

Ministry of Higher Education and Scientific Research Scientific Supervision and Scientific Evaluation Apparatus Directorate of Quality Assurance and Academic Accreditation Accreditation Department

# Academic Program and Course Description Guide

# **Introduction:**

Process as the basis for their work.

The educational program is a well—planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staP together under the supervision of scientific committees in the scientific departments. This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quaJerly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna

# Academic Program Description Form

| University Name:Tikrit   |
|--|
| Faculty/Institute:Arts   |
| .Scientific Department: . Geography and Geographic Information Systems   |
| Academic or Professional Program Name: Environmental Problems  |
| Final Certificate Name: Geography of Iraq  |
| Academic System: Annual  |
| <b>Description Preparation Date</b> : 2024-2025  |
| File Completion Date: 16/9/2024  |
| مدد.أوس علي مجمَّات  |
| رئيس قسم الجهافية وتطم المعلومات الجغرافية   |
| Signature:   |
| Head of Department Name: Scientific Associate Name:  |
| Dr. Aws Ali Muhammad  Prof. Dr. Nizar Fadel Hussein  |
| Date: 17 9-2024 Date:  |
| All Maria Andrews and Andrew |
| he file is checked by: Khali of Established  |
| Department of Quality Assurance and University Performance   |
| Director of the Quality Assurance and University Performance Department: Date:   |
| Signature:   |
|  |
|  |
|  |
| $\mathcal{M}$  |

Approval of the Dean

#### Program vision

The Department of Geography and Geographic Information Systems aspires to be one of the best departments in scientific institutions in the field of quality assurance and accreditation, based on the great cognitive service provided by its scientists to the Arab world and the world in its bright scientific history, through providing high–quality scientific programs that explore the cognitive dimension, to explore the solid creative horizon. The department seeks to achieve a pioneering role in the field of education, research and training in geographical sciences and their technologies and to contribute effectively to serving all community issues

#### Program message .Y

The Department of Geography and Geographic Information Systems College of Arts seeks to achieve a quality management system in ) accordance with the international standard in all its  $\iota$  (ISO 9001) educational. research and administrative aspects, through planning, organizing, directing and monitoring all activities, to raise the efficiency of members, including members and professors of the Department of Geography and Geographic Information Systems, due to the distinction of this department from other departments of the College of Arts in that it combines three axes of information, curricula and applications specific to its curricula (pure natural sciences, human and social sciences, geographic technologies, geographic information systems and geographic statistics), and adopting their creative ideas motivated by continuous development in light of an appropriate work environment that achieves their job satisfaction to reach accreditation that guarantees that the institution has achieved the conditions and specifications of the approved quality, in line with the international standards of evaluation institutions, in order to recognize the scientific qualifications of its outputs, and to preserve the cultural and national identity of our Iraqi society in the face of scientific competition

#### Program objectives

۳.

Preparing a graduate who has the ability to understand the relationship between the .\)
environment and man by studying the interaction between man and his environment, and
how man affects the environment through agriculture, industry and urbanization, and how
.societies adapt. Humanity with environmental conditions such as climate and terrain

Preparing a graduate who has the ability to analyze the natural and human .Y characteristics of a place using modern technologies such as: remote sensing, geographic information systems, artificial intelligence tools and their spatial modeling, and presenting them in the form of accurate geographical maps that reflect geographic .data in an understandable way

Preparing a graduate who has the capabilities to diagnose and address contemporary .

problems and crises related to water resources, soil, climate change, environmental .pollution, migration, housing, disasters, and other fields

Preparing a graduate who has the ability to apply the theories and concepts of .٤ planning for sustainable development, and emphasizing that development is a complex process and a multidimensional phenomenon, including economic, social, environmental, .and institutional indicators

Preparing a graduate who has the ability to integrate theoretical and library aspects, .o field study results, and advanced technological innovation tools in a harmonious manner to achieve scientific research objectives, and to move away from and overcome the .approximate estimation process

| Duo avono a correditation (            |            |                 |                 |                      |  |  |  |
|--|------------|-----------------|-----------------|----------------------|--|--|--|
| Program accreditation . ٤              |            |                 |                 |                      |  |  |  |
|  | ls th      | ne program accr | redited? And by | which authority? No  |  |  |  |
|  |            |                 | Other extern    | nal influences .o    |  |  |  |
| Is there a sponsor for the program? No |            |                 |                 |                      |  |  |  |
|  |            |                 | Prog            | ram Structure     .٦ |  |  |  |
| * comments                             | percentage | Study unit      | Number of       | Program Structure    |  |  |  |
|  |            |                 | courses         |                      |  |  |  |
|  |            | 105             | ١.              | Institutional        |  |  |  |
|  |            |                 |                 | Requirements         |  |  |  |
|  |            |                 | nothing         | College Requirements |  |  |  |
|  |            |                 | nothing         | Department           |  |  |  |
|  |            |                 |                 | Requirements         |  |  |  |
|  |            |                 | nothing         | Summer training      |  |  |  |
|  |            |                 | nothing         | Other                |  |  |  |

<sup>.</sup>Notes may include whether the course is basic or optional \*

| Program Description .v |                 |                                       |  |       |  |  |  |  |  |
|------------------------|-----------------|---------------------------------------|--|-------|--|--|--|--|--|
|                        | The first stage |                                       |  |       |  |  |  |  |  |
| Credit hou             | rs              | Course name Course code Academic year |  |       |  |  |  |  |  |
| practical              | theor           |                                       |  |       |  |  |  |  |  |
|                        | etical          |                                       |  |       |  |  |  |  |  |
|                        | ٣               | Meteorology and climate               |  | First |  |  |  |  |  |
|                        |                 | science basics                        |  |       |  |  |  |  |  |
| ,                      | ۲               | Fundamentals of                       |  | First |  |  |  |  |  |

|             |        | cartography and surveying |             |               |
|-------------|--------|---------------------------|-------------|---------------|
| ۲           | ۲      | Fundamentals of Remote    |             | First         |
|             |        | Sensing and Information   |             |               |
|             |        | Systems                   |             |               |
|             | ٣      | Foundations of            |             | First         |
|             |        | geomorphology and         |             |               |
|             |        | geology                   |             |               |
|             | ۲      | Rights and democracy      |             | First         |
|             | ۲      | C. The Old World          |             | First         |
|             | ١      | Computer                  |             | First         |
|             | ١      | Arabic                    |             | First         |
|             | ١      | English language          |             | First         |
|             |        | Phase ۲                   |             |               |
| Credit hou  | urs    | Course name               | Course code | Academic year |
| practical   | theor  |                           |             |               |
|             | etical |                           |             |               |
|             | ٣      | Applied climate           |             | Second        |
| ۲           | ١      | Thematic maps             |             | Second        |
| ۲           | ٣      | applied geomorphology     |             | Second        |
| ۲           | ١      | Remote sensing            |             | Second        |
|             |        | applications              |             |               |
|             | 7      | c. new world              |             | Second        |
|             | ۲      | Geographical research     |             | Second        |
|             |        | methodology and field     |             |               |
|             |        | study                     |             |               |
|             | ۲      | C. Population             |             | Second        |
|             | ١      | Arabic                    |             | Second        |
|             | ١      | English language          |             | Second        |
|             | ١      | Computer                  |             | Second        |
|             | ١      | Crimes of the Moth Party  |             | Second        |
|             |        |                           |             |               |
|             |        | Stage ۳                   |             |               |
| Credit hou  | ırs    | Course name               | Course code | Academic year |
| Orealt 110t | J1 3   | Oourse Haine              | Jourse Code | Academic year |

| practical  | theor  |                         |             |               |
|------------|--------|-------------------------|-------------|---------------|
|            | etical |                         |             |               |
|            | ۲      | C. Agricultural         |             | Third         |
|            | ۲      | C. Services             |             | Third         |
|            | ۲      | C. Medical              |             | Third         |
|            | ۲      | C. Cities               |             | Third         |
|            | 7      | C. Industrial           |             | Third         |
|            | ۲      | C. Geographical thought |             | Third         |
| ١          | ۲      | Resources Water         |             | Third         |
|            | ۲      | Research methods        |             | Third         |
| ١          | ١      | Remote sensing          |             | Third         |
|            |        | applications            |             |               |
| ١          | ١      | Field study             |             | Third         |
|            | ١      | English language        |             | Third         |
|            |        | Stage Four              |             |               |
| Credit hou | rs     | Course name             | Course code | Academic year |
| practical  | theor  |                         |             |               |
|            | etical |                         |             |               |
|            | ٣      | C. Political            |             | Fourth        |
|            | ٤      | C. Iraq                 |             | Fourth        |
|            | ۲      | Environmental problems  |             | Fourth        |
|            | ۲      | Regional planning       |             | Fourth        |
|            | ٣      | C. Industrial           |             | Fourth        |
|            | ٣      | C. Geographical thought |             | Fourth        |
| ١          | ۲      | Geographic Information  |             | Fourth        |
|            |        | Systems                 |             |               |
|            | ١      | English language        |             | Fourth        |

| Expected learning outcomes of the program | ٠.٨ |
|---|-----|
|---|-----|

## Knowledge

.Providing students with experience in thinking and analysis .\

Providing students with the ability to identify the problem of the phenomenon, its results, and .٢ .how to treat it

Gain experience in drawing maps using different programs, including geographic information .v. .systems

#### **Skills**

Theoretical aspect: learning about different geographical sciences, including natural (climate, .)

.geomorphology) and human sciences

(Population, politics, cities) and other geographic sciences

Practical aspect: Applications on the possibility of drawing and representing maps using .v various means, including the use of geographic information systems, as well as knowledge of .statistical analysis

#### **Values**

- .Enabling students to understand the material theoretically and practically .1
  - .Enabling students to think and analyze to reach correct conclusions .Y
    - .Enabling students to prepare good scientific reports .٣

## Teaching and learning strategies .9

- .Using modern methods in teaching the subject .\
- Using technological means to present scientific material, including data shows and .Y .PowerPoint
  - .Conduct field visits to review the topics studied by geography .T

#### Evaluation methods .1.

Daily assessment from discussion + daily exams + monthly exams + practical

assignments and faculty reports

|                 | Faculty .               |                |           |                        |    |  |  |  |  |
|-----------------|-------------------------|----------------|-----------|------------------------|----|--|--|--|--|
| Faculty members |                         |                |           |                        |    |  |  |  |  |
| Position        | Specialization          | General        | Academic  | Instructor's name      | Т  |  |  |  |  |
|                 |                         | specialization | Rank      |                        |    |  |  |  |  |
|                 | C. Agricultural         | Human          | .Mr       | Dr. Dhafer Ibrahim     | ١  |  |  |  |  |
|                 |                         | Geography      |           | Taha                   |    |  |  |  |  |
|                 | Hydromorphology         | Physical       | .Mr       | Dr. Latif Muzail Saleh | ۲  |  |  |  |  |
|                 |                         | Geography      |           |                        |    |  |  |  |  |
|                 | C. Cities               | Human          | .Mr       | Dr. Manhal Abdullah    | ٣  |  |  |  |  |
|                 |                         | Geography      |           | Hammadi                |    |  |  |  |  |
|                 | C. Agricultural         | Human          | .Mr       | Dr. Adnan Attia        | ٤  |  |  |  |  |
|                 |                         | Geography      |           | Mohammed               |    |  |  |  |  |
|                 | C. Geographical thought | Human          | .Mr       | Dr. Mohammed Fazaa     | ٥  |  |  |  |  |
|                 |                         | Geography      |           | Obaid                  |    |  |  |  |  |
|                 | C. Political            | Human          | assistant | Dr. Khata B Saad       | ٦  |  |  |  |  |
|                 |                         | Geography      | professor | Muhaimid               |    |  |  |  |  |
|                 | C. Climate              | Physical       | assistant | D. Ahmed Dr. Abdel     | ٧  |  |  |  |  |
|                 |                         | Geography      | professor | Ghafour Khattab        |    |  |  |  |  |
|                 | C. Climate              | Physical       | assistant | Dr. Hamad H. Hamoudi   | ٨  |  |  |  |  |
|                 |                         | Geography      | professor | Sheet                  |    |  |  |  |  |
|                 | Geomorphology           | Physical       | assistant | Dr. Mohammed Najm      | ٩  |  |  |  |  |
|                 |                         | Geography      | professor | Khalaf                 |    |  |  |  |  |
|                 | C. Soil                 | Physical       | assistant | Dr. Taghray D. Khalil  | ١. |  |  |  |  |

|     | Muhammad               | professor | Geography |                        |              |
|-----|------------------------|-----------|-----------|------------------------|--------------|
| ١١  | Dr. Saad Y. Abdullah   | assistant | Human     | C. Cities              |              |
|     | Ahmed                  | professor | Geography | o. olues               |              |
| ١٢  | Dr. Faeq Hassan        | assistant | Physical  | Maps and Geographic    | Postgraduate |
|     | •                      |           | •         |                        | -            |
| ١٣  | Muhaimid               | professor | Geography | Information Systems    | Course       |
|     | Dr. Aziz Ibrahim Ali   | assistant | Physical  | maps                   |              |
| ١٤  | D. N                   | professor | Geography | 0 1:16 "               |              |
| , 2 | D. Nour Fanar Abdel    | assistant | Human     | Geographic Information |              |
| ١.  | Baqi                   | professor | Geography | Systems                |              |
| 10  | Dr. Aws Ali Mohammed   | Doctor    | Physical  | C. Desertification and | Head of      |
|     |                        | teacher   | Geography | environment            | Department   |
| ١٦  | Dr. Ibrahim M. Hussein | Doctor    | Physical  | maps                   |              |
|     | Ali                    | teacher   | Geography |                        |              |
| 1 \ | Faten Saadoun Aboud    | Teacher   | Human     | C. Industrial          |              |
|     |                        |           | Geography |                        |              |
| ۱۸  | Ahmed Allawi's         | Assistant | Human     | C. Political           |              |
|     | obstacle               | Professor | Geography |                        |              |
| ۱۹  | In the name of Helou   | Assistant | Human     | C. Tourism             |              |
|     | Mohammed               | Professor | Geography |                        |              |
| ۲.  | Marouj Taher Noman     | Assistant | Physical  | C. Climate             |              |
|     |                        | Professor | Geography |                        |              |
| ۲,  | Saad Thamer Ibrahim    | Assistant | Human     | maps                   |              |
|     |                        | Professor | Geography |                        |              |
| ۲ ۲ | Age Shaker             | Assistant | Human     | C. Political           |              |
|     | Mohammed               | Professor | Geography |                        |              |
| 77  | Omar Ahmed Awad        | Assistant | Physical  | C. Climate             | Department   |
|     |                        | Professor | Geography |                        | decision     |
| ۲ : | Zainab Jamal Noman     | Assistant | Human     | C. Population          |              |
|     |                        | Professor | Geography | ·                      |              |
| ۲ ۵ | Ali Faeq Mashal        | Assistant | Human     | C. Agricultural        |              |
|     | ,                      | Professor | Geography | J                      |              |
| ۲-  | Maha Haji Shaheen      | Doctor    | law       | Rights and democracy   |              |

|                 |   |   | teacher                                      |   |                |  |  |
|-----------------|---|---|--|---|----------------|--|--|
|                 |   |   |  |   |                |  |  |
|                 | Professional development  |   |  |   |                |  |  |
|                 |   |   | Orientatio                                   | on of new faculty member                                    | S              |  |  |
|                 |   |   |  | em in some committees.                                      |                |  |  |
|                 |   | <b></b>   |  | Involve them in courses .                                   |                |  |  |
|                 |   |   |  | nduct scientific research .  pment for faculty member       |                |  |  |
|                 | Inv   |   | •  | Iministrative committees .                                  |                |  |  |
|                 |   | orving them in s  |  | Involve them in courses .                                   |                |  |  |
|                 |   | .Encoura  |  | nduct scientific research .                                 |                |  |  |
|                 |   |   | -  |   | _              |  |  |
|                 |   |   | Acc  | eptance Criteria  | ,              |  |  |
|                 | С   | entral acceptand  | e by the Minis                               | try of Higher Education .                                   | )              |  |  |
| Acceptance from | om the preparatory school                                       | certificate in bo   | th its branches                              | (literary and scientific) .                                 | _              |  |  |
|                 | The most important  | sources of in   | formation ab                                 | out the program . \ \                                       | _              |  |  |
|                 |   | . Modern  | Arabic and Er                                | nglish scientific sources \.                                |                |  |  |
|                 |   |   | Arabic and En                                | nglish scientific journals .                                | í              |  |  |
|                 |   |   | Professors' ex                               | xperience over the years .                                  | ۲              |  |  |
|                 |   |   | Program d                                    | levelopment plan .\   | ٤              |  |  |
| Preparing a pro | ogram to develop teachi   | ng staff by sup   | porting and in                               | ncreasing development                                       | ١.             |  |  |
|                 |   | .courses,   | and aligning wi                              | ith international universitie                               | es             |  |  |
|                 |   |   |  |   |                |  |  |
| Preparing a pro | gram to develop curricula                                       | by preparing ne   | ew and advanc                                | ced curricula, relying on                                   | ۲.             |  |  |
| Preparing a pro | -   |   |  | ced curricula, relying on cocially (artificial intelligence |                |  |  |
|                 | -   | chnological deve  | elopment, espe                               | cially (artificial intelligence                             | e)             |  |  |
| Preparing final | .te   | chnological deve  | elopment, espe                               | cially (artificial intelligence                             | e)<br>.٣       |  |  |
| Preparing final | .te<br>stage student projects, v<br>paring statistics, and pres | chnological devenues the characteristic control of the results of | elopment, espendoratory work, ts in the form | cially (artificial intelligence                             | e)<br>.۳<br>ne |  |  |

on publishing in Clarivate and Scopus containers and relying on modern scientific ideas. The possibility of cooperation with many institutions, including the General Authority for .o Meteorology, the Ministry of Planning, Statistics Department. And the Department of Information .Systems

| : Course name  |
|--|
| Geography of Iraq  |
| : Course code  |
|  |
| : Chapter / Year   |
| Annual Schedule  |
| : Date this description was prepared . £   |
| 7.75/17/9  |
| : Available attendance forms .°  |
| urth-year students according to the weekly lesson schedule prepared by the           |
| department head  |
| :Number of study hours (total) / Number of units (total)                             |
| hours 1.   |
| Name of the course administrator (if more than one name is                           |
| (mentioned   |
| Dr. Aws Ali Mohammed   |
| Course objectives .A   |
| The aim of this course is to study Iraq from all natural, economic and human aspects |
| Teaching and learning strategies .٩  |
| Learn how to know Geography of Iraq according to the lecture system, and the         |
| Digital technologies, maps and the use of use of electronic boards and CDs           |

| modern programs in representing the surface of Iraq, its divisions and |
|--|
| .administrative units  |

| •        | Course structure .1. |   |                     |                                     |              |        |              |
|----------|----------------------|---|---------------------|-------------------------------------|--------------|--------|--------------|
| е        | The                  | Watche                                  | Required            | Name of the unit or topic           | Learning     | 1      | Evaluation   |
| k        | week                 | s                                       | learning            |                                     | method       | 1      | method       |
|          |                      |   | outcomes            |                                     |              |        |              |
| ١        | ۲                    | hical                                   | Geograp             | Study of Iraq's geographical        | Theoretical/ | al     | General      |
|          |                      | nd land                                 | location a          | location and the geological         | Discussion   | ns     | question     |
|          |                      | ure                                     | struct              | composition of the land             |              |        |              |
| ۲        | ۲                    | ce                                      | s <b>Surfa</b>      | Study of the surface sections       | Theoretical/ | and    | Discussion a |
|          |                      |   |                     | of Iraq                             | Discussion   | stions | general ques |
| ٣        | ٢                    | ite                                     | Clima               | Identify the nature of the          | Theoretical/ |        | Discussion a |
| <u> </u> |                      |   |                     | prevailing climate                  | Discussion   |        | general ques |
| ٤        | ۲                    |   | g soil              | Learn about the soils of Iraq       | Theoretical/ |        | Discussion a |
|          |                      |   |                     | and their geographical distribution | Discussion   | xam    | surprise ex  |
| 0        | ۲                    | OUTCES -                                | n Water Res         | Surface and groundwater in          | Theoretical/ | al     | General      |
|          | ,                    |   | Water So            | Iraq                                | Discussion   |        | questions a  |
|          |                      |   |                     |                                     | 2.000.00.0   |        | discussio    |
| ٦        | ۲                    | water                                   | t Dams and          | Study of the most important         | Theoretical/ | al     | General      |
|          |                      | cts                                     | proje               | dams, reservoirs and water          | Discussion   | ns     | question     |
|          |                      |   |                     | projects                            |              |        |              |
| ٧        | ۲                    |   | Natural veg         | Study of the geographical           | Theoretical/ |        | Discussion a |
|          |                      | _                                       | s <b>Natural ve</b> | distribution of natural plants      | Discussion   | stions | general ques |
|          |                      | areas                                   |                     | in Iraq                             |              |        |              |
| ٨        | ۲                    | activity -                              | Economic            | Learn about economic                | Theoretical/ | and    | Discussion a |
|          |                      | e - Grains                              | Agriculture         | activity in Iraq                    | Discussion   | stions | general ques |
| ٩        | ١                    | First month test for the first semester |                     |                                     |              |        |              |
| ١.       | ۲                    | rial crops                              | t Industr           | Study of the most important         | Theoretical/ | on     | discussio    |
|          |                      |   |                     | crops of grains, fruits and         | Discussion   |        |              |
|          |                      |   |                     | vegetables                          |              |        |              |
| 11       | ۲                    | oduction                                | Animal pr           | Study of animal production          | Theoretical/ | al     | General      |
|          |                      |   |                     | and its importance                  | Discussion   |        | questions a  |
|          |                      |   |                     |                                     | -1           |        | discussio    |
| ١٢       | ۲                    |   | Miner               | Economic sector study               | Theoretical/ |        | Discussio    |
|          |                      | ın                                      | wealt               |                                     | Discussion   | IIS    | question     |
|          |                      |   |                     |                                     |              |        |              |

