

Ministry of Higher Education &
Scientific Research
University of Mosul
College of Education For Human
Sciences
Department of Geography



وزارة التعليم العالي والبحث
العلمي
جامعة الموصل



التعليم الجيد

Description of the academic program

for the academic year

2021 - 2020

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many geomorphological topics that contain many geographical applications that are directly related to the natural environment in which we live.

Educational institution	University of Al Mosul
University department/center	College of Education for Human Sciences–Department of Geography
Course name/code	GeomorphologyEDGE14F105 Code:
Programs in which it is included	BSC
Available attendance forms	Daily attendance in class and attendance recording
Semester/year	annual
Number of study hours(total)	Three hours a week/90 hours a year
Date this description was prepared	2021

1. Course objectives Extending bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student's studies in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to expand scientific memory.

2. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link secondary school curricula with university studies

A2-Introducing students to new curricula that contain specialized vocabulary taught for the first time

A3-Expanding some of the vocabulary that was given to students to serve as a basis for them to perform teaching tasks and complete the postgraduate program.

B - Subject-specific skills

B 1 -Training students to collect additional information about the vocabulary presented in lectures.

B2 -Assigning students to solve mathematical problems related to some of the subject's vocabulary.

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and group dialogue within the class

Homework assignments, reports on a topic or borrowing, and watching educational documentaries

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

The lectures are arranged and organized well and integrated, according to the chronological progression of the curriculum and according to the arrangement of the vocabulary issued by the Ministry

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple manner keeps the student engaged with the lecture

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-Encouraging first-stage students to link the vocabulary of the subject with what is clearly visible in terms of natural phenomena.

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Using more than one teaching method in order to attract students and pay attention to the lecture

Evaluation methods

Daily surprise exams

Monthly and quarterly exams

Homework

Giving the student more than one option to do activities, such as presenting research and doing introductory sessions on some vocabulary that needs clarification

High-level questions are given incentive grades to encourage those who are able to solve them during the lecture

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

- General and transferable skills (other skills related to employability and personal development).

-An attempt to apply the academic vocabulary given during this stage to some geographical research to demonstrate the role of the academic vocabulary and its application in the research field so that the academic benefit is greater.

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Homework	The concept of Earth's shape science	Lectures	Homework
			The relationship between the science of the shape of the Earth		
2	3	Homework	The development of geomorphic thought	Lectures	Daily exam
			Modern and contemporary geomorphic thought		
3	3	Homework	Earth's relationship with the solar system	Lectures	Homework
4	3	Homework	Theories that explain the distribution of land and water	Lectures	oral exam

5	3	Homework	Landforms of ocean basins	Lectures	Homework
6	3	Homework	Hyposometric curve for the distribution of land and water	Lectures	Monthly exam
7	3	Homework	Basic potentials of the lithosphere	Lectures	Homework
8	3	Homework	Metamorphic rocks	For lectures	Homework
9	3	Homework	Earth shapes resulting from internal forces	Lectures	Daily exam
10	3	Homework	Earthquakes	Lectures	Homework
11	3	Homework	Volcanoes	Lectures	Semester exam
12	3	Homework	Weathering: its types, manifestations, and outcomes	Lectures	Homework
13	3	Homework	Physical weathering and its factors	Lectures	Homework
14	3	Homework	Chemical weathering and its processes	Lectures	Homework
15	3	Homework	Factors affecting weathering	Lectures	Homework
			Weathering products		
16	3	Homework	the soil	Lectures	Monthly exam
17	3	Homework	Types of soil	Lectures	Homework
18	3	Homework	Physical and chemical characteristics of the soil	Lectures	Homework
19	3	Homework	Slopes and their impact	Lectures	Homework
20	3	Homework	Movement of surface materials	Lectures	Homework
21	3	Homework	Landforms in a slope environment	Lectures	Semester exams
22	3	Homework	Even ground shapes	Lectures	Homework
23	3	Homework	Depositional landforms	Lectures	Homework
24	3	Homework	Rivers and their impact on shaping the Earth's surface	Lectures	Daily exam
25	3	Homework	River stages	Lectures	Homework

26	3	Homework	Groundwater and its impact	Lectures	Homework
27	3	Homework	Karst topography and landforms	Lectures	Homework
28	3	Homework	Wind and associated shapes	Lectures	Homework
29	3	Homework	Snow line Ice fields and movements	Lectures	Homework
30	3	Homework	Processes of erosion, deposition, and glacial deposition	Lectures	Homework

▪ Infrastructure	-1Geomorphology book / Professor Dr. Isbahia Younis Al-Mohsen
Required readings:	-2Applied Earth's Surface Forms/Dr. Taghlib Girgis Daoud
▪ Basic texts	-3Principles of geomorphology / Hassan Ramadan Salama
▪ Course books	
Other	
Special requirements (including, for example, workshops, periodicals, software, and websites)	Field studies on campus
Social services (including, for example, guest lectures, vocational training, and field studies)	

3. admissions	
Prerequisites	Bachelor of Preparatory/Literary-Scientific
The smallest number of students	108
The largest number of students	114

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many geomorphological topics that contain many geographical applications that are directly related to the natural environment in which we live.

Educational institution	University of Al Mosul
University department/center	College of Education for Human Sciences–Department of Geography
Course name/code	GeomorphologyEDGE14F105 Code:
Programs in which it is included	BSC
Available attendance forms	Daily attendance in class and attendance recording
Semester/year	annual
Number of study hours(total)	Three hours a week/90 hours a year
Date this description was prepared	2022
12. Course objectivesExtending bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student’s studies in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to expand scientific memory.	

13. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link secondary school curricula with university studies, especially with regard to the first stage

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some of the vocabulary that was given to the student as a basis for them in the stages, especially since the subject is given in the second stage and postgraduate studies.

B - Subject-specific skills

B 1 -Training students to collect additional information about the vocabulary that will be presented as material in the subsequent lecture.

B2 -Assigning the student to solve mathematical questions related to some of the subject's vocabulary.

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and group dialogue within the class

Homework assignments, reports on a topic or borrowing, and watching educational documentaries

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

The lectures are arranged and organized well and integrated, according to the chronological progression of the curriculum and according to the arrangement of the vocabulary issued by the Ministry

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple manner keeps the student engaged with the lecture

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-Encouraging first-stage students to link the vocabulary of the subject with what is clearly visible in terms of natural phenomena.

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Using more than one teaching method in order to attract students and pay attention to the lecture

Evaluation methods

Daily surprise exams

Monthly and quarterly exams

Homework

Giving the student more than one option to do activities, such as presenting research and doing introductory sessions on some vocabulary that needs clarification

High-level questions are given incentive grades to encourage those who are able to solve them during the lecture

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

- General and transferable skills (other skills related to employability and personal development).

-An attempt to apply the academic vocabulary given during this stage to some geographical research to demonstrate the role of the academic vocabulary and its application in the research field so that the academic benefit is greater.

course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Homework	The concept of Earth's shape science	Lectures	Homework
			The relationship between the science of the shape of the Earth		
2	3	Homework	The development of geomorphic thought	Lectures	Daily exam
			Modern and contemporary geomorphic thought		
3	3	Homework	Earth's relationship with the solar system	Lectures	Homework
4	3	Homework	Theories that explain the distribution of land and water	Lectures	oral exam
5	3	Homework	Landforms of ocean basins	Lectures	Homework
6	3	Homework	Hyposometric curve for the distribution of land and water	Lectures	Monthly exam
7	3	Homework	Basic potentials of the lithosphere	Lectures	Homework
8	3	Homework	Metamorphic rocks	For lectures	Homework

9	3	Homework	Earth shapes resulting from internal forces	Lectures	Daily exam
10	3	Homework	Earthquakes	Lectures	Homework
11	3	Homework	Volcanoes	Lectures	Semester exam
12	3	Homework	Weathering: its types, manifestations, and outcomes	Lectures	Homework
13	3	Homework	Physical weathering and its factors	Lectures	Homework
14	3	Homework	Chemical weathering and its processes	Lectures	Homework
15	3	Homework	Factors affecting weathering	Lectures	Homework
			Weathering products		
16	3	Homework	the soil	Lectures	Monthly exam
17	3	Homework	Types of soil	Lectures	Homework
18	3	Homework	Physical and chemical characteristics of the soil	Lectures	Homework
19	3	Homework	Slopes and their impact	Lectures	Homework
20	3	Homework	Movement of surface materials	Lectures	Homework
21	3	Homework	Landforms in a slope environment	Lectures	Semester exams
22	3	Homework	Even ground shapes	Lectures	Homework
23	3	Homework	Depositional landforms	Lectures	Homework
24	3	Homework	Rivers and their impact on shaping the Earth's surface	Lectures	Daily exam
25	3	Homework	River stages	Lectures	Homework
26	3	Homework	Groundwater and its impact	Lectures	Homework
27	3	Homework	Karst topography and landforms	Lectures	Homework
28	3	Homework	Wind and associated shapes	Lectures	Homework
29	3	Homework	Snow line Ice fields and movements	Lectures	Homework
30	3	Homework	Processes of erosion, deposition, and glacial deposition	Lectures	Homework

4- Infrastructure	<ul style="list-style-type: none"> 1- Geomorphology book / Professor Dr. Isbahia Younis Al-Mohsen 2- Applied Earth's Surface Forms/Dr. Taghlib Girgis Daoud 3- Principles of geomorphology / Hassan Ramadan Salama
Required readings: <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books Other	programARCGIS 1- 2- WMS
Special requirements (including, for example, workshops, periodicals, software, and websites)	Field studies on campus
Social services (including, for example, guest lectures, vocational training, and field studies)	

<ul style="list-style-type: none"> ▪ 16. admissions 	
Prerequisites	<ul style="list-style-type: none"> ▪ Bachelor of Preparatory/Literary-Scientific
The smallest number of students	<ul style="list-style-type: none"> ▪ 108
The largest number of students	<ul style="list-style-type: none"> ▪ 114

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many cartographic topics that contain many geographical applications that are directly related to practical life

Educational institution	University of Al Mosul
University department/center	College of Education for Human Sciences– Department of Geography
Course name/code	Weather and climateCode:EDGE14F104
Programs in which it is included	BSC
Available attendance forms	Daily attendance in class and attendance recording
Semester/year	annual
Number of study hours(total)	Three hours a week/90 hours a year
Date this description was prepared	2022
3. Course objectivesExtending bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student’s studies in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to expand scientific memory.	

4. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link secondary school curricula with university studies, especially with regard to the first stage

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some of the vocabulary that we introduced in secondary school and clarifying some of the previous paragraphs

A4-Giving the student principles for the subject of weather and climate and clarifying its objectives geography

A5-Informing the student about weather and climatic topics and linking them to the geographical aspect

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A6-Linking applied climate issues to the specialty of the Geography Department

B - Subject-specific skills

B 1 -Teaching students the basics of weather and climate science

B2 -Assigning the student to answer evaluation questions asked in class

B3 -Assigning students to prepare reports on weather and climate problems and their impact on humans and their activities

B4-

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class

Homework assignments, reports on a topic or borrowing, and reading some recent weather and climate books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple way makes the student communicate with the lecturer

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-The summit seeks to link weather and climatic topics to the applied geographical aspect in general and specificitiesFlour in particular

C4-

Teaching and learning methods
Scheduled weekly lectures Additional lectures Discussion and dialogue within the class Homework assignments, reports on a topic or borrowing, and reading some recent weather and climate books
Evaluation methods
Quarterly exams Monthly and daily surprise exams Homework High-level questions for which motivational and encouraging grades are given to those who are able to solve them Participation in discussion and dialogue and regular attendance at lectures Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum
D - General and transferable skills (other skills related to employability and personal development). D1- D1-An attempt to apply the academic vocabulary given during that stage to some minor geographical projects, explaining the main role of each geographical topic in the details of this project. D2- D2- D3- D4-

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Homework	the introduction	Lectures	Homework
2	3	Homework	Second: Basic definitions of weather and climate science and the relationship of these sciences to other sciences	For lectures	Daily exams
3	3	Homework	Atmosphere (gase) Installation of the gas jacket	For lectures	Homework

4	3	Homework	Natural properties of the gaseous atmosphere	For lectures	Homework
5	3	Homework	Specifications of all layers	For lectures	Monthly exam
6	3	Homework	Gasosphere pollution	For lectures	Homework
			Increased carbon dioxide		
			High temperatures		
8	3	Homework	Impurities	For lectures	Daily exam
			Ozone		
9	3	Homework	Introduction to weather elements	For lectures	Homework
10	3	Homework	Solar radiation	For lectures	Daily exams
12	3	Homework	-Concept, nature, distribution and influencing factors	For lectures	Homework
			Related		
			Measuring devices use		
13	3	Homework	Statistics and data that enable the student to analyze	For lectures	Semester exam
			Changes and comparisons		
14			-1the heat		
			Heat sources		
15			Daily and seasonal changes		
16	3	Homework	heat transfer	Lectures	Homework
17	3	Homework	Regional distribution of heat over a surface	Lectures	Homework
			the earth		
18	3	Homework	Statistics and data enable the student to analyze changes and comparisons	Lectures	Evening exam
19	3	Homework	Atmospheric pressure	Lectures	Homework
			Definition and measurement		
			Change in daily and seasonal atmospheric pressure		

			Horizontal and vertical distribution of atmospheric pressure		
20	3	Homework	Atmospheric pressure	Lectures	Evening exam
			Definition and measurement		
			Change in daily and seasonal atmospheric pressure		
			Horizontal and vertical distribution of atmospheric pressure		
21	3	Homework	Statistics and data that enable the student to analyze	Lectures	Homework
			Changes and comparisons		
22	3	Homework	Winds and air masses	Lectures	Homework
			Factors affecting wind movement		
			Wind types		
			General cycle of winds		
			Wind measurement		
23	3	Homework	Air masses	Lectures	Daily exams
			tion and growth		
			Formation of air fronts		
24	3	Homework	Hurricanes and their damage	Lectures	Homework
25	3	Homework	Statistics and data that enable the student to analyze changesTAnd comparisons	Lectures	Homework
26	3	Homework	Humidity	Lectures	Evening exam
			Its types		
			Measure it		
			Distribute it		
27	3	Homework	Evaporation	Lectures	Homework
			Its types		
			Measure it		
			Distribute it		
28	3	Homework	Condensation and precipitation	Lectures	Daily exams
			Condensation and its types		
29	3	Homework	Precipitation (types and measurements)	Lectures	Homework
			Regional distribution of condensation and precipitation		

			Statistics and data enable the student to analyze changes and comparisons		
30	3	Homework	Geographic climatic region	Lectures	Evening exam
			Ways to classify it to focus on		
			Köppen studies only		
			Climatic regions according to the Köppen classification		
31	3	Homework	General Review	Lectures	Homework

Infrastructure	
<p>Required readings:</p> <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books <p>Other</p>	<p>Geography of climate and weather - Ali Salem Al-Shawara</p> <p>Climate Geography - Ali Hassan Musa</p> <p>Foundations of climate science - Sabah Al-Rawi and Adnan Hazza Al-Bayati</p> <p>, Meteorology understanding the Atmosphere, - Ackerman, Steven A John A. Knox.</p> <p>7-, Meteorology- Eric Danielson, W, James Levin, Elliot Abrams,</p>
Special requirements (including, for example, workshops, periodicals, software, and websites)	
Social services (including, for example, guest lectures, vocational training, and field studies)	

admissions	
Prerequisites	Bachelor of Preparatory/Literary-Scientific
The smallest number of students	70
The largest number of students	90

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many geographical topics that contain many concepts that are directly related to practical lifeFor human

Educational institution	University of Al Mosul
University department/center	College of Education for Human Sciences- Department of History
Course name/code	General geographyCode:ENDWR 14G 101
Programs in which it is included	BSC
Available attendance forms	Daily attendance in class and attendance recording
Semester/year	annual
Number of study hours(total)	Two hours a week/60 hours a year
Date this description was prepared	2022
5. Course objectivesExtending bridges of scientific communication with geographical vocabulary that was taught in the previous stages of the student's study in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to expand the mental ability to understand the mechanism of operation of geographical phenomena and the extent of their impact on human societies.	

6. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link secondary school curricula with university studies, especially with regard to the first stage

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some of the vocabulary that we introduced in secondary school and clarifying some of the previous paragraphs

A4a-Informing the student about geographical topics related to life.

A5-Training the student on questions with theoretical and practical geographical application

A6-Linking applied geographical issues to the specialty of the History Department

B - Subject-specific skills

B 1 -Training students to solve problems in class

B2 –Assigning the student to solve the questions on the board in front of the students

B3 –Form groups of students to solve questions collectively

B4-

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class

Homework assignments, reports on a place or borrowing, and reading some modern geography books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple way makes the student communicate with the lecturer

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-Training the student to link geographical issues to the applied aspect of society in general and specificitysFlour in particular

D - General and transferable skills (other skills related to employability and personal development).

D1- D1-An attempt to apply the academic vocabulary given during that stage to some minor geographical projects, explaining the main role of each geographical topic in the details of this project.

D2-Thinking from a geographical perspective about geographical phenomena while developing the ability to initially analyze some phenomena.

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	2	Homework	The samshi group	Lectures	Homework

2	2	Homework	Geography concepts	For lectures	Daily exams
3	2	Homework	Branches of physical geography	For lectures	Homework
4	2	Homework	Branches of human geography	For lectures	Homework
5	2	Homework	Crustal	For lectures	Monthly exam
6	2	Homework	Types of rocks	For lectures	Homework
8	2	Homework	Geological times	For lectures	Daily exam
9	2	Homework	Sprains	For lectures	Homework
10	2	Homework	Refractions	For lectures	Daily exams
11	2	Homework	Earthquakes	For lectures	Homework
12	2	Homework	Volcanoes	For lectures	Semester exam
13	2	Homework	Weathering		Homework
14	2	Homework	Stripping		Homework
15	2	Homework	the climate	Lectures	Homework
16	2	Homework	The spread of man on the surface of the Earth	Lectures	Homework
17	2	Homework	Village and city	Lectures	Monthly exam
18	2	Homework	City installation	Lectures	Homework
19	2	Homework	Theories of state power in political geography	Lectures	Homework
20	2	Homework	The concept of pollution and its types	Lectures	Homework
21	2	Homework	Pollution treatment methods	Lectures	Homework
22	2	Homework	Solid waste and its types	Lectures	Daily exams
23	2	Homework	Methods of treating the solid waste problem	Lectures	Homework
24	2	Homework		Lectures	Homework

25	2	Homework	Desertification and its causes	Lectures	Evening exam
26	2	Homework	Methods of addressing the problem of desertification	Lectures	Homework
27	2	Homework	Globalization and its concepts	Lectures	Daily exams
28	2	Homework	Geographic information systems	Lectures	Homework
29	2	Homework	Types of data included in geographic information systems	Lectures	Evening exam
30	4	Homework	Applications of geographic information systems in geographical fields	Lectures	Homework

Infrastructure	
Required readings: <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books Other	1- The prescribed book 2- References in general geography 3- Online video lectures
Special requirements (including, for example, workshops, periodicals, software, and websites)	1- Exercises in geographical mapping 2- Video observations about the nature of geographical phenomena
Social services (including, for example, guest lectures, vocational training, and field studies)	Assignments related to preparing research on various geographical topics

admissions	
Prerequisites	Bachelor of Preparatory/Literary-Scientific
The smallest number of students	70
The largest number of students	90

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many statistics topics that contain many geographical applications that are directly related to practical life

Educational institution	University of Al Mosul
University department/center	College of Education for Human Sciences–Department of Geography
Course name/code	Geographic statisticsCode:ENDWR EDGE14F306
Programs in which it is included	BSC
Available attendance forms	Daily attendance in class and attendance recording
Semester/year	annual
Number of study hours(total)	Three hours a week/90 hours a year
Date this description was prepared	2022
7. Course objectivesExtending bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student’s study in the secondary stage and preparing him for the university stage of study, which is the application of statistical methods to geographical phenomena to reveal the correlational relationships between geographical phenomena.	

8. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Applying statistical methods to geographical phenomena to reveal spatial relationships and connections between them in order to predict the behavior of geographical phenomena.

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some of the vocabulary that we introduced in secondary school and clarifying some of the previous paragraphs

A4a-Introducing the student to statistical topics related to the geographical aspect

A5-Training the student on questions with theoretical and practical geographical application

A6-Linking applied statistical issues to the specialty of the Geography Department

B - Subject-specific skills

B 1 -Training students to solve problems in class

B2 -Assigning the student to solve the questions on the board in front of the students

B3 -Form groups of students to solve questions collectively

B4-

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class

Homework assignments, reports on a place or borrowing, and reviewing some modern map books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple way makes the student communicate with the lecturer

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-The summit seeks to link cartographic issues to the applied aspect of geography in general and specificitiesFlour in particular

C4-

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class

Homework assignments, reports on a place or borrowing, and reviewing some modern map books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

D - General and transferable skills (other skills related to employability and personal development).

D1 -An attempt to apply the academic vocabulary given during that stage to some minor geographical projects, explaining the main role of each geographical topic in the details of this project.

D2-

D2-

D3-

D4-

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Homework	Data classification	Lectures	Homework
2	3	Homework	Measuring the degree of spatial concentration	For lectures	Daily exams
3	3	Homework	Spatial mediator	For lectures	Homework
4	3	Homework	Standard distance	For lectures	Homework
5	3	Homework	Spatial pattern analysis	For lectures	Monthly exam
6	3	Homework	Nearest neighbor analysis	For lectures	Homework
7	3	Homework	Cluster analysis	For lectures	Daily exam
8	3	Homework	Analysis of network patterns	For lectures	Homework
9	3	Homework	probability theory	For lectures	Daily exams
10	3	Homework	Standard error	For lectures	Homework

11	3	Homework	Probability sampling	For lectures	Semester exam
12			Non-probability samples		Homework
13			Chi square		Semester exam
14	3	Homework	The intersection	Lectures	Homework
15	3	Homework	Yule's coefficient	Lectures	Homework
16	3	Homework	Phi coefficient	Lectures	Evening exam
17	3	Homework	Pearson coefficient	Lectures	Homework
18	3	Homework	Sirman coefficient	Lectures	Monthly exam
19	3	Homework	Regression analysis	Lectures	Homework
20	3	Homework	Regression analysis	Lectures	Homework
23	3	Homework	Dimensions of time in geography	Lectures	Daily exams
24	3	Homework	Intermediate broker	Lectures	Homework
25	3	Homework	Seasonal analysis	Lectures	Homework
26	3	Homework	Modeling	Lectures	Monthly exam
27	3	Homework	Basics of building the model	Lectures	Homework
28	3	Homework	Interaction model	Lectures	Daily exams
29	3	Homework	Interaction model	Lectures	Homework
30	3	Homework	Distribution model	Lectures	Monthly exam
31	3	Homework	Applications and examples of the gravity model	Lectures	Homework
			Applications and examples of the gravity model		
			Reviews and examples		

Infrastructure	
<p>Required readings:</p> <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books <p>Other</p>	<p>CALCULUS by Ross L.Fhnney and George B.</p> <p>CALCULUS by Salas, Hille and Etgen</p> <p>CALCULUS by Robert T Smith and Ronald B Minton</p> <p>CALCULUS by Howard Anton, Earl Bivens and Stephen Davis</p> <p>Geographical Statistics. Mudar Khalil Al-Omar. Ibn Al-Atheer Printing House. Mosul. 2000</p>
Special requirements (including, for example, workshops, periodicals, software, and websites)	

Social services (including, for example, guest lectures, vocational training, and field studies)	
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9. admissions	
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Prerequisites	Bachelor of Preparatory/Literary-Scientific
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The smallest number of students	70
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The largest number of students	90
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Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many topics about natural resources, their classification, types, and distribution with a clear geographical methodology, and the importance of this for the specialist in geography, as the diverse geographical environments contain many natural resources, as well as the Earth's covers, and that natural resources are in direct contact with humans because the resources are harnessed for humans.

