigration and boycott of Banu Hashim	Migration to Abyssinia	2	October 3
Attendance tests	In-person lectures	The first and second pledge of allegiance at Aqaba	They sold Aqaba	2	October 4
Attendance tests	In-person lectures	Migration to Medina	Learn about immigration	2	November 1
Attendance tests	In-person lectures	Invasions and companies	Learn about the raids and expeditions	2	November 2
Attendance tests	In-person lectures	The Great Battle of Badr	Learn about the Battle of Badr	2	November 3
Attendance tests	In-person lectures	The Battle of Uhud	Recognizing the conquest of Uhud		November 2 4
Tests	Lectures	The invasion of the parties	Getting to know Ghazwa		December 1 2

Inside the hall.	

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week
Attendance tests	In-person lectures	Chapter One / Introduction to life Messenger (PBUH)	Identify the concept of the Prophet's biography	2	September 3
Attendance tests	In-person lectures	Birth of the Prophet (PBUH)	Learn about the lineage and ancestors of the Messenger (PBUH)	2	September 4
Attendance tests	In-person lectures	Chapter Two / The New Arab Islamic State	Learn about the prophetic mission		October 2 1
Attendance tests	In-person lectures	The prophetic mission	The origin of the Messenger (PBUH)		October 22
Attendance tests	In-person lectures	Includes immigration and boycott of Banu Hashim	Migration to Abyssinia	2	October 3
Attendance tests	In-person lectures	The first and second pledge of allegiance at Aqaba	They sold Aqaba	2	October 4
Attendance tests	In-person lectures	Migration to Medina	Learn about immigration	2	November 1
Attendance tests	In-person lectures	Invasions and companies	Learn about the raids and expeditions	2	November 2
Attendance tests	In-person lectures	The Great Battle of Badr	Learn about the Battle of Badr	2	November 3
Attendance tests	In-person lectures	The Battle of Uhud	Recognizing the conquest of Uhud		November 2 4
Tests	Lectures	The invasion of the parties	Getting to know Ghazwa I		December 1 2

Urbanism	Urbanism		Lad Al-Sham		
Attendance tests	In-person lectures	Conquest of Egypt	Getting to know Egypt	2	April 2
Attendance tests	In-person lectures	The victory of the Arabs over the Persians and the Romans	Identify the factors that facilitated the Arabs' victory over the Romans	2	April 3
Attendance tests	In-person lectures	Omar's death	Get to know Nashaat Omar	2	April 4
Attendance tests	In-person lectures	His lineage and birth	Learn about the Caliphate of Uthman bin Affan (may Allah be pleased with him)	2	May 1
Attendance tests	In-person lectures	Conquest of Andalusia	Uthman's conquests	2	mais 2
———	———	Final exams		———	Mays 3.4

11. Course evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12 Learning and Teaching Resources	
Biography of the Prophet / Hashem Yahya Al-Mallah	Required textbooks (methodology if any)
Ibn Hisham Al-Maghazi died in the year 218	Main References (Sources)
Al-Waqidi Biography and Battles Al-Tabari / The Messengers and Kings	Supporting books and references recommended by journals Scientific reports....)
E.maiL:DarKitb2003@Yahoo>COM>	Electronic references Internet sites

نموذج وصف المقرر

1. اسم المقرر	
البحار والمحيطات	
2. رمز المقرر	
G PG445	
3. الفصل / السنة	
2024 -2025	
4. تاريخ إعداد هذا الوصف	
محاضرات حضورية نظري وعملي	
6. عدد الساعات الدراسية (الكلي) / عدد الوحدات (الكلي)	
60 ساعة / 4 وحدات	
7. اسم مسؤول المقرر الدراسي (اذا اكثر من اسم يذكر)	
الاسم: م.د.علي عبدالله موسى خلف الجبوري	الايميل Ali.Mousa@tu.edu.iq
8. اهداف المقرر	
اهداف المادة الدراسية	**1- اعداد باحثين متخصصين في مجال مادة البحار والمحيطات .** **2- المساهمة في معالجة المشكلات التي تواجه الطلبة في تعلم مادة البحار والمحيطات وتوجيههم التوجيه المهني الصحيح .** **3- التمرس على استخدام شبكة المعلومات الدولية في الوصول إلى المراجع والمعلومات المطلوبة.** **المقدرة على التعامل مع فهارس المكتبات والفهارس الببليوغرافية للحصول على المراجع والمصادر المطلوبة.**