| General           | Theoretical/ | Study of the most important      | Oil export ports -   | ۲ | ۱۳ |
|-------------------|--------------|----------------------------------|----------------------|---|----|
| questions and     | Discussion   | oil ports                        | types of industries  |   |    |
| discussion        |              |                                  |                      |   |    |
| General           | Theoretical/ | Study of internal and            | commerce             | ۲ | ١٤ |
| questions,        | Discussion   | external trade in Iraq           |                      |   |    |
| discussion and    |              |                                  |                      |   |    |
| daily test        |              |                                  |                      |   |    |
| General           | Theoretical/ | Humidity measuring               | Characteristics of   | ۲ | 10 |
| questions and     | Discussion   | instruments                      | Iraq's foreign trade |   |    |
| discussion        |              |                                  |                      |   |    |
| General           | Theoretical/ | Learn about the most             | Types of             | ۲ | 10 |
| questions and     | Discussion   | important transportation         | transportation       |   |    |
| discussion        |              | methods in Iraq                  | methods              |   |    |
| General           | Theoretical/ | Study of roads and railways      | Land transport       | ۲ | ١٦ |
| questions and     | Discussion   |                                  |                      |   |    |
| discussion        |              |                                  |                      |   |    |
|                   | Secon        | d month test for the first semes | ter                  |   | ١٧ |
| General           | Theoretical/ | Identify air and sea routes      | Air and sea          | ۲ | ١٨ |
| questions and     | Discussion   | ,                                | transport            |   |    |
| discussion        |              |                                  |                      |   |    |
| General           | Theoretical/ | The concept of tourism           | Tourism              | ۲ | 19 |
| questions,        | Discussion   | ·                                |                      |   |    |
| discussion and    |              |                                  |                      |   |    |
| surprise exam     |              |                                  |                      |   |    |
| General           | Theoretical/ | How the tourism sector           | Arena development    | ۲ | ۲. |
| questions and     | Discussion   | develops                         | •                    |   |    |
| discussion        |              | ·                                |                      |   |    |
| General           | Theoretical/ | Learn about tourist and          | Tourist places       | ۲ | ۲۱ |
| questions and     | Discussion   | archaeological sites in Iraq     | •                    |   |    |
| discussion        |              |                                  |                      |   |    |
|                   | First month  | n test for the second semester   |                      | ١ | 77 |
| Daily discussion  | Theoretical/ | Study of the population of       | Population           | ۲ | ۲۳ |
| and quiz          | Discussion   | Iraq, its growth and customs     |                      |   |    |
| Discussion and    | Theoretical/ | Iraq population growth study     | population growth    | ۲ | 7٤ |
| general questions | Discussion   |                                  |                      |   |    |
| Discussion and    | Theoretical/ | Study of the geographical        | Population           | ۲ | 70 |
| general questions | Discussion   | distribution of the              | distribution         |   |    |
|                   |              | population                       |                      |   |    |
| Discussion and    | Theoretical/ | Study of population              | Population           | ۲ | ۲٦ |
| general questions | Discussion   | structures in Iraq               | composition          |   |    |
| Discussion and    | Му           | Preparing reports                | Preparing reports    | ۲ | ۲۷ |
| general questions | research/dis |                                  |                      |   |    |
|                   | cussion      |                                  |                      |   |    |

| ۳۱ | Second month test for the second semester |   |   |  |  |
|----|---|---|---|--|--|
|    |   |   |   |  |  |
|    | -   | ks assigned to the student, such laily and monthly exams, practic | The grade is distributed out of ' according to the task .etc, preparation, o            |  |  |
|    | s .11                                     | ning and teaching resources                                       | Lear  |  |  |
|    | y if any)                                 | Required textbooks (methodolog                                    | Geography of Iraq   |  |  |
|    | Sources)                                  | Main References (S  | Natural geography of Iraq   |  |  |
|    | oks and                                   | Recommended supporting bo   | Regional Geography of Iraq  |  |  |
|    | reports,                                  | references (scientific journals,                                  |   |  |  |
|    | (.etc                                     |   |   |  |  |
|    | websites                                  | Electronic references, v  | 'Arab Geographers Forum Internet<br>Statistical data issued by the Ministry of Planning |  |  |

| : Course name  |
|--|
| Environmental problems   |
| : Course code  |
| Environmental science and its problems   |
| : Chapter / Year   |
| Annual Schedule  |
| : Date this description was prepared .10   |
| 7.72/17/9  |
| : Available attendance forms .\\\  |
| urth-year students according to the weekly lesson schedule prepared by the department head   |
| :Number of study hours (total) / Number of units (total) . \\\   |
| hours 7.   |
| Name of the course administrator (if more than one name is .\^   |
| (mentioned   |
| Dr. Aws Ali Mohammed   |
| Course objectives .19  |
| The aim of this course is to introduce the student to environmental problems, the concepts of problems, and the methods of solving and treating them |
| Teaching and learning strategies .۲٠   |
| Learn how to know Environmental science and its  |
| problems according to the lecture system, and the use  |
| ital technologies, maps of electronic boards and CDs   |
| and the use of modern programs in representing   |
| .environmental problems  |
| Course structure .Y )  |

| Evaluation                | Learning | g Name of                      | the unit or                       | F  | Required learning                        | Watche    | The  |    |
|---------------------------|----------|--------------------------------|-----------------------------------|--|--|-----------|------|----|
| method                    | method   | d                              | topic                             |  | outcomes                                 | s         | week |    |
| General que               |          | Γheoretica<br>l/Discussi<br>on | cause<br>indus                    | e change<br>ed by<br>estrial<br>vities   | Climate ch<br>caused by inc<br>activitie | dustrial  | ۲    | 1  |
| Discussion<br>general que |          | Theoretica<br>l/Discussi<br>on | Global v                          | warming                                  | Global war                               | ming      | ۲    | ۲  |
| Discussion general que    |          | Γheoretica<br>l/Discussi<br>on | acid                              | l rain                                   | Types of                                 | rain      | ۲    | ٣  |
| Discussion surprise e     | exam 1   | Γheoretica<br>l/Discussi<br>on | deplo                             | e layer<br>letion                        | Troposphere                              | layer     | ۲    | ٤  |
| General que and discus    |          | Theoretica<br>l/Discussi<br>on | proble<br>ozone                   | ns to the<br>lem of<br>e layer<br>letion | Layers of atmosphe                       |           | ۲    | 0  |
| General que               |          | Theoretica<br>l/Discussi<br>on | desertif                          | ition of fication d its                  | Desertifica<br>concep                    |           | ۲    | ٦  |
| Discussion general que    |          | Theoretica<br>l/Discussi<br>on |                                   | ses of fication                          | Desertification                          | 1 factors | ۲    | ٧  |
| Discussion<br>general que |          | Theoretica<br>l/Discussi<br>on |                                   | ification<br>bution                      | Geograph<br>distribution of              |           | ۲    | ٨  |
|                           | Fir      | st month te                    | est for the                       | first seme                               | ester                                    |           | )    | ٩  |
| discussi                  |          | Theoretica<br>l/Discussi<br>on | ar                                | e sensing<br>nd<br>fication              | Definition of                            | sensing   | ۲    | ١. |
| General que and discus    | ssion 1  | Theoretica<br>l/Discussi<br>on | interna<br>efforts to<br>desertif | bined ational o combat fication          | Methods and s<br>to treat deserti        | ification | ۲    | 11 |
| Discuss                   | ion 7    | Theoretica                     | Degrad                            | lation of                                | dynamic bala                             | ance of   | ۲    | ١٢ |

|                    | T                | T .                        |                       |   | 1   |
|--------------------|------------------|----------------------------|-----------------------|---|-----|
| questions          | l/Discussi<br>on | the environment and marine | the environment       |   |     |
|                    | On               | resources                  |                       |   |     |
| General questions  | Theoretica       | marine                     | marine ecological     | ۲ | ١٣  |
| and discussion     | 1/Discussi       | ecosystem                  | balance               | · |     |
| and discussion     | on               | ceosystem                  | balance               |   |     |
| General questions, | Theoretica       | Negative                   | Problems facing       | ۲ | ١٤  |
| discussion and     | 1/Discussi       | environmental              | marine yields         | · |     |
| daily test         | on               | impacts on                 | marme yields          |   |     |
| daily test         | On               | marine materials           |                       |   |     |
| General questions  | Theoretica       | Destruction of             | Wetland demolition    | ۲ | 10  |
| and discussion     | 1/Discussi       | wetlands                   | treatment             | , | ,   |
| and discussion     | on               | (coastal)                  | treatment             |   |     |
| General questions  | Theoretica       | Efforts to protect         | Ways and solutions to | ۲ | 10  |
| and discussion     | 1/Discussi       | the marine                 | problems              | , | ,   |
| and discussion     | on               | environment                | problems              |   |     |
| General questions  | Theoretica       | Agricultural               | Agricultural          | ۲ | ١٦  |
| and discussion     | 1/Discussi       | development and            | development concept   | , | , , |
| and discussion     | on               | its                        | development concept   |   |     |
|                    | OII              | environmental              |                       |   |     |
|                    |                  | dimensions                 |                       |   |     |
|                    | Second me        | onth test for the first    | t gamagtar            |   | ١٧  |
|                    | Second inc       | onth test for the first    | i semesiei            |   | , , |
|                    |                  |                            |                       |   |     |
| General questions  | Theoretica       | Negative                   | Modern methods for    | ۲ | ١٨  |
| and discussion     | 1/Discussi       | environmental              | agricultural projects |   |     |
| WII                | on               | impacts of                 |                       |   |     |
|                    |                  | agricultural               |                       |   |     |
|                    |                  | projects                   |                       |   |     |
| General questions, | Theoretica       | Deterioration of           | Addressing soil       | ۲ | 19  |
| discussion and     | 1/Discussi       | education and              | degradation and       |   |     |
| surprise exam      | on               | means of                   | developing plans for  |   |     |
| Z Tribe on will    |                  | controlling                | solutions to          |   |     |
|                    |                  | erosion                    | degradation           |   |     |
| General questions  | Theoretica       | forest                     | Reducing forest       | ۲ | ۲.  |
| and discussion     | 1/Discussi       | degradation                | degradation           |   |     |
|                    | on               | 2.20144441011              | 2.51.444.1011         |   |     |
| General questions  | Theoretica       | sustainable                | The concept of        | ۲ | ۲۱  |
| and discussion     | 1/Discussi       | development                | sustainable           |   |     |
| alla albeablioli   | on               | ac , cropinent             | development in its    |   |     |
|                    | <u> </u>         | l                          | ac veropinent in its  |   | L   |

| -                 | T             | T                     | T.                      |   |     |
|-------------------|---------------|-----------------------|-------------------------|---|-----|
|                   |               |                       | general sense           |   |     |
| Fi                | rst month tes | t for the second sen  | nester                  | ١ | 77  |
| Daily discussion  | Theoretica    | Resource              | Natural resource        | ۲ | 77  |
| and quiz          | 1/Discussi    | conservation and      | conservation methods    |   |     |
|                   | on            | ecological            |                         |   |     |
|                   |               | concepts              |                         |   |     |
| Discussion and    | Theoretica    | Ecosystem             | the ecosystem           | ۲ | ۲ ٤ |
| general questions | 1/Discussi    | structure             |                         |   |     |
|                   | on            |                       |                         |   |     |
| Discussion and    | Theoretica    | Geography and         | Geography and           | ۲ | 70  |
| general questions | 1/Discussi    | Natural               | resource conservation   |   |     |
|                   | on            | Resources             | concept                 |   |     |
|                   |               | Conservation          |                         |   |     |
| Discussion and    | Theoretica    | Views on the          | Linking                 | ۲ | 77  |
| general questions | 1/Discussi    | environment           | environmental           |   |     |
|                   | on            |                       | perspectives            |   |     |
| Discussion and    | Theoretica    | Resource              | Resource maintenance    | ۲ | 7 7 |
| general questions | 1/Discussi    | Maintenance           | methods                 |   |     |
|                   | on            | Concepts              |                         |   |     |
| General questions | Theoretica    | Maintenance           | The nature of the       | ۲ | ۲۸  |
| and discussion    | 1/Discussi    | movements and         | maintenance             |   |     |
|                   | on            | their                 | movement and its        |   |     |
|                   |               | development           | development             |   |     |
| General questions | Theoretica    | Increased             | Environment and         | ۲ | ۲٩  |
| and discussion    | 1/Discussi    | interest in           | global concern for      |   |     |
|                   | on            | environmental         | environmental           |   |     |
|                   |               | issues at the         | problems                |   |     |
|                   |               | global and            |                         |   |     |
|                   |               | regional levels       |                         |   |     |
| General questions | Theoretica    | Renewable             | Identify the objectives | ۲ | ٣.  |
| and discussion    | 1/Discussi    | resources             | and maintenance of      |   |     |
|                   | on            | conservation          | renewable resources     |   |     |
|                   |               | objectives            |                         |   |     |
| Sec               | ond month te  | est for the second se | emester                 | ١ | 71  |
|                   |               |                       |                         |   |     |

Course Evaluation . ۲۲

The grade is distributed out of '.. according to the tasks assigned to the student, such as daily .etc, preparation, daily and monthly exams, practical exams

Learning and teaching resources . .

| nvironmen | tal problems and natural resource conservation                                | Required textbooks (methodology if any)                                    |
|-----------|---|--|
|           | Geography of desertification  | Main References (Sources)  |
| vironment | problems and solutions, contemporary environmental problems                   | Recommended supporting books and references (scientific journals, reports, |
|           | 'Arab Geographers Forum Internet<br>United Nations Environment Programme data |  |

# **Course Description**

This course description provides a concise summary of the main features of the course and the learning outcomes expected of the student, demonstrating whether the student has made the most of the learning opportunities available. It must be linked to the programme description

| Tikrit University / College of Arts Khattab Saad | Educational institution .\ |
|--|----------------------------|
| Muhaimid   |                            |
| Department of Geography and Geographic           | Scientific Department / .Y |
| Information Systems                              | Center                     |
| geopolitics                                      | Course Name/Code . "       |
|  |                            |

| Attendance according to the weekly class schedule | Available attendance forms .5 |
|---|-------------------------------|
| prepared by the department head                   |                               |
| Annual Schedule                                   | Chapter/Year .º               |
|   | _                             |
| 9.  | Number of study hours .7      |
|   | (total)                       |
| 7.70/77/1   | Date this description was .Y  |
|   | prepared                      |
|   | Course objectives .^          |

The aim of this course is to introduce the student to the concept of political geography and geopolitics, the nature of the state and its components, and the factors affecting its power, and to enable the student to identify the problems that countries suffer from from a political geography perspective, and to help decision-makers overcome the obstacles of influence, control, and possibility in the field of .power and geopolitics

## Course outcomes, teaching and learning methods and assessment .9

A- Cognitive objectives

.The student learns about the concept of political geography -

A<sup>\(\gamma\)</sup>- Identifying the concept of geopolitics and its relationship to political .geography

A<sup>r</sup>- Introducing the student to the concept of state power and methods of .quantitatively measuring state power

A<sup>\xi</sup>- The student learns about the main components of the state's natural, human and .economic strength

A°- Introducing the student to the state, its components, political borders, problems, types and classification

A<sup>¬</sup>- Introducing the student to the strategy and theories related to state power and .the impact of each of the theories in the field of geopolitics

. B - Course specific skill objectives

B\ - Scientific Reports

BY - Graduation research

B<sup>r</sup> - Benefit from information in the field of work

## Teaching and learning methods

- .Questions and interrogation during daily lectures -
  - .tests Daily assignments and -7
- .Guiding students to benefit from external resources available around the course 7

#### Evaluation methods

- The student's commitment to the deadlines for submitting reports and -\(^1\) assignments assigned to him and respecting their deadlines
  - .Daily applications and duties -7
  - .Continuous semester and weekly exams 7
- Student participation in the classroom and serious discussion shows the extent .of the student's interest and his attempt to bear responsibility

# C- Emotional and value-based goals

- A\ Giving the student opportunities for dialogue and discussion during the lesson
  - A<sup>\gamma</sup>- Enhancing the student's ability to perform assignments and adhere to their .deadlines
    - A<sup>r</sup>- Encouraging the student to benefit from the available means
- A<sup>\xi</sup>- Developing the student's ability to find appropriate solutions to any problem . he encounters

# Teaching and learning methods

- .Discussion and interrogation \
- .tests Daily assignments and -7
- .Guiding students to benefit from external resources available around the course T

#### **Evaluation** methods

- The student's commitment to the deadlines for submitting reports and .assignments assigned to him and respecting their deadlines
  - .Daily applications and duties -
  - .Continuous semester and weekly exams "
- Student participation in the classroom and serious discussion shows the extent -5

.of the student's interest and his attempt to bear responsibility

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

.D'- Raising the level of students' ability to deal with modern learning methods .D'- Enhancing the student's ability to discuss and engage in constructive dialogue D'- Encouraging the student to have access to the resources available in libraries and the Internet on the subject

.D\(\xi\)- Developing the student's ability to deal with various media

| Course name : Industrial Geography  | ۲٤.       |
|---|-----------|
|   |           |
| EWG3302 : Course code   | .70       |
| Composton / Voor Amayol   |           |
| Semester / Year : Annual  | ۲۲.       |
| Date of preparation of this description : \\-\/\circ\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\               | . ۲ ۷     |
| In-person hall: Available attendance forms  | ۸۲.       |
| In person han. Available attendance forms   | • ' / '   |
| :Number of study hours (total) / Number of units (total)  | .۲۹       |
| Name of the course supervisor (if more than one name is mentioned) : Ms.  Faten Saadoun Abo         | ۳۰<br>oud |
| Course objectives   | ۳۱.       |
| Gaining the ability and knowledge of the philosophy and concept   Subject object                    |           |
| of industrial geography   |           |
| Identify the most important industrial branches and the principles • . of industrial geography      |           |
| Scientific analysis for selecting suitable industrial sites, taking •                               |           |
| advantage of theoretical proposals and experiments. Scientific in                                   |           |
| determining the location of the industrial project  |           |
|   | ۲۳.       |
| sting students' ability to understand the factors that contributed to industrial • Stra development | ategy     |
| veloping students' knowledge of industrial theoretical principles and foundations •                 |           |
| Developing students' scientific analysis of industrial sites •                                      |           |
| Testing students' mental skills on theories of industrial localization •                            |           |
| veloping students' ability to scientifically analyze economics Industrial • localization            |           |
|   |           |

| Course structure .٣              |                                |  |  |        |      |
|----------------------------------|--------------------------------|--|--|--------|------|
| Evaluation method                | Learning                       | Name of the unit or  | Required learning                                  | Watche | The  |
|                                  | method                         | topic  | outcomes   | s      | week |
| Discussion and general questions | Theoretica<br>1/Discussi<br>on | Industry, its characteristics and stages of development  | Industry<br>definition                             | ٣      | )    |
| Discussion and general questions | Theoretica l/Discussi on       | primitive industry, simple industry, modern industry, competition of industrialized countries                          | Industry<br>patterns                               | ٣      | ۲    |
| Discussion and general questions | Theoretica<br>l/Discussi<br>on | Its development,<br>functions and<br>research methods<br>in industrial<br>geography                                    | Development of industrial geography                | ٣      | ٣    |
| Discussion and surprise exam     | Theoretica<br>l/Discussi<br>on | Considerations for choosing the optimal industrial site and the main and secondary localization factors  Raw materials | Factors<br>affecting<br>industrial<br>localization | ٣      | ٤    |
| General questions and discussion | Theoretica<br>l/Discussi<br>on | Capital,<br>transportation and<br>transportation jobs  | Basic factors of industrial localization           | ٣      | ٥    |
| General questions                | Theoretica<br>1/Discussi<br>on | Labor force, classification of industries according to the importance of work and workers' wages, energy sources       | factors of Basic industrial localization           | ٣      | ٦    |
| Discussion and general questions | Theoretica l/Discussi          | Wood - Wind and<br>Direct Water  | Energy sources                                     | ٣      | ٧    |

|                                  | on                             | Energy - Coal  |   |   |    |
|----------------------------------|--------------------------------|--|---|---|----|
|                                  |                                | First month test for   | the first semester                                    |   | ٨  |
| discussion                       | Theoretica l/Discussi on       | Oil and natural gas<br>Electricity                               | Energy sources  | ٣ | ٩  |
| General questions and discussion | Theoretica l/Discussi on       | Market, industrial policy and personal desires                   | Basic factors of industrial localization              | ٣ | ١. |
| Discussion questions             | Theoretica<br>1/Discussi<br>on | land, water, climate   | Secondary<br>factors of<br>industrial<br>localization | ٣ | 11 |
| General questions and discussion | Theoretica<br>l/Discussi<br>on | Weber, Kristaller,<br>Rostrum theory                             | Industrial localization theories                      | ٣ | ١٢ |
| General questions and discussion | Theoretica<br>l/Discussi<br>on | Norcliffe's<br>Industrial Place<br>Theory                        | Industrial localization theories                      | ٣ | ١٣ |
|                                  |                                |  | Second month<br>test for the first<br>semester        |   | ١٤ |
| General questions and discussion | Theoretica l/Discussi on       | Industrial localization and industrial regions in Western Europe | Major industrial regions                              | ٣ | 10 |
|                                  |                                |  | Chapter Two   |   |    |
| General questions                | Theoretica l/Discussi          | Agricultural development and                                     | Industrial regions in                                 | ٣ | ١٦ |

| and discussion                                  | on                             | its environmental dimensions  | Germany   |     |
|---|--------------------------------|---|---|-----|
| General questions and discussion                | Theoretica<br>l/Discussi<br>on | Traditional industry, mechanical industry, large industries                       | Types of industrial activity                                  | ١٧  |
| General questions, discussion and surprise exam | Theoretica<br>l/Discussi<br>on | Machinery and transportation equipment  | Engineering Industries Machinery and Transportation Equipment | 1 % |
| General questions and discussion                | Theoretica<br>l/Discussi<br>on | Heavy chemicals, fine chemicals   | Chemical industries   | 19  |
| General questions and discussion                | Theoretica<br>l/Discussi<br>on | Oil industry<br>features  | Features of the oil industry                                  | ۲.  |
|   |                                |   | First month test<br>for the second<br>semester                | 71  |
| General questions, discussion and surprise exam | Theoretica<br>l/Discussi<br>on | Oil refining and refining stages  | Oil refining industry   | *** |
| General questions and discussion                | Theoretica<br>l/Discussi<br>on | Ease of transportation, international agreements, advertising of commercial goods | International trade in industrial goods                       | 78  |

| General questions and discussion | Theoretica l/Discussi on       | Western Europe,<br>North America,<br>Eastern Europe,<br>Japan                          | major business<br>areas | ۲ ٤ |
|----------------------------------|--------------------------------|--|-------------------------|-----|
| General questions and discussion | Theoretica<br>l/Discussi<br>on | Iron and steel industry, factors that led to the growth of the iron and steel industry | Main Industries         | 70  |