Educational institution	University of Al Mosul
University department/center	College of Education for Human Sciences/Department of Geography
Course name/code	Natural resourcesCode:ENDWR 14G 101
Programs in which it is included	BSC
Available attendance forms	Daily attendance in the hall and attendance recording
Semester/year	annual
Number of study hours(total)	2 hours per week/60 hours/year
Date this description was prepared	2013-2022
10. GoalsCourse: The aim of teaching the course is to reveal the importance of nature through the Earth's covers, which represents the core of the study of geography in that it contains many sources and wealth and the extent of the importance of these sources and wealth to achieve benefit and interest for man and develop his capabilities and progress.	

11. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Introducing the student to some concepts such as source, wealth, resource and resources.

A2-The student understands what is meant by natural resources and their classification.

A3-The student will distinguish the types of natural resources in terms of their potential for renewal and depletion and their geographical distribution

A4a-The student understands the importance and role of humans in dealing with natural resources.

A5-The student knows the types of natural resources.

A6-The student should link the concept of storing resources and preserving resources for sustainable development

B - Subject-specific skills

B 1 -Training students to review types of natural resources.

B2 -To give each student an example of the classifications of natural resources.

B3 -The student should give an example of examples of failure to maintain natural resources

B4-The student diagnoses the manifestations of pollution and destruction of natural resource sources.

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class.

Interactive assignments, reports on a certain topic or borrowing, and reviewing some modern natural resources books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-Urging students to predict the reality of natural resources with increasing population growth. How to be

C2-Does the environmental balance equation and natural conditions have a relationship with the exploitation of natural resources? What is the relationship?

C3-The student will search for the answer to the future of natural resources and how sustainable development can be achieved.

C4-The student will develop his thinking abilities by searching for ways to reduce the depletion of natural resources in a way that achieves longer sustainability of natural resources.

Teaching and learning methods

Scheduled weekly lectures

Additional lectures
 Discussion and dialogue within the class.
 Interactive assignments, reports on a certain topic or borrowing, and reviewing some modern natural resources books

Evaluation methods

Quarterly exams
 Monthly and daily surprise exams
 Homework
 High-level questions for which motivational and encouraging grades are given to those who are able to solve them
 Participation in discussion and dialogue and regular attendance at lectures
 Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

D - General and transferable skills (other skills related to employability and personal development).
 D1-The student will compare geographical environments in terms of the availability of natural resources
 D2-What are the natural resources that constitute a natural resource that are available, for example, in the spatial area of the student's presence?
 D2-How can a student do some practical things that can be considered a way to sustain natural resources?
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Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	2	Homework + questions in the next lecture	The concept of natural resources, source and natural wealth	Lectures	oral test
2	2	Homework + questions in the next lecture	The importance of natural resources	For lectures	oral test
3	2	Homework + questions in the next lecture	Geography and study of natural resources	For lectures	Daily exams
4	2	Homework + questions in	Reasons for studying natural resources	For lectures	oral test

		the next lecture			
5	2	Homework + questions in the next lecture	Classification of natural resources	For lectures	Daily exams
6	2	Homework + questions in the next lecture	The importance of studying classifications	For lectures	oral test
7	2	Homework + questions in the next lecture	Conservation of natural resources	For lectures	oral test
8	2	Homework + questions in the next lecture		For lectures	Daily exams
			Soil as a natural resource		
9	2	Homework + questions in the next lecture	Physical and soil properties	For lectures	oral test
10	2	Homework + questions in the next lecture	Soil chemical properties	For lectures	Daily exams
11	2	Homework + questions in the next lecture	Geographical distribution of soil	For lectures	oral test
12	2	Homework + questions in the next lecture	Soil problems	Lectures	Daily exams
13	2	Homework + questions in the next lecture		Lectures	oral test
			Water Resources		
14	2	Homework + questions in the next lecture	Water forms and geographical distribution	Lectures	oral test
15	2	Homework + questions in the next lecture	The environmental importance of water	Lectures	Daily exams

16	2	Homework + questions in the next lecture	Fresh water and its properties	For lectures	oral test
17	2	Homework + questions in the next lecture	Water problems	For lectures	oral test
18	2	Homework + questions in the next lecture	Mineral resources	For lectures	Daily exams
19	2	Homework + questions in the next lecture	Solid and liquid hydrocarbons	For lectures	oral test
20	2	Homework + questions in the next lecture	Maintenance of mineral resources	Lectures	oral test
21	2	Homework + questions in the next lecture	Energy as a natural source	<i>For lectures</i>	<i>Daily exams</i>
22	2	Homework + questions in the next lecture	Natural energy sources	<i>For lectures</i>	<i>oral test</i>
23	2	Homework + questions in the next lecture	Energy problems	<i>For lectures</i>	<i>Oral test</i>
24	2	Homework + questions in the next lecture	Biological resources	<i>For lectures</i>	<i>Daily exams</i>
26	2	Homework + questions in the next lecture	Forests)	For lectures	oral test
27	2	Homework + questions in the next lecture	Livestock	For lectures	oral test
28	2	Homework + questions in the next lecture	Basic problems in exploiting natural resources	Lectures	oral test

29	2	Homework + questions in the next lecture	Depletion of natural resources and erosion	For lectures	oral test
30	2	Homework + questions in the next lecture	Anthropocene regions	Lectures	Oral exam and daily exams

Infrastructure Classrooms-library-

<p>Required readings:</p> <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books <p>Other</p>	<ul style="list-style-type: none"> ▪ Azad Muhammad Amin, Taghlib Jarjis Daoud, Geography of Natural Resources, Basra University Press, 1990. ▪ Wafiq Hussein Al-Khashab, Mahdi Al-Sahhaf, Natural Resources: Their Nature and Conservation, Baghdad, 1976. <p>Y.F. Milanova – A.M. Ryanishkov, Geographical Aspects in the Protection of Natural Resources, translated by Amin Tarboush, Damascus, 2010</p> <p>Alferd E.Hartemink.Alex Mc Bratney, Maria de Lourdes, digital soil mapping with limited data, springer, the natherland, 2008</p>
Special requirements (including, for example, workshops, periodicals, software, and websites)	Show some videos about natural resources Manifestations of depletion and destruction of these sources
Social services (including, for example, guest lectures, vocational training, and field studies)	nothing

admissions

Prerequisites	Bachelor's degree in preparatory/literary + scientific
The smallest number of students	60
The largest number of students	90

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course covers many industrial topics with many geographical applications that have direct contact with practical life

University of Al Mosul	Educational institution
College of Education for Human Sciences–Department of Geography	University department/center
Industry geographyEDGE14F301 Code:	Course name/code
BSC	Programs in which it is included
Daily attendance in class and attendance recording	Available attendance forms
annual	Semester/year
Three hours a week/90 hours a year	Number of study hours(total)
2022	Date this description was prepared
12. Course objectivesExtending bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student’s study in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to expand scientific memory, learn about the most important industries in the world, and know the natural and human factors affecting their geographical distribution.	

13. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link secondary school curricula with university studies, especially with regard to the third stage

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some vocabulary that was given an idea about in secondary school and clarifying some of the previous paragraphs

A4a-Informing the student about industrial topics related to the geographical aspect

A5-Training the student on questions with theoretical and practical geographical application

A6-Linking applied industrial issues to the specialty of the Geography Department

B - Subject-specific skills

B 1 -Training students to solve problems in class

B2 -Assigning students to write a research paper on one of the industries and its geographical distribution in the world

B3 -Assigning students to make an inventory of sources from the library regarding the geography of industry

B4 -Conducting scientific trips to a number of nearby factories to learn about the factories in the field

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class

Homework assignments and reports on the subject matter, and reading or borrowing some recent books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams (quizzes)

Homework

High-level questions are given incentive grades to encourage those who can solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the prescribed curriculum

C- Thinking skills

C1-throwThe lecture is delivered to the students in a smooth, clear and simple manner that keeps the student in touch with the lecturer

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-Prompting the student to link industrial issues with the applied aspect of geography in general and specialtiesFlour in particular

C4-Discussing some of the research completed by students to expand students' awareness and stimulate their thinking

Teaching and learning methods

D - General and transferable skills (other skills related to employability and personal development).

D1-An attempt to apply the academic vocabulary given during this stage to some minor geographical projects to demonstrate the main role of each geographical topic in the details of this project.

D2-Taking the students to a field study of a textile factory or a pharmaceutical factory and recommending that the students write a report about the trip to develop the students' ability to study and link reality to the academic subject.

D3-Show some pictures and documentaries to students to illustrate the impact of industry on the environment and pollution

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Homework	The concept of industry and manufacturing	Lectures	Homework
2	3	Homework	Development of industry and manufacturing	Lectures	Daily exams
3	3	Homework	Types of industries	Lectures	Homework
4	3	Homework	Standard industrial classification	Lectures	Homework
5	3	Homework	Industry measurement methods	Lectures	Monthly exam
6	3	Homework	Factors of industrial endemism	Lectures	Homework
7	3	Homework	Raw materials	Lectures	Daily exam
8	3	Homework	manpower	Lectures	Homework
9	3	Homework	market	Lectures	Daily exams

10	3	Homework	capital	Lectures	Homework
11	3	Homework	Transportation methods	Lectures	Semester exam
12	3	Homework	Energy and fuel	Lectures	Homework
13	3	Homework	Government policies	Lectures	Homework
14	3	Homework	Social factors	Lectures	Daily exam
15	3	Homework	Other factors	Lectures	Homework
16	3	Homework	Placement elements	Lectures	Homework
17	3	Homework	place (earth)	Lectures	Monthly exam
18	3	Homework	Water	Lectures	Homework
19	3	Homework	the climate	Lectures	Monthly exam
20	3	Homework	Industrial waste disposal	Lectures	Homework
21	3	Homework	Industrial links	Lectures	Homework
22	3	Homework	Industry problems	Lectures	Daily exams
23	3	Homework	The problem of the security situation	Lectures	Homework
24	3	Homework	Energy problem	Lectures	Homework
25	3	Homework	Fuel problem	Lectures	Monthly exam
26	3	Homework	Raw material problem	Lectures	Homework
27	3	Homework	Machinery spare parts problem	Lectures	Daily exams
28	3	Homework	Capital problem	Lectures	Homework

29	3	Homework	The problem of space constraints	Lectures	Monthly exam
30	3	Homework	Workers' problem	Lectures	Homework

14. Infrastructure	
- Muhammad Al-Sammak and Abbas Al-Tamimi, Geography of Industry, University of Mosul 1987. - Ahmed Talal Al-Taie, Lectures on Industrial Geography, University of Mosul, 2022.	Required readings: <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books ▪ Other
www.arabgeographers.com	Special requirements (including, for example, workshops, periodicals, software, and websites)
- Field studies on some factories, such as the textile factory and the pharmaceutical factory.	Social services (including, for example, guest lectures, vocational training, and field studies)

15. admissions	
Bachelor of Preparatory/Literary-Scientific	Prerequisites
70	The smallest number of students
90	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many historical topics related to the science of geography in terms of studying the countries in which the historical event occurred and the personalities who had a role in history and explaining their cultural achievement in the place in which they ruled and worked.