9. استراتيجيات التعليم والتعلم

الاستراتيجية	1- استعمال طريقة العصف الذهني في تنمية المهارات . 2- استعمال التفكير التجمعي لانتاج معلومات صحيحة. 3- قيام الطلبة بإعداد المحاضرة وعرضها على زملائهم ثم فتح باب النقاش. 4- تكليف الطالب باستخدام شبكة المعلومات بطريقة إيجابية تحقق الفائدة منها. تدريب الطالب على الاستخدام الصحيح للمراجع.

10. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	طريقة التعلم	طريقة التقييم
1	3	**التعرف على الطلبة**	**المحاضرات الحضورية**	**اختبارات**
2	3	**تعريف الطالبات بأهمية مادة البحار و المحيطات** **ونظام الدرجات والاختبارات**	**المحاضرات الحضورية**	**اختبارات**
3	3	**التعرف على مفهوم علم البحار و المحيطات وتطوره وماهي مصادر المعلومات في التحري الموقعي.**	**المحاضرات الحضورية وعملي**	**اختبارات حضورية**
4	3	**مفهوم جغرافية البحار والمحيطات**	**المحاضرات**	**واجبات بيتية**
5	3	**نظريات نشأة البحار والمحيطات**	**المحاضرات**	**واجبات بيتية**
6	3	**نظريه الانكماش و الكويكبات**	**المحاضرات**	**واجبات بيتية**
7	3	**نظريه انسلاخ القمر ـ نظريه زحزحة القارات**	**المحاضرات**	**واجبات بيتية**
8	3	**نظريه الصفائح التكتونية**	**المحاضرات**	**واجبات بيتية**
9	3	**نظريه انتشار قاع المحيط**	**المحاضرات**	**واجبات بيتية**
10	3	**التوزيع المكاني للبحار**	**المحاضرات**	**واجبات بيتية**
11	3	**التوزيع المكاني للمحيطات**	**المحاضرات**	**واجبات بيتية**
12	3	**التوزيع المكاني للخلجان**	**المحاضرات**	**واجبات بيتية**

13	3	التوزيع المكاني للمضايق	المحاضرات	واجبات بيتية
14	3	حركة المياه في البحار	المحاضرات	واجبات بيتية
15	3	حركة المياه في المحيطات	المحاضرات	واجبات بيتية
16	3	الامواج و المد والجزر و التيارات المحيطية	المحاضرات	واجبات بيتية
عطلة ربيعية				
	3			
17	3	تصنيف البحار والمحيطات على اساس الملوحة	المحاضرات	واجبات بيتية
18	3	تصنيف البحار والمحيطات عل اساس الموقع الجغرافي	المحاضرات	واجبات بيتية
19	3	اهميه و الانواع البحار الحديثة	المحاضرات	واجبات بيتية
20	3	اهميه البحار والمحيطات ظخامه امتداد غلافها المائي	المحاضرات	واجبات بيتية
21	3	الخصائص الطبيعة / الحرارة / الكثافة / اللون /	المحاضرات	واجبات بيتية
22	3	الخصائص الكيميائية / المياه / البحار / المحيطات	المحاضرات	واجبات بيتية
23	3	اهميه البحار والمحيطات في حركه انتقال السلالات البشرية	المحاضرات	واجبات بيتية
24	3	الامواج / التيارات المحيطية	المحاضرات	واجبات بيتية
25	3	السواحل / تصنيف السواحل	المحاضرات	واجبات بيتية
26	3	الظواهر التضاريسية الموجبة لقيعان البحار والمحيطات	المحاضرات	واجبات بيتية
27	3	الظواهر التضاريسية السالبة لقيعان البحار والمحيطات	المحاضرات	واجبات بيتية
28	3	الظاهرات الجيومرفولوجية الساحلية	المحاضرات	واجبات بيتية
29		الامتحانات النهائية		

