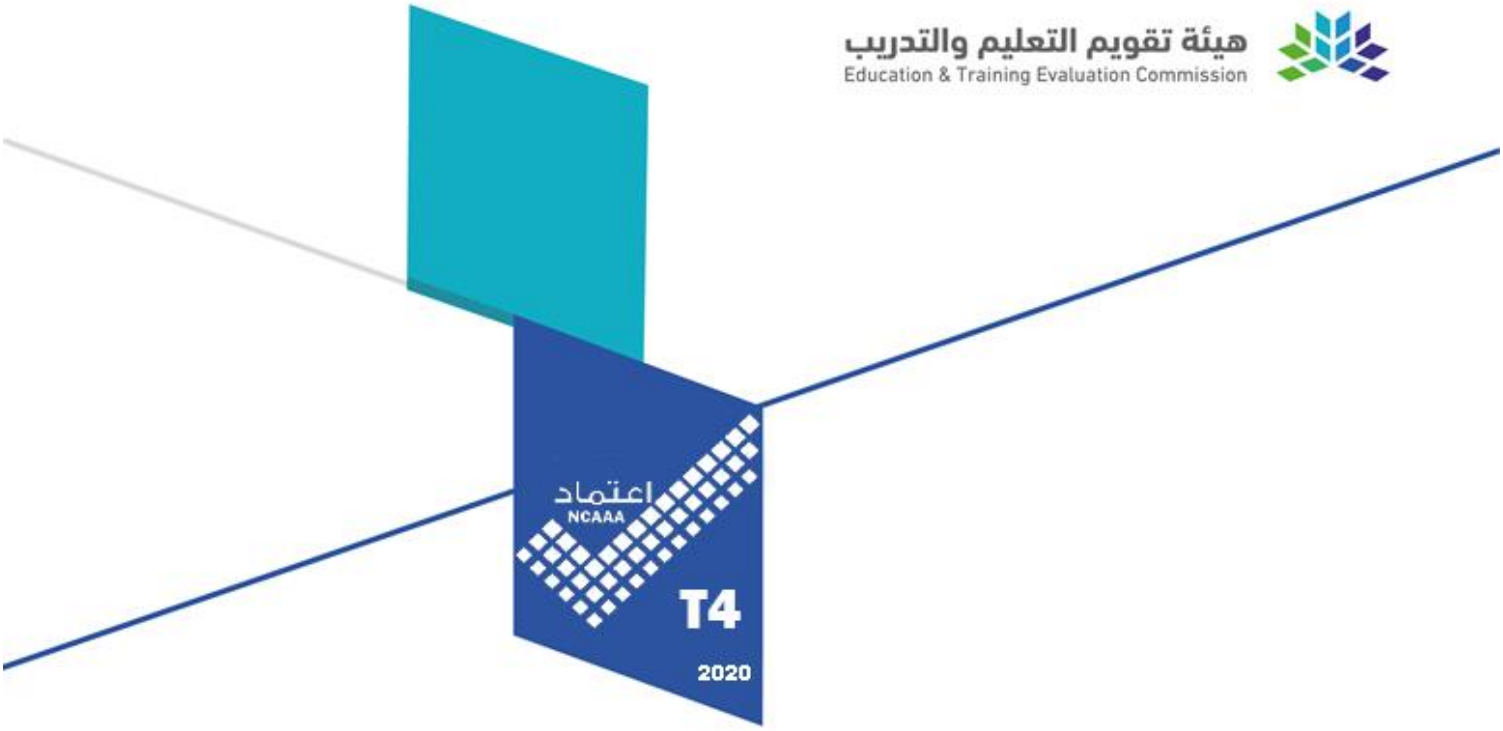
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	GENERAL GEOLOGY
Course Code:	GEO 100
Program:	BSc Geology
Department:	Geology and Geophysics Department
College:	College of Science
Institution:	King Saud University

Table of Contents

A. Course Identification

1. Credit hours:
2. Course type **a.** University ☐ College ☒ Department ☐ Others ☐ **b.** Required ☒ Elective ☐
3. Level/year at which this course is offered:
4. Pre-requisites for this course (if any)**:** None
5. Co-requisites for this course (if any)**:** **None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**		20%
2	**Blended**		40%
3	**E-learning**		40%
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	15
3	**Tutorial**	10
4	**Others** (specify)	
	Total	70

B. Course Objectives and Learning Outcomes

1. Course Description

Introduction to physical geology and minerals – volcanism and intrusive igneous rocks – weathering, soil, sediments and sedimentary rocks – metamorphism and metamorphic rocks – water courses and groundwater – glaciers and glaciations – deserts and coasts – geological structures – earthquakes – plate tectonics – mountain belts and continental growth – earth resources.