### Course Evaluation . ٣٤

- The student's commitment to the deadlines for submitting reports and assignments -\(^1\) assigned to him and respecting their deadlines
  - .Daily applications and duties 7
  - .Continuous semester and weekly exams T
- Student participation in the classroom and serious discussion shows the extent of the \( \xi\$ .student's interest and his attempt to bear responsibility

|                          | Learning and teaching resources .٣٥  |
|--------------------------|--|
| Industrial Geography     | Required textbooks (methodology if any)  |
| Planning and development | Main References (Sources)  |
|                          | Recommended supporting books and references (scientific journals, reports, etc.) |
| With internet data       | Electronic references, websites  |
|                          |  |
|                          |  |

| .(GIS ) Course name : Geographic Information Systems  |
|---|
|   |
| : Course code . TV  |
| • ( )   |
| Semester / Year : Annual . TA   |
|   |
| Date of preparation of this description 2024-2025 . ۳۹  |
| Faeq Hassan Muhaimid  |
| theoretical lectures, practical applications, : Available forms of attendance .5.   |
| .field studies, e-learning  |
|   |
| Number of study hours (total) / number of units (total): 5 hours (theoretical: .5) .(practical: 7)  |
| .(praetical. 1 • 1  |
| Name of the course administrator (if more than one name is .٤٢  |
| (mentioned  |
|   |
|   |
|   |
| Course objectives . £ ٣   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using•  |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps•   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps• .Application of remote sensing techniques and coordinate systems in geographical studies•   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps•   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps• .Application of remote sensing techniques and coordinate systems in geographical studies• paring students to use geographic information systems in the fields of urban planning, environment, •   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps• .Application of remote sensing techniques and coordinate systems in geographical studies• paring students to use geographic information systems in the fields of urban planning, environment, • . and natural resource management   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps• .Application of remote sensing techniques and coordinate systems in geographical studies• paring students to use geographic information systems in the fields of urban planning, environment, • . and natural resource management  Teaching and learning strategies .£ £  |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps• .Application of remote sensing techniques and coordinate systems in geographical studies• paring students to use geographic information systems in the fields of urban planning, environment, • . and natural resource management  Teaching and learning strategies .£ £  For theory lectures: Presenting key concepts using presentations and interactive maps   |
| their (GIS ) Introducing students to the basic concepts of Geographic Information Systems .applications .GIS software Develop geographic data analysis skills using• .Enabling students to create and analyze digital maps• .Application of remote sensing techniques and coordinate systems in geographical studies• paring students to use geographic information systems in the fields of urban planning, environment, • . and natural resource management  Teaching and learning strategies .£ £  .For theory lectures: Presenting key concepts using presentations and interactive maps .QGIS andArcGIS such asGIS software Practical labs: Training students on • |

| .specialized institutions |  |
|---------------------------|--|
|                           |  |

## Course structure .50

| Evaluation | Learning                | Name of the unit or | Required learning                                     | Watches | The  |
|------------|-------------------------|---------------------|---|---------|------|
| method     | method                  | topic               | outcomes  |         | week |
| $\sim$ 1   | ctures +<br>liscussions | GIS Introduction to | rn the basics of<br>geographic<br>information systems | 2       | 1    |

#### Course Evaluation . £٦

The evaluation is based on several criteria to ensure the achievement of learning outcomes, including

- .Theoretical tests to measure academic understanding.
- .Practical assessment through students' performance in laboratories•
- in real-GIS Research and applied projects that reflect the student's understanding of the use of .world problems
- Assignments and reports to measure the student's ability to apply theoretical concepts .practically
- Participate in discussions and presentations to measure critical thinking and scientific .communication

| Learning ar   | nd teaching resources .£ Y      |
|---|---------------------------------|
| Public lectures   | uired textbooks (methodology if |
|   | (any                            |
|   | Main References (Sources)       |
| RI and "International Journal of GIS " Scientific articles published in | Recommended supporting          |
| .specialized reports  | books and references            |
|   | scientific journals, reports, ) |
|   | (.etc                           |
| :Electronic references •  | Electronic references, websites |
| .ESRI website: www.esri.com •   |                                 |
| .QGIS website: www.qgis.org •   |                                 |
| ESRI Train and .edX .Coursera :E-learning platforms•                    |                                 |

| -  |            |
|--|------------|
| hg[yvhtdm hg'fdm : Course name .5  | <u>.</u> A |
|  |            |
| : Course code  | ٩          |
|  |            |
| Semester / Year : Annual .c  | ٠,         |
|  |            |
| ۱۱/۱٦/۲۰۲٤: of preparation of this description .c  | ۰,         |
|  |            |
| According to the weekly class schedule: Available forms of attendance .c   | 7          |
| prepared by the department hea   | ıd         |
|  |            |
| Number of study hours (total) / Number of units (total): ٩٠  | ۳,         |
| Name of the course supervisor (if more than one name is mentioned):  | > {        |
| Ms. Ms. Zainab Jamal Ńaama   | ın         |
|  |            |
| Course objectives .c   | ,0         |
| e aim of this course is to introduce the student to the concept of medical geography, i portance, objectives, and research methods, the relationship between the environment human health, the impact of climate phenomena resulting from air pollution on the | nt         |

vironment and humans, and the impact of medical laboratory experiments on humans and the environment.

# Teaching and learning strategies .or

- .Give the student opportunities for dialogue and discussion during the lesson -\
  Enhancing the student's ability to perform assignments and adhere to their -\(\frac{1}{2}\)
  .deadlines
  - .Encouraging the student to benefit from the available means -
- veloping the student's ability to find appropriate solutions to any problem he -2.

#### Course structure .ov

| Evaluation                             | Learning                 | Name of the unit or                                     | Required learning                            | Watches | The  |
|--|--------------------------|---|--|---------|------|
| method                                 | method                   | topic   | outcomes                                     |         | week |
| General questions                      | eoretical/Dis<br>cussion | finition of some concepts                               | dical geography<br>concept                   | ٤       | •    |
| Discussion<br>and general<br>questions | eoretical/Dis<br>cussion | Medical geography, its development and research methods | Research Methods in<br>Geography             | ٤       | ۲    |
| Discussion<br>and general<br>questions | eoretical/Dis<br>cussion | relationship between<br>environment and human<br>health | The impact of the vironment on health man    | ٤       | ٣    |
| Discussion and surprise                | eoretical/Dis<br>cussion | r pollution and its risks to<br>man                     | effect of pollution<br>on the layer<br>Ozone | ٤       | ٤    |

| exam                                   |                          |   |  |   |    |
|--|--------------------------|---|--|---|----|
| General questions and discussion       | eoretical/Dis<br>cussion | Water pollution   | effect of pollution<br>on health<br>man              | ٤ | ٥  |
| General<br>questions                   | eoretical/Dis<br>cussion | e impact of climate and<br>variables<br>Climate on health | ather and climate<br>relationship<br>In human health | ٤ | ٦  |
| Discussion<br>and general<br>questions | eoretical/Dis<br>cussion | impact of natural<br>disasters                            | Nino phenomenon<br>and its impact<br>On human health | ٤ | ٧  |
| Discussion<br>and general<br>questions | eoretical/Dis<br>cussion | Flood risks on<br>Human health                            | impact of floods<br>on<br>Human health               | ٤ | ٨  |
|  |                          | e effect of earthquakes on<br>health<br>man               | Associated damages<br>For earthquakes                | ٤ | ٩  |
| exam                                   | exam                     | exam  | exam   | ٤ | ١. |
| General questions and discussion       | eoretical/Dis<br>cussion | hurricanes and health                                     | origin of the hurricane modern hurricanes            | ٤ | 11 |
| Discussion questions                   | eoretical/Dis<br>cussion | e effect of drought on<br>health<br>man                   | Effects of drought And its cases                     | ٤ | ١٢ |

|  | 1                                      | Γ   | 1   |   |    |
|--|--|---|---|---|----|
| General questions and discussion             | eoretical/Dis<br>cussion               | The impact of wars on Human health                                      | Weapons used In wars                                  | ٤ | 14 |
| General questions, discussion and daily test | eoretical/Dis<br>cussion               | pes of chemical weapons<br>and their effects<br>On the human            | Use of gases<br>During wars                           | ٤ | ١٤ |
| General questions and discussion             | eoretical/Dis<br>cussion               | e effect of wrong practices On human health                             | The role of man in Spread of diseases                 | ٤ | 10 |
| General questions and discussion             |  | noking and its bad effects In human health behavior and the environment | oking and its effect<br>on<br>Human health            | ٤ | 10 |
| General questions and discussion             | eoretical/Dis<br>cussion               | health  | concept of drugs<br>and abuse<br>rugs and their types | ٤ | ١٦ |
|  | ond month<br>for the first<br>semester | e effect of trade<br>laboratory experiments<br>On the human             | Conducting tests<br>Medical                           | ٤ | ١٧ |
| exam   | exam                                   | exam  | exam  | ٤ | ١٨ |

|   | . 1/5:                   |  | ~   | , 1 |     |
|---|--------------------------|--|---|-----|-----|
| General questions, discussion and surprise exam | eoretical/Dis<br>cussion | smanagement of<br>wastewater<br>Healthy<br>Waste treatment | Sewage<br>Waste management                      | ٤   | 19  |
| General questions and discussion                | eoretical/Dis<br>cussion | nmon non-epidemic<br>diseases                              | Factors that help<br>Diabetes                   | ٤   | ۲.  |
| General questions and discussion                | eoretical/Dis<br>cussion | Common diseases  | esity and overweight diseases the weight        | ź   | *1  |
| General questions and discussion                | eoretical/Dis<br>cussion | ectious epidemic diseases                                  | Cholera disease nptoms and nethods of infection | ٤   | **  |
| Daily<br>discussion<br>and quiz                 | eoretical/Dis<br>cussion | ectious epidemic diseases                                  | Malawi disease                                  | ٤   | 77  |
| exam  | exam                     | exam   | exam  | ٤   | 7 £ |
| Discussion<br>and general<br>questions          | eoretical/Dis<br>cussion | Spread of diseases   | Cancer concept Cause and treatment              | ٤   | 70  |

| Discussion                             | eoretical/Dis<br>cussion | Aaintaining human health  | importance of public health             | ٤ | 77 |
|--|--------------------------|---|---|---|----|
| and general                            |                          |   | -                                       |   |    |
| questions                              |                          |   |   |   |    |
| Discussion<br>and general<br>questions | cussion                  | role of Islam and its<br>teachings in<br>intaining health and<br>individual |   | ٤ | ** |
| General questions and discussion       | eoretical/Dis<br>cussion | thods of care and preservation health                                       | of modern<br>technologies<br>reasonably | ٤ | 7. |

### Course Evaluation

.01

.Participate in the classroom -  $^{\mbox{\scriptsize .}}$  .Classroom activities and assignments performed by the student -  $^{\mbox{\scriptsize .}}$ 

### Exams

| Learning and teaching resources .oq  |
|--|
| Required textbooks (methodology if any)  |
| Main References (Sources)  |
| Recommended supporting books and references (scientific journals, reports, etc.) |
| Electronic references, websites  |
| F  |

| C  | ourse name: Services Geography .1.                                      |
|--|---|
|  |   |
|  | ۰،۹،۳٤،۱۳ : Course code الم   |
|  |   |
|  | Semester / Year : Annual  |
|  | · · · · · · · · · · · · · · · · · · ·                                   |
| Date of preparation  | on of this description: 1/۲۸/۲.۲0 .78                                   |
|  |   |
| Daily / except Friday, Saturday and offi   | cial: Available attendance forms .٦٤                                    |
|  | holidays  |
|  |   |
| Number of study hours (total) / Number   | r of units (total): Total number of                                     |
| nours (**) n   | iours / Total number of units ( , , , ) units                           |
| Name of the course administra  | ator (if more than one name is .٦٦                                      |
|  | : (mentioned  |
|  |   |
|  | Prof. Dr. Manhal Abdullah Hammadi                                       |
|  | Course objectives .٦٧   |
| The course aims to introduce, enable, : • clarify and enlighten students on Identify the general foundations, concepts and theoretical frameworks Identify the . • of service geography geographical factors affecting the distribution of services and their uses Varying at .in different environments . the international and local levels Identifying the problems of spatial • distribution of services, their causes Building a basic • and solutions database to be used in planning Enhancing students' . • services | The teacher will follow ) Strategy Between strategy and the blending it |

abilities to criticize and analyze the . subject of services Enabling • students to know how to conduct field Following modern . studies technology methods studying in . • service projects and problems Developing students' sense responsibility during the study and Possessing self-. • work period management skills and the ability to manage one's own time and work Scheduled dates within

### Teaching and learning strategies .٦٨

strategy Meeting and its • (lecture, forms..... explanation. Discussion). • description, story and interrogation strategy questions Effective strategy, classroom questions Active . • learning strategies, and I will choose strategies from them . • according to the lecture topic · Design and application strategy Practical presentation strategy Mixing different). • applied) strategies according to the type of . lecture

|         | 10. بنية المقرر :            |                         |                        |        |         |  |
|---------|------------------------------|-------------------------|------------------------|--------|---------|--|
| طريقة   | طريقة التعلم                 | اسم الوحدة او الموضوع   | مخرجات التعلم المطلوبة | الساعا | الأسبوع |  |
| التقييم |                              |                         |                        | Ū      |         |  |
| اختبار  | الالقاء والمناقشة والاستجواب | جغرافية الخدمات         | تذكر والفهم والاستيعاب | 4      | 2 + 1   |  |
| تكويني  |                              | مفهومها وتطورها         |                        |        |         |  |
| اختبار  | الالقاء والمناقشة والاستجواب | علاقة الجغرافية بدراسة  | التذكر والفهم          | 4      | 4 + 3   |  |
| شفوي    |                              | الخدمات                 | والاستيعاب             |        |         |  |
| اختبار  | الاسئلة الفعالة والصفية      | الخدمات الحضرية في      | التذكر والفهم          | 4      | 6 + 5   |  |
| تكويني  |                              | المدن                   | والاستيعاب             |        |         |  |
| اختبار  | الالقاء والمناقشة والاستجواب | مصادر البيانات المتعلقة | التذكر والفهم          | 4      | 8 + 7   |  |

| تكويني       |                              | بالخدمات               | والاستيعاب    |   |         |
|--------------|------------------------------|------------------------|---------------|---|---------|
|              |                              | ) تحريري من ( 10 )     | امتحان        |   |         |
| اختبار       | المزج بين الاستراتيجيات      | مفهوم الخدمة و طبيعة   | التذكر والفهم | 4 | 10 + 9  |
| شفو <i>ي</i> |                              | الخدمات                | والاستيعاب    |   |         |
| اختبار       | الالقاء والمناقشة والاستجواب | الاطار المكاني للخدمة  | التذكر والفهم | 4 | 12 + 11 |
| شفو <i>ي</i> |                              | وكيفية تقييم كفاءتها   | والاستيعاب    |   |         |
| اختبار       | الاسئلة الفعالة والصفية      | مفهوم المركز الخدمي    | التذكر والفهم | 4 | 14 + 13 |
| تكويني       |                              | وتحديده                | والاستيعاب    |   |         |
| اختبار       | المزج بين الاستراتيجيات      |                        | التذكر والفهم | 4 | 16 + 15 |
| شفو <i>ي</i> |                              | تصنف مراكز الخدمات     | والاستيعاب    |   |         |
|              |                              | الى رئيسية وثانوية وفي |               |   |         |
|              |                              | الضواحي                |               |   |         |
|              |                              | ) تحريري من ( 10 )     | امتحان        |   |         |
| اختبار       | العروض العملية التطبيقية     | تصنيف خدمات المدن      | التذكر والفهم | 4 | 18 + 17 |
| تكويني       |                              |                        | والاستيعاب    |   |         |
| اختبار       | المزج بين الاستراتيجيات      | معايير الخدمات         | التذكر والفهم | 4 | 20 + 19 |
| شفوي         |                              | الحضرية                | والاستيعاب    |   |         |
| 1 1          | T: N TH: H TIS AN            | -11.1 - 11             | iti Cinti     | 4 | 22 + 21 |
| اختبار       | الاسئلة الفعالة والصفية      | دور المخططات           | التذكر والفهم | 4 | 22 + 21 |
| شفو <i>ي</i> |                              | الاساسية في تخطيط      | والاستيعاب    |   |         |
|              |                              | الخدمات                |               |   |         |
| بطاقة        | المزج بين الاستراتيجيات      | توظيف التقانة الحديثة  | التذكر والفهم | 4 | 24 + 23 |
| ملاحظة       |                              | في الخدمات وتوظيف      | والاستيعاب    |   |         |
|              |                              | في دراسة GISخدمات      |               |   |         |

|            |   |                  | دمات         | الذ                    |                    |             |               |  |
|------------|---|------------------|--------------|------------------------|--------------------|-------------|---------------|--|
|            | امتحان تحريري من ( 10 )   |                  |              |                        |                    |             |               |  |
| شفوي +     | المزج بين الاستراتيجيات   |                  | وزيع المراكز | نظریات ن               | التذكر والفهم      | 4           | 26 + 25       |  |
| تكويني     |   |                  | فدمية        | الـ                    | والاستيعاب         |             |               |  |
| اختبار     | ة التطبيقية   | العروض العمليا   | ئط الخدمات   | دراسة خرا              | التذكر والفهم      | 4           | 28 + 27       |  |
| تطبيقي     |   |                  |              |                        | والاستيعاب         |             |               |  |
| شفوي +     | ىيم والتطبيق  | استراتيجية التصم | عوقات اشباع  | مشاكل وم               | التذكر والفهم      | 4           | 30 + 29       |  |
| تكويني     |   |                  | الانسانية    | الحاجان                | والاستيعاب         |             |               |  |
|            |   |                  | (10)         | نحان تحریر <i>ي</i> مز | امن                |             |               |  |
|            |   |                  |              |                        |                    | مقرر :      | 11. تقييم ال  |  |
| الدرجة     | درجة  | درجة السعي       | سي الثاني    | الفصل الدرا            | سي الاول           | الفصل الدرا |               |  |
| النهائي    | الدفتر  |                  |              |                        |                    |             | توزيع         |  |
|            |   |                  | الامتحان     | الامتحان               | الامتحان الثاني    | متحان الاول | الارجات       |  |
| 100        | 60  | 40               | الثاني       | الاول                  |                    |             |               |  |
|            |   |                  | 10           | 10                     | 10                 | 10          |               |  |
|            |   |                  | 2            | 0                      | 2                  | 0           |               |  |
|            |   |                  |              | Learn                  | │<br>ing and teach | ning resor  | urces .٦٩     |  |
|            |   | geograp          | ohy Service  |                        | equired textboo    | -           |               |  |
| Geog       | Geography The services To Dr. D                                     |                  |              |                        | Mai                | n Referenc  | ces (Sources) |  |
| -          | - Mazen Abdulrahman Al- Hiti<br>Dr. Mohsen slave Ali - Dr. Riad The |                  |              |                        |                    |             | ( -)          |  |
| J) [ . [V] | beautiful   |                  |              |                        |                    |             |               |  |
| Geogra     | eography Services For the doctor • . Fouad son Angry                |                  |              |                        |                    |             |               |  |
| Pla        | Planning Urban For the doctor                                       |                  |              |                        |                    |             |               |  |
|            | . behind Hussein or   |                  |              |                        |                    |             |               |  |

