Course Specifications

Programme(s) on which the course is given: B.Sc. (Geology, Geophysics, Petroleum geology, Chemistry and Geology, Physics and Geology, Mathematics etc....)
Major or Minor element of programmes: Major in Geology, Geophysics, Physics and Geology, Chemistry and Geology and minor in most programs.
Department offering the programme: Geology
Department offering the course: Geology
Academic year / Level:00/ >36, 1
Date of specification approval:

a- Basic Information

Title: Physical Geology
Code: G141

Credit Hours: 3 Credit
Lecture: 1½ Credit Hour

Prerequisite:-------- **Practical: 3 Hours**
Total: 3 Credit Hours

b- Professional Information

1 – Overall Aims of Course:

- **Knowing the geological internal and external processes affect the surface of the earth.**
- **Developing the basic geological knowledge**

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding: By the end of this course, the student should be able to:

a1- Understand the terminology, nomenclature and classifications used in physical geology

a2- Understand the concepts and principles of physical geology

b- Intellectual Skills: By the end of this course, the student should be able to:

b1- Classify the main topographic features.

b2- Identify different rock types.

b3- Apply knowledge and understanding to address familiar and unfamiliar problems

c- Professional and Practical Skills: By the end of this course, the student should be able to:

c1- Read and write scientific physical geology research articles.

c2- Interpret information derived from topographic maps.

d- General and Transferable Skills: By the end of this course, the student should be able to:

d1- Write scientific report of geologic map.

d2- Respect the views and opinions of other team members

d3- Interpret different information on topographic and hydrogeologic maps.

3. Contents

Topic	Credit hours	Lecture	Tutorial/Practical
The solar system	**3**	**1½**	**3**

Origin of the Earth	**3**	**1½**	**3**
Earth's interior	**3**	**1½**	**3**
The atmosphere	**3**	**1½**	**3**
The hydrosphere	**3**	**1½**	**3**
The lithosphere	**3**	**1½**	**3**
The external processes	**6**	**3**	**6**
The weathering processes	**3**	**1½**	**3**
Transportation and deposition	**3**	**1½**	**3**
The internal processes	**3**	**1½**	**3**
Earth movement	**3**	**1½**	**3**
Volcanic and Earthquakes	**3**	**1½**	**3**
Groundwater	**3**	**1½**	**3**
Total	**42**	**21**	**42**

4 – Teaching and Learning Methods

4.1-professional lecture.

4.2-class discussion.

4.3-individual laboratory work.

4.4-quizzes and homework problems.

5- Student Assessment Methods

5.1-regular verbal and written exam. to assess a1-a3, b1-b2

5.2-mid-term exam to assess a1-a3, b1-b2, c1-c2

5.3-at the end of term exam to assess a1-a3, b1-b2, c1-c2

5.4-reports, discussion and practical to assess d1-d3

Assessment Schedule

Assessment 1: short exam (class activities) every two weeks

Assessment 2 :mid-term (written and practical)
week 7
Assessment 3: final-term (written and practical)
week 15-16
Weighting of Assessments

	Written	Practical
Mid-Term Examination:	**20%**	**20%**
Written Final-term Examination:	**60%**	**60%**
Semester Work (including reports, oral and discussion):	**20%**	**20%**
Total:	**100%**	**100%**

6- List of References

6.1- Course Notes: Prepared by staff members

6.2- Essential Books (Text Books):

Tarbuck and Lutgens: Earth: An introduction to physical geology, eight edition.

6.3- Recommended Books

See many historical geology books in the library.

6.4- Periodicals, Web Sites, … etc

7- Facilities Required for Teaching and Learning

Laptop, data show, internet connection and computers, different crystal models (glass, wood and metal) for practices.

Course Coordinator: Prof. Hasan El Shayeb

Head of Department: Prof. Ahmed Al-Boghdady

Date: / / 2012