2. Course Main Objective

1. This course addresses the general education outcome relating to communications as follows:

a. Students develop their reading comprehension skills by reading the textbook, handout materials, and/or web materials.

b. Students develop their writing skills through a variety of homework assignments, tests,

and quizzes.

c. Students develop their speaking/communications skills through class discussions, by asking questions in class verbally or through electronic media as well as interactions with their peers in and out of class.

2. This course addresses the general education outcomes of recognition and application of scientific inquiry as follows:

a. Students must apply the geological principles to explain various observed natural phenomena that occur on the Earth's surface as well as in the interior of the Earth.

b. Students will develop their observation skills to be able to recognize the various geological features and materials the Earth is constructed from.

c. Students will develop the skills of inquiry by use of the scientific method to experience, evaluate, and synthesize data as applied to various geological problems.

3. This course addresses the general education outcomes of developing effective individual, and at times, group problem-solving and critical thinking skills as applied to geology.

a. Students will develop their ability to solve problems and think critically by applying their acquired knowledge of geology to various problems that deal with geological issues as well as geological hazards.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe origin of the Earth	
1.2	Outline how different rock types and minerals are formed	
2	**Skills :**	
2.1	Compare between various geologic features and materials	
2.2	Explain various observed natural phenomena that occur on the Earth's surface as well as in its interior	
3	**Values:**	
3.1	Work independently and as part of a team	
3.2	Communicate results of work to others	
3.3	Scientific writing	
3...	Working in teams	

C. Course Content

No	List of Topics	Contact Hours
1	An Introduction to Geology	**3**
2	Matter and Minerals	**6**
3	Igneous Rocks	**6**
4	Sedimentary Rocks	**3**
5	Metamorphic Rocks	**3**

6	Weathering and Soil	**6**
7	Volcanoes	**3**
8	Earthquakes	**3**
9	Geologic time	**6**
10	Plate tectonics	**6**
Total		**45**

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe origin of the Earth	In-class lecturing	Major and final exams
1.2	Outline how different rock types and minerals are formed	Laboratory practice	Evaluation of lab reports
2.0	**Skills**		
2.1	Compare between various geologic features and materials	Homework assignments	Quizzes
2.2	Explain various observed natural phenomena that occur on the Earth's surface as well as in its interior	Problem solving in the tutorial	Checking the problems solved in the homework assignments
3.0	**Values**		
3.1	Work independently and as part of a team	Writing group reports	Assessment of the laboratory reports
3.2	Communicate results of work to others	Solving problems in groups during tutorial	Grading homework assignments
3.3	Scientific writing	Writing laboratory reports	Evaluating the laboratory written reports
3.4	Working in teams	Incorporating the use and utilization of computer in the course requirements	Evaluating the laboratory written reports

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	**Homework and quizzes**	**weekly**	**10%**
2	**1st Exams**	**6**	**10%**
3	**Lab activates**	**weekly**	**30%**
4	**2x Exam**	**11**	**10%**
5	**Final exam**	As scheduled by the registrar	**40%**

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice : • Each faculty is required to be available in his office to devote at least 3 hrs/week for students' consultation and academic advice.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Tarbuck, E.J. and Lutgens, F.K., 2002, ***The Earth***, Ninth Edition, Prentice Hall, New Jersey, 670 p. with accompanying GEODe III CD-ROM bound into book inside back cover**.**
Essential References Materials	Selected handouts and reference materials on physical geology have been provided as part of course materials.
Electronic Materials	Websites on the internet that are relevant to the topics of the course
Other Learning Materials	Multimedia associated with the text book and the relevant websites

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	• Lecture room equipped with a black board, overhead projector, computer and internet connection. The laboratory will have a blackboard, overhead projector with computer connection and seating arrangement for the students
Technology Resources (AV, data show, Smart Board, software, etc.)	An easily accessible computer.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
• Course evaluation by student	Students	• Students- faculty meetings
Peer consultation on teaching	Peers	• Departmental council discussions
• Undergraduate Committee will review samples of student work in this course to check on the standard of grades and achievements.	Faculty	• A faculty member from a reputable university will evaluate the course material and the students' work to compare the standard of grades and achievements with those at his university. This

Evaluation Areas/Issues	Evaluators	Evaluation Methods
		evaluator will also comment on the laboratory facilities and the adequacy of the equipment used in the lab.
The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils	Department Council	• The head of department and faculty take the responsibility of implementing the proposed changes.

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	17 January 2022