| Magazines : Magazine Al-Farahidi              | Recommended     | supporting        | books       | and    |
|---|-----------------|-------------------|-------------|--------|
| <b>College of Arts - College of Education</b> | references (so  | cientific journal | ls renorts  | etc.)  |
| - Magazine For science Humanity               | 10101011000 (01 | oloritino journa  | o, roporto, | 0.0.,  |
| Tikrit University                             |                 |                   |             |        |
| Reports: Writing Research on •                |                 |                   |             |        |
| . Vocabulary Services Cities                  |                 |                   |             |        |
| Periodicals: Review Periodicals in •          |                 |                   |             |        |
| . Libraries Central                           |                 |                   |             |        |
|   |                 |                   |             |        |
| <b>Sites on network The Internet Special</b>  | Е               | Electronic refere | ences, we   | bsites |
| Cities And its services                       |                 |                   |             |        |
|   |                 |                   |             |        |
|   | 1               |                   |             |        |

| database information systems and their functions is used to analyze spatial, descriptive and   |   | : Course name                                  |
|--|---|--|
| Chapter / Year   | Applications in                             | Geographic Information Systems                 |
| : Date this description was prepared \( \forall \psi \) \( V \cdot |   | : Course code                                  |
| : Date this description was prepared \( \forall \psi \) \( V \cdot |   |  |
| : Date this description was prepared Y • Y • Z • Z • Z • Z • Z • Z • Z • Z •   |   | Chapter / Year .vy                             |
| : Available attendance forms . V  : Number of study hours (total) / Number of units (total) . V  : hours each week, totaling (٩٠) hours (٣)  Name of the course administrator (if more than one name is . V \ (mentioned)  Asst. Prof. Dr. Aziz Ibrahim Ali Obaid  Course objectives . V \  able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and . Its applications and uses  |   | annual   |
| : Available attendance forms . V  :Number of study hours (total) / Number of units (total) . V  .hours each week, totaling (٩٠) hours (٣)  Name of the course administrator (if more than one name is . V \ (mentioned)  Asst. Prof. Dr. Aziz Ibrahim Ali Obaid  Course objectives . V \  able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and Its applications and uses  |   | : Date this description was prepared           |
| :Number of study hours (total) / Number of units (total) . Vo .hours each week, totaling (१٠) hours (٣)  Name of the course administrator (if more than one name is . V٦   |   | 7.75/10/9                                      |
| .hours each week, totaling (१٠) hours (٢)  Name of the course administrator (if more than one name is (mentioned   |   | : Available attendance forms . V ٤             |
| .hours each week, totaling (१٠) hours (٢)  Name of the course administrator (if more than one name is  |   |  |
| Name of the course administrator (if more than one name is . \( \text{\capacita} \) (mentioned \)  Asst. Prof. Dr. Aziz Ibrahim Ali Obaid  Course objectives . \( \text{\capacita} \) \( \text{able} \) the student to create an integrated database information systems and their functions is used to analyze spatial, descriptive and . Its applications and uses   | :Number of study                            | hours (total) / Number of units (total) . Vo   |
| Asst. Prof. Dr. Aziz Ibrahim Ali Obaid  Course objectives .vv  able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and .lts applications and uses  | 1.  | nours each week, totaling (੧٠) hours (་)       |
| Asst. Prof. Dr. Aziz Ibrahim Ali Obaid  Course objectives .vv  able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and .lts applications and uses  | Name of the course admin                    | istrator (if more than one name is . ' \       |
| Course objectives .vv  able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and .lts applications and uses  |   | (mentioned                                     |
| able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and  |   | Asst. Prof. Dr. Aziz Ibrahim Ali Obaid         |
| able the student to create an integrated dent knowledge of the importance of geographic information systems and their functions is used to analyze spatial, descriptive and  |   |  |
| database information systems and their functions is used to analyze spatial, descriptive and   |   | Course objectives .vv                          |
| is used to analyze spatial, descriptive and .Its applications and uses   | able the student to create an integrated    | dent knowledge of the importance of geographic |
|  | database                                    | information systems and their functions        |
| .guantitative data   | is used to analyze spatial, descriptive and | .lts applications and uses                     |
| i daminiani a ana  | .quantitative data                          |  |

### Teaching and learning strategies

abling the student to create linked -Y able the student to use more than -Y .information layers Database through practical applications r mapping and matching with visuals

.one program

#### Course structure .٧9

| Evaluation       | Learning    | Name of the unit or    | Required learning   | Watches | The  |
|------------------|-------------|------------------------|---------------------|---------|------|
| method           | method      | topic                  | outcomes            |         | week |
| Discuss          | theoretical | importance of systems  | Information systems | ٣       | ١    |
| ion and applicat | practical   | and their uses         | applications        |         |      |
| ions             |             |                        | Geography           |         |      |
| Daily<br>test    |             |                        |                     |         |      |
| Discuss          | theoretical | Stages of building     | Information systems | ٣       | ۲    |
| ion and applicat | practical   | geographic information | applications        |         |      |
| ions             |             | systems                | Geography           |         |      |
| Daily            |             |                        |                     |         |      |
| test<br>Discuss  | theoretical | Data processing        | Information systems | ٣       | ٣    |
| ion and          |             | Data processing        |                     | '       | ,    |
| applicat<br>ions | practical   |                        | applications        |         |      |
| Daily            |             |                        | Geography           |         |      |
| test             |             |                        |                     |         |      |
| Discuss ion and  | theoretical | Various uses           | Uses of systems     | ٣       | ٤    |
| tests            | practical   | Software advantages    | Information         |         |      |
| Daily            |             |                        |                     |         |      |
| test<br>Discuss  | theoretical | Spatial data vehicles  | Uses of systems     | ٣       | 0    |
| ion and          | practical   | opaliai data voilloios | Information         | '       |      |
| applicat<br>ions | practical   |                        | mormation           |         |      |
| Daily            |             |                        |                     |         |      |
| <u>test</u>      |             |                        |                     |         |      |
| ion and          | theoretical |                        | pes of data models  | ٣       | ٦    |
| applicat         | practical   | And the caller         |                     |         |      |
| ions<br>Daily    |             |                        |                     |         |      |
| test             |             |                        |                     |         |      |
|                  | theoretical | a collection and       | GIS Jobs            | 4       | ٧    |
| ion and          |             |                        |                     |         |      |

| applicat<br>ions<br>Daily<br>test                       | practical                | storage   |   |   |    |
|---|--------------------------|---|---|---|----|
| Discuss ion and applicat ions Daily test                | theoretical<br>practical | alysis and display<br>operations<br>And the output        | GIS Jobs  | ٣ | ٨  |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | Save and analyze information Display and draw information | Benefits of using<br>systems<br>Geographic<br>information | ٣ | ٩  |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | Troubleshooting and issuing right decisions               | Benefits of using<br>systems<br>Geographic<br>information | ٣ | ١. |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | Survey data installation                                  | Data structure  | ٣ | 11 |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | Linear data structure                                     | Data structure  | ٣ | ١٢ |
|   |                          | Monthly exam  | Monthly exam  |   | ١٣ |
| Discuss<br>ion and<br>applicat<br>ions                  | theoretical<br>practical | From surveying to linear And vice versa                   | Convert models  | ٣ | ١٤ |

| Daily   |                          |   |   |   |    |
|---|--------------------------|---|---|---|----|
| test  |                          |   |   |   |    |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily         | theoretical<br>practical | dels between negatives And the positives                    | Pros Cons<br>Models                         | ٣ | 10 |
| test  |                          |   |   |   |    |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | curacy and efficiency of content eliability and suitability | ırce Evaluation<br>Criteria<br>Spatial data | ٣ | 17 |
|   | theoretical<br>practical | etwork installationTIN In information systems               | work representation                         | ٣ | 17 |
|   | theoretical<br>practical | me representation path Place in systems                     | Spatial changes  Dynamic                    | ٣ | ١٨ |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | near and spatial sources                                    | Spatial data sources                        | ٣ | 19 |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | Maps of all kinds   | Spatial data sources                        | ٣ | ۲. |
| Discuss<br>ion and<br>applicat                          | theoretical practical    | Satellite data  | Spatial data sources                        | ٣ | 71 |

| ion and<br>applicat<br>ions<br>Daily                    | theoretical<br>practical | cosmic system and<br>stations<br>Monitoring       | Importance of data remote sensing | ٣ | 77         |
|---|--------------------------|---|-----------------------------------|---|------------|
| Discuss ion and applicat ions Daily test                | theoretical              | The goal of building a<br>base<br>Geographic data | geodatabase                       | ٣ | 77         |
|   |                          | Monthly exam                                      | Monthly exam                      |   | 7 £        |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | ule design requirements<br>Data                   | geodatabase                       | ٣ | <b>7</b> 0 |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | practical<br>theoretical | Database components  Geography                    | geodatabase                       | ٣ | 77         |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily<br>test | theoretical<br>practical | oological matching operations                     | Spatial analysis                  | ٣ | 44         |
| Discuss<br>ion and<br>applicat<br>ions<br>Daily         | theoretical<br>practical | Create domains digital elevation model            | nstallation method                | ٣ | ۲۸         |

|                  | ı                      |            |           |           | •                       | 1            |             |
|------------------|------------------------|------------|-----------|-----------|-------------------------|--------------|-------------|
| test             |                        |            |           |           |                         |              |             |
|                  | theoretical            | rivation o | f re      | gression  | Network structure       | ٣            | 79          |
| ion and applicat | practical              |            |           | maps      |                         |              |             |
| ions             |                        | hill       | shado     | w maps    |                         |              |             |
| Daily            |                        | 11111      | nauc      | тарз      |                         |              |             |
| test             |                        |            |           |           |                         |              |             |
|                  | theoretical            | pping ar   | ıd :      | Systems   | aps and projections     | ٣            | ٣.          |
| ion and applicat | practical              |            | N         | /lodeling |                         |              |             |
| ions             |                        |            |           | ormation  |                         |              |             |
| Daily            |                        |            |           | , mation  |                         |              |             |
| test             |                        |            |           |           |                         |              |             |
|                  | <u>'</u>               |            |           |           | Course                  | Evaluation   | ۱ .۸۰       |
|                  |                        |            |           |           | (Pract                  | tical + The  | oretical)   |
| First semester   | (Y) Second s           | semester ( | (•) E     | nd of ye  | ar (৲) and the eval     | luation is a | passing     |
|                  |                        |            |           |           |                         | grade        | e of )∘ • ( |
|                  |                        |            |           | Lea       | ning and teaching       | resource     | ۱۸. ۵       |
| plications in    | Information            | Systems    | s, Al     | i         | Required textbooks (    | methodolog   | y if any)   |
|                  | Abdu                   | ıl Abbas   | ۲.,٠      | l         |                         | ·            |             |
| ormation Sy      | • •                    |            |           |           | Main Re                 | eferences (S | Sources)    |
|                  | _                      | Al-Zaidi,  |           |           |                         |              |             |
| nciples of       | •                      | naking,    | _\<br>~~~ |           |                         |              |             |
| llow develor     | uhammad A              |            |           |           | ana anala d             |              |             |
| liow develop     | טוויסוווס טא           | ioliowing  | wek       | `         | nmended supporti        | -            |             |
|                  | Remote sensing centers |            |           | rei       | erences (scientific jou | urnals, repo | rts, etc.)  |
| Vebsites rela    |                        |            |           |           | Electronic r            | eferences, v | websites    |
| Reports prep     | •                      | _          |           |           |                         | ,            |             |

| Course Nam | ne: Research Methods .AY |
|------------|--------------------------|
|            |                          |
|            |                          |
|            | : Course code .AT        |

| Semester / Year : Annual . A &   |
|--|
|  |
| Date of preparation of this description: \\/\/\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\   |
|  |
| In-person: Available attendance forms .^\  |
| NT 1 C 4 1 1 (4 4 1) / (Y) TT1 4' 1 NT 1 C '4 (4 4 1) 4 AV   |
| Number of study hours (total) / (۲) Theoretical Number of units (total): ٤   |
| Name of the course supervisor ( Prof. Dr. Adnan Attia Muhammad ) .^^   |
|  |
|  |
| Course objectives  |
| student learns about the concept of scientific research and  |
| ethics and is trained on how to obtain information, use  |
| .sources, and prepare scientific research  |
| Teaching and learning strategies .٩٠   |
| eractive scientific participation in the ssroom and classroom activities on program's vocabulary and training ld visits, in addition to written tests, I then preparing scientific research. eractive scientific participation in the ssroom and classroom activities on program's vocabulary and training ld visits, in addition to written tests, and then preparing scientific research |
| Course Evaluation .٩١  |
| Students' commitment to submitting reports and assignments assigned to them and respecting their deadlines   |
| Learning and teaching resources .9 Y   |
| - Required textbooks (methodology if any)  |

| Scientific Research Methods: Foundations and Applications, Muhammad Azhar Saeed Al-Samak, Dar Al-Yazouri, Jordan, ۲۰۱۱                                  | Main References (Sources)  |
|---|--|
| Assistant in preparing scientific research and theses, Ibrahim Muhammad Khafajah, \st ed., Dar Tuwaiq for Publishing and Distribution, Riyadh, \square. | Recommended supporting books and references (scientific journals, reports, etc.) |
| -   | Electronic references, websites  |

| Course name : Agricultural Geography  | .98  |
|---|------|
|   |      |
| : Course code   | .9 & |
|   |      |
| Semester / Year : Annual  | .90  |
|   |      |
| Date of preparation of this description: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | .97  |
|   |      |
|   |      |

Attendance according to the weekly class: Available forms of attendance . 99 . schedule prepared by the department head

Number of study hours (total) / Number of units (total): ٩٠ hours .٩٨

Name of the course supervisor (if more than one name is .٩٩ mentioned): Prof. Dr. Dhafer Ibrahim Taha

#### Course objectives . 1 . .

The aim of this course is to introduce the student to the concept of agricultural geography as a branch of geography, its study methods, the geographical factors affecting agricultural production worldwide, and the most important requirements .for these products

### Teaching and learning strategies . 1 . 1

- .Give the student opportunities for dialogue and discussion during the lesson -\
- Enhancing the student's ability to perform assignments and adhere to their -۲ .deadlines
  - .Encouraging the student to benefit from the available means \(^{7}\)
- Developing the student's ability to find appropriate solutions to any problem he \( \xi \) encounters

#### Course structure .1.7

| Evaluation            | Learning     | Name of the unit or    | Required learning | Watch | The  |
|-----------------------|--------------|------------------------|-------------------|-------|------|
| method                | method       | topic                  | outcomes          | es    | week |
| General               | Theoretical/ | The concept of         | Agricultural      | ۲     | ١    |
| questions             | Discussion   | agricultural geography | Geography         |       |      |
| Discussion            | Theoretical/ | The emergence of       | Agricultural      | ۲     | ۲    |
| and general questions | Discussion   | agricultural centers   | Geography         |       |      |
| Discussion            | Theoretical/ | The relationship of    | Agricultural      | ۲     | ٣    |
| and general questions | Discussion   | agricultural geography | Geography         |       |      |
|                       |              | to other branches      |                   |       |      |
|                       |              |                        |                   |       |      |
| Discussion            | Theoretical/ | The relationship       | Agricultural      | ۲     | ٤    |
| and surprise exam     | Discussion   | between agricultural   | Geography         |       |      |
|                       |              | geography and other    |                   |       |      |

|                           |                            | sciences                 |                     |   |    |
|---------------------------|----------------------------|--------------------------|---------------------|---|----|
| General                   | Theoretical/               | Agricultural Geography   | Agricultural        | ۲ | ٥  |
| questions and discussion  | Discussion                 | Study Methods            | Geography           |   |    |
| General                   | Theoretical/               | The importance of        | Agricultural        | ۲ | ٦  |
| questions                 | Discussion                 | agricultural geography   | Geography           |   |    |
| Discussion                | Theoretical/               | Natural factors          | Agricultural        | ۲ | ٧  |
| and general               | Discussion                 |                          | _                   |   |    |
| questions                 |                            | affecting agricultural   | Geography           |   |    |
|                           |                            | production               |                     |   |    |
| Discussion and general    | Theoretical/<br>Discussion | Surface and its          | Agricultural        | ۲ | ٨  |
| questions                 | Discussion                 | relation to agricultural | Geography           |   |    |
| -                         |                            | production               |                     |   |    |
|                           | exam                       | exam                     | Agricultural        | ۲ | ٩  |
|                           |                            |                          | Geography           |   |    |
| discussion                | Theoretical/               | Climatic conditions      | Agricultural        | ۲ | ١. |
|                           | Discussion                 | and their relationship   | Geography           |   |    |
|                           |                            | to agriculture           |                     |   |    |
| General                   | Theoretical/               | Soil and its             | Agricultural        | ۲ | ١١ |
| questions and             | Discussion                 |                          | _                   |   |    |
| discussion                |                            | relationship to          | Geography           |   |    |
| Discussion                | TT1 + 1/                   | agricultural production  |                     | ۲ | ١٢ |
| questions                 | Theoretical/<br>Discussion | Human factors and        | Agricultural        | ' | 11 |
| questions                 | Dis <b>vu</b> ssion        | their relationship to    | Geography           |   |    |
|                           |                            | agricultural production  |                     |   |    |
| General                   | Theoretical/               | Characteristics of       | Agricultural        | ۲ | ١٣ |
| questions and discussion  | Discussion                 | agricultural production  | Geography           |   |    |
| General                   | Theoretical/               | Agricultural production  | Agricultural        | ۲ | ١٤ |
| questions,                | Discussion                 | patterns                 | Geography           |   |    |
| discussion and daily test |                            | <b>F</b>                 | 3 - 1 3 - 1 4 - 1 7 |   |    |
| General                   | Theoretical/               | Agricultural production  | Agricultural        | ۲ | 10 |
| questions and discussion  | Discussion                 | classification           | Geography           |   |    |
| exam                      | exam                       | exam                     | Agricultural        | ۲ | 10 |
| GAGIII                    | GAAIII                     | GAAIII                   | _                   |   |    |
|                           |                            | ٣٠                       | Geography           |   |    |
|                           |                            | 1 •                      |                     |   |    |

|  | Course Evaluation . ۱ . ۳  |
|--|--|
| Classroom activities and   | Participate in the classroom -۳. ا<br>I assignments performed by the عدد student<br>Exams -۰ |
|  | Learning and teaching resources .1.5   |
| Agricultural Geography, written<br>by Nouri Khalil Al-Barazi and<br>Ibrahim Abdul Jabbar Al-<br>Mashhadani, ۲۰۰۰ | Required textbooks (methodology if any)  |
| Agricultural Geography, written by Kazem Abbadi Al-Jassem, ۲۰۱۵  | Main References (Sources)  |
|  | Recommended supporting books and   |
|  | references (scientific journals, reports, etc.)  |
|  | Electronic references, websites  |

| Course name: Urban Geography   |
|--|
|  |
| : Course code 1.7  |
|  |
| Semester / Year : Annual   |
|  |
| Date of preparation of this description: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\                |
|  |
| Attendance according to the weekly class: Available forms of attendance . \. \ 9             |
| schedule prepared by the department head.  |
|  |
| Number of study hours (total) / Number of units (total): ٩ · hours . ١١٠                     |
|  |
| Name of the course supervisor (if more than one name is .\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |

### mentioned): Asst. Prof. Dr. Saadi Abdullah Ahmed

#### Course objectives .117

The aim of this course is to introduce the student to the concept of urban geography, its importance and objectives, the internal structure of the city and its theories, land uses, tidal classification, sizes and functions of cities, city problems, regional relations between the city and the countryside, and the economic basis of .the city

#### Teaching and learning strategies . 11 m

- .Give the student opportunities for dialogue and discussion during the lesson -\
  Enhancing the student's ability to perform assignments and adhere to their -\(\frac{1}{2}\)
  .deadlines
  - .Encouraging the student to benefit from the available means -
- Developing the student's ability to find appropriate solutions to any problem he \( \xi \) encounters

