

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name Sedmentary Rocks & Sedmentation

Course number GEOL3313

Faculty

Department

Course type Major Needs

Course level 3

Credit hours (theoretical) 2

Credit hours (practical) 1

Course Prerequisites

Course Objectives

- 1 Studying the depositional environments and the factors effect in the formation of sedimentary rocks
- 2 Studying the different types of sedimentary rocks; their characteristics and composition

Intended Learning Outcomes

| Knowledge and Understanding * | To have enough knowledge about the different types of sedimentary rocks and their characteristics |
|-------------------------------|---|
| * | Evaluation and excavation the economic values of the sedimentary rocks |

Course Contents

- 1 (The relation of sedimentation and other Earth sciences Sedimentary cycle Weathering Porosity and permeability of rocks and their measurement Classification of porosity Transportation and sedimentation Primary structures Classification of sedimentary rocks (Clastic, chemical and organic sedimentary rocks)
- 2 (Practical part Roundness and its measurement Sieve analysis Description of sedimentary rocks (hand specimens and thin-sections

Teaching and Learning Methods

- 1 Explanation and discussion with presentation devices
- 2 Field trips and experimental labs
- 3 Exercises in La

Students Assessment

| Assessment Method | <u>TIME</u> | <u>MARKS</u> |
|-------------------------------------|---------------------|--------------|
| Final term exam | In seventh week | 10 |
| Second term exa | In eleventh week | 10 |
| Exercises and practical assignments | lab and field trips | 10 |
| Final practical exam | In fourteenth week | 20 |
| Final term exam | In sixteenth week | 50 |

Books and References

| Essential books | Boggs. S.J. 1987. Principlees of Sedimentology and Stratigraphy. Macmillan Publishing Campany, New Yourk |
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| Recommended books | Nichols, G. 2009. Sedimentology and Stratigraphy. Wiley-Blackwell, Chichester, England |
| | Selley, R.C. 2000. Applied Sedimentology. Academic Press, New Yor |
| | Pittijohn, E.J. 1985. Sedimentary Rocks. Harper & Row, Publisher, New York |
| | Tucker, M.T. 2003. Sedimentary Rocks in the Field. John Wiley & Sons Ltd., Chichester, England |
| | Lewis, D.W. 1984. Practical Sedimentology. Hutchinson Ross Publishing Company, New York |