11. تقييم المقرر	
50 درجة للسعي السنوي بواقع 25 درجة لكل فصل وتقسم كالاتي: 20 درجة للامتحان التحريري 5 درجات لليومي توزع بين امتحانات يومية او تقارير 50 درجة امتحان آخر السنة	
12. مصادر التعلم والتدريس	
المراجع الرئيسة (المصادر)	**1- مهدي الصحاف . البحار والمحيطات** **جودة حسنين جودة – البحار والمحيطات**
الكتب والمراجع الساندة التي يوصى بها...)	**1- كل المصادر التي تخص البحار والمحيطات والابحاث الأجنبية في هذا المجال**
المراجع الإلكترونية, مواقع الانترنيت	**1- المواقع العلمية العالمية مثل Research Gate لأمكانية تحميل الابحاث العلمية العالمية الرصينة في موضوع البحار والمحيطات**

1. Name of the course
2 Course code 40GG
3rd Semester / Year 2024
4 Date of preparation of this description 2024/3/1
5 forms of attendance available Lectures
6. Number of study hours (total) / 60 hours Number of units (total) 4
7. Name of the course administrator if more than one name is mentioned.
Name: M.M. Nadra Hilan Yaqoub :Email nabera.h[illegible]
8 Course objectives

Developing students' ability to know •	Objectives of the study subject
Glimpses of the history of the Ottoman Empire	
Clarifying the identity of the origin of the Ottoman Empire •	
Knowing the resistance movements that resist •	
The Arab world and how to liberate it	

9 teaching and learning strategies

Using mental skills to develop skills.	Strategy
Discussion method in daily lecture inside	
Study hall	

10. Course structure

road Evaluation	Learning method	Unit name Or the topic	Learning outcomes required	Watches	week

Tests Urbanism	In-person lectures	The emergence of the state Ottoman	Introduction / History Modern of the Arab World	2	September 3
Tests Urbanism	Lectures Urbanism	theory Kibons Cobrely	Theories about the origins of the Ottoman Empire	2	September 4
Attendance tests	In-person lectures	The emergence of the Safavid state	expansion of the Arab world The Ottoman		October 2 1
Attendance tests	In-person lectures	Includes the Portuguese invasion For the Arab Maghreb	The European colonial invasion of the Arab homeland		October 22
Attendance tests	Lectures Urbanism	Includes: Al-Jaza'a, Tripoli and Tunis.	Spanish invasions		October 2 3
Tests Urbanism	In-person lectures	It includes the Levant Egypt and Hijaz And Yemen Iraq	Ottoman control of the Arab world		2 October 4
Tests Urbanism	Lectures Urbanism	Include is Morocco a story	Ottoman control over the Maghreb countries		November 2 1
Attendance tests	In-person lectures	Caliphate government	Chapter Two / The Governance Administration and Systems of the Ottoman Empire		November 2 2
Attendance tests	In-person lectures	It includes: cast The sector of the Janissary forces	military The system of the Ottoman Empire		November 3 2
Tests Urbanism	Lectures Urbanism	The situation except Economic otherwise Social and political taxes and trade	conditions General of the Ottoman Empire		November 4 2
Tests Urbanism	Lectures Urbanism	Mamluks in Baghdad Mamluks	The Ottoman states and local powers		December 1 2

11. Course evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12 Learning and Teaching Resources	
Anis Muhammad The Ottoman Empire and the Levant Arabic Brockelmann / History of Islamic Peoples	Required textbooks (methodology if any)
Hourani Albert Ottoman Foundation of the East | The middle and the modern accompanied Abdul Karim Balad Levant and Egypt since the Ottoman conquest until Napoleon's campaign	Main References (Sources)
Supporting books and references recommended by Islamic state	Al-Shinawi magazines Muhammad Abdul Aziz The Ottoman State Scientific reports...)
Electronic resources in Al-Nour Library For electronic books and the Iraqi warehouse For electronic books	Electronic references, websites