#### Course structure .112

|               |              |                         |                        |       | •        |
|---------------|--------------|-------------------------|------------------------|-------|----------|
| Evaluation    | Learning     | Name of the unit or     | Required learning      | Watch | The      |
| method        | method       | topic                   | outcomes               | es    | week     |
| General       | Theoretical/ | Definition of some      | Urban geography        | ٤     | 1        |
| questions     | Discussion   | concepts related to the | concept                |       |          |
|               |              | city                    | -                      |       |          |
| Discussion    | Theoretical/ | Natural, military,      | The role of Arabs in   | ٤     | ۲        |
| and general   | Discussion   | political,              | choosing the locations |       |          |
| questions     |              | administrative and      | of cities              |       |          |
| -             |              | religious factors       |                        |       |          |
| Discussion    | Theoretical/ | Public roads and        | Research methods in    | ٤     | ٣        |
| and general   | Discussion   | detailed roads          | urban geography        |       |          |
| questions     |              |                         |                        |       |          |
| Discussion    | Theoretical/ | Location, position, and | The foundations on     | ٤     | ٤        |
| and surprise  | Discussion   | types of cities,        | which the city is      |       |          |
| exam          |              | locational and          | distinguished from the |       |          |
|               |              | positional              | village                |       |          |
| General       | Theoretical/ | Concentric circle       | The internal structure | ٤     | 0        |
| questions and | Discussion   | theory, sector theory,  | of the city and its    |       |          |
| discussion    |              | and multiple nuclei     | theories               |       |          |
|               |              | theory                  |                        |       |          |
| General       | Theoretical/ | Central and             | City internal          | ٤     | ٦        |
| questions     | Discussion   | decentralized power     | installation controls  |       |          |
| Discussion    | Theoretical/ | Commercial use          | Land uses in the city  | ٤     | <b>\</b> |
| and general   | Discussion   |                         | -                      |       |          |
| questions     |              |                         |                        |       |          |

| Discussion and general questions and discussion and daily test General questions and discussion and daily test General questions and discussion and discus   |                                       |               |                          |                              |         |            |
|--|---------------------------------------|---------------|--------------------------|------------------------------|---------|------------|
| Theoretical/ Discussion   Theoretical/ Discussion   Theoretical/ Discussion   Theoretical/ Discussion   Theoretical/ Discussion   Theoretical/ Questions and discussion   Di   |                                       |               | Residential use          | Land uses in the city        | ٤       | ٨          |
| discussion   Theoretical/   Discussion   D   | questions                             |               |                          |                              |         |            |
| Theoretical/ Discussion   Theoretical/ Discussion   Theoretical/ Discussion   Dis   |                                       |               |                          | First month test for the     | ١       | ٩          |
| General questions and discussion  General questions and discussion  General questions and discussion  General questions and discussion  General questions, discussion  General questions and discussion  General questions and discussion  General questions, discussion  General questions and discussion  General ques |                                       |               |                          | first semester               |         |            |
| General questions and discussion  General questions and discussion  General questions and discussion  General questions and discussion  General questions, discussion  General questions and discussion  General questions and discussion  General questions, discussion  General questions and discussion  General ques | discussion                            | Theoretical/  | Industrial use           | Land uses in the city        | ٤       | ١.         |
| General questions and discussion puestions and discussion questions and discussion questions and discussion questions and discussion questions and discussion and daily test General questions and discussion questions and discussion and daily test Questions and discussion questions and discussion and discussion and discussion and discussion questions and discussion and discussion and discussion questions and discussion and discussion and discussion and discussion questions and discussion questions and discussion and discussion questions and questions, discussion questions, discussion questions, discussion and surprise exam questions and questions and questions and discussion questions and questions questions and questions  |                                       |               |                          |                              |         |            |
| Questions and discussion   Di   | General                               |               | Recreational use         | Land uses in the city        | ٤       | 11         |
| Discussion   Dis   |                                       |               | Teoreament use           | Land ages in the only        |         |            |
| Discussion questions   Theoretical/ Discussion   Cities classification   Cit   | 1 -                                   | Discussion    |                          |                              |         |            |
| General questions and discussion   Theoretical/ Discussion   City Jobs   Cit   |                                       | The emetical/ | I las of thomas outstion | I and year in the city       | 4       | 1 7        |
| General questions and discussion  General questions, discussion and daily test  General questions and discussion  General questions, addiscussion  General questions, discussion and discussion  General questions discussion  General questions discussion  General questions discu |                                       |               | -                        | Land uses in the city        | `       | , ,        |
| Questions and discussion   City Jobs   City Jobs   Signature   City Jobs   City Jobs   Signature   City Jobs   City Jobs   Signature   Signature   City Jobs   Signature   S   | questions                             | Discussion    | within the city          |                              |         |            |
| Questions and discussion   City Jobs   City Jobs   Signature   City Jobs   City Jobs   Signature   City Jobs   City Jobs   Signature   Signature   City Jobs   Signature   S   |                                       |               |                          |                              |         |            |
| Questions and discussion   City Jobs   City Jobs   Signature   City Jobs   City Jobs   Signature   City Jobs   City Jobs   Signature   Signature   City Jobs   Signature   S   | General                               | Theoretical/  | Cities classification    | Cities classification        | ٤       | ۱۳         |
| discussion   General questions and discussion   General questions and discussion   Theoretical/ Discussion   General questions and discussion   Discussion   Theoretical/ Discussion   Theoretical/ Discussion   Theoretical/ Questions and discussion   Discussion   Theoretical/ Questions and discussion   Discussion   Theoretical/ Questions and discussion   Theoretical/ Discussion   Discussion   Theoretical/   |                                       |               |                          |                              |         |            |
| General questions, discussion and daily test  General questions and discussion  General questions, discussion  General questions, discussion  General questions, discussion  General questions, discussion  General questions and discussion  General questions and discussion  General questions and discussion  General Theoretical/ Discussion  General questions and discussion  General questions and discussion  General Theoretical/ Discussion  General Theoretical/ Discussion  General Theoretical/ Sewerage problem  General questions and discussion  General Theoretical/ Discussion  General Theoretical/ Sewerage problem  Gity problems  \$\frac{\f      |                                       | Biscussion    |                          |                              |         |            |
| questions, discussion and daily test  General questions and discussion  Theoretical/ Discussion  General questions and discussion  General questions, discussion and surprise exam  General questions and discussion  General questions, discussion  General questions, discussion and surprise exam  General Theoretical/ Discussion  General questions and discussion  General questions and discussion  General questions and discussion  General Theoretical/ Discussion  General questions and discussion  General questions and discussion  General Theoretical/ Sewerage problem City problems £ 7.  First month test for the 5 71  YY  First month test for the 5 71  YY  First month test for the 7 74  TY  TY  TY  |                                       | Theoretical/  | City Johe                | City John                    | 4       | ١ ۶        |
| discussion and daily test  General questions and discussion  General questions, discussion and surprise exam  General questions and discussion  First month test for the problem of the problem of the city and the |                                       |               | City 300s                | City 300s                    | `       | , -        |
| and daily test  General questions and discussion  General questions, discussion and surprise exam  General questions and discussion  General questions and discussion  First month test for the first semester  Y health problem City problems  Education problem City problems  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y he city problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y he city problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem City problems  First month test for the first semester  Y health problem first semester  Y health problem first semester  Y health problem first semester  |                                       | Discussion    |                          |                              |         |            |
| General questions and discussion  General questions, and discussion  General questions, discussion and surprise exam  General questions and discussion  First month test for the second semester   |                                       |               |                          |                              |         |            |
| questions and discussion  General questions, discussion and surprise exam  General questions and discussion  General questions and discussion  General questions, discussion  General questions and discussion  General puestions and discussion  General questions and discussion  General puestions and discussion  First month test for the second semester   | · · · · · · · · · · · · · · · · · · · |               | ~· ·                     | a                            |         |            |
| General questions and discussion   Theoretical/ Questions and discussion   Theoretical/ Discus   |                                       |               | City sizes               | City sizes                   | ž       | 10         |
| General questions and discussion  General questions, discussion and surprise exam  General questions and discussion  First month test for the second semester  | _                                     | Discussion    |                          |                              |         |            |
| questions and discussion         Discussion         the city         the city           General questions and discussion         Theoretical/ Discussion         Pollution problem         City problems         £         17           General questions and discussion         Theoretical/ Discussion         Water problem         City problems         £         1A           General questions, discussion and surprise exam         Discussion         Education problem         City problems         £         19           General questions and discussion         Theoretical/ Discussion         Health problem         City problems         £         Y           General questions and discussion         Discussion         City problems         £         Y           First month test for the second semester         Y         Y   |                                       |               |                          |                              |         |            |
| discussion   General questions and discussion   General questions and discussion   Second month test for the first semester   1  | General                               |               | The economic basis of    | The economic basis of        | ٤       | 10         |
| General questions and discussion    Second month test for the first semester   1   | questions and                         | Discussion    | the city                 | the city                     |         |            |
| questions and discussion    Compared to the first semester   Compa | discussion                            |               |                          |                              |         |            |
| questions and discussion    Second month test for the first semester   Y   | General                               | Theoretical/  | Pollution problem        | City problems                | ٤       | ١٦         |
| Second month test for the first semester   Y   | questions and                         | Discussion    | -                        |                              |         |            |
| General questions and discussion  General questions, discussion and surprise exam  General questions and discussion  General Theoretical/ Discussion  Addiscussion and surprise exam  General questions and discussion  General puestions and discussion  First month test for the second semester   | *                                     |               |                          |                              |         |            |
| General questions and discussion  General questions, discussion and surprise exam  General questions and discussion  General Theoretical/ Discussion  Addiscussion and surprise exam  General questions and discussion  General puestions and discussion  First month test for the second semester   |                                       |               | Second                   | d month test for the first s | emester | ١٧         |
| questions and discussion  General questions, discussion and surprise exam  General questions and discussion  General Theoretical/ sewerage problem  General questions and discussion  General questions and discussion  General questions and discussion  General puestions and discussion  First month test for the second semester   | General                               | Theoretical/  |                          |                              |         | ١٨         |
| General questions, discussion and surprise exam  General questions and discussion  First month test for the second semester  |                                       |               | ,, ater proofein         | City problems                |         |            |
| General questions, discussion and surprise exam  General questions and discussion  First month test for the second semester  | *                                     | Discussion    |                          |                              |         |            |
| questions, discussion and surprise exam  General questions and discussion  General Theoretical/ Discussion  General questions and discussion  General questions and discussion  First month test for the second semester   |                                       | Theoretica1/  | Education problem        | City problems                | 4       | ١٩         |
| discussion and surprise exam  General questions and discussion  General questions and discussion  General questions and discussion  General questions and discussion  First month test for the second semester   |                                       |               | Education problem        | City problems                |         | , ,        |
| and surprise exam  General Theoretical/ Discussion  General Theoretical/ Sewerage problem  General questions and discussion  General Theoretical/ Discussion  General Theoretical/ Sewerage problem  First month test for the second semester  | _                                     | Discussion    |                          |                              |         |            |
| General Theoretical/ Health problem City problems to the questions and discussion  General Theoretical/ Sewerage problem City problems to the questions and discussion  First month test for the second semester to the general to the problem to the problems to the problem to the |                                       |               |                          |                              |         |            |
| General questions and discussion  General questions and discussion  General questions and discussion  General questions and discussion  First month test for the second semester   | _                                     |               |                          |                              |         |            |
| questions and discussion  General questions and discussion  Giscussion  General questions and discussion  First month test for the second semester   |                                       | TOTAL A STATE | ** 44 44                 | ~                            |         | <b>L</b> 1 |
| General Theoretical/ sewerage problem City problems to the questions and discussion discussion    First month test for the second semester   |                                       |               | Health problem           | City problems                | ٤       | ۲.         |
| General questions and discussion  General questions and discussion  First month test for the second semester   | 1 -                                   | Discussion    |                          |                              |         |            |
| questions and discussion  Discussion  First month test for the second semester   | discussion                            |               |                          |                              |         |            |
| discussion  First month test for the second semester   | General                               |               | sewerage problem         | City problems                | ٤       | 71         |
| First month test for the second semester   |                                       | Discussion    |                          |                              |         |            |
| First month test for the second semester   | discussion                            |               |                          |                              |         |            |
| second semester  |                                       |               |                          | First month test for the     | ١       | 77         |
|  |                                       |               |                          |                              |         |            |
| Example I HOOLOHOUM   I MOOLHOUM INTRIBUTE   CALCULATION   | Daily                                 | Theoretical/  | Electricity problem      | City problems                | ٤       | 77         |

| discussion    | Discussion   |                        |                      |   |     |
|---------------|--------------|------------------------|----------------------|---|-----|
| and quiz      |              |                        |                      |   |     |
| Discussion    | Theoretical/ | Entertainment problem  | City problems        | ٤ | ۲ ٤ |
| and general   | Discussion   |                        |                      |   |     |
| questions     |              |                        |                      |   |     |
| Discussion    | Theoretical/ | transportation problem | City problems        | ٤ | 70  |
| and general   | Discussion   |                        |                      |   |     |
| questions     |              |                        |                      |   |     |
| Discussion    | Theoretical/ | Waste collection       | City problems        | ٤ | 77  |
| and general   | Discussion   | service problem        |                      |   |     |
| questions     |              |                        |                      |   |     |
| Discussion    | Theoretical/ | concentric circle      | concentric circle    | ٤ | 7 7 |
| and general   | Discussion   | theory                 | theory               |   |     |
| questions     |              |                        |                      |   |     |
| General       | Theoretical/ | City dwellers          | City dwellers        | ٤ | 77  |
| questions and | Discussion   |                        |                      |   |     |
| discussion    |              |                        |                      |   |     |
| General       | Theoretical/ | City Morphology        | City Morphology      | ٤ | 79  |
| questions and | Discussion   |                        |                      |   |     |
| discussion    |              |                        |                      |   |     |
| General       | Theoretical/ | Agricultural,          | Regional relations   | ٤ | ٣.  |
| questions and | Discussion   | administrative,        | between the city and |   |     |
| discussion    |              | commercial, industrial | the countryside      |   |     |
|               |              | and cultural relations |                      |   |     |
|               | _            |                        |                      |   |     |

### Second month test for the second semester

### Course Evaluation . 110

- .Participate in the classroom -7
- Classroom activities and assignments performed by the -v .student
  - Exams A

|   | Learning and teaching resources . 117           |  |  |  |  |
|---|---|--|--|--|--|
| Geography of cities / Sabry Faris Al-Hiti | ti Required textbooks (methodology if any)      |  |  |  |  |
| Urban Geography / Saleh Falih Hassan      | Main References (Sources)                       |  |  |  |  |
| ban Geography / Dr. Yahya Al-Farhan       | Recommended supporting books and                |  |  |  |  |
| and his colleagues                        | references (scientific journals, reports, etc.) |  |  |  |  |
|   | Electronic references, websites                 |  |  |  |  |

| Course Name: Geographical Research Methodology and Field Study   |
|--|
|  |
| : Course code . 11A  |
|  |
| Semester / Year : Annual 119   |
|  |
| Date of preparation of this description: \\/\/\/\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\   |
| , ,  |
| In-person: Available attendance forms .\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  |
| 1  |
| Number of study hours (total): " (۲) theoretical + (۱) practical Number of   |
| units (total): °   |
| Name of the course supervisor ( Prof. Dr. Adnan Attia Muhammad ) .\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  |
| ,  |
|  |
| Course objectives .17 £  |
| student learns about the concept of scientific research and  |
| ethics and is trained on how to obtain information, use .sources, and prepare scientific research  |
| Teaching and learning strategies . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   |
| reaching and learning strategies .115  |
| eractive scientific participation in the ssroom and classroom activities on program's vocabulary and training ld visits, in addition to written tests, I then preparing scientific research. eractive scientific participation in the ssroom and classroom activities on program's vocabulary and training ld visits, in addition to written tests, and then preparing scientific research |
| Course Evaluation .١٢٦   |

| Students' commitment to submitting reports and assignments assigned to them and respecting their deadlines             |  |  |  |  |
|--|--|--|--|--|
|  | Learning and teaching resources . \ \ \ \ \                                      |  |  |  |
| -  | Required textbooks (methodology if any)  |  |  |  |
| Scientific Research Methods: Foundations and Applications, Muhammad Azhar Saeed Al-Samak, Dar Al-Yazouri, Jordan, ۲۰۱۱ | Main References (Sources)  |  |  |  |
| Scientific Research Methods: Foundations and Applications, Muhammad Azhar Saeed Al-Samak, Dar Al-Yazouri, Jordan, ۲۰۱۱ | Recommended supporting books and references (scientific journals, reports, etc.) |  |  |  |
| -  | Electronic references, websites  |  |  |  |

| : Course name . 17A  |
|--|
| Thematic maps  |
| : Course code 179  |
|  |
| : Chapter / Year .17.  |
| annual   |
| : Date this description was prepared   |
| 7.70/1/10  |
| : Available attendance forms .\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\                             |
|  |
| :Number of study hours (total) / Number of units (total) . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
| .hours each week, totaling (۹۰) hours (۳)  |
| Name of the course administrator (if more than one name is .\\\^\varepsilon_1                  |
| (mentioned   |
| Asst. Prof. Dr. Aziz Ibrahim Ali Obaid   |

|  | Course objectives .150  |
|--|---|
| king the student able to prepare the -r    | student's knowledge of the importance of -1   |
| .graduation research                       | .maps, their concept and classification   |
| student learns about the development of -£ | ntifying the most important systems studied in -Y   |
| .mapping methods                           | .thematic maps  |
|  | T 1-1 |

### Teaching and learning strategies .1 ٣٦

pid questioning using brainstorming 
method

Making the student able to dialogue 
in more than one way

method

cting students to use more than one 
cting students to benefit from external 
resources

#### Course structure .1 TV

| Evaluation                           | Learning                 | Name of the unit or                                 | Required learning         | Watches | The  |
|--------------------------------------|--------------------------|---|---------------------------|---------|------|
| method                               | method                   | topic   | outcomes                  |         | week |
| Daily<br>discuss<br>ion and          |                          | Definition of maps, their oncept and classification | Map classification        | ٣       | ١    |
| tests Daily                          | theoretical              | Types of measurements                               | Statistical               | ٣       | ۲    |
| discuss<br>ion and<br>tests          | practical                | Types of measurements                               | measurements              | '       | ,    |
| Daily<br>discuss<br>ion and<br>tests | theoretical              | Absolute and derived statistics                     | Statistics                | ٣       | ٣    |
| Daily<br>discuss<br>ion and<br>tests | theoretical practical    | Dot symbols   | How to locate On the maps | ٣       | ٤    |
| Daily<br>discuss<br>ion and<br>tests | theoretical<br>practical | Linear symbols                                      | How to locate On the maps | ٣       | 0    |
| Daily<br>discuss<br>ion and<br>tests | theoretical practical    | Survey symbols                                      | How to locate On the maps | ٣       | ٦    |
| Daily                                | theoretical              | Sports applications                                 | lapping applications      | ٣       | ٧    |

| discuss | practical   |                          |                      |   |    |
|---------|-------------|--------------------------|----------------------|---|----|
| ion and |             |                          |                      |   |    |
| tests   |             |                          |                      |   |    |
| Daily   | theoretical | nbol classification      | Classification       | ٣ | ٨  |
| discuss | practical   | concept                  |                      |   |    |
| ion and |             |                          |                      |   |    |
| tests   |             |                          |                      |   |    |
| Daily   | theoretical | thods of constructing    | presenting triangles | ٣ | ٩  |
| discuss | practical   | triangle maps            |                      |   |    |
| ion and |             | Divided                  |                      |   |    |
| tests   |             |                          |                      |   |    |
| Daily   | theoretical | ilding relative jam maps | presenting the jams  | ٣ | ١. |
| discuss | practical   |                          |                      |   |    |
| ion and |             |                          |                      |   |    |
| tests   |             |                          |                      |   |    |
| Daily   | theoretical | Building cube maps       | Cube representation  | ٣ | ١١ |
| discuss | practical   |                          |                      |   |    |
| ion and |             |                          |                      |   |    |
| tests   |             |                          |                      |   |    |
| Daily   | theoretical | Assembled cube maps      | Cube representation  | ٣ | ١٢ |
| discuss | practical   |                          |                      |   |    |
| ion and |             |                          |                      |   |    |
| tests   |             |                          |                      |   |    |
|         |             | Monthly exam             | Monthly exam         |   | ١٣ |
|         |             |                          |                      |   |    |
| Daily   | theoretical | flowchart maps           | Line Maps            | ٣ | ١٤ |
| discuss | practical   |                          |                      |   |    |
| ion and |             |                          |                      |   |    |
| tests   |             |                          |                      |   |    |
| Daily   | theoretical | Single motion maps       | Line Maps            | ٣ | 10 |
| discuss | practical   |                          |                      |   |    |

| ion and |             |                       |                 |   |    |
|---------|-------------|-----------------------|-----------------|---|----|
| tests   |             |                       |                 |   |    |
| Daily   | theoretical | omposite motion maps  | Line Maps       | ٣ | ١٦ |
| discuss | practical   |                       |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   | theoretical | es of approved        | Coroblith Maps  | ٣ | ۱۷ |
| discuss | practical   | statistics            |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   |             | Ways to build it      | Coroblith Maps  | ٣ | ١٨ |
| discuss | practical   |                       |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   | theoretical | Pros and cons of maps | Coroblith Maps  | ٣ | ١٩ |
| discuss |             | Coroblith             |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   | theoretical | Applications in maps  | Desimetric maps | ٣ | ۲. |
| discuss | practical   | decimetric            |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   |             | Building TD Maps      | ۳D Maps         | ٣ | 71 |
| discuss | practical   |                       |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   |             | Building TD Maps      | ۳D Maps         | ٣ | 77 |
| discuss | practical   |                       |                 |   |    |
| ion and |             |                       |                 |   |    |
| tests   |             |                       |                 |   |    |
| Daily   | theoretical | Building a connected  | Cartogram maps  | ٣ | 74 |
| discuss |             | cartogram             |                 |   |    |

| ion and |             |               |             |                |   |     |
|---------|-------------|---------------|-------------|----------------|---|-----|
| tests   |             |               |             |                |   |     |
|         |             | Monthly       | exam        | Monthly exam   |   | 7 £ |
| Daily   | theoretical | lding a       | separate    | Cartogram maps | ٣ | 70  |
| discuss | practical   |               | cartogram   |                |   |     |
| ion and |             |               |             |                |   |     |
| tests   |             |               |             |                |   |     |
| Daily   | theoretical | Building      | a cartogram | Cartogram maps | ٣ | ۲٦  |
| discuss | practical   |               |             |                |   |     |
| ion and |             |               |             |                |   |     |
| tests   |             |               |             |                |   |     |
| Daily   | theoretical | s and         | cons of     | Cartogram maps | ٣ | 77  |
| discuss |             |               | cartogram   |                |   |     |
| ion and |             |               |             |                |   |     |
| tests   |             |               |             |                |   |     |
| Daily   | theoretical | Relative cir  | cles method | Circle maps    | ٣ | ۲۸  |
| discuss | practical   |               |             |                |   |     |
| ion and |             |               |             |                |   |     |
| tests   |             |               |             |                |   |     |
| Daily   | theoretical | Divided cir   | cles method | Circle maps    | ٣ | 79  |
| discuss | practical   |               |             |                |   |     |
| ion and |             |               |             |                |   |     |
| tests   |             |               |             |                |   |     |
| Daily   | theoretical | Bisecting cir | cles method | Circle maps    | ٣ | ٣.  |
| discuss | practical   |               |             |                |   |     |
| ion and |             |               |             |                |   |     |
| tests   |             |               |             |                |   |     |

