Course Specifications

Programme(s) on which the course is given: Post-Graduate (Mineralogy & Petrology)
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: Advanced Basement Rocks **Code:** G634

Credit Hours: 3 Credits Hours **Lecture:** 3 Credit

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

b- Professional Information

1 – Overall Aims of Course

- To study the new theories and characteristics of basement rocks in Egypt and neighboring countries.

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding: By the end of this course, the student should be able to:
a1- Identify types of basement rocks according to the recent studies.
a2- Recognize and identify the basement rock types.

b- Intellectual Skills: By the end of this course, the student should be able to:
b1- Differentiate between the old and young granitodis, old and young volcanic, etc..
b2- Specify 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 for course topics.
d2- Write and present the basement rock subjects in a potentiality published way.
d3- Organize and work effectively within a team.
d4- Give effective presentations using appropriate methods.

3. Contents

Topic	Credit hours	Lecture
Regional distribution of basement rocks	3	3
Geology of the Precambrian lithosphere	3	3
Pan-African Orogeny	3	3
Migif-Hafafit Gneisses	3	3
Island arc Metasediments	3	3
Island arc Metavolcanics	3	3
Ophiolites	3	3
Calc-alkaline and alkaline gabbros	3	3
I- and A-type granites	3	3
Dokhan volcanics	6	6

Molasse sediments	3	3
Dykes	3	3
Alkaline complexes	3	3
Total	**42**	**42**

4 – Teaching and Learning Methods

4.1-Professional lectures

4.2- Class discussion.

4.3- Preparation of scientific reports during the semester.

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-b2, c1-c2, d1-d2
5.4- Reports and discussions	to assess d3-d4

Assessment Schedule

Assessment 1: Short exam (class activities)	every two weeks
Assessment 2: Mid-term exam (written)	week 7
Assessment 3: Final-term exam (written and verbal)	week 15-16

Weighting of Assessments

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

6- List of References

6.1- All topics are given from international and high standard local journals (Annals of the Geological Survey, Egyptian Journal of Geology).

6.4- Periodicals, Web Sites, … etc

Journal of African Earth Sciences (Elsevier), Precambrian Research (Elsevier)

7- Facilities Required for Teaching and Learning

Laptop, data show, computers, internet, funds for Journals reprints.

Course Coordinator: Prof. Ibrahim khalaf

Head of Department: Prof. Ahmed Al-Boghdady

Date: / /2012