University of Al Mosul	16. Educational institution
College of Education for Human Sciences–Department of Geography	17. University department/center
Islamic historyCode:EDGE 14F 209	18. Course name/code
BSC	19. Programs in which it is included
Daily attendance in class and attendance recording	20. Available attendance forms
annual	21. Semester/year
Six hours a week/192 hours a year	22. Number of study hours(total)
2022	23. Date this description was prepared
24. Course objectivesExtending bridges of scientific communication with the historical vocabulary that was taught in the previous stages of the student’s studies in the middle and preparatory stages and preparing him for the university stage of study, which is self-reliance in learning and receiving, as well as scientific research in order to expand scientific memory.And the student's knowledge storage	

25. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

- A1-Trying to link secondary school curricula with university studies, especially with regard to the first stage
- A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time
- A3-Expanding on some of the vocabulary that we introduced in secondary school and clarifying some of the previous paragraphs
- A4a-Informing the student about historical topics related to the geographical aspect
- A5-Training the student on questions with theoretical and practical historical application
- A6-Linking applied historical issues to the specialty of the Geography Department, such as drawing historical maps and identifying regions, locations, cities, and places of historical battles on the map.

B - Subject-specific skills

- B 1 -Training students to solve problems in class
- B2 -Assigning the student to solve the questions on the board in front of the students
- B3 -Form groups of students to solve questions collectively
- B4-Training the student to deliver a summary of the lecture, not exceeding five minutes, to enhance self-confidence, build the student's personality, qualify him academically, and create communication with his colleagues.
- B5 - Urging the student to pay attention to drawing maps on the board. This is considered a practical exercise for him and helps him determine the locations of cities and regions that are related to the course without relying on it directly. This develops his memory and mind and helps him draw these sites in his imagination, which creates in him the spirit of creativity and distinction and helps On the link between history and geography, which complement each other

Teaching and learning methods

- Scheduled weekly lectures
- Additional lectures
- Discussion and dialogue within the class
- Homework assignments, reports on a topic or borrowing, and reviewing some historical books from ancient sources and modern references
- Using the Internet by returning to the free encyclopedia website (Wikipedia), which includes many historical materials and topics related to geography.

Evaluation methods

- Daily exams
- Monthly exams
- Quarterly exams
- Homework
- High-level questions for which motivational and encouraging grades are given to those who are able to solve them
- Participation in discussion and dialogue and regular attendance at lectures
- Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

- C1-throwCommunicating the lecture to the students in a clear and simple way makes the student communicate with the lecturer
- C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-Adapting the student to linking historical issues to the applied aspect of geography in general and specialties in particular

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	6	Homework	Biography of the Prophet ﷺ And Islamic preaching (Meccan and Medinan)	Lectures	Homework
2	6	Homework	The migration to Abyssinia and the first and second pledges of Aqaba	Lectures	Homework
3	6	Homework	Migration to Medina and construction of the Prophet's Mosque	Lectures	Homework
4	6	Homework	Acts of the Messenger ﷺ In the city and draw up the city constitution	Lectures	Daily exams
5	6	Homework	Battles of the Messenger ﷺ Against the polytheists (Badr, Uhud, Khandaq)	Lectures	Homework
6	6	Homework	Treaty of Hudaibiyyah and the conquest of Mecca	Lectures	Homework
7	6	Homework	Apostasy movements during the era of Abu Bakr Al-Siddiq ﷺ	Lectures	Homework
8	6	Homework	Liberation of Iraq and the Levant during the era of Omar bin Al-Khattab ﷺ	Lectures	Daily exams
9	6	Homework	Financial and administrative regulations during the era of Omar bin Al-Khattab ﷺ	Lectures	Homework
10	6	Homework	Islamic conquests during the reign of Othman bin Affan ﷺ	Lectures	Homework
11	6	Homework	Works of Othman bin Affan ﷺ	Lectures	Monthly exam
12	6	Homework	The state's financial policy during the era of Ali bin Abi Talib ﷺ And his efforts to preserve the unity of the nation	Lectures	Homework
13	6	Homework	The establishment of the Umayyad state and the actions of Muawiyah bin Abi Sufyan ﷺ	Lectures	Homework

14	6	Homework	Conquests during the reign of Muawiyah and his son Yazid and the establishment of the Crown Prince	Lectures	Homework
15	6	Homework	The transfer of power to the Marwani branch of the Umayyad dynasty, the rule of Abd al-Malik bin Marwan, and the establishment of the bureaus	Lectures	Daily exam
16	6	Homework	Al-Walid bin Abdul-Malik and an overview of the most important leaders of the Umayyad era	Lectures	Homework
17	6	Homework	Administrative reforms by Al-Hajjaj bin Yusuf Al-Thaqafi in Iraq	Lectures	Homework
18	6	Homework	The works of Omar bin Aziz	Lectures	Homework
19	6	Homework	Yazid bin Abdul Malik	Lectures	Homework
20	6	Homework	Achievements of Hisham bin Abdul Malik	Lectures	Daily exams
21	6	Homework	The weakness of the state and the emergence of division within the Umayyad family	Lectures	Homework
22	6	Homework	The era of Marwan bin Muhammad	Lectures	Homework
23	6	Homework	Attempts at reconciliation between the members of the Umayyad family	Lectures	Homework
24	6	Homework	The most important aspects of civilization in the Umayyad era	Lectures	Daily exams
25	6	Homework	The emergence of the Abbasids	Lectures	Homework
26	6	Homework	Works of the Abbasid Caliph Abu Abbas al-Saffah	Lectures	Homework
27	6	Homework	The era of Harun al-Rashid and his political relations with the Romans and Europe	Lectures	Homework
28	6	Homework	The era of Caliph Al-Amin and Al-Mamun	Lectures	Daily exams
29	6	Homework	The emergence of the Mu'tazila doctrine	Lectures	Homework
30	6	Homework	The era of Buyid and Seljuk influence	Lectures	Homework
31	6	Homework	The Mongols' occupation of Baghdad and an introduction to the most important administrative systems in the Abbasid era	Lectures	Monthly exam

26. Infrastructure	
<p>Course books</p> <ol style="list-style-type: none"> 1. An assistant booklet on Islamic history (the era of the Message and the Rightly Guided Caliphate), prepared by Dr. Ahmed Maysar Al-Sanjari and Firas Ghanem Al-Ghassani 2. An assistant booklet on Islamic history (the Umayyad era), prepared by Dr. Yasser Abdel-Jawad Al-Mashhadani. 3. An assistant booklet on Islamic history (the Abbasid era), prepared by Dr. Yasser Abdel-Jawad Al-Mashhadani, summarized by: Firas Ghanem Al-Ghassani. <p>Other</p> <ol style="list-style-type: none"> 4. The free encyclopedia website (Wikipedia) on the Internet: www.ar.wikipedia.org 	<p>Required readings:</p> <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books ▪ Other
	Special requirements (including, for example, workshops, periodicals, software, and websites)
	Social services (including, for example, guest lectures, vocational training, and field studies)

27. admissions	
Bachelor of Preparatory/Literary-Scientific	Prerequisites
45	The smallest number of students
60	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many technical sciences and applications in contemporary geography that have direct contact with the practical lives of users in all fields

University of Al Mosul	28. Educational institution
College of Education for Human Sciences–Department of Geography	29. University department/center
GeotechnologiesCode:EDGE14F205	30. Course name/code
BSC	31. Programs in which it is included
Daily attendance in a lecture hall during a week	32. Available attendance forms
annual	33. Semester/year
Three hours weekly / 90 hours annually	34. Number of study hours(total)
2022	35. Date this description was prepared

36. Course objectives

Scientific communication with geographical vocabulary that was taught in the previous stages of the student's study in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to prepare him to become a successful teacher or geography researcher.

37. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link secondary school curricula with university studies

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some vocabulary that was introduced in secondary school and clarifying its concepts

A4a-Introducing the student to modern geographical topics related to the technical aspect

A5-Training the student on questions with theoretical and practical geographical application

A6-Linking applied geographical issues to the specialty of the Geography Department

B - Subject-specific skills

B 1 -Training students to solve geographical problems in class

B2 -Assigning the student to solve the questions on the board in front of the students

B3 -Forming groups of students to carry out geographical applications and projects on the computer

Teaching and learning methods

- Scheduled weekly lectures
- Workshops in practical lectures inside computer laboratories
- Discussion and dialogue within the class
- Homework assignments and reports on modern geographic techniques

Evaluation methods

- Quarterly exams
- Monthly and daily surprise exams
- Homework
- High-level questions are given incentive grades to encourage those who can solve them
- Participation in discussion and dialogue and regular attendance at lectures
- Practical tests on the computer individually for each student as time permits

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple manner, with the use of presentations that keep the student in touch with the lecturer.

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-Teaching the student to link technical issues with the applied aspect of geography in general and specialtysFlour in particular

Teaching and learning methods

- Scheduled weekly lectures
- Scheduled weekly practical lectures
- Discussion and dialogue within the class
- Assignments and reports submitted weekly after practical training lectures

Evaluation methods

- Quarterly exams
- Daily surprise exams
- Weekly reports on practical material
- High-level questions are given incentive grades to encourage those who can solve them
- Participation in discussion and dialogue and regular attendance at lectures
- Practical tests on the computer individually for each student as time permits

D - General and transferable skills

(Other skills related to employability and personal development).