Course Description Form

1. Course name
Geography of Drylands/First Stage
2. Course code
111GDR
3. Semester/Year
2024- 2025
4. Date this description was prepared
9/18/2024
5. Available forms of attendance
In-person lectures
6. Number of study hours (total) / Number of units (total)
60Hour / 4 units
7. Name of the course supervisor (if more than one name is mentioned)
the name: M.M. Mohammed SALAM YOUSIF Email: mohammed.yousif819@tu.edu.iq
8. Course objectives

A- Developing the ability of students to understand the arid and semi-arid regions and their places of distribution within the world and continents. B- Providing students with knowledge and ideas to identify the most important sources of obtaining geoclimatic data and information, including those related to the data available at the Ministry of Transport, as well as books, references and research regarding the material. C- Enabling students to understand the basic rules of dry regions and activating their role in their development on the ground.	Subject objectives

9. Teaching and learning strategies	
- Using brainstorming to develop skills. **- Discussion method in daily lecture Inside the classroom.**	Strategy

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
In-person tests	**In-person lectures**	**Chapter One/Drought and its causes**	**The concept of drought and its causes**	2	November7
In-person tests	**In-person lectures**	**For dry lands**	**dryland concept**	2	November14
In-person tests	**In-person lectures**	**Drought Geography**	**The concept of drought geographically**	2	October the second21
In-person tests	**In-person lectures**	**Causes of drought**	**Natural causes of drought**	2	October28th
In-person tests	**In-person lectures**	**Chapter Two/Arid and semi-arid climate**	**Dry climate**	2	**December 5**
In-person tests	**In-person lectures**	**Köppen classification Benman Thornthwaite classification**	**Climate classifications and their differences**	2	December 12
In-person tests	**In-person lectures**	**Climate elements heat, evaporation, solar radiation**	**Learn about the Köppen classification**	2	December 19
In-person tests	**In-person lectures**	**Benin classification**	**Learn about the Benin classification**	2	December 26
In-person tests	**In-person lectures**	**Thornthwaite classification**	**Learn about Thornthwaite's classification**	2	January 2
In-person tests	**In-person lectures**	**Climatic elements**	**Climatic elements and their**	2	January 9

			characteristics in dry areas		
In-person tests	**In-person lectures**	=	**Arid and semi-arid climate**	2	January 61
In-person tests	**In-person lectures**	**Chapter Three/Landforms in dry areas**	**Identify landforms in dry areas**	2	January 23
In-person tests	**In-person lectures**	**Earth surface shapes formed due to Weathering**	**Surface forms of the Earth that are formed by weathering, erosion and sedimentation.**	2	January 30
In-person tests	**In-person lectures**	**Earth surface forms formed by erosion**	**Earth surface forms formed by erosion**	2	February 6
Spring break from 1/3/2024 to 8/3/2024					
In-person tests	**In-person lectures**	**Chapter 1fourth/**	**Dryland water resources**	2	February 20
In-person tests	**In-person lectures**	**Dryland water resources**	**Main sources of water in dry lands**	**2**	**February27**
In-person tests	**In-person lectures**	**Water is a crucial element in the development of dry areas.**	**Water is a crucial element in the development of dry areas.**	2	March 5
In-person tests	**In-person lectures**	**Main sources of water in dry lands**	**Identify the main sources of water in dry lands**	2	March 12
In-person tests	**In-person lectures**	**On the water resources of the Arab drylands**	**Identifying the water resources of the Arab drylands**	2	March 19
In-person tests	**In-person lectures**	**Chapter 1fifth/dryland dwellers**	**dryland dwellers**	2	March 26
In-person tests	**In-person lectures**	**Population distribution in drylands**	**Identifying population distribution and density in drylands**	2	April 2
In-person tests	**In-person lectures**	**Factors affecting**	**Identify the factors that affect**	2	April 9

		population distribution	**population distribution and density.**		
In-person tests	**In-person lectures**		**Oil and its impact on the economic and social development of the inhabitants of dry lands**	2	April 16
In-person tests	**In-person lectures**	**Chapter 1sixth/Agriculture in dry areas**	**The concept of agriculture in dry areas**	2	April 23
In-person tests	**In-person lectures**	**soil in dry areas**	**The nature of the soil and its suitability for agriculture in dry areas**	2	April 28
In-person tests	**In-person lectures**	**Agriculture in dry areas**	**Agriculture in arid and semi-arid areas**	2	April 28
			Final exams	___	Mays3,5