### Course Evaluation . 1 TA

(Practical + Theoretical)

First semester (Y·) Second semester (Y·) End of year (T·) and the evaluation is a passing grade of ) o · (

Learning and teaching resources .1 89

| ematic Maps, Falah Shaker Aswad  | Required textbooks (methodology if any)  |
|--|--|
| ntour Maps, Ahmed Ahmed -\ 'Mustafa, \9^\\ nciples of map writing, -\footnote{\text{Muhammad Al-Nasir Imran}}  | Main References (Sources)  |
| me published applied references -\frac{1}{\text{in the field of maps}} \text{.On the Internet deo teaching practical lessons -\frac{7}{\text{.prepared by the instructor}} . | Recommended supporting books and references (scientific journals, reports, etc.) |
| Vebsites related to maps and systems ports prepared by faculty and students  | Electronic references, websites  |

| Course name : English Poetry                                  | .1 2 . |
|---|--------|
|   |        |
|   |        |
| : Course code   | .1 ٤ 1 |
|   |        |
| Semester / Year : Annual                                      | .127   |
|   |        |
| Date this description was prepared                            | .127   |
| 7.75  | /17/9  |
| : Available attendance forms                                  | .1 £ £ |
|   |        |
| Number of study hours (total) / Number of units (total): ٩٠/٥ | .150   |
|   |        |
| Name of the course administrator (if more than one name is    | .127   |
| (menti  | oned   |
| Prof. Latif Muzail  | Saleh  |

#### Course objectives .1 £ Y

- Participation in the classroom -\
- Classroom activities and assignments performed by the student -7
- Guiding students to benefit from external resources available around the -\(^{\text{r}}\) .course

#### Teaching and learning strategies . 1 £ A

- Cognitive objectives through studying hydrology and its importance in the sustainability of -\ .life
  - The interrelationship in the study of water resources and its relationship to geography -Y
    - Rationalization of consumption and ways to preserve it -\mathcal{\pi}
    - .Study the importance of water for the life of living organisms £
  - Using sources, research and the Internet to access valuable information about water .resources
- Using artificial intelligence to stimulate ideas V- Students' activity in their personal efforts -٦ in lectures and seminars
  - Scientific reports-Y
  - Scientific research A
  - .The importance of the topic as it is the talk of the hour and the coming war -9

#### Course structure .1 £9

| Evaluation | Learning  | Name of the unit or | Required learning | Watches | The  |
|------------|-----------|---------------------|-------------------|---------|------|
| method     | method    | topic               | outcomes          |         | week |
| E          |           | w to study it as a  | ter Resources     | 2+2     | 1    |
| Exams      | and field | resource            | Geography         | 2+1     |      |
| and        |           |                     |                   |         |      |
| question   |           |                     |                   |         |      |
| S          |           |                     |                   |         |      |
|            |           |                     |                   |         |      |

#### Course Evaluation . 10.

|  | Learning and teaching resources . 101  |  |
|--|--|--|
| Dr. 'Geography of Water Resources - 'Hassan Abu Samar and Dr. Hamed Al-Khatib, '٩٩٩, First Edition, Safa Publishing House - Amman  | Required textbooks (methodology if any)  |  |
| Geography of Water Resources: A - Y Contemporary Study, Foundations and Applications. Professor Dr. Fathi Al- Turkmani. Saudi House for Publishing .and Distribution. Jeddah Y • • • | Main References (Sources)  |  |
| oks related to the study of water resources  | Recommended supporting books and references (scientific journals, reports, etc.) |  |
| Artificial Intelligence Social Media - F Electronic references, webs   |  |  |

| Course name : Geomorphology | .107 |
|-----------------------------|------|
|                             |      |
| : Course code               | .107 |
|                             |      |

| .108    | : Annual   | Semester / Year   |   |  |   |
|---------|--|---|---|--|---|
| 100     | prepared   | this description was  | Date  |  |   |
|         |  | 1   |   |  |   |
| 107     |  | : Available attenda   |   |  |   |
| •       | 1011115  | · · · · · · · · · · · · · · · · · · ·   |   |  |   |
| .104    | al): ٩٠/٥  | Number of units (to   | of study hours (total) /  | Number o   |   |
|         |  |   |   |  |   |
|         |  | (if more than one   | course administrator  | ame of the o   | N   |
|         |  | fessor Dr. Mohamm   | Δ ssistant Pro  |  |   |
|         | ·  |   | 7 Issistant 110   |  |   |
|         |  |   | ha student to the seem  | Introducina t  |   |
|         |  |   |   | _  |   |
|         |  |   | in a classical, manual  | study them   |   |
| 8       |  | 8   |   |  |   |
| .17.    | trategies  | ching and learning  | Tea   |  |   |
| ents to | ging stude   | e daily or weekly, ur   | ests, some of which are   | Continuous te  |   |
|         | _  | -   |   |  |   |
| vities  | room acti  | clas  |   |  |   |
| 171     | etructura  | Course  |   |  |   |
|         |  |   | Name of the count or  | Laamina  | C. alvatia  |
|         | vatches  |   |   |  | Evaluation  |
| week    |  |   |   |  | method  |
|         |  | 1 0   | -   |  | General questions   |
|         |  |   | How to study it as a  | on   | =   |
|         |  |   | resource  | =  |   |
|         | 7+7  |   |   |  | Discussion and general  |
|         | 1+5  |   |   |  | questions   |
|         |  |   | 1   |  | =   |
|         |  |   |   | =  |   |
|         | 7+7  |   | low to study the various  | Theoretica H   | Discussion  |
|         |  | formation of the  | pes of influential forces   | 1/Discussi ty  | and general   |
|         | 1+4  | Earth's surface features  | oil as a natural resource   | on S   | questions   |
|         | . Noo<br>/NT/9<br>. No N<br>oned<br>halaf<br>. No 9<br>ow to<br>uters,<br>logies<br>. NT ·<br>nts to<br>ation,<br>vities | prepared 100  Y.Y \$\frac{1}{1}\frac{1}{9}  Ince forms . \frac{1}{9}  Ince form . \fra | this description was prepared  YYYE/YY/A  : Available attendance forms  Number of units (total): 4./o . 10V  (if more than one name is . 10A (mentioned fessor Dr. Mohammed Najm Khalaf Course objectives . 10A norphology of landforms and how to land practical way using computers, using modern technologies  aching and learning strategies . 17. et daily or weekly, urging students to nefit from the available information, classroom activities  Course structure . 17.1  Required learning Watches The week  Geomorphology Resources definition and types  The most important rocks and the reasons for their formation (1+7)  Rocks as a natural resource  Forces affecting the formation of the | Date this description was prepared  YYYE/YY/A  : Available attendance forms . 1° 7  if study hours (total) / Number of units (total): 9 · / ° . 1° V  course administrator (if more than one name is . 1° A (mentioned)  Assistant Professor Dr. Mohammed Najm Khalaft  Course objectives . 1° 9  the student to the geomorphology of landforms and how to in a classical, manual and practical way using computers, using modern technologies  Teaching and learning strategies . 1° 1. ° 1. ° 1. ° 1. ° 1. ° 1. ° 1. | Date this description was prepared York 17/9 : Available attendance forms York/17/9 : Available attendance forms York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf Course objectives York (mentioned Assistant Professor Dr. Mohammed Najm Khalaf York (mentioned Najm Khalaf York |

= = Soil as a natural

resource

|              |       | ~.                                      |                            |            |              |
|--------------|-------|---|----------------------------|------------|--------------|
| ٤٤           | 7+7   | Slopes                                  | Slopes and their types     | Theoretica | Discussion   |
|              | 1+4   | Natural plant                           | Natural plant as a natural | 1/Discussi | and          |
|              |       |   | resource                   | on         | surprise     |
|              |       |   |                            |            | exam         |
|              |       |   |                            | =          | =            |
| 00           | 7+7   | Terrain sectors                         | Methods of identifying     | Theoretica | General      |
|              | , , , | Terram sectors                          |                            | 1/Discussi |              |
|              |       | 0.11                                    | and analyzing sectors      |            | questions    |
|              | 1+7   | Soil as a natural                       | Types of soils, factors of | on         | and          |
|              |       | resource                                | their formation, problems  |            | discussion   |
|              |       |   | and solutions              | =          | =            |
| 17           | 7+7   | Geomorphological                        | Morphology of sectors      | Theoretica | General      |
|              |       | features within the                     |                            | 1/Discussi | questions    |
|              | 1+1   | sector                                  | Resources as a natural     | on         | •            |
|              |       | Water Resources                         | resource                   |            | =            |
|              |       | water Resources                         | resource                   | =          |              |
| V V          | 7+7   | Discussion sessions                     | Presenting and discussing  | Theoretica | Discussion   |
| [ ' ]        | ' ' ' | Discussion sessions                     |                            |            |              |
|              |       | <b>5</b>                                | field research             | 1/Discussi | and general  |
|              | 1+7   | Discussion sessions                     | =                          | on         | questions    |
|              |       |   |                            |            | =            |
|              |       |   |                            |            |              |
| <b>\</b> \ \ | 7+7   | Field visit                             | Field visit                | Practical  | Discussion   |
|              |       |   |                            | Discussio/ | and general  |
|              | 1+1   | Field visit                             | Field visit                | n          | questions    |
|              |       | 2 |                            |            | =            |
|              |       |   |                            | =          |              |
| 9 9          | ١     | test based on two exams                 | First semester             |            |              |
| 1.1.         | 7+7   | Weathering                              | Chemical and physical      | Theoretica | discussion   |
| , , , , , ,  | ' ' ' | Weathering                              |                            | 1/Discussi | = discussion |
|              |       | XX 1 1.1 '                              | weathering                 |            | _            |
|              | 1+7   | Weeds and their                         | Distribution of weeds in   | on         |              |
|              |       | distribution                            | the world                  | =          |              |
| 11   11      | 7+7   | The most important                      | Physical and chemical      | Theoretica | General      |
|              |       | aspects of weathering                   | weathering phenomena       | 1/Discussi | questions    |
|              | 1+1   |   | The most important         | on         | and          |
|              |       | Distribution of                         | resources and their        |            | discussion   |
|              |       | resources within the                    | distribution within the    | practical  | =            |
|              |       | world map                               | map                        | praetical  |              |
| 17 17        | 7+7   |   | Computer Use Practical     | nractical  | Discussion   |
| , ,   , ,    | ' ' ' | Practical applications                  | *                          | practical  |              |
|              |       | of extracting regression                | Applications               | 1          | questions    |
|              | 1+7   | Practical applications                  | Practical applications for | practical  |              |
|              |       |   | resource distribution and  |            | practical    |
|              |       |   | soil mapping               |            |              |
| 17 17        | 7+7   | Quantitative and                        | Application of sector      | Practical  | General      |
|              |       | computational methods                   | study according to         | Discussio/ | questions    |
|              |       | for studying sectors                    | equations and computer     | n          | and          |
|              |       | ,,                                      | methods                    |            | discussion   |
|              | 7+7   | erosion                                 | Definition of erosion      | Theoretica | General      |
| 1 2 1 2      |       |   |                            | rnoordida  | General      |
| 1 2 1 2      | 1+7   | Water resources                         | Water resources and their  | 1/Discussi | questions,   |

|                        | I            | T .                                    |                           | 1            |     | 1   |
|------------------------|--------------|--|---------------------------|--------------|-----|-----|
| discussion             | on           | types                                  | distribution              |              |     |     |
| and daily              |              |  |                           |              |     |     |
| test                   |              |  |                           |              |     |     |
| General                | Theoretica   | Identify the types of Types of erosion |                           | 7+7          | 10  | 10  |
| questions              | 1/Discussi   | erosion                                |                           |              |     |     |
| and                    | on           | Identify the relationship              | The role of water         | 1+7          |     |     |
| discussion             |              | between water resources                | resources in settlement   |              |     |     |
|                        |              | and population                         |                           |              |     |     |
| =                      | =            | concentration                          |                           |              |     |     |
| General                | Theoretica   | The role of rainfall                   | The most important        | 7+7          | ١٦  | 10  |
| questions              | 1/ Practical | erosion and how to                     | manifestations            |              |     |     |
| and                    | i Tractical  | measure it                             | resulting from rain       | 1+7          |     |     |
| discussion             |              | How to identify and map                | erosion                   |              |     |     |
| discussion             |              | water resources                        | Water resources           |              |     |     |
|                        |              | water resources                        |                           |              |     |     |
| C 1                    | TP1 4        | XX/1                                   | mapping                   | <b>7</b> , 7 | ١٧  | . 7 |
| General                | Theoretica   | What is river erosion and              | River erosion             | 7+7          | 1 V | , , |
| questions              | 1/Discussi   | how is it measured?                    |                           | ,            |     |     |
| and                    | on           | How to use water                       | Use of water resources    | 1+7          |     |     |
| discussion             |              |  |                           |              |     |     |
|                        |              |  |                           |              |     |     |
| =                      | =            |  |                           |              |     |     |
|                        |              | First                                  | month test for the second | semester     | ١٨  | ١٧  |
| General                | Theoretica   | How wave erosion occurs                | Wave erosion              | 7+7          | 19  | ١٨  |
| questions              | 1/Discussi   | and the most important                 |                           |              |     |     |
| and                    | on           | manifestations resulting               |                           |              |     |     |
| discussion             |              | from it                                | How to develop water      | 1+7          |     |     |
|                        |              | Methods followed to                    | investment                |              |     |     |
| =                      | practical    | invest water in the world              |                           |              |     |     |
|                        | 1            |  |                           |              |     |     |
| General                | Theoretica   | How glacial erosion                    | Glacial erosion           | 7+7          | ۲.  | ۱۹  |
| questions              | 1/Discussi   | occurs and its most                    |                           |              |     |     |
| and                    | on           | important manifestations               |                           |              |     |     |
| discussion             |              | important manifestations               | Wrong methods and         | 1+7          |     |     |
| discussion             |              | How to develop water                   | treatment methods         |              |     |     |
| _                      | =            | exploitation methods                   | treatment methods         |              |     |     |
| Practical              | practical    | Detecting types of                     | River erosion and how     | 7+7          | ۲۱  | ۲.  |
|                        | practical    | C 71                                   |                           | '+'          | 1 1 | '   |
| tests                  |              | erosion using computer                 | to show it on maps        |              |     |     |
|                        |              | programs Information                   |                           |              |     |     |
|                        |              | Systems                                |                           |              |     |     |
| Practical              | practical    | Using topographic maps                 | How to extract the        | 7+7          | 77  | ۲۱  |
| tests                  |              | to extract the river                   | river network             |              |     |     |
|                        |              | network                                |                           |              |     |     |
|                        | practical    | Using GIS software to                  |                           | 1+7          |     |     |
|                        |              | analyze land cover                     | Methods used to           |              |     |     |
|                        |              | _                                      | determine land covers     |              |     |     |
|                        |              |  |                           |              |     |     |
| Course Evaluation .١٦٢ |              |  |                           |              |     |     |

| The student's commitment to submitting reports and assignments assigned  .to him and respecting their deadlines  .Daily applications and duties |   |  |  |
|---|---|--|--|
|   | Learning and teaching resources . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |  |  |
| plied Geomorphology - Mohammed<br>Hussein Khalaf  | Required textbooks (methodology if any)                               |  |  |
| Principles of Geomorphology, -1   | Main References (Sources)   |  |  |
| Hassan Sayed Ahmed Abu Al-Anin,   |   |  |  |
| University Culture Foundation, \ th ed.,  |   |  |  |
| .1990   |   |  |  |
|   | Recommended supporting books and                                      |  |  |
|   | references (scientific journals, reports, etc.)                       |  |  |
|   | Electronic references, websites                                       |  |  |

| Course Name: Human Rights and Democracy   | .178 |
|---|------|
|   |      |
| : Course code   | .170 |
|   |      |
| Semester / Year : Annual  | .177 |
|   |      |
| Date of preparation of this description $\gamma$ , $\gamma \not \in /\gamma$ , $\gamma \circ$ | .١٦٧ |
|   |      |
| : Available attendance forms  | ۱۲۸  |
|   |      |
| :Number of study hours (total) / Number of units (total)                                      | .179 |
|   |      |
| Name of the course administrator (if more than one name is                                    | .17. |

## **Course Description**

This course description provides a concise summary of the main features of the course and the learning outcomes expected of the student, demonstrating whether the student has made the most of the learning

. opportunities available. It must be linked to the programme description

|   |                            |   |  | Course st | ructure . \ • |
|---|----------------------------|---|--|-----------|---------------|
| Evaluation method                         | Teaching method            | Unit name/topic   | Required learning outcomes   | Watche    | The week      |
| General<br>questions                      | Theoretical/<br>Discussion | Stages of Earth's development and the formation of continents | Knowing the evolution of the Earth and the formation of continents                             | ۲         | 1             |
| Discussion<br>and general<br>questions    | Theoretical/<br>Discussion | Location and area of Asia                                     | Knowing the geographical location of the continent of Asia and the importance of this location | ۲         | ۲             |
| Discussion<br>and general<br>questions    | Theoretical/<br>Discussion | Structure and terrain   | Study of the geological structure and topography of Asia                                       | ۲         | ٣             |
| Discussion and exam                       | Theoretical/<br>Discussion | Climate of Asia   | Learn about the continent's climate .conditions  | ۲         | ٤             |
| General<br>questions<br>and<br>discussion | Theoretical/<br>Discussion | Climate regions of the continent                              | Knowing the characteristics of the continent's climatic regions                                | ۲         | ٥             |
| General<br>questions                      | Theoretical/<br>Discussion | Natural plant   | Study of plant regions and their characteristics   | ۲         | ٦             |
| Discussion<br>and general<br>questions    | Theoretical/<br>Discussion | Water Resources   | Knowledge of the continent's water resources and their sources                                 | Y         | Y             |
| Discussion<br>and general<br>questions    | Theoretical Discussion/    | Population  | Study of the characteristics of the population of the Asian continent                          | ۲         | ٨             |
| First month to                            | est                        | I   |  | ۲         | ٩             |
| discussion                                | Theoretical/<br>Discussion | Agricultural production                                       | Identify agricultural production types   | ۲         | ١.            |
| General                                   | Theoretical/               | Mineral wealth  | Study of the most  |           | 11            |

| questions<br>and<br>discussion                           | Discussion                 |                              | important minerals and<br>their geographical<br>distribution on the<br>continent                        | ۲ |    |
|--|----------------------------|------------------------------|---|---|----|
| Discussion questions                                     | theoretical                | Europe: Location and Area    | Identify the characteristics of the geographical location and area of the continent of Europe           | ۲ | ١٢ |
|  |                            |                              | Monthly exam/first semester   | ١ | ١٣ |
| General<br>questions,<br>discussion<br>and daily<br>test | Theoretical/<br>Discussion | Topography of the continent  | Study of the topographical characteristics of the European continent                                    | ۲ | ١٤ |
| General<br>questions<br>and<br>discussion                | Theoretical/<br>Discussion | Climate of the continent     | Learn about the climate of the continent  | ۲ | 10 |
| General<br>questions<br>and<br>discussion                | theoretical                | Climate regions of<br>Europe | Study the most important climatic regions on the continent and learn the characteristics of each region | ۲ | ١٦ |
| General<br>questions<br>and<br>discussion                | Theoretical/<br>Discussion | Natural plant                | Know the geographical distribution of natural plants in the continent                                   | ۲ | 11 |
| General<br>questions<br>and<br>discussion                | Theoretical/<br>Discussion | Water Resources              | Study of water resources and their sources  | ۲ | 14 |
| General<br>questions<br>and<br>discussion                | Theoretical/<br>Discussion | People of the continent      | Study of the characteristics of the continent's population  | ۲ | 19 |
| discussion   | theoretical                | Agricultural production      | Knowing the most important agricultural   | ۲ | ۲. |

|                                 |                 |   | products on the continent<br>and their geographical<br>distribution  Monthly Exam/Second Semester | , | 71  |
|---------------------------------|-----------------|---|---|---|-----|
| Study of mine                   | eral wealth and | its types Mineral weal                          | th theoretical discussion   | ۲ | 77  |
| discussion                      | theoretical     | Africa: Location and Area                       | Study of the geographical and astronomical location and area of the African continent             | ۲ | 74  |
| Discussion and testing          | theoretical     | Geology and topography of the continent         | Learn about the geological structure and topography of the .continent                             | ۲ | 7 £ |
| discussion                      | theoretical     | Climate   | Study of the climatic characteristics of the continent  | ۲ | 70  |
| discussion                      | theoretical     | Climate regions                                 | Knowing the climate regions and their characteristics   | ۲ | 77  |
| Discuss and map                 | theoretical     | Natural vegetation and water resources          | Study of the continent's natural plants and its most important water resources                    | ۲ | 77  |
| Daily<br>discussion<br>and quiz | theoretical     | Population and agricultural production          | Knowing the continent's population and agricultural production                                    | ۲ | ۲۸  |
| Monthly<br>exam                 | theoretical     | Mineral Wealth + Monthly Exam / Second Semester | Knowing the most important minerals + monthly exam  | ۲ | 79  |

| Infrastructure . \ \          |
|-------------------------------|
| Required textbooks -1         |
| Main references (sources) - Y |
|                               |
|                               |
|                               |
|                               |

| .continents by following up on the web | A- Recommended books and references (scientific journals, (.reports, etc |
|--|--|
|  |  |