D1-Applying geographical academic vocabulary within this stage to some technical geographical projects

And comparing them to classical geographical methods for each geographical topic in various projects

D2-

D3-

D4-

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Understanding and mastering the meaning of geotechnology and its applications	Concept of geographical techniques	Lectures Theory and practical	Weekly testing
2	3	Explaining the relationship of sensing to geography and its applications	What is remote sensing and its definitions	Lectures Theory and practical	Weekly testing
3	3	Explaining the relationship of sensing to geography and its applications	The importance of sensing the environment and monitoring pollution	Lectures Theory and practical	Weekly testing
4	3	The importance of sensors for spatial environmental monitoring	Monitoring sources of pollution on land and at sea	Lectures Theory and practical	Weekly testing
5	3	Explaining the technical development in sensing methods	Types of sensing methods and technologies	Lectures Theory and practical	Weekly testing

6	3	Explaining the technical development in sensing methods	Contemporary sensor technologies	Lectures Theory and practical	Weekly testing
7	3	Explaining the technical development in sensing methods	Contemporary sensor technologies	Lectures Theory and practical	Weekly testing
8	3	Applications of using the digital cascade model in studying the Earth's surface	Using radar data to model terrain geographically	Power point	Weekly practical test
9	3	Explaining the technical development in environmental sensing methods	Use of geographically imaged radar data	Lectures Theory and practical	practical
10	3	Learn about digital satellite images	General features of space data	Lectures Theory and practical	practical
11	3	Learn about digital satellite images	Using satellite data for applied geographical research	Power point	practical test
12	3	Develop classification skills	Digital classification operations	Lectures Theory and practical	Weekly testing
13	3	Develop location skills	Global Positioning SystemGPS	Lectures Theory and practical	Weekly testing
14	3	Define moving paths	GPS applications in geography	Power point	Weekly testing
15	3	Theoretical idea about Total station	Complete station device for surveying	Lectures Theory and practical	Weekly testing
16	3	Get an idea of the system's style	General concept of geographic information systems	Lectures Theory and practical	Quarterly theoretical exam
17	3	Understand the meaning of order	Definitions of information systems	Lectures Theory and practical	practical
18	3	See its most important features	Features of information systems	Lectures Theory and practical	practical

19	3	View jobs	Information system functions and benefits	Lectures Theory and practical	practical
20	3	Know the most important components	Components of a geographic information system	Lectures Theory and practical	practical
21	3	Distinguish between different data	Types of geographical data	Lectures Theory and practical	practical
22	3	They are the sources of data supply	Geographic data sources	Lectures Theory and practical	practical
23	3	Learn to use it practically	Digital elevation model, its characteristics and applications	Lectures Theory and practical	practical
24	3	Understand the importance of metadata	Descriptive and spatial data	Power point	practical
25	3	Determine how you collect data	Data collection methods	Lectures Theory and practical	practical
26	3	Practice storing data in the computer	Data storage methods	Lectures Theory and practical	practical
28	3	Familiarity with geographical charts	Geographic databases and their most important types	Power point	practical
29	3	Practice on automated map output	Production of geographical maps automatically by computer	Lectures Theory and practical	practical
30	3	View geographic applications online	The Internet and its interactive geographic applications	Lectures Theory and practical	Quarterly practical exam

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38. Infrastructure	
<ul style="list-style-type: none"> The book (Geographic Technologies, Foundations and Applications) is identical to the curriculum of the subject A summary of the basic theoretical topics prepared by the lecturer Practical training guide for the program prepared by the lecturer 	Required readings: Basic texts Course books Other
<ul style="list-style-type: none"> Weekly practical training on sequential exercises in the practical training program 	Special requirements (including, for example, workshops, periodicals, software, and websites)
<ul style="list-style-type: none"> Training on the Aizri company program ARCVIEW 	Social services (including, for example, guest lectures, vocational training, and field studies)

39. admissions	
Bachelor of Preparatory/Literary-Scientific	Prerequisites
70 (small numbers provide great training skills)	The smallest number of students
90 (but the actual number is currently 300 students)anyThree times the maximum number, which causes major problems and obstacles in the education process	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many climate topics that contain many geographical applications that are directly related to practical life

University of Al Mosul	40. Educational institution
College of Education for Human Sciences–Department of Geography	41. University department/center
Applied climateEDGE14F203 Code:	42. Course name/code
BSC	43. Programs in which it is included
Daily attendance in class and attendance recording	44. Available attendance forms
annual	45. Semester/year
Three hours per week, one theoretical hour and two practical hours/90 hours per year	46. Number of study hours(total)
2022	47. Date this description was prepared
48. Course objectivesExtending bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student’s studies in the secondary stage and preparing him for the university stage of study, which is self-reliance in learning and scientific research in order to expand scientific memory.	

49. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

- A1-Trying to link secondary school curricula with university studies, especially with regard to the first stage
- A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time
- A3-Expanding on some of the vocabulary that we introduced in secondary school and clarifying some of the previous paragraphs
- A4a-Introducing the student to applied climate topics related to the geographical aspect
- A5-Training the student on mathematical and statistical questions with practical geographical application
- A6-Linking applied cartographic issues to the specialty of the Geography Department

B - Subject-specific skills

- B 1 -Training students to solve problems in class
- B2 -Assigning the student to solve the questions on the board in front of the students
- B3 -Form groups of students to solve questions collectively

Teaching and learning methods

- Scheduled weekly lectures
- Additional lectures
- Discussion and dialogue within the class
- Homework assignments, reports on a topic or borrowing, and reviewing some recent applied climate books

Evaluation methods

- Quarterly exams
- Monthly and daily surprise exams
- Homework
- High-level questions for which motivational and encouraging grades are given to those who are able to solve them
- Participation in discussion and dialogue and regular attendance at lectures
- Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

- C1-throwConveying the lecture to the students in a smooth, clear and simple way makes the student communicate with the lecturer
- C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.
- C3-The summit seeks to link cartographic issues to the applied aspect of geography in general and specificitiesFlour in particular

Teaching and learning methods

- Scheduled weekly lectures
- Additional lectures
- Discussion and dialogue within the class
- Homework assignments, reports on a topic or borrowing, and reviewing some recent applied climate books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

- General and transferable skills (other skills related to employability and personal development) .

-An attempt to apply the academic vocabulary given during that stage to some minor geographical projects, explaining the main role of each geographical topic in the details of this project and its applications.

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	Homework	The concept of applied climatology and trends in its study	Lectures	Homework
2	3	Homework	Definition of applied climate, its origins and development	Lectures	Homework
3	3	Homework	Recent trends in the study of applied climate	Lectures	Homework
4	3	Homework	Climatic information measurements and processing	practical	Homework
5	3	Homework	Equipment used in applied studies	practical	Homework

6	3	Homework	Moving from direct methods of measurement to statistical and mathematical methods	practical	Homework
7	3	Homework	Measurement of possible evapotranspiration	practical	Monthly exam
8	3	Homework	Measurement of dehydration	practical	Homework
9	3	Homework	Measurement of solar radiation	practical	Daily exam
10	3	Homework	Climate water budget	practical	Homework
11	3	Homework	Climatic classifications	practical	Semester exam
12	3	Homework	Fundamental climate classifications	practical	Homework
13	3	Homework	Köppen classification	practical	Homework
14	3	Homework	Modern climate classifications (Holderge, Bedeko, Kosen)	practical	Homework
15	3	Homework	Human climate classifications (Tom, Spell and Basel)	practical	Homework
16	3	Homework	The relationship between climate and human activities	Lectures	Homework
17	3	Homework	Agriculture and grazing Air, land and water transportation	Lectures	Homework
18	3	Homework	Industry Tourism and entertainment Military operations	Lectures	Homework
19	3	Homework	Climate and society	Lectures	Daily exam

20	3	Homework	Human physiological comfort	practical	Homework
21	3	Homework	Climate and public health	Lectures	Homework
22	3	Homework	Climate and building design	Lectures	Daily exams
23	3	Homework	Climate and alternative energy sources	practical	Homework
			(solar radiation, wind energy)		
24	3	Homework	(tidal energy, lightning energy)	Lectures	Homework
25	3	Homework	(daily and annual energy consumption)	Lectures	Homework
26	3	Homework	Weather forecasting and control	Lectures	Homework
27	3	Homework	– Weather forecasting and its methods	Lectures	Monthly exam
			– Climate forecasting and climate change		
28	3	Homework	Theories	Lectures	Homework
29	3	Homework	The importance of predicting and controlling weather and climate	Lectures	Homework
30	3	Homework	The city's climate is a model for local climate change	Lectures	Homework

Infrastructure

<p>- Iqbal,M,1983,An introduction to solar radiation. - Allen,R,H,et all,1998,Solar radiation (FAO). -Roger, G, B, Richard, J, c, 2003. Atmosphere, Weather and Climate, London.</p> <p>- Applied Climate, Ali Ahmed Ghanem, Amman, 2010. - Applied Climate, Adel Saeed, Qusay Al-Samarrai, Baghdad, 1990. - Climate Change in the Balance, Ibrahim Al-Aroud, Jordan, 2001.</p>	<p>Required readings:</p> <ul style="list-style-type: none">▪ Basic texts▪ Course books▪ Other
	<p>Special requirements (including, for example, workshops, periodicals, software, and websites)</p>
	<p>Social services (including, for example, guest lectures, vocational training, and field studies)</p>

admissions

Bachelor of Preparatory/Literary-Scientific	Prerequisites
70	The smallest number of students
90	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes many topics related to the scientific research method, which contain many academic research concepts that guide the student on how to write research in a way that serves the various geographical topics related to humans and their activities on the surface of the Earth.

University of Al Mosul	50. Educational institution
College of Education for Human Sciences–Department of Geography	51. University department/center
Scientific research methodEDGE14F207	52. Course name/code
BSC	53. Programs in which it is included
Daily attendance in class and attendance recording	54. Available attendance forms
annual	55. Semester/year
2 hours per week/60 hours per year	56. Number of study hours(total)
2022	57. Date this description was prepared
58. Course objectivesExtending bridges of scientific communication with geographical vocabulary taught in the university stages of study and training the student on how to write academic research by relying on himself in learning and scientific research in order to expand scientific memory in service to society.	

59. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

- A1-Trying to link the study curricula with the four stages of university study
- A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time
- A3-Expanding on some vocabulary within the academic subjects that were given and will be given in the coming stages
- A4a-Informing the student about the topics and how to write scientific research related to geographical topics
- A5-Training the student on questions related to theoretical and applied geographical methodology
- A6-Linking applied research issues to the specialty of the Geography Department

B - Subject-specific skills

- B 1 -Training students to prepare a plan for writing research in class
- B2 -Assigning the student to write an introduction to geographical scientific research
- B3 -Stimulate the student's mind on how to study geographical topics by preparing a specific research
- B4-Enabling the student to choose a geographical subject and study it academically

Teaching and learning methods

Scheduled weekly lectures
Additional lectures
Discussion and dialogue within the class
Homework assignments, reports on a topic or borrowing, and reviewing some books on scientific research methods

Evaluation methods

Quarterly exams
Monthly and daily surprise exams
Homework
Preparing research for which incentive grades are given that encourage those who are able to prepare distinguished research
Participation in discussion and dialogue and regular attendance at lectures
Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

- C1-throwConveying the lecture to the students in a smooth, clear and simple way makes the student communicate with the lecturer
- C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.
- C3-The summit seeks to link cartographic issues to the applied aspect of geography in general and specificitiesFlour in particular
- C4-

Teaching and learning methods

Scheduled weekly lectures
Additional lectures
Discussion and dialogue within the class
Homework assignments, reports on a topic or borrowing, and reviewing some books on scientific research methods

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

Preparing research for which incentive grades are given that encourage those who are able to prepare distinguished research

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

D - General and transferable skills (other skills related to employability and personal development).

D1- D1-An attempt to apply the academic vocabulary given during this stage to some minor geographical projects to demonstrate the main role of each geographical topic in the details of this project.