11. Course Evaluation	
50 points for annual pursuit, 25 points for each semester, divided as follows: 20 marks for the written exam 5 marks per day, distributed between daily exams or reports. 50 marks final exam	
12. Learning and teaching resources	
-D.Qusa Abdul Majeed Al-Samarrai, Geography of Dry Lands	Required textbooks (methodology if any)
-Dr. Abdul Makhour Al-Rayhani, Geography of Dry Lands	Main References (Sources)
1-Geography of dry regions: a geographical perspective ,Hassan Ramadan Salama, 2010	Recommended supporting books and references (scientific journals, reports...)
(PDF) Updated World Map of the Koppen-Geiger Climate Classification (researchgate.net) World Maps of Köppen-Geiger climate classification (vu-wien.ac.at)	Electronic references, websites

1. Program vision
Remember to see the program as stated in the university prospectus and website.

2. Program message
Remember tAskThe program is as stated in the university's bulletin and website.

3. Program objectives
General statements that describe what he intendsthe programOr the institution achieves it.

4. Programmatic accreditation
Dothe programHave program accreditation? From which side?

5. Other external influences
Is there a sponsor? Ofprogram?

6. Program structure				
comments	**percentage**	**Study unit**	**Number of courses**	**Program structure**
				Enterprise requirements
				College requirements
				Department requirements

				summer training
				Other

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

7. Program description				
Credit hours		**Name of the course or course**	**Course or course code**	**Year/level**
practical	**theoretical**			

8. Expected learning outcomes of the program	
Knowledge	
Statement of learning outcomes 1	Learning outcomes 1
Skills	
Statement of learning outcomes 2	Learning outcomes 2
Statement of learning outcomes 3	Learning outcomes 3
Value	
Statement of learning outcomes 4	Learning outcomes 4
Statement of learning outcomes 5	Learning outcomes 5
9. Teaching and learning strategies	
Teaching and learning strategies and methods adopted in implementing the program in general.	
10. Evaluation methods	
Implementing it in all stages of the program in general.	
11. The teaching staff	
Faculty members	

Preparing the teaching staff		**Requirements/skills (if any)**	**Specialization**		**Scientific rank**
lecturer	angel		private	general	

Professional development
Orienting new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institution and department levels.
Professional development for faculty members
Briefly describe the academic and professional development plan and arrangements for faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance criterion
(Developing regulations related to admission to the college or institute, whether central admission or others mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program development plan

Program skills chart															
Learning outcomes required from the programme															
Value				Skills				Knowledge				Essential or optional?	Course Name	Course Code	Year/level
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				

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

Course description form

1. Course name	
Meteorology and Climatology	
2. Course code	
104 GCS	
3. Semester/year	
2025 – 2024	
.4The date this description was prepared	
2024 / 9 / 18	
.5Available forms of attendance	
In-person lectures	
.6Number of study hours (total) / number of units (total(	
60hours / 4 units	
.7Name of the course administrator (if more than one name is mentioned(	
Name: Dr. Abdul Rahman Abdul Karim Yahya Jassim Email: abdulrahman.yahya@tu.edu.iq	
.8Course objectives	
Objectives of the study subject	• Keeping up with and staying updated on topics related to climate elements and their devices. • Studying the fundamentals of weather and climate elements and phenomena. • Utilizing technology to enhance education and deliver lectures via computers.
9. Teaching and learning strategies	
- In-person lectures.	The strategy

- Use the method of asking questions to students. - Using brainstorming to develop students' skills. - Discussion method for details of the lecture topic in the classroom. - Weekly duties	