# Curriculum development plan . \ \ \ \ \

It is possible to add new vocabulary to the curriculum vocabulary, such as some .advanced practical tools

| Course name: English Poetry . 1 V  |
|--|
| Meteorology and climate science basic  |
| : Course code  |
| • • • •  |
| Semester / Year : Annual   |
|  |
| annua  |
| Date this description was prepared 117   |
| 7.7 5/17/  |
| : Available attendance forms . \^  |
| In-person and onlin  |
| :Number of study hours (total) / Number of units (total) . \^  |
| hours  |
| Name of the course administrator (if more than one name is . ) A                                       |
| (mentione  |
| 'Assistant Professor Hamda Hamoudi Shee  |
| Mr. Omar Ahmed Awa   |
|  |
| Course objectives . 1 A  |
| some equations to link weather and climate inition of weather and climate elements and the facto       |
| nents to find environmental diversity and identify affecting their distribution on the Earth's surface |
| .some environmental problems   |
|  |

| Teaching and learning strategies .١٨٤  |
|--|
| and owing the lecture method and sequential and intific presentation with mental stimulation of students through dialogue and discussion |
| Course structure .١٨٥  |

| Evaluation method                          | Teaching method                         | Unit name/topic  | Required learning outcomes                            | Watch<br>es | The<br>week |
|--|---|--|---|-------------|-------------|
| General<br>questions                       | Theoretica 1/Discussi on                | Definition of climatology and meteorology                                      | Development of climatology and meteorology            | ٤           | ١           |
| Discussio<br>n and<br>general<br>questions | Theoretica 1/Discussi on                | Study the actual value of weather and climate elements                         | Modern trends in climate study                        | ٤           | ۲           |
| Discussio<br>n and<br>general<br>questions | Theoretica l/Discussi on                | nature of the atmosphere   | atmosphere  | ٤           | ٣           |
| Discussio<br>n and<br>surprise<br>exam     | Theoretica l/Discussi on                | Basic and transitional layers  | Layers of the atmosphere                              | ٤           | ٤           |
| General questions and discussion           | Theoretica l/Discussi on                | Ozone and impurities   | Atmospheric pollution                                 | ٤           | 0           |
| General<br>questions                       | Theoretica l/Discussi on                | The importance of solar radiation  | Solar and terrestrial radiation                       | ٤           | ٦           |
| Discussio<br>n and<br>general<br>questions | Theoretica l/Discussi on                | Angle of -\ incidence The distance -\footnote{1} between the Earth and the Sun | Factors affecting the distribution of solar radiation | ٤           | ٧           |
| Discussio<br>n and<br>general<br>questions | Theoretica 1/Discussi on                | Radiation and brightness measuring instruments                                 | Geographical distribution of solar radiation          | ٤           | ٨           |
| First month discussion                     | test for the fine Theoretica 1/Discussi | rst semester Calculate temperature   | terrestrial radiation and heat                        | ٤           | ۹ ) ۰       |
|  | on                                      | averages   | and nout  |             |             |

| General    | Theoretica      | Factors affecting        | Isothermal lines and   | ٤ | 11 |  |
|------------|-----------------|--------------------------|------------------------|---|----|--|
| questions  | 1/Discussi      | air temperature          | geographic             |   |    |  |
| and        | on              | variation                | distribution           |   |    |  |
| discussion |                 |                          |                        |   |    |  |
| Discussio  | Theoretica      | Vertical change          | Geographical           | ٤ | 17 |  |
| n          | 1/Discussi      | of air                   | distribution of        |   |    |  |
| questions  | on              | temperature and          | temperatures during    |   |    |  |
| 1          |                 | thermal                  | northern summer and    |   |    |  |
|            |                 | inversion                | winter                 |   |    |  |
| General    | Theoretica      | Daily and annual         | Daily and annual       | ٤ | 18 |  |
| questions  | 1/Discussi      | change                   | temperature change     |   |    |  |
| and        | on              |                          |                        |   |    |  |
| discussion |                 |                          |                        |   |    |  |
| General    | Theoretica      | Factors affecting        | atmospheric pressure   | ٤ | ١٤ |  |
| questions, | 1/Discussi      | pressure                 |                        |   |    |  |
| discussion | on              | distribution and         |                        |   |    |  |
| and daily  |                 | measuring                |                        |   |    |  |
| test       |                 | devices                  |                        |   |    |  |
| General    | Theoretica      | Permanent - \            | pressure distribution  | ٤ | 10 |  |
| questions  | 1/Discussi      | pressure areas           |                        |   |    |  |
| and        | on              | Pressure in -7           |                        |   |    |  |
| discussion |                 | winter                   |                        |   |    |  |
| General    | Theoretica      | Wind measuring           | Wind                   | ٤ | 10 |  |
| questions  | 1/Discussi      | instruments and          |                        |   |    |  |
| and        | on              | types of wind            |                        |   |    |  |
| discussion |                 |                          |                        |   |    |  |
| General    | Theoretica      |                          | Wind                   | ٤ | ١٦ |  |
| questions  | 1/Discussi      |                          |                        |   |    |  |
| and        | on              |                          |                        |   |    |  |
| discussion |                 |                          |                        |   |    |  |
| Second mor | nth test for th | e first semester         |                        |   | ١٧ |  |
| General    | Theoretica      | Warm winds - \           | Local winds            | ٤ | ١٨ |  |
| questions  | 1/Discussi      | Cold winds - 7           | accompanying           |   |    |  |
| and        | on              | stream Jet- <sup>r</sup> | depressions            |   |    |  |
| discussion |                 |                          |                        |   |    |  |
| General    | Theoretica      | Definition of air        | Air masses, fronts and | ٤ | 19 |  |
| questions, | 1/Discussi      | masses, their            | hurricanes             |   |    |  |
| discussion | on              | types and types          |                        |   |    |  |
| and        |                 | of fronts                |                        |   |    |  |
| surprise   |                 |                          |                        |   |    |  |

| exam        |                |                         |                         |   |     |  |
|-------------|----------------|-------------------------|-------------------------|---|-----|--|
| General     | Theoretica     | Moderate                | Air depressions         | ٤ | ۲.  |  |
| questions   | 1/Discussi     | depressions and         |                         |   |     |  |
| and         | on             | cyclones                |                         |   |     |  |
| discussion  |                |                         |                         |   |     |  |
| General     | Theoretica     | Tropical                | Storms and hurricanes   | ٤ | 71  |  |
| questions   | 1/Discussi     | cyclones, their         |                         |   |     |  |
| and         | on             | classification          |                         |   |     |  |
| discussion  |                | and hurricane           |                         |   |     |  |
|             |                | formation               |                         |   |     |  |
| First month | test for the s | econd semester          |                         | ١ | 77  |  |
| Daily       | Theoretica     | Definition of           | Humidity                | ٤ | 7 7 |  |
| discussion  | 1/Discussi     | atmospheric             |                         |   |     |  |
| and quiz    | on             | humidity, water         |                         |   |     |  |
|             |                | variation on the        |                         |   |     |  |
|             |                | Earth's surface,        |                         |   |     |  |
|             |                | and humidity            |                         |   |     |  |
|             |                | terms                   |                         |   |     |  |
| Discussio   | Theoretica     | Relativity - \          | Types of humidity       | ٤ | ۲ ٤ |  |
| n and       | 1/Discussi     | Divorcee - <sup>۲</sup> |                         |   |     |  |
| general     | on             | Quality- <sup>r</sup>   |                         |   |     |  |
| questions   |                |                         |                         |   |     |  |
| Discussio   | Theoretica     | Condensation            | Condensation            | ٤ | 70  |  |
| n and       | 1/Discussi     | conditions, fog         |                         |   |     |  |
| general     | on             | factors and types       |                         |   |     |  |
| questions   |                | of fog                  |                         |   |     |  |
| Discussio   | Theoretica     | Clouds in Iraq          | Clouds                  | ٤ | 77  |  |
| n and       | 1/Discussi     | and pictures of         |                         |   |     |  |
| general     | on             | precipitation and       |                         |   |     |  |
| questions   |                | its types               |                         |   |     |  |
| Discussio   | Theoretica     | Its types,              | Rain                    | ٤ | 77  |  |
| n and       | 1/Discussi     | systems and             |                         |   |     |  |
| general     | on             | oscillations            |                         |   |     |  |
| questions   |                |                         |                         |   |     |  |
| General     | Theoretica     | Factors affecting       | Rain in Iraq and        | ٤ | ۲۸  |  |
| questions   | 1/Discussi     | transpiration           | evaporation-            |   |     |  |
| and         | on             |                         | transpiration           |   |     |  |
| discussion  |                |                         |                         |   |     |  |
| General     | Theoretica     | Climate                 | Climate classifications | ٤ | 49  |  |
| questions   | 1/Discussi     | classification          |                         |   |     |  |

| and          | on              | principles        |   |                      |                 |
|--------------|-----------------|-------------------|---|----------------------|-----------------|
| discussion   |                 |                   |   |                      |                 |
| General      | Theoretica      | cupen             | Types of  | ٤                    | ٣.              |
| questions    | 1/Discussi      |                   | classifications                                     |                      |                 |
| and          | on              |                   |   |                      |                 |
| discussion   |                 |                   |   |                      |                 |
| Second mon   | nth test for th | e second semester |   | ١                    | 71              |
|              |                 |                   | Course Ev   | /aluation            | .۱۸٦            |
|              |                 |                   |   |                      |                 |
|              |                 |                   | Learning and teaching re                            | esources             | .۱۸٧            |
| undations c  | of Climatolo    | gy Sabah          | Required textbooks (me                              | thodology            | if any)         |
|              | Mal             | nmoud Al-Rawi     |   |                      |                 |
| Weather      | Geography       | . Ibrahim Sharif  | Main Refe   | rences (So           | ources)         |
| Foundat      | tions of Clima  | atology Sabah     |   |                      |                 |
| Mahmou       | d Al-Rawi ar    | nd Adnan Hazaa    |   |                      |                 |
| cal climate. | Ahmed S         | aeed Hadid and    |   |                      |                 |
|              |                 | Hazem Al-Ani      |   |                      |                 |
|              | references i    |                   | Recommended supporting references (scientific journ | books<br>als, report | and<br>s, etc.) |
| ses, doctora | l dissertation  | s, and research   | •   |                      | ´               |
|              | published       | d on the Internet |   |                      |                 |
|              |                 |                   | Electronic refe                                     | erences, w           | ebsites         |

| Course name: English Poetry . 1 AA     |
|--|
| Fundamentals of Applied Climatology    |
| : Course code .1A9                     |
|  |
| Semester / Year : Annual . 19.         |
| annual                                 |
| Date this description was prepared 191 |

|  | ۲۰۲٤/١٦/٩  |
|--|--|
|  | : Available attendance forms . 197   |
|  | In-person and online   |
| :Number of study hour                                | rs (total) / Number of units (total) . ١٩٣   |
|  | hours 2  |
| Name of the course administra                        | ator (if more than one name is . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   |
|  | (mentioned   |
| 'Ass   | istant Professor Hamda Hamoudi Sheet   |
|  | Mr. Omar Ahmed Awad  |
|  |  |
|  | Course objectives .190   |
| some equations to link the elements of applied ining | the elements of the impact of climate elements   |
| late and environmental diversity and identify hum    | an activities and events in order to achieve   |
| .some environmental problems                         | comfort  |
|  |  |
|  |  |
|  | Teaching and learning strategies . ۱۹٦   |
| opting the method of oral questions an               | d owing the lecture method and sequential  |
| ctical exam for the subject of weather an            | The process and the state of th |
| mate, whether it is a weekly or monthly exar         | n students through dialogue and discussion   |
|  | 3  |
|  |  |
|  | Course structure .197  |
|  | Course structure . 147   |

| Evaluation method                          | Teaching method                | Unit name/topic  | Required learning outcomes  | Watch | The week |
|--|--------------------------------|--|---|-------|----------|
| General<br>questions                       | Theoretica<br>l/Discussi<br>on | Stations and devices for measuring climate elements, solar                   | The concept of applied climate, its development and its devices     | ۲     | ١        |
|  |                                | radiation  |   |       |          |
| Discussio<br>n and<br>general<br>questions | Theoretica l/Discussi on       | Radiation,<br>temperature,<br>continental and<br>equations                   | Mathematical and statistical methods for measuring climate elements | ۲     | ۲        |
| Discussio                                  | Theoretica                     | Effective  | Replace missing   | ۲     | ٣        |
| n and general questions                    | l/Discussi<br>on               | temperature,<br>temperature<br>conversion                                    | rainfall data and return time                                       |       |          |
| Discussio<br>n and<br>surprise<br>exam     | Theoretica<br>1/Discussi<br>on | Lange, Demarton, Koppen, Ivanov, Cappotray laboratories                      | Signs of dehydration<br>Thornthwaite                                | ۲     | ٤        |
| General<br>questions<br>and<br>discussion  | Theoretica<br>1/Discussi<br>on | Köppen classification, fundamental classifications and human classifications | Climate classifications   | ۲     | ٥        |
| General questions                          | Theoretica 1/Discussi          | Rays, heat, pressure, wind   | Climate and crops   | ۲     | ٦        |
| Discussio                                  | Theoretica                     | and plant pests Temperature,   | Climate and   | ۲     | ٧        |
| n and<br>general<br>questions              | 1/Discussi<br>on               | highs and lows,<br>winds and dust<br>storms and other<br>.elements           | transportation  |       |          |
| Discussio<br>n and<br>general<br>questions | Theoretica l/Discussi on       | Climate and a number of human activities                                     | Climate and industrial activity                                     | ۲     | ٨        |

| First month test for the first semester |            |                      |                     |   | ٩  |  |
|---|------------|----------------------|---------------------|---|----|--|
| discussion                              | Theoretica | Causes and           | Medical climate     | ۲ | ١. |  |
|   | 1/Discussi | vectors, climate     |                     |   |    |  |
|   | on         | elements             |                     |   |    |  |
| General                                 | Theoretica | Water balance in     | Climate and human   | ۲ | 11 |  |
| questions                               | 1/Discussi | the human body       | comfort             |   |    |  |
| and                                     | on         | and thermal          |                     |   |    |  |
| discussion                              |            | balance              |                     |   |    |  |
| Discussio                               | Theoretica | Effective            | Comfort indicators  | ۲ | 17 |  |
| n                                       | 1/Discussi | temperature, wet     | and their laws      |   |    |  |
| questions                               | on         | bulb index, wind     |                     |   |    |  |
|   |            | cooling factor       |                     |   |    |  |
| General                                 | Theoretica | Climate and          | Climate and         | ۲ | ١٣ |  |
| questions                               | 1/Discussi | building             | architecture        |   |    |  |
| and                                     | on         | materials, the       |                     |   |    |  |
| discussion                              |            | effect of            |                     |   |    |  |
|   |            | construction         |                     |   |    |  |
|   |            | factors on           |                     |   |    |  |
|   |            | buildings            |                     |   |    |  |
| General                                 | Theoretica | Climate, country     | Climate and         | ۲ | ١٤ |  |
| questions,                              | 1/Discussi | of origin,           | population          |   |    |  |
| discussion                              | on         | population           |                     |   |    |  |
| and daily                               |            | distribution and     |                     |   |    |  |
| test                                    |            | density              |                     |   |    |  |
| General                                 | Theoretica | Geographical         | Climate and natural | ۲ | 10 |  |
| questions                               | 1/Discussi | distribution of      | vegetation          |   |    |  |
| and                                     | on         | plants               |                     |   |    |  |
| discussion                              |            |                      |                     |   |    |  |
| General                                 | Theoretica | The impact of        | Climate and Tourism | ۲ | 10 |  |
| questions                               | 1/Discussi | climate elements     |                     |   |    |  |
| and                                     | on         | on tourism           |                     |   |    |  |
| discussion                              |            |                      |                     |   |    |  |
| General                                 | Theoretica |                      | Climate and water   | ۲ | ١٦ |  |
| questions                               | 1/Discussi |                      |                     |   |    |  |
| and                                     | on         |                      |                     |   |    |  |
| discussion                              |            |                      |                     |   |    |  |
|   |            | d month test for the |                     |   | ١٧ |  |
| General                                 | Theoretica | Definition of soil   | Climate and soil    | ۲ | ١٨ |  |
| questions                               | 1/Discussi | and factors          |                     |   |    |  |
| and                                     | on         | affecting its        |                     |   |    |  |

| discussion |             | formation             |                       |   |     |
|------------|-------------|-----------------------|-----------------------|---|-----|
| General    | Theoretica  | Solar energy,         | Climate and           | ۲ | 19  |
| questions, | 1/Discussi  | wind energy,          | renewable energy      |   |     |
| discussion | on          | hydro energy,         | sources               |   |     |
| and        |             | bioenergy             |                       |   |     |
| surprise   |             |                       |                       |   |     |
| exam       |             |                       |                       |   |     |
| General    | Theoretica  | Tidal energy,         | Thermal energy in the | ۲ | ۲.  |
| questions  | 1/Discussi  | wave energy,          | seas and oceans       |   |     |
| and        | on          | lightning energy      |                       |   |     |
| discussion |             | and its               |                       |   |     |
|            |             | advantages            |                       |   |     |
| General    | Theoretica  | Pollution, its        | Climate and air       | ۲ | 71  |
| questions  | 1/Discussi  | sources,              | pollution             |   |     |
| and        | on          | treatment and         | •                     |   |     |
| discussion |             | problems              |                       |   |     |
|            | First month | n test for the second | semester              | ١ | 77  |
| Daily      | Theoretica  | The concept of        | Climate and           | ۲ | 74  |
| discussion | 1/Discussi  | desertification,      | desertification       |   |     |
| and quiz   | on          | its causes, and       |                       |   |     |
| 1          |             | its                   |                       |   |     |
|            |             | manifestations        |                       |   |     |
| Discussio  | Theoretica  | Drought, heat         | Climate disasters     | ۲ | 7 £ |
| n and      | 1/Discussi  | waves, floods,        |                       |   |     |
| general    | on          | hurricanes            |                       |   |     |
| questions  |             |                       |                       |   |     |
| Discussio  | Theoretica  | Ancient climate       | Climate change        | ۲ | 70  |
| n and      | 1/Discussi  | history methods       | S                     |   |     |
| general    | on          | and evidence,         |                       |   |     |
| questions  |             | cold climate          |                       |   |     |
|            |             | evidence              |                       |   |     |
| Discussio  | Theoretica  | ،Natural              | Causes of climate     | ۲ | 77  |
| n and      | 1/Discussi  |                       | change                |   |     |
| general    | on          |                       | $\mathcal{S}$         |   |     |
| questions  |             |                       |                       |   |     |
| Discussio  | Theoretica  | mankind               |                       | ۲ | 77  |
| n and      | 1/Discussi  |                       |                       |   |     |
| general    | on          |                       |                       |   |     |
| questions  |             |                       |                       |   |     |
| General    | Theoretica  |                       | The effect of climate | ۲ | ۲۸  |

| questions<br>and<br>discussion | l/Discussi<br>on |                             | on animal husbandry          |               |          |
|--------------------------------|------------------|-----------------------------|------------------------------|---------------|----------|
| uiscussion                     | Second mon       | th test for the sec         | ond semester                 | 1             | ۲٩       |
|                                | 2000110          |                             | Course E                     | valuation     | .191     |
|                                |                  |                             |                              |               |          |
|                                |                  |                             | Learning and teaching re     | esources      | .199     |
| ndamentals                     | of Applied       | Climatology                 | Required textbooks (me       | ethodology    | if any)  |
|                                |                  | Hello Phone                 |                              |               |          |
| plied Clima                    | tology A         | del Saeed Al-               | Main Refe                    | erences (Sc   | ources)  |
| I                              | Rawi and Qus     | ay Al <sub>-</sub> Samarrai |                              |               |          |
|                                |                  | in the applied              | Recommended supporting       | books         | and      |
| mate, especi                   | ally master's    | theses, doctoral            | references (scientific journ | nals, reports | s, etc.) |
| sertations, a                  | nd research p    | oublished on the            | ,                            |               | ,        |
|                                |                  | Internet                    |                              |               |          |
|                                |                  |                             | Electronic refe              | erences, w    | ebsites  |

| Course name : Foundations Geomorphology                       |         |
|---|---------|
| Course name; Foundations deomorphology                        | . ۲     |
|   |         |
| : Course code   | .7.1    |
|   |         |
| Semester / Year : Annual                                      | . 7 . 7 |
|   |         |
| Date this description was prepared                            | . ۲ . ۳ |
| 7.75  | /17/9   |
| : Available attendance forms                                  | ٤٠٢.    |
|   |         |
| Number of study hours (total) / Number of units (total): ٩٠/٥ | .7.0    |
|   |         |
| Name of the course administrator (if more than one name is    | ٦٠٢.    |
| (mention  | oned    |