D2-

D2-

D3-

D4-

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	2	Prepare a search	Framework of scientific thinking	Lectures	Homework
2	2	Prepare a search	Definition and importance of scientific research	For lectures	Daily exams
3	2	Prepare a search	The problem of scientific research	For lectures	Homework
4	2	Prepare a search	What is scientific thinking?	For lectures	Homework
5	2	Prepare a search	Objectives of science	For lectures	Monthly exam
6	2	Prepare a search	Scientific research methods	For lectures	Homework
7	2	Prepare a search	Types of scientific research methods	For lectures	Daily exam
8	2	Prepare a search	Identify geographical problems	For lectures	Homework
9	2	Prepare a search	Determine geographical hypotheses	For lectures	Daily exams

10	2	Prepare a search	Design the research framework	For lectures	Homework
11	2	Prepare a search	Literature survey (previous studies)	For lectures	Semester exam
12		Prepare a search	Organizing the research schedule	For lectures	Homework
13		Prepare a search	Technical framework for data collection	For lectures	Homework
14	2	Prepare a search	Geographical techniques used in various stages of research	Lectures	Homework
15	2	Prepare a search	Desk sources	Lectures	Homework
16	2	Prepare a search	Field technologies	Lectures	Evening exam
17	2	Prepare a search	Inspection	Lectures	Homework
18	2	Prepare a search	Statistical rules used to achieve sampling	Lectures	Monthly exam
19	2	Prepare a search	the interview	Lectures	Homework
20	2	Prepare a search	Questionnaire	Lectures	Homework
21	2	Prepare a search	Organizing the questionnaire form	Lectures	Daily exams
22	2	Prepare a search	data analysis	Lectures	Homework
23	2	Prepare a search	Data calendar	Lectures	Homework
24	4	Prepare a search	Analysis using maps and aerial photos and displaying data.	Lectures	Monthly exam
25	4	Prepare a search	Statistical methods and their applications in geographical research	Lectures	Homework
26	4	Prepare a search	Dispersion criteria	Lectures	Homework
27	4	Prepare a search	Positioning criteria	Lectures	Monthly exam
28	4	Prepare a search	Discussing research prepared as an assignment by students	Lectures	discussion

29	4	Prepare a search	Discussing research prepared as an assignment by students	Lectures	Monthly exam
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60. Infrastructure

Book: Scientific Research Methods by Dr. Abdul Razzaq Al-Butaihi	Required readings: <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books ▪ Other
	Special requirements (including, for example, workshops, periodicals, software, and websites)
	Social services (including, for example, guest lectures, vocational training, and field studies)

61. admissions

Bachelor of Preparatory/Literary-Scientific	Prerequisites
70	The smallest number of students
90	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

Modern political geography / fourth stage. The course includes many topics related to political events and phenomena, such as concepts, theories, methodological steps, and quantitative methods from the perspective of applied geography that seek to solve many natural and human problems that are directly related to the geopolitical aspects of political units from a regional perspective.

University of Al Mosul	62. Educational institution
College of Education for Human Sciences–Department of Geography	63. University department/center
Modern political geographyCode: EDGE14M404	64. Course name/code
BSC	65. Programs in which it is included
Daily attendance in the classroom and recording attendance	66. Available attendance forms
annual	67. Semester/year
Three hours a week/90 hours a year	68. Number of study hours(total)
2022	69. Date this description was prepared
70. Course objectives Extending a bridge of scientific communication with geographical vocabulary that was studied in the previous three university stages of the student's studies with the aim of preparing him for the stage of graduate studies or practicing professional work in the field of secondary teaching, which is self-reliance in learning and scientific research in order to expand scientific memory.	

71. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-An attempt to link the university curricula for the first three years with the political geography curriculum in the fourth stage

A2-Introducing the student to the new curricula in the field of specialization and its vocabulary to determine the strength or weakness of the country

A3-Expansion of contemporary political topics adopted in the twenty-first century

A4-Introducing the student to theories of strategic power related to geopolitics

A5-Training the student on questions with theoretical and practical geographical application

A6-Linking the curriculum in applied political geography to the geography specializations

B - Subject-specific skills

B 1 -Helping students understand the objective and methodological dimensions of political geography

B2 -Training students to discuss spatial relationships and state power from a perspective of natural and human geographical phenomena

B3 -Assigning the student to draw political maps on the board in front of the students

B4-Developing thinking skills through induction or deduction to expand the field of objective perception

Teaching and learning methods

Scheduled weekly lectures

Available educational means (computer and maps)

Discussion and dialogue in the classroom

Assignments and reports on a topic, or borrowing and reviewing some sources related to political geography

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Duties and monthly reports

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-throwDelivering the lecture to students in an organized manner according to the steps and curricula of university teaching methods

C2-Creating a study environment that stimulates the student to think programmed for methodological vocabulary based on asking unconventional questions through which students' skills can be discovered while giving encouraging incentives to those who possess these skills.

C3-Asking students to link the topics of transport and trade with their applied aspects to the fields of geographical specializations, especially economic geography

C4-Encouraging students to answer deductive intellectual questions as an attempt to discover and encourage individual skills

D - General and transferable skills (other skills related to employability and personal development).

D1-An attempt to apply the academic vocabulary given within the course to some geographical graduation research projects.

D2-Developing the personality of the academic researcher among students in studying geographical problems related to transportation and trade

D3-Increasing students' skills in quantitative aspects through the application of some statistical indicators

D4-Developing students' skills by employing computer capabilities (GIS) related to the vocabulary of the academic subject

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	UnderstandingAnd perception	The emergence of geopolitics	Lecture and discussion	Oral and daily testing
2	3	UnderstandingAnd perception	Research methods in political geography	Lecture and discussion	Oral and daily testing
3	3	UnderstandingAnd perception	ImportancePolitical theories	Lecture and discussion	Oral and daily testing
4	3	UnderstandingAnd perception	Natural elements and their role in the strength of the state	Lecture and discussion	Oral and daily testing
5	3	UnderstandingAnd perception	The human foundations affecting the power of the state	Lecture and discussion	Oral and daily testing
6	3	UnderstandingAnd perception	Elements of economic power of state power	Lecture and discussion	Oral and daily testing
7	3	UnderstandingAnd perception	Ground force theory	Lecture and discussion	Monthly exam

8	3	UnderstandingAnd perception	The theory of sea power	Lecture and discussion	Oral and daily testing
9	3	UnderstandingAnd perception	Air power theory	Lecture and discussion	Homework
10	3	UnderstandingAnd perception	Political boundaries and its importance	Lecture and discussion	Oral and daily testing
11	3	UnderstandingAnd perception	Classification of political boundaries	Lecture and discussion	Oral and daily testing
12	3	UnderstandingAnd perception	Economic blocs	Lecture and discussion	Oral and daily testing
13	3	UnderstandingAnd perception	The regional perception of the composition of the population in the power of the state	Lecture and discussion	Oral and daily testing
14	3	UnderstandingAnd perception	Water security concept and importance	Lecture and discussion	Mid-year exam
15	3	UnderstandingAnd perception	Food security political importance	Lecture and discussion	Oral and daily testing
16	3	UnderstandingAnd perception	Economic structures and their political reflection	Lecture and discussion	Oral and daily testing
17	3	UnderstandingAnd perception	Neighboring countries from a national security perspective	Lecture and discussion	Oral and daily testing
18	3	UnderstandingAnd perception	A case study of the neighboring role of the State of Iraq	Lecture and discussion	Oral and daily testing

19	3	UnderstandingAnd perception	The Zionist entity and the problem of Arab national security	Lecture and discussion	Oral and daily testing
20	3	UnderstandingAnd perception	Geopolitics of international conflict	Lecture and discussion	Oral and daily testing
21	3	UnderstandingAnd perception	Geopolitics of the Arab Gulf countries	Lecture and discussion	Oral and daily testing
22	3	UnderstandingAnd perception	Geopolitics of the Red Sea countries	Lecture and discussion	Oral and daily testing
23	3	UnderstandingAnd perception	Geopolitics of the Mediterranean countries	Lecture and discussion	Oral and daily testing
24	3	UnderstandingAnd perception	Geopolitical dimensions of foreign trade	Lecture and discussion	Oral and daily testing
25	3	UnderstandingAnd perception	Geography of elections	Lecture and discussion	Monthly exam
26	3	UnderstandingAnd perception	The main requirements in studying elections	Lecture and discussion	Oral and daily testing
27	3	UnderstandingAnd perception	A case study of the geography of elections	Lecture and discussion	Oral and daily testing
28	3	UnderstandingAnd perception	The role of trade in creating economic blocs	Lecture and discussion	Oral and daily testing
29	3	UnderstandingAnd perception	Theories Classic and contemporaryFor elections	Lecture and discussion	Oral and daily testing

30	3	UnderstandingAnd perception	Standards and foundationsHolding elections	Lecture and discussion	Oral and daily testing
31	3	UnderstandingAnd perception	Geographical analysisPoliticianFor the peopleMThe largest in the world	Lecture and discussion	End of year exam

72. Infrastructure

<p>Primary sources</p> <p>1. Mr. Dr. Muhammad Azhar Saeed Al-Sammak, Modern geopolitics in the twenty-first century perspective Dar Al-Yazouri / Jordan, 2011</p> <p>Helping sources</p> <p>2. Qasim Al Dweikat, Political Geography. 1999</p>	<p>Required readings:</p> <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books ▪ Other
<p>Providing reports and inventorying modern office and electronic sources Contemporary political cartography</p>	<p>Special requirements (including, for example, workshops, periodicals, software, and websites)</p>
<p>Training in methodological and quantitative methods the Geography Politics And apply methods Ha modern</p>	<p>Social services (including, for example, guest lectures, vocational training, and field studies)</p>

73. admissions

Graduates of middle and high school, literary and scientific	Prerequisites
50	The smallest number of students
70	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

Geography of transport and foreign trade / fourth stage. The course includes many topics related to transportation and foreign trade, such as concepts, theories, methodological steps, and quantitative methods from the perspective of applied geography that seek to solve many natural and human problems that are directly related to economic aspects from a regional perspective.

University of Al Mosul	1. Educational institution
College of Education for Human Sciences–Department of Geography	2. University department/center
Geography of transport and tradeCode: EDGE14M404	3. Course name/code
BSC	4. Programs in which it is included
Daily attendance in the classroom and recording attendance	5. Available attendance forms
annual	6. Semester/year
Three hours a week/90 hours a year	7. Number of study hours(total)
2022	8. Date this description was prepared
9. Course objectives Extending a bridge of scientific communication with geographical vocabulary that was studied in the previous three university stages of the student's studies with the aim of preparing him for the stage of graduate studies or practicing professional work in the field of secondary teaching, which is self-reliance in learning and scientific research in order to expand scientific memory.	

10. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-An attempt to link the university curricula for the first three years with the geography of transport and trade curriculum for the fourth stage

A2-Introducing the student to the new curricula in the field of specialization with its vocabulary to reveal spatial relationships between geographical phenomena

A3-Expanding the quantitative and statistical methods adopted in studying transportation phenomena

A4-Introducing the student to topics related to transportation and trade related to the geographical economic aspect

A5-Training the student on questions with theoretical and practical geographical application

A6-Linking the curriculum in applied transport and trade geography to the geography specializations

B - Subject-specific skills

B 1 -Helping students understand the objective and methodological dimensions of the geography of transport and trade

B2 -Training students to discuss spatial relationships between transport and commercial phenomena with natural and human geographical phenomena

B3 -Assigning the student to apply quantitative indicators on the board and in front of the students

B4-Developing thinking skills through induction or deduction to expand the field of objective perception

Teaching and learning methods

Scheduled weekly lectures

Available educational means (computer and maps)

Discussion and dialogue in the classroom

Assignments and reports on a certain place or borrowing and access to some sources related to the geography of transport and trade

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Duties and monthly reports

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-throwDelivering the lecture to students in an organized manner according to the steps and curricula of university teaching methods

C2-Creating a study environment that stimulates the student to think programmed for methodological vocabulary based on asking unconventional questions through which students' skills can be discovered while giving encouraging incentives to those who possess these skills.

C3-Asking students to link the topics of transport and trade with their applied aspects to the fields of geographical specializations, especially economic geography

C4-Encouraging students to answer deductive intellectual questions as an attempt to discover and encourage individual skills

D - General and transferable skills (other skills related to employability and personal development).

D1-An attempt to apply the academic vocabulary given within the course to some geographical graduation research projects.

