

Course Specifications

Programme(s) on which the course is given: Post-Graduate Geophysics
Major or Minor element of programmes: Major.
Department offering the programme: Geology
Department offering the course: Geology
Academic year / Level: 00/Post Graduate
Date of specification approval:

a- Basic Information

Title: Seismic Methods

Code: G663

Credit Hours: 2 Credit
Hour

Lecture: 2 Credit

Tutorial:

Practical: -----

Total: 2 Credit Hours

b- Professional Information

1 – Overall Aims of Course:

- Introducing the basic principles and methodology of seismic methods
- Understanding of seismic processing and its influence on interpretable seismic data..
- Explaining how seismic field data is converted into interpretable data

2 – Intended Learning Outcomes of Course (ILOs)

- c- **Knowledge and Understanding:** By the end of this course, the student should be able to:
- a1- Understand the basic of seismic methods.
 - a2- Familiarize with the geological applications of seismic methods.
 - a3- Understand processing requirements of acquired data
- d- **Intellectual Skills:** By the end of this course, the student should be able to:
- b1- Planning and carrying out a simple seismic survey
- e- **Professional and Practical Skills:** By the end of this course, the student should be able to:
- c1- Draw and plot the raw data from the seismic measurements.
 - c2- Perform the field measurements.
- f- **General and Transferable Skills:** By the end of this course, the student should be able to:
- d1- Work effectively within a team.
 - d2- Record and analyze data, including from seismic equipment.

3. Contents

Topic	Credit hours	Lecture
Seismic waves and wave propagations	4	4
Seismic equipment	2	2
Refraction method surveying	6	6
Mid Term Exam.		
Seismic reflection method survey	4	4
Interpretation of Seismology	4	4
Applications of the seisology method	4	4

4 – Teaching and Learning Methods

4.1- lectures.

5- Student Assessment Methods

- 5.1- Regular written exam. to assess a1, a2
- 5.2- Mid-term exam. to assess a2, c1
- 5.3- At the end of term exam. to assess a1-a2, b1, c1-c2
- 5.4- Reports and discussions to assess d1-d2

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
Assessment 4..... Week	

Weighting of Assessments

Written

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

6- List of References

- 6.1- Course Notes:
- 6.2- Essential Books (Text Books):

- 6.3- Recommended Books:

- 6.4- Periodicals, Web Sites, ... etc

7- Facilities Required for Teaching and Learning

Data show

Course Coordinator: Prof. Hassan El Shayeb

Head of Department: Prof. Ahmed Al-Boghdady

Date: / / 2012