### Assistant Professor Dr. Mohammed Najm Khalaf

#### Course objectives . Y . Y

Introducing the student to the basics of geomorphology of landforms and how to study them in a classical, manual and practical way using computers, using modern technologies

### Teaching and learning strategies . Y . A

Continuous tests, some of which are daily or weekly, urging students to use additional resources and benefit from the available information, classroom activities

#### Course structure . Y . 9

| Evaluatio   | n Leari    | ning Name of the unit of    | Required learning       | Watches      | The                 |     |
|-------------|------------|-----------------------------|-------------------------|--------------|---------------------|-----|
| metho       | od met     | hod topi                    | c outcomes              |              | week                |     |
| General     | Theoretica | How it developed as an      | Geomorpholog            | y Y+1        | ,                   | ١   |
| questions   | 1/Discussi | independent science         | Resources definition    | $n \mid 1+1$ | <b>'</b>            |     |
| =           | on         | How to study it as a        | and type                | es           |                     |     |
|             | =          | resource                    |                         |              |                     |     |
| Discussion  | Theoretica | How rocks are formed        | The most important      |              | 1                   | ۲ ۲ |
| and general | 1/Discussi | How it was formed,          | rocks and the reason    |              |                     |     |
| questions   | on         | extracted and exploited     | for their formation     | on 1+1       | Ĭ                   |     |
|             | =          |                             | Rocks as a natura       | al           |                     |     |
|             |            |                             | resourc                 | ee           |                     |     |
| Discussion  | Theoretica | How to study the various    | Forces affecting th     | ne Y+1       | <b>'</b>   <b>'</b> | ٣٣  |
| and general | 1/Discussi | types of influential forces | formation of th         | ie           |                     |     |
| questions   | on         | Soil as a natural resource  | Earth's surface feature |              | <b>`</b>            |     |
| =           | =          |                             | Soil as a natura        | al           |                     |     |
|             | =          |                             | resourc                 |              |                     |     |
| Discussion  | Theoretica | Slopes and their types      | Slope                   |              |                     | ٤٤  |
| and         | 1/Discussi | Natural plant as a natural  | Natural plan            | nt 1+7       | <b>~</b>            |     |
| surprise    | on         | resource                    |                         |              |                     |     |
| exam        |            |                             |                         |              |                     |     |
| =           | =          |                             |                         |              |                     |     |
| General     | Theoretica | Methods of identifying      | Terrain sector          | rs Y+1       | ´                   | ٥٥  |
| questions   | 1/Discussi | and analyzing sectors       | ~ 4                     |              | .                   |     |
| and         | on         | Types of soils, factors of  | Soil as a natura        |              |                     |     |
| discussion  |            | their formation, problems   | resourc                 | ee           |                     |     |
| =           | =          | and solutions               |                         | 1 0.5        | ,                   | Ļ   |
| General     | Theoretica | Morphology of sectors       | Geomorphologic          |              |                     | 7   |
| questions   | 1/Discussi | D                           | features within th      |              | ,                   |     |
|             | on         | Resources as a natural      | secto                   | or 1+1       |                     |     |

| _                     |                  | ragaliraa                                | Water Resources                        |              |         |
|-----------------------|------------------|--|--|--------------|---------|
| _                     | =                | resource                                 | water Resources                        |              |         |
| Discussion            | Theoretica       | Presenting and discussing                | Discussion sessions                    | 7+7          | Y Y     |
| and general questions | 1/Discussi<br>on | field research                           | Discussion sessions                    | 1+7          |         |
| =                     |                  |  |  |              |         |
|                       | =                |  |  |              |         |
| Discussion            | Practical        | Field visit                              | Field visit                            | 7+7          | \ \ \   |
| and general           | Discussio/       | 77: 11                                   | T 11                                   |              |         |
| questions             | n                | Field visit                              | Field visit                            | 1+7          |         |
| =                     | =                |  |  |              |         |
|                       |                  | First semester                           | test based on two exams                | ١            | 9 9     |
| discussion            | Theoretica       | Chemical and physical                    | Weathering                             | 7+7          | 1.1.    |
| =                     | 1/Discussi       | weathering                               |  |              |         |
|                       | on               | Distribution of weeds in                 | Weeds and their                        | 1+7          |         |
|                       | =                | the world                                | distribution                           |              |         |
| General               | Theoretica       | Physical and chemical                    | The most important                     | 7+7          | 11 11   |
| questions             | 1/Discussi       | weathering phenomena                     | aspects of weathering                  |              |         |
| and                   | on               | The most important                       |  | 1+7          |         |
| discussion            |                  | resources and their                      | Distribution of                        |              |         |
| =                     | practical        | distribution within the                  | resources within the                   |              |         |
|                       |                  | map                                      | world map                              |              |         |
| Discussion            | practical        | Computer Use Practical                   | Practical applications                 | 7+7          | 17 17   |
| questions             |                  | Applications                             | of extracting regression               | A . M        |         |
|                       | practical        | Practical applications for               | Practical applications                 | 1+7          |         |
| practical             |                  | resource distribution and                |  |              |         |
| Cananal               | Practical        | soil mapping                             | Overetitetisse and                     | 7+7          | 17 17   |
| General questions     | Discussio/       | Application of sector study according to | Quantitative and computational methods | 1+1          | 11 11   |
| questions             |                  | equations and computer                   | for studying sectors                   |              |         |
| discussion            | n                | methods                                  | for studying sectors                   |              |         |
| General               | Theoretica       | Definition of erosion                    | erosion                                | 7+7          | 1 £ 1 £ |
| questions,            | 1/Discussi       | Water resources and their                | Water resources                        | 1+7          |         |
| discussion            | on               | types                                    | distribution                           |              |         |
| and daily             |                  | 31                                       |  |              |         |
| test                  |                  |  |  |              |         |
| General               | Theoretica       | Identify the types of                    | Types of erosion                       | 7+7          | 10 10   |
| questions             | 1/Discussi       | erosion                                  |  |              |         |
| and                   | on               | Identify the relationship                | The role of water                      | 1+7          |         |
| discussion            |                  | between water resources                  | resources in settlement                |              |         |
|                       |                  | and population                           |  |              |         |
| =                     | =                | concentration                            | 771 · · ·                              | <b>U</b> . U | , w l.  |
| General               | Theoretica       | The role of rainfall                     | The most important                     | 7+7          | 17 10   |
| questions             | 1/ Practical     | erosion and how to                       | manifestations                         | \ \ \        |         |
| and                   |                  | measure it                               | resulting from rain                    | 1+7          |         |
| discussion            |                  | How to identify and map                  | erosion                                |              |         |

|            |            | water resources           | Water resources           |          |    |    |
|------------|------------|---------------------------|---------------------------|----------|----|----|
|            |            |                           | mapping                   |          |    |    |
| General    | Theoretica | What is river erosion and | River erosion             | 7+7      | 11 | ١٦ |
| questions  | 1/Discussi | how is it measured        |                           |          |    |    |
| and        | on         | How to use water          | Use of water resources    | 1+1      |    |    |
| discussion |            |                           |                           |          |    |    |
|            |            |                           |                           |          |    |    |
| =          | =          |                           |                           |          |    |    |
|            |            | First                     | month test for the second | semester | ١٨ |    |
| General    | Theoretica | How wave erosion occurs   | Wave erosion              | 7+7      | 19 | ۱۸ |
| questions  | 1/Discussi | and the most important    |                           |          |    |    |
| and        | on         | manifestations resulting  |                           |          |    |    |
| discussion |            | from it                   | How to develop water      | 1+1      |    |    |
|            |            | Methods followed to       | investment                |          |    |    |
| =          | practical  | invest water in the world |                           |          |    |    |
|            |            |                           |                           |          |    |    |
| General    | Theoretica | How glacial erosion       | Glacial erosion           | 7+7      | ۲. | ۱۹ |
| questions  | 1/Discussi | occurs and its most       |                           |          |    |    |
| and        | on         | important manifestations  |                           |          |    |    |
| discussion |            |                           | Wrong methods and         | 1+7      |    |    |
|            |            | How to develop water      | treatment methods         |          |    |    |
| =          | =          | exploitation methods      |                           |          |    |    |
| Practical  | practical  | Detecting types of        | River erosion and how     | 7+7      | ۲۱ | ۲. |
| tests      |            | erosion using computer    | to show it on maps        |          |    |    |
|            |            | programs Information      |                           |          |    |    |
|            |            | Systems                   |                           |          |    |    |
| Practical  | practical  | Using topographic maps    | How to extract the        | 7+7      | 77 | ۲۱ |
| tests      |            | to extract the river      | river network             |          |    |    |
|            |            | network                   |                           |          |    |    |
|            | practical  | Using GIS software to     |                           | 1+1      |    |    |
|            |            | analyze land cover        | Methods used to           |          |    |    |
|            |            |                           | determine land covers     |          |    |    |

### Course Evaluation . ۲۱.

The student's commitment to submitting reports and assignments assigned -\text{\text{-V}} to him and respecting their deadlines

.Daily applications and duties -^

|                                 |         |   | Learning and teaching resources .۲۱۱    |
|---------------------------------|---------|---|---|
| undations                       |         | Geomorphology -<br>ammad Hussein Khalaf | Required textbooks (methodology if any) |
| Prin                            | ciples  | of Geomorphology, -\                    | Main References (Sources)               |
| Hassan Sayed Ahmed Abu Al-Anin, |         |   |   |
| University                      | Culture | Foundation, \£th ed.,                   |   |

| .1990 |   |
|-------|---|
|       | Recommended supporting books and                |
|       | references (scientific journals, reports, etc.) |
|       | Electronic references, websites                 |

|                              | Course name: Baath crimes . ۲۱۲  |
|------------------------------|--|
|                              |  |
|                              | : Course code . ۲۱۳  |
|                              |  |
|                              | Semester / Year : Annual . ۲۱۶   |
|                              |  |
| Date of preparat             | ion of this description $7.72/7.70$ .710                                     |
|                              |  |
|                              | : Available attendance forms . ٢١٦   |
|                              |  |
| :Number of study hou         | rs (total) / Number of units (total) . Y \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
|                              |  |
| Name of the course administr | ator (if more than one name is . ۲۱۸   |
|                              | (mentioned   |
|                              |  |
|                              | Course objectives . ۲۱۹  |
|                              |  |
|                              | Teaching and learning strategies .۲۲.  |
|                              |  |
|                              | Course structure . ۲۲۱   |

| Evaluation                              | Learning  | Name of the unit or | Required learning | Watches | The       |  |  |  |
|---|---|---------------------|-------------------|---------|-----------|--|--|--|
| method                                  | method  | topic               | outcomes          |         | week      |  |  |  |
|   |   |                     |                   |         |           |  |  |  |
|   |   |                     |                   |         |           |  |  |  |
|   | Course Evaluation . ۲۲۲                         |                     |                   |         |           |  |  |  |
|   |   |                     |                   |         |           |  |  |  |
|   |   |                     |                   |         |           |  |  |  |
| Learning and teaching resources .۲۲۳    |   |                     |                   |         |           |  |  |  |
| Required textbooks (methodology if any) |   |                     |                   |         | y if any) |  |  |  |
| Main References (Sources)               |   |                     |                   |         |           |  |  |  |
|   | Recommended supporting books and                |                     |                   |         |           |  |  |  |
|   | references (scientific journals, reports, etc.) |                     |                   |         |           |  |  |  |
|   | Electronic references, websites                 |                     |                   |         | websites  |  |  |  |

# **Course Description**

This course description provides a concise summary of the main features of the course and the learning outcomes expected of the student, demonstrating whether he or she has made the most of the learning .opportunities available. It must be linked to the programme description

| Tikrit University / College of Arts                        | Educational institution . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
|--|---|
| Department of Geography and Geographic Information Systems | Scientific Department / .\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  |
| Population Geography                                       | Course Name/Code . 10   |

| Attendance according to the weekly class schedule | Available attendance forms . \ \ |
|---|----------------------------------|
| prepared by the department head                   |                                  |
| Annual Schedule                                   | Chapter/Year . \ \               |
|   | _                                |
| 9.  | Number of study hours . \^       |
|   | (total)                          |
| 7.70/77/1   | Date this description was . 19   |
|   | prepared                         |
|   | Course objectives                |

Objective: To introduce the student to population geography and its importance, the history of population growth in the world, population distribution and the factors affecting it, the age and gender composition of the population, and the social and . economic characteristics of the population

### Course outcomes, teaching and learning methods and assessment . '\

### Cognitive objectives

- . A \ Introducing the student to the concepts of population geography
- .A<sup>7</sup>- Introducing the student to the history of population growth in the world
- .Population distribution and factors affecting it A<sup>\u03c4</sup>- Student definition
- .A ξ- The student learns about the age and gender structure of the population
- .A°- Introducing the student to population growth and demographic transformation
- A<sup>\\\</sup>- Introducing the student to the concept of mortality, methods of measuring .it, and its geographical distribution
- . B Course specific skill objectives
- B) Scientific Reports
- By Graduation research
- Br Benefit from information in the field of work

#### Teaching and learning methods

- .Questions and interrogation during daily lectures -\
- .tests Daily assignments and -7
- . Guiding students to benefit from external resources available around the course -<sup> $\tau$ </sup>

#### Evaluation methods

- The student's commitment to the deadlines for submitting reports and -o .assignments assigned to him and respecting their deadlines
  - .Daily applications and duties -7
  - .Continuous semester and weekly exams -Y
- Student participation in the classroom and serious discussion shows the extent -\(^{\text{-}}\) of the student's interest and his attempt to bear responsibility
- C- Emotional and value-based goals
- A\ Giving the student opportunities for dialogue and discussion during the .lesson
- A<sup>\gamma</sup>- Enhancing the student's ability to perform assignments and adhere to their .deadlines
- A<sup>r</sup>- Encouraging the student to benefit from the available means
- A<sup>\(\xete\)</sup>- Developing the student's ability to find appropriate solutions to any problem . he encounters

## Teaching and learning methods

- .Discussion and interrogation -\
- .tests Daily assignments and -7
- .Guiding students to benefit from external resources available around the course T

#### Evaluation methods

- The student's commitment to the deadlines for submitting reports and -o .assignments assigned to him and respecting their deadlines
  - .Daily applications and duties -7
  - .Continuous semester and weekly exams \(^{\text{V}}\)
- Student participation in the classroom and serious discussion shows the extent -^\ .of the student's interest and his attempt to bear responsibility

- D General and transferable skills ( other skills related to employability and .(personal development
- .D'- Raising the level of students' ability to deal with modern learning methods
- .D<sup>\(\gamma\)</sup> Enhancing the student's ability to discuss and engage in constructive dialogue
- $D^{r}$  Encouraging the student to have access to the resources available in libraries and the Internet on the subject
- .D <sup>€</sup> Developing the student's ability to deal with various media

| Co                           | ourse name : English Language . ۲۲۶                                   |
|------------------------------|---|
|                              |   |
|                              | : Course code . 770   |
|                              |   |
| Semest                       | ter / Year : Annual ۲۰۲٤-۲۰۲۰ .۲۲٦                                    |
|                              |   |
| Date of preparation          | of this description: \-Y-Y-Y0   |
|                              |   |
| Dail                         | y: Available attendance forms . ۲۲۸                                   |
|                              |   |
| Number of study hours (to    | tal) / Number of units (total): \ . \ . \ . \ . \ . \ . \ . \ . \ . \ |
|                              |   |
| Name of the course superviso | r (if more than one name is .٢٣٠                                      |
| mentioned): M                | 1.M. Osama Mohammed Abdullah  |
|                              |   |
|                              | Course objectives .۲۳۱  |
|                              |   |
| reloping                     | English language skills as a secondary                                |
| lang                         | uage for first-year applied geography students                        |
| Те                           | eaching and learning strategies .۲۳۲                                  |
|                              |   |
|                              | Study English Grammar   |
|                              |   |

| Course structure . ۲۳۲   |  |                     |   |          |                |              | 777. €   |
|--------------------------|--|---------------------|---|----------|----------------|--------------|----------|
| Evaluation               | Learning                                       | Name of the unit or |   | Required | learning       | Watches      | The      |
| method                   | method   |                     | topic                                   | o        | utcomes        |              | week     |
| Monthly<br>and           | My presence                                    | dating in er        | nglish                                  |          | get<br>uainted | 1            | 1        |
| annual                   |  |                     |   |          |                |              |          |
| exam                     |  |                     |   |          |                |              |          |
|                          |  |                     |   |          | Course         | Evaluation   | . ۲۳٤    |
|                          |  |                     |   |          |                |              |          |
|                          | Learning and teaching resources .۲۳٥           |                     |   |          |                |              |          |
| Headway: Beginners' book |  |                     | Required textbooks (methodology if any) |          |                |              |          |
| Some related books       |  |                     |   |          | Main Re        | eferences (S | Sources) |
| Books on various topics  |  | Recon               | nmended                                 | supporti | ng books       | s and        |          |
|                          | references (scientific journals, reports, etc. |                     |   |          |                | rts, etc.)   |          |
| artificial intelligence  |  |                     |   | El       | ectronic r     | eferences, v | websites |

| Course name : English language                             | .777  |
|--|-------|
|  |       |
| : Course code  | .777  |
|  |       |
| Semester / Year : Annual ۲۰۲٤-۲۰۲٥                         | ۸۳۲.  |
|  |       |
| : \-Y-Y · Y o Date of preparation of this description      | . ۲۳9 |
|  |       |
| Daily: Available attendance forms                          | ٠٤٤.  |
|  |       |
| Number of study hours (total) / Number of units (total): \ | .7٤1  |
|  |       |

| Name of the course supervisor (if more than one name is بنائة). Mame of the course supervisor (if more than one name is mentioned): M.M. Osama Mohammed Abdullah |                           |                                 |          |                                  |              |            |  |  |
|--|---------------------------|---------------------------------|----------|----------------------------------|--------------|------------|--|--|
|  |                           |                                 |          |                                  |              |            |  |  |
|  | Course objectives . 7 5 T |                                 |          |                                  |              |            |  |  |
|  |                           | relo                            | oping E  | English language skil            | ls as a s    | econdary   |  |  |
|  |                           | anı                             | guage fo | or applied geography st          | udents, seco | nd stage   |  |  |
|  |                           |                                 | Tea      | ching and learning               | strategies   | 337. 8     |  |  |
|  |                           |                                 |          |                                  |              |            |  |  |
|  | Study English Gramm       |                                 |          |                                  |              | Grammar    |  |  |
|  | Course structure . Y 50   |                                 |          |                                  |              |            |  |  |
| Evaluation   | Learning                  | Name of the                     | unit or  | Required learning                | Watches      | The        |  |  |
| method   | method                    | topic                           |          | outcomes                         |              | week       |  |  |
| My   | dialogue                  | Dating                          |          | Dating                           | 1            | 1          |  |  |
| presence   |                           |                                 |          |                                  |              |            |  |  |
|  |                           |                                 |          | Course                           | Evaluation   | אל. ר      |  |  |
|  |                           |                                 |          | Daily, monthly                   | and end of   | course     |  |  |
|  |                           |                                 | Lear     | ning and teaching                |              |            |  |  |
| Headway: Beginners' book   |                           |                                 |          | Required textbooks (             | methodolog   | y if any)  |  |  |
|  | Some related books        |                                 |          | Main References (Sources)        |              |            |  |  |
|  | Books on various topics   |                                 |          | Recommended supporting books and |              |            |  |  |
| references (scie   |                           |                                 |          | erences (scientific jou          | urnals, repo | rts, etc.) |  |  |
|  | artifici                  | Electronic references, websites |          |                                  |              |            |  |  |