Course Specifications

Programme(s) on which the course is given: Post-Graduate (Stratigraphy and Sedimentation)
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: Sedimentary Facies **Code:** G625

Credit Hours: 2 Credits Hours **Lecture:** 2 Credit

Tutorial: **Practical:** ------- **Total:** 2 Credit Hours

b- Professional Information

1 – Overall Aims of Course:

- Understanding the concept of facies.
- Knowing the different types of facies.
- Interpreting the different factors affecting the distribution of facies and deducing their depositional environments.

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 different facies.
a2- Interpret the environment of deposition

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

b1- Interpret the paleoenvironmental conditions.
b2-Conclude the past environmental conditions.
b3- Determine the vertical and lateral distribution of the facies during environments.
B4- Deduce the geologic history of an area.

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

c1- Drawing columnar sections and dividing them into rock units.
c2- Use facies relationships as a tool for interpretation of geologic history.

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

d1- Write scientific reports.
d2- Work as part of a team
d3- Solve problems of lithologic columns

3. Contents

Topic	Credit hours	Lecture
The meaning of facies	2	2
Concepts of facies	2	2
Recognition and definition of facies types	2	2
Factors controlling the nature and distribution of facies	2	2
Basic tools of environmental analysis	4	4
Facies models (definition, types, construction and use)	4	4
Nonmarine depositional environments and facies analysis	4	4
Transitional depositional environments and facies analysis	4	4
Marine depositional environments and facies analysis	4	4

Total	**28**	**28**

4 – Teaching and Learning Methods

4.1- lectures.

4.2- Lab Practical

5- Student Assessment Methods

5.1-Regular verbal and 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-b2, c1-c2, d1-d4
5.4-Reports and discussion	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

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

6- List of References

6.1- Course Notes: Different articles provided by the course coordinator

6.2- Essential Books (Text Books):

6.3- Recommended Books:

Leeder, M. R. (1982): Sedimentology: Processes and product. George Allen & Unwin, London, 344 p.

Miall, A. D. (1984): Principles of sedimentary basin analysis. Springer-Verlag, New York, Berlin, 490 p.

Reading, H. G.,ed., (1986): Sedimentary environments and facies, 2nd ed., Blackwell Scientific Puplications, Oxford, 615 p..

6.4- Periodicals, Web Sites, … etc

7- Facilities Required for Teaching and Learning

Data show, computer

Course Coordinator: Prof. Hosny E. Soliman

Head of Department: Prof. Ahmed Al-Boghdady

Date: / / 2012