D2-Developing the personality of the academic researcher among students in studying geographical problems related to transportation and trade

D3-Increasing students' skills in quantitative aspects through the application of some statistical indicators

D4-Developing students' skills by employing computer capabilities (GIS) related to the vocabulary of the academic subject

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	3	UnderstandingAnd perception	The concept of transportation and its main pillars	Lecture and discussion	Oral and daily testing
2	3	UnderstandingAnd perception	Transport and sustainable development in a geographical perspective	Lecture and discussion	Oral and daily testing
3	3	UnderstandingAnd perception	The importance of transportation planning and the stages and requirements of the planning process	Lecture and discussion	Oral and daily testing
4	3	UnderstandingAnd perception	Transportation costs, their types and factors affecting them.	Lecture and discussion	Oral and daily testing
5	3	UnderstandingAnd perception	Transport and theories of spatial organization of land uses	Lecture and discussion	Oral and daily testing

6	3	UnderstandingAnd perception	The main elements of transportation systems	Lecture and discussion	Oral and daily testing
7	3	UnderstandingAnd perception	Transport geography and its position in geography and other sciences	Lecture and discussion	Monthly exam
8	3	UnderstandingAnd perception	Research methods and data sources in transportation geography	Lecture and discussion	Oral and daily testing
9	3	UnderstandingAnd perception	Quantitative methods in transportation geography	Lecture and discussion	Homework
10	3	UnderstandingAnd perception	Natural controls affecting transportation	Lecture and discussion	Oral and daily testing
11	3	UnderstandingAnd perception	Human factors affecting transportation	Lecture and discussion	Oral and daily testing
12	3	UnderstandingAnd perception	Land transportation by automobile	Lecture and discussion	Oral and daily testing
13	3	UnderstandingAnd perception	Characteristics and economic advantages of land transportation by automobile	Lecture and discussion	Oral and daily testing
14	3	UnderstandingAnd perception	Classification of methods and means of transportation by automobile	Lecture and discussion	Mid-year exam
15	3	UnderstandingAnd perception	Land transportation by rail	Lecture and discussion	Oral and daily testing

16	3	UnderstandingAnd perception	Types of railway networks	Lecture and discussion	Oral and daily testing
17	3	UnderstandingAnd perception	The importance of moving equipment on railways	Lecture and discussion	Oral and daily testing
18	3	UnderstandingAnd perception	Transport characteristics of land transport by pipeline	Lecture and discussion	Oral and daily testing
19	3	UnderstandingAnd perception	Economic advantages of pipe transportation	Lecture and discussion	Oral and daily testing
20	3	UnderstandingAnd perception	Problems arising from pipeline transportation management	Lecture and discussion	Oral and daily testing
21	3	UnderstandingAnd perception	Maritime transport systems (ports, marine fleets)	Lecture and discussion	Oral and daily testing
22	3	UnderstandingAnd perception	Navigational channels and fjords	Lecture and discussion	Oral and daily testing
23	3	UnderstandingAnd perception	Global shipping lines and its importance for international trade	Lecture and discussion	Oral and daily testing
24	3	UnderstandingAnd perception	Characteristics and requirements of air transport systems (Airports, airplanes, airlines).	Lecture and discussion	Oral and daily testing
25	3	UnderstandingAnd perception	The main air transport regions in the world	Lecture and discussion	Monthly exam

26	3	UnderstandingAnd perception	Theoretical framework of business activity (concept, importance, goals)	Lecture and discussion	Oral and daily testing
27	3	UnderstandingAnd perception	Natural and human foundations affecting commercial activity	Lecture and discussion	Oral and daily testing
28	3	UnderstandingAnd perception	The role of trade in creating economic blocs	Lecture and discussion	Oral and daily testing
29	3	UnderstandingAnd perception	Theories Classic and contemporary in doing business	Lecture and discussion	Oral and daily testing
30	3	UnderstandingAnd perception	Standards and foundations for commercial classification of goods and services	Lecture and discussion	Oral and daily testing
31	3	UnderstandingAnd perception	A geographical analysis of the world's major trading regions	Lecture and discussion	End of year exam

11. Infrastructure

Primary sources

3. Dr.. Saadi Ali Ghalib, Geography of Transport and International Trade, Dar Ibn al-Atheer, University of Mosul, 1978.

Required readings:

- Basic texts
- Course books
- Other

4. Mr. Dr. Muhammad Azhar Saeed Al-Sammak, Dr. Ahmed Hamed, Dr. Muhammad Hashem Thanoun Al-Hayali, The Geography of Transport between Methodology and Application, Dar Al-Yazouri / Jordan, 2011

Helping sources

5. Thamer Yasser Al-Bakri, Transportation and Communications Facilities Management, Dar Al-Qadisiyah Printing and Publishing Press, Baghdad, 1985.
6. Awad Youssef Al-Haddad, Individual Roads and Transport Networks, A Quantitative and Applied Study in Transport Geography, first edition, Qar Younis University Publications – Benghazi, 2002.
7. Khaled Muhammad Al-Sawai, Theoretical International Trade and its Applications, World of Modern Books, Jordan, 2010.

Providing reports and inventorying modern office and electronic sources	Special requirements (including, for example, workshops, periodicals, software, and websites)
Training on methodological and quantitative methods in the geography of transport and trade and the application of field research methods	Social services (including, for example, guest lectures, vocational training, and field studies)

12. admissions	
Graduates of middle and high school, literary and scientific	Prerequisites
50	The smallest number of students
70	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

This subject includes topics of geographical thought that contain many of its geographical vocabulary from ancient times to the present. By explaining the role of the Arabs in this knowledge and in establishing its rules and origins, as well as modern geographical schools and their contemporary trends.

University of Al Mosul	1. Educational institution
College of Education for Human Sciences–Department of Geography	2. University department/center
Geographic thought, symbol:EDGE14F402	3. Course name/code
BSC	4. Programs in which it is included
Daily attendance in class and attendance recording	5. Available attendance forms
annual	6. Semester/year
Two hours a week	7. Number of study hours(total)
2022	8. Date this description was prepared
9. Course objectives Building bridges of scientific communication with geographical vocabulary that was studied in the previous stages of the student's studies at the university level and his intellectual development in preparation for the future stages of his academic or professional life to rely on himself in learning and scientific research in order to expand scientific memory.	

10. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Trying to link university curricula, especially with regard to developments in geography

A2-Introducing the student to the new curriculum and the new vocabulary it contains, taught for the first time

A3-Expanding on some of the vocabulary that was given and clarifying some of the previous paragraphs

A4a-Introducing the student to topics within geographical thought and explaining the relationship between the past and the present

A5-Training the student on questions with theoretical geographical application

A6-Linking intellectual issues with developments in geography

B - Subject-specific skills

B 1 -Training students to answer questions in class

B2 -Assigning the student to participate in solving the questions in front of the students

B3 -Form groups of students to answer questions collectively

B4-

Teaching and learning methods

Scheduled weekly lectures

Additional lectures

Discussion and dialogue within the class

Homework assignments, reports on a place or metaphor, and reading some books on geographical thought

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

C1-throwConveying the lecture to the students in a smooth, clear and simple way makes the student communicate with the lecturer

C2-Creating a study environment that stimulates the student to be creative and think by asking unconventional questions through which students' skills can be discovered, while giving encouraging incentives to those who possess these skills.

C3-The summit seeks to link issues related to geographical thought to the branches of geography in general and specializationsFlour in particular

C4-

Teaching and learning methods

Scheduled weekly lectures
 Additional lectures
 Discussion and dialogue within the class
 Homework assignments, reports on a place or metaphor, and reading some books on geographical thought

Evaluation methods

Quarterly exams
 Monthly and daily surprise exams
 Homework
 High-level questions for which motivational and encouraging grades are given to those who are able to solve them
 Participation in discussion and dialogue and regular attendance at lectures
 Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

D - General and transferable skills (other skills related to employability and personal development).

D1- D1-An attempt to apply the academic vocabulary given during that stage to some minor geographical projects to demonstrate the main role of each geographical topic in the details of this project (research).

D2-

D2-

D3-

D4-

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	2	Homework	Introducing students to the vocabulary and sources of geographical thought	Lectures	Homework
2	2	Homework	The concept of geographical thought, its general focus and its relationship to the development of geography	For lectures	Daily exams
3	2	Homework	The nature of geography and its relationship to various branches of science and drawing	For lectures	Homework
4	2	Homework	Definition of the geographical phenomenon and its conditions, the position of geography	For lectures	Homework

			among the various branches of science, with examples		
5	2	Homework	The location of geography between group theory and drawing, branches of geography and the relationship of geography to different fields of knowledge	For lectures	Monthly exam
6	2	Homework	The concept of the region and regional geography, human geography and its various branches, physical geography and its various branches	For lectures	Homework
7	2	Homework	Geographical thought in ancient times, aspects of geographical knowledge shared by ancient civilizations	For lectures	Daily exam
8	2	Homework	Geographical thought in Iraqi civilization, geographical thought in Egyptian civilization	For lectures	Homework
9	2	Homework	Geographical thought in the Phoenician civilization	For lectures	Daily exams
10	2	Homework	Geographical thought in Chinese civilization, geographical thought in Indian civilization	For lectures	Homework

11	2	Homework	Geographical thought in Greek civilization, with reference to the most prominent scholars of this period	For lectures	Semester exam
12	2		Geographical thought in Roman civilization with reference to the most prominent scholars of this period		
13	2		Arab geographical thought before Islam		
14	2	Homework	Arab-Islamic geographical thought By dividing the development of geographical thought into four basic stages, the most prominent scholars of each of the four stages	Lectures	Homework
15	2	Homework	Arab-Islamic geographical thought until the end of the Ottoman era, with emphasis on the most important phenomena that emerged in geographical thought after the fall of Baghdad, with a presentation of Arab authors in that period.	Lectures	Homework
16	2	Homework	The most important phenomena that emerged in the dark period of Arab-Islamic geographical thought, with reference to the most prominent scholars of this period	Lectures	Evening exam
17	2	Homework	Fields of Arab geography	Lectures	Homework
18	2	Homework	Mathematical and astronomical geography, with reference to the most important ancient astronomical instruments that were used in Arab astronomy	Lectures	Evening exam
19	2	Homework	Descriptive geography, the journeys and stages it went through, with an emphasis on the most prominent scholars in this field	Lectures	Homework
20	2	Homework	Physical Geography/Human Geography	Lectures	Homework
22	2	Homework	The emergence of cartography in Arabic geography, the stages through which the development of Arabic maps passed, with reference to the Al-Idrisi map	Lectures	Daily exams
23	2	Homework	The impact of Arab-Islamic geography on the European Renaissance	Lectures	Homework

24	2	Homework	Geographical discoveries, the Arabs' contribution to them, and their goals	Lectures	Homework
25	2	Homework	Discovery of the continent of Australia, stages of the discovery process	Lectures	Evening exam
26	2	Homework	Contemporary geographical thought, new trends in modern geography	Lectures	Homework
27	2	Homework	Modern German Geographical School, Modern French Geographical School	Lectures	Daily exams
28	2	Homework	Modern English Geographic School, Modern American Geographic School	Lectures	Homework
29	2	Homework	Contemporary Arab Geography	Lectures	Evening exam
30	2	Homework	Contemporary geographical concepts	Lectures	Homework

11. Infrastructure

1: Grift Tyker, Geography in the Twentieth Century, translated by Ahmed Al-Sayyid Ghallab, Cairo, 1974.
 2: T. W. Freeman, A Century of Geographer's Development, translated by Shaker Khasbak
 3: Nafis Ahmed, Muslim Efforts in Geography, translated by Fathi Othman
 4: R. J. Hartshorne, The Nature of Geography, 1st, 2nd ed., translated by Shaker
 Your fertility
 5: Yousry Al-Gawhary, Geographical Thought and Geographical Discoveries, 1976
 6: D. Muhammad Azhar Al-Sammak, Geographical Thought, Dar Ibn Al-Atheer for Printing and Publishing (methodological book), 1990.
 7: Abd Khalil Fadil, Ibrahim Abd al-Jabbar al-Mashhadani, National Library, Baghdad, 1990.