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
In-person tests	In-person tests	Chapter One / Basics of Climatology	**Chapter One: Understanding the Concept of Climate and Weather Fundamentals**	2	**eptember** 3
In-person tests	In-person tests	The importance of climatology	**Understand the importance of climate science from a theoretical and practical .perspective**	2	**eptember** 4
In-person tests	In-person tests	Factors affecting climate elements	**Identify the elements of climate**	2	1 **October**
In-person tests	In-person tests	Types of solar radiation	**Chapter Two Solar Radiation**	2	2 **October**
In-person tests	In-person tests	Factors affecting radiation	**The importance of radiation**	2	**October** 3
In-person tests	In-person tests	Factors affecting temperature	**Chapter Three: Heat and its Types**	2	4 **October**
In-person tests	In-person tests	Atmospheric pressure centers	**Chapter Four Atmospheric Pressure**	2	**November** 1
In-person	In-person tests	Types of winds	**Chapter Five**	2	**November**

tests			**Winds**		2
In-person tests	In-person tests	The importance of rain and how to classify it	**Chapter Six Rain**	2	**November** 3
In-person tests	In-person tests	Types of rain	**Factors affecting rainfall**	2	**November** 4
In-person tests	In-person tests	Knowledge of evaporation measurements	**Evaporation and types of transpiration**	2	**December** 1
In-person tests	In-person tests	Types of devices	**Study of measuring devices**	2	**December** 2
In-person tests	In-person tests	Dust storms	**Climate phenomena**	2	**December** 3
In-person tests	In-person tests	Stratosphere	**Layers of the atmosphere**	2	**December** 4
In-person tests	In-person tests	Troposphere	**The atmosphere**	2	Decembe 1 r
Spring break from 14/2/ to 21/2/2025					
In-person tests	In-person tests	Köppen classification	**Learn about climate classifications**	2	4 January
In-person tests	In-person tests	Fundamental classifications		**2**	**February** 1
In-person tests	In-person tests	Classification results		2	**February** 2
In-person tests	In-person tests	Classification types		2	**February** 3
In-person tests	In-person tests			2	**February** 4
In-person tests	In-person tests			2	1 **March**
In-person tests	In-person tests			2	2 **March**

In-person tests	In-person tests			2	**March** 3
In-person tests	In-person tests			2	**March** 4
In-person tests	In-person tests			2	1 **April**
In-person tests	In-person tests			2	2 **April**
In-person tests	In-person tests			2	3 **April**
In-person tests	In-person tests			2	4 **April**
In-person tests	In-person tests			2	1 May
In-person tests	In-person tests	**Examples of the ritual map**		2	2 May
			Final exams	___	3،4 May

11. Course Evaluation
50points for the annual effort, 25 points for each semester, divided as follows: 20points for the written exam 5points for the daily exam, distributed between daily exams or reports 50points for the end-of-year exam

12. Learning and teaching resources	
Required textbooks (methodology if any)	- Basics of climate and weather
Main References (Sources)	Qusay Al-Samarrai, Applied Climate, University of Baghdad, College of Arts. Ali Hassan Musa, Contemporary Climate Issues, Dar Al-Fikr, Damascus, First Edition, 2022.
Recommended supporting books and references (scientific journals, (...reports	The comprehensive electronic magazine mecsJournal of scientific and geographical studiesDar Al Fikr Al Geographical House in DamascusAnd meteorological research centers and NASA

Electronic references, websites	www.darsafa.net dijla.bookshop@yahoo.com

the signature

Authentication of the Dean

1. Program vision
Remember to see the program as stated in the university prospectus and website.

2. Program message
Remember tAskThe program is as stated in the university's bulletin and website.

3. Program objectives
General statements that describe what he intendsthe programOr the institution achieves it.

4. Programmatic accreditation
Dothe programHave program accreditation? From which side?

5. Other external influences
Is there a sponsor? Ofprogram?

6. Program structure				
comments	percentage	Study unit	Number of courses	Program structure
				Enterprise requirements
				College

				requirements
				Department requirements
				summer training
				Other

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

7. Program description				
Credit hours		**Name of the course or course**	**Course or course code**	**Year/level**
practical	**theoretical**			

