Course Specifications

Programme(s) on which the course is given: M.Sc. 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 Graduated

Date of specification approval:

a- Basic Information

Title: Advanced Biotratigraphy Code: G623

Credit Hours: 2 Credits Lecture: 2 Credit

Hours

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

b- Professional Information

1 – Overall Aims of Course

- Introducing faunal stratigraphic principles, methods, and applications.
- Demonstrating the importance of integrated studies in the petroleum industry using practical examples and project work based on real faunal stratigraphic data

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 principles of faunal stratigraphy.
 - **a2-** Recognize and identify the international stratigraphic code.
 - a3-Identify modern events affecting the different faunal stratigraphical zones
 - **a4-** Recognize different types of biozones.
- **b- Intellectual Skills:** By the end of this course, the student should be able to:
 - **b1-** Differentiate between different types of faunal zones.
 - **b2-** Specify faunal zone problems and finding solutions.
- **c- Professional and Practical Skills:** By the end of this course, the student should be able to:
 - **c1-** Apply and adopt the course topics into professional application.
 - c2- Solve problems using logical reasons
- **d-** General and Transferable Skills: By the end of this course, the student should be able to:
 - d1- Use internet critically for communication and searching on the course topics.
 - **d2-** Organize and work effectively within a team.
 - **d3-** Give effective presentations using appropriate methods.

3. Contents

Торіс	Credit hours	Lecture
Stratigraphic subdivision	4	4
Principle of faunal succession biostratigraphic units	4	4
Biostratigraphic units	4	4
Biostratigraphic zonation	4	4
Paleobiogeography and biocorrelation	4	4
Paleocene/Eocene boundary	4	4
Cretaceous/Paleogene boundary	4	4
Total	28	28

4 - Teaching and Learning Methods

- **4.1-**Professional lectures
- 4.2- discussion sessions

5- Student Assessment Methods

5.1-Regular reports and discussions 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-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

Semester Work and discussions: 20 % Mid-Term Exam : 20% Final-term Exam 60% Total: 100%

6- List of References

6.1- Biostratigraphy code

Principles of stratigraphy by Carl O. Dunbar

Stratigraphical Atlas of fossil foraminifera by D. G. Jenkins and J. W. Murray.

Principle of stratigraphy (Lemon, R.R. 1990)

Caron, M. (1985): Cretaceous planktic foraminifera, in Plankton Stratigraphy edited by Bolli, H. M.; Sautiders, J. B. and Perch-Nielsen, K. Cambridge Univ. Press., p. 17-86, Cambridge

6.4- Periodicals, Web Sites, ... etc

Journal of paleontology, marine geology, Cretaceous Research Micropaleontology

7- Facilities Required for Teaching and Learning

Laptop, data show.

Course Coordinator: Prof. Orabi Hussein Orabi

Head of Department: Prof. Ahmed Al-Boghdady

Date: / / 2012