Required readings:

- Basic texts
- Course books
- Other

Special requirements (including, for example, workshops, periodicals, software, and websites)

Social services (including, for example, guest lectures, vocational training, and field studies)

12. admissions	
Preparatory/Literary-Scientific	Prerequisites
70	The smallest number of students
90	The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course includes geographical topics that have a direct impact on biological life (plants and animals).

University of Al Mosul	1. Educational institution
College of Education for Human Sciences–Department of Geography	2. University department/center
BiogeographyCode:EDGE 14M 407:	3. Course name/code
BSC	4. Programs in which it is included
Daily attendance in class and attendance recording	5. Available attendance forms
annual	6. Semester/year
Two hours a week/60 hours a year	7. Number of study hours(total)
2022	8. Date this description was prepared
9. Course objectives:Scientific research and learning in order to raise scientific skill	

10. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

A1-Introducing the student to the curriculum and the vocabulary it contains

A2-Introducing the student to topics related to the biological aspects of plants and animals

A3-Training the student on questions with theoretical and practical geographical content

A4a- A5-A6-Linking theoretical issues to geographical reality through distribution, comparison and application

B - Subject-specific skills

B 1 -Training students to acquire mental skills and possess the abilities to describe, analyze and interpret

B2 –Assigning the student to answer questions or provide clarification to test and develop his skills

B3 –Assigning students to convert or represent the theoretical framework into tables or illustrative figures 0

B4-

Teaching and learning methods

Scheduled weekly lectures

Discussion and dialogue within the class

Homework assignments and reviewing modern sources

Evaluation methods

Participation in discussion and dialogue and regular attendance at lectures

Homework

Monthly and daily examinations

Quarterly exams

C- Thinking skills

C1-aAdopting the appropriate method for delivering the lecture to students in a way that motivates the student to communicate and participate in the lecture

C2-Encouraging students to be creative and think by asking questions to discover their skills and giving encouraging incentives to those who possess those skills

C3-Teaching students how to link theoretical issues to the realistic aspect and developing their geographical abilities in general and in the vital field in particular

C4-

Teaching and learning methods

Scheduled weekly lectures

Discussion and dialogue within the class

Homework assignments, reports on a topic, or borrowing and reviewing some modern books and sources

Evaluation methods

Lectures are arranged and organized in an integrated manner and according to the chronological progression of the curriculum

Quarterly exams

Monthly and weekly exams

Homework

Questions with specific contents, with incentive marks allocated to those who can solve them

Participation in discussion and dialogue and regular attendance at lectures

Dr1- General and transferable skills (other skills related to employability and personal development).

Dr2-An attempt to apply the academic vocabulary given during this stage to some biological phenomena that explains the true role of the aforementioned vocabulary in the existence of the biological phenomenon.

D3-

D4-

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	2	Homework	Biogeography is the most importantYGet lost	Lectures	Discussion and clarification
2	2	Homework	Dynamics and evolution of plants on Earth	For lectures	Clarifying questions
3	2	Homework	Biosphere	For lectures	Required answers
4	2	Homework	And the spread of plants	For lectures	Follow up on assignments
5	2	Homework	Plant history	For lectures	ExamDaily
6	2	Homework	Classification of plants	For lectures	Homework
7	2	Homework	Bioreactivity	For lectures	Follow up on preparation
8	2	Homework	Environmental controls for living things	For lectures	Recitation and interpretation
9	2	Homework	the climate/ the heat	For lectures	Illustrative examples
10	2	Homework	the climate/ Rain	For lectures	Regional comparisons
11	2	Homework	Other climate elements	For lectures	Semester exam
15	2	Homework	Soil properties	Lectures	Discussion and inquiry
16	2	Homework	Soil types	Lectures	Regional comparisons
17	2	Homework	Conflicts	Lectures	Clarifying questions
18	2	Homework	Human	Lectures	Recitation and interpretation
19	2	Homework	Vital regions	Lectures	Follow up on preparation

20	2	Homework	Tropical dense evergreen regions	Lectures	Discussion and inquiry
21	2	Homework	Tropical forests and forests	Lectures	Homework
22	2	Homework	Small trees and young lands Desert	Lectures	Daily exams
23	2	Homework	Middle shows weed	Lectures	Follow up on preparation
24	2	Homework	Subtropical evergreen forests	Lectures	Homework
25	2	Homework	Mediterranean plants	Lectures	Monthly exam
26	2	Homework	Mixed forests	Lectures	Homework
27	2	Homework	Coniferous forests	Lectures	Daily exams
28	2	Homework	Tundra plants	Lectures	Homework
29	2	Homework	Highland areas	Lectures	Homework
30	2	Homework	The future of the biosphere	Lectures	Monthly exam

11. Infrastructure

The fascicle prepared for this purpose is a curriculum for study Climatic and biological geography books help The Internet	Required readings: <ul style="list-style-type: none"> ▪ Basic texts ▪ Course books ▪ Other
	Special requirements (including Distribution maps, shapes, and illustrations)
	Social services (including field studies And applied)

1. admissions

Bachelor of Preparatory/Literary-Scientific

Prerequisites

60

The smallest number of students

70

The largest number of students

Course description form

Reviewing the performance of higher education institutions ((academic program review))

Course description

The course covers many hydrological topics with a geographical approach, as human health and well-being, food security, industrial development, and ecosystems are all at risk unless water and land resources are managed more effectively than in the past.

University of Al Mosul	1. Educational institution
College of Education for Human Sciences/Department of Geography	2. University department/center
Water resourcesCode:ENDWR 14G 101	3. Course name/code
BSC	4. Programs in which it is included
Daily attendance in the hall and attendance recording	5. Available attendance forms
annual	6. Semester/year
2 hours per week/60 hours/year	7. Number of study hours(total)
2013-2022	8. Date this description was prepared
9. GoalsCourse: The course aims to give the student a complete and comprehensive overview of the topics of the geography of water resources, as water is the most important element that must be available to achieve a water strategy and towards continuous comprehensive development.	

10. Learning outcomes, teaching, learning and assessment methods

A- Knowledge and understanding

- A1-Introducing the student to some topics in the field of geography of water resources.
- A2-The student understands water sciences.
- A3-The student will distinguish the elements of the water cycle in nature
- A4a-For the student to understand water basins.
- A5-The student should know in detail and in hydrological terms the topic of rain.
- A6-The student should make a connection between surface water and groundwater

B - Subject-specific skills

- B 1 -Training students to review the shapes of water.
- B2 -The student measures seepage, performs limited artificial cloud seeding, or measures rainfall intensity.
- B3 -To assign a group of students to measure water drainage during a rainstorm in nearby valleys
- B4-Each group of students is assigned to conduct morphometric studies of the surface water network.

Teaching and learning methods

Scheduled weekly lectures
Additional lectures
Discussion and dialogue within the class.
Interactive assignments, reports on a certain topic or borrowing, and reviewing some modern natural resources books

Evaluation methods

Quarterly exams
Monthly and daily surprise exams
Homework
High-level questions for which motivational and encouraging grades are given to those who are able to solve them
Participation in discussion and dialogue and regular attendance at lectures
Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

C- Thinking skills

- C1-Urging students to predict the reality of water resources with increasing population growth. How to be
- C2-Will water contribute to being a party to the problems of the twenty-first century?
- C3-The reality of water in arid and semi-arid areas, analysis by students.
- C4-The student develops mathematical and statistical analysis capabilities through analyzing hydrographic shapes and curves, floods, and methods of analyzing hydrological data. .

Teaching and learning methods

Scheduled weekly lectures
Additional lectures
Discussion and dialogue within the class.
Interactive assignments, reports on a certain topic or borrowing, and reviewing some modern natural resources books

Evaluation methods

Quarterly exams

Monthly and daily surprise exams

Homework

High-level questions for which motivational and encouraging grades are given to those who are able to solve them

Participation in discussion and dialogue and regular attendance at lectures

Lectures are well arranged and organized, integrated and according to the chronological progression of the curriculum

D - General and transferable skills (other skills related to employability and personal development).

D1-The student will compare geographical environments in terms of the availability of water resources

D2-Is it possible to conduct some hydrological experiments, such as measuring infiltration, evaporation, soil moisture, and artificial rain?

D2-How can the student do some practical things so that he can be considered part of the management of water basins in the form of proposals by choosing basins within the student's environment?-

Course structure

the week	hours	Required learning outcomes	Name of the unit/course or subject	Teaching method	Evaluation method
1	2	Homework + questions in the next lecture	The concept of hydrology and areas of hydrological study	Lectures	oral test
2	2	Homework + questions in the next lecture	Water sciences	For lectures	An oral exam
3	2	Homework + questions in the next lecture	The hydrological cycle and its elements	For lectures	oral test
4	2	Homework + questions in the next lecture	Methods of measuring rain and estimating its quantities	For lectures	Daily exams

5	2	Homework + questions in the next lecture	Evaporation, methods of measuring it and estimating its quantities	For lectures	oral test
6	2	Homework + questions in the next lecture	Leaching and methods for measuring it	For lectures	oral test
7	2	Homework + questions in the next lecture	Water flow	For lectures	oral test
8	2	Homework + questions in the next lecture	Surface hydrology	For lectures	Daily exams
			The relationship between precipitation and flow		
9	2	Homework + questions in the next lecture	Theoretical mathematical equations	For lectures	An oral exam
10	2	Homework + questions in the next lecture	Application of mathematical equations	For lectures	oral test
11	2	Homework + questions in the next lecture	Application of mathematical equations	For lectures	oral test
12	2	Homework + questions in the next lecture	Application of mathematical equations	Lectures	Daily exams
13	2	Homework + questions in the next lecture		Lectures	oral test
			Application period		

14	2	Homework + questions in the next lecture	Application period	Lectures	oral test
15	2	Homework + questions in the next lecture	Application period	Lectures	oral test
16	2	Homework + questions in the next lecture	Application period	For lectures	Daily exams
17	2	Homework + questions in the next lecture	Application period	For lectures	oral test
18	2	Homework + questions in the next lecture	Application period	For lectures	oral test
19	2	Homework + questions in the next lecture	Water basins, hydromorphometric study	For lectures	oral test
20	2	Homework + questions in the next lecture	Mathematical equations	Lectures	Daily exams
21	2	Homework + questions in the next lecture	Application of mathematical equations	For lectures	oral test
22	2	Homework + questions in the next lecture	Application of mathematical equations	For lectures	oral test
23	2	Homework + questions in the next lecture	Floods	For lectures	oral test
24	2	Homework + questions in the next lecture	Flood control methods	For lectures	Daily exams
26	2	Homework + questions in the next lecture)Estimating the parts of a standard water chart	For lectures	oral test

27	2	Homework + questions in the next lecture	Groundwater hydrology	For lectures	oral test
28	2	Homework + questions in the next lecture	Methods of searching for groundwater	Lectures	oral test
29	2	Homework + questions in the next lecture	Qualitative characteristics of groundwater	For lectures	oral test