8. Expected learning outcomes of the program	
Knowledge	
Statement of learning outcomes 1	Learning outcomes 1
Skills	
Statement of learning outcomes 2	Learning outcomes 2
Statement of learning outcomes 3	Learning outcomes 3
Value	
Statement of learning outcomes 4	Learning outcomes 4
Statement of learning outcomes 5	Learning outcomes 5
9. Teaching and learning strategies	
Teaching and learning strategies and methods adopted in implementing the program in general.	
10. Evaluation methods	
Implementing it in all stages of the program in general.	
11. The teaching staff	

Faculty members					
Preparing the teaching staff		**Requirements/skills (if any)**	**Specialization**		**Scientific rank**
lecturer	angel		private	general	

Professional development
Orienting new faculty members
Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institution and department levels.
Professional development for faculty members
Briefly describe the academic and professional development plan and arrangements for faculty members such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.
12. Acceptance criterion
(Developing regulations related to admission to the college or institute, whether central admission or others mentioned)
13. The most important sources of information about the program
Remember briefly.
14. Program development plan

Program skills chart															
Learning outcomes required from the programme															
Value				Skills				Knowledge				Essential or optional?	Course Name	Course Code	Year/level
C4	C3	C2	C1	B4	B3	B2	B 1	A4	A3	A2	A1				

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

Course description form

1. Course name	
Applied Climatology	
2. Course code	
211 GAC	
3. Semester/year	
2025 – 2024	
.4The date this description was prepared	
2024 / 9 / 18	
.5Available forms of attendance	
In-person lectures	
.6Number of study hours (total) / number of units (total(	
60hours / 4 units	
.7Name of the course administrator (if more than one name is mentioned(	
Name: Dr. Abdul Rahman Abdul Karim Yahya Jassim Email: abdulrahman.yahya@tu.edu.iq	
.8Course objectives	
Subject objectives	Introducing students to the concept of applied climatology, its objectives and methods of study, and the stages of development that this science has gone through, in addition to explaining measuring devices and how to work on them and use them. This course also aims to make the student able to deal with statistical data and mathematical equations within this branch of climate.
9. Teaching and Learning Strategies	
Strategy	In-person lectures. - Using the method of asking questions to students. - Using brainstorming to develop skills. - Discussion

	method for the details of the lecture topic inside the classroom. - Weekly assignments

10. Course Structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
In-person tests	In-person tests	Chapter One: Applied Climatology (Research Tools) First: The Emergence of Applied Climatology and Climate Impact Assessment Weather, Climate and Daily Life Development of Applied Climatology, Concepts, Applications, Weather Concerns and Awareness Assessment of Climate Impacts	Homework	2	One
In-person tests	In-person tests	Second: Earth and remote sensing measurements Comparison between old and modern climate devices Old-fashioned climate devices New generation of climate devices Remote sensing	Homework	2	Two
In-person tests	In-person tests	Third: Statistical considerations Statistical significance and time series analysis Spatial analysis	Homework	2	Three
In-person tests	In-person tests	Fourth: Climate Model Climate System Modeling, Comprehensive Climate Model, Climate Impact Models, Integrated Assessment Models, and Climate Model Evaluation	Homework	2	Four
In-person tests	In-person tests	Fifth: Management of the gaseous envelope resources Issues of managing the gaseous envelope resources History of managing the gaseous envelope resources Current management approachThe problem of air quality Integration of the air issue Sustainable development and the gaseous envelope	Homework	2	Five
In-person tests	In-person tests	Chapter Two Climate and the Natural Biosphere First: Hydrological Processes	Homework	2	Six

		and Water Resources Climate and Water Environment Hydrological Processes Impact of Climate Change and Hydrological Response			
In-person tests	In-person tests	Second: Glaciers - Refrigerators Climate and glaciers Types of glaciers Natural and thermal characteristics Refrigerators - the range of components and climatic controls	Homework	2	Seven
In-person tests	In-person tests	The role of climate in the transformation of ice glaciers Glacier mass balance and climate controls	Homework	2	Eight
In-person tests	In-person tests	Third: Geomorphological processes and landforms Geomorphological climateClimate and geomorphological processesClimate change and landforms	Homework	2	Nine
In-person tests	In-person tests	Fourth: Soils Soil Soil Atmosphere Soil Climate Climate and Soil Geography Soils and the Effect of Greenhouse Gases The Effect of Climate Change on Soils	Homework	2	Ten
In-person tests	In-person tests	Fifth: Vegetation: Climate and Vegetation Plant Communities in the Geological Past Current Climate and Vegetation	Homework	2	Eleven
In-person tests	In-person tests	Sixth: The response of living organisms to climate Climate and life Climate elements Bioclimatic zones Climate instability Energy sources	Homework	2	Twelve
In-person tests	In-person tests	Biochemical adaptation Temperature change and stability Poikilothermic system Homeothermic system	Homework	2	Thirteen
In-person tests	In-person tests	Chapter Three: Climate and the Urban EnvironmentFirst: Comfort - Clothing and Health Human Adaptation and Microclimate Management Temperature Stability and Adaptation Human Energy BalanceEstimating Heat Stress	Homework	2	Fourteen
In-person tests	In-person tests	Outerwear Thermal comfortAcclimatization Weather effects on behavior and performanceWeather effects on morbidity and mortality	Homework	2	Fifteen
In-person tests	In-person tests	Second: Urban Planning, Architecture and Construction Climate and Building Environment Heat, Humid Climates Cold Climates, Polar Climates Other Climates Applications in Urban Planning	Homework	2	Sixteen

In-person tests	In-person tests	Third: Industry and Trade Climate, Industrial Production and Commercial Activities Location of Industries Industrial Operations Construction Operations Trade	Homework	2	Seventeen
In-person tests	In-person tests	Fourth: Climate transport systems and air transport services	Homework	2	Eighteen
In-person tests	In-person tests	Rail transport Land transport Water transport	Homework	2	Nineteen
In-person tests	In-person tests	Fifth: Agriculture and fishing Nature and rate of environmental change Climate elements, crop and animal production regulation Response of agricultural crops to global environmental changes	Homework	2	Twenty
In-person tests	In-person tests	Crop Production and Climate Change Climate and Animal Production Fishing and Environmental Change Plants and Animal Husbandry	Homework	2	Twenty-one
In-person tests	In-person tests	Sixth: Forests Climate and Forests Climate and Forest Sustainability	Homework	2	Twenty-two
In-person tests	In-person tests	Seventh: Tourism and Recreation Climate and Recreational Effects Weather and Recreation Temporal and spatial disturbance	Homework	2	Twenty-three
In-person tests	In-person tests	Weather and Climate Information Industry Tourism Climate Change Tourism and Leisure	Homework	2	Twenty-four
In-person tests	In-person tests	Eighth: Politics, Social and Legal Aspects of Climate Political Considerations Legal Considerations Ninth: Energy Sector: Climate and Energy Sources Global Energy Sources	Homework	2	Twenty-five
In-person tests	In-person tests	Energy Transmission Energy Conversion Energy Demand	Homework	2	Twenty-six
In-person tests	In-person tests	Chapter Four: Climate Change First: Global Climate and Global Environmental Change The Nature of Global Environmental Change The Impact of City Climates on Global Environmental Change The Impact of Global Environmental Climate on City Climate	Homework	2	Twenty-seven
In-person	In-person	Second: Air Pollution Concepts and Classification of Air Pollution and Global	Homework	2	Twenty-

tests	tests	Air Pollution Problems Air Pollution Problems on a Continental Scale City Air Pollution Problems			eight
In-person tests	In-person tests	Third: Climate extremism as a threat to humanity Climate extremism, risks and disasters Impact of weather disasters Reducing the risks and impact of weather disasters	Homework	2	Twenty-nine
In-person tests	In-person tests	Fourth: Climate change, past and present Climate and human history In the Middle Ages	Homework	2	Thirty

12- Infrastructure	
1- Required textbooks	Applied Climatology, Author: Adel Saeed Al-Rawi, Qusay Abdul Majeed Al-Samarrai.
2- Main references (sources)	
3- Books and references recommended (scientific journals, reports, ...)	

13- Curriculum development plan