



## Faculty of Earth Sciences



### Structural Geology & Remote Sensing Department



The Geological Society  
Accredited degree courses

### GEOTECTONICS

Course Name	Course ID	Prerequisite
GEOTECTONICS	ESR 412	ESR 301

#### Course Description

Theory of continental drift, sea floor spreading paleomagnetism, plate tectonic theory. Orogenic and related processes. Regional depressions.

#### Course Objectives

1. The properties, models of internal structures and composition of the planet Earth.
2. The Earth outer skin, the lithosphere and its familiar surface expression (continents and oceans).
3. Discussing observations, hypotheses and models concerning the workings of the crust.
4. Revolution of Earth sciences using developments of technology.

#### General References for the Course: (Books/Journals...etc.)

Students in this course can read from:

1. *Earth*, by Press, F., and Siever, R., 1974. Freeman, San Francisco.
2. *Plate Tectonics* بنائية الألواح Hosain/Marzoki (Arabic translation after D.C. Heather ) مركز النشر العلمي - جامعة الملك عبد العزيز 1989م
3. *Tectonics*, by Moores, E.M., and Twiss, R.J., 1995. W.H. Freeman and Co., New York.
4. *The Earth* الأرض Hammoda / Bahlool & Salim (Arabic translation after Tarbuck & Lutgens) منشورات مجمع الفاتح للجامعات طرابلس 1989م
5. *The Earth: An Introduction to Physical Geology*, by Tarbuck, E.J. & Lutgens, F.K., 1984. Columbus OH: Merrill Pub.

6. *The New View of the Earth; Moving Continents and Moving Oceans*, by Uyeda, S., 1978.  
San Francisco CA: W.H Freeman and Co.

**List of URLs for this Course**

- [http://www.utpb.edu/ceed/GeologicalResources/Cool\\_Links/Links/plate\\_tectonics.htm](http://www.utpb.edu/ceed/GeologicalResources/Cool_Links/Links/plate_tectonics.htm)
- [http://www.gpc.edu/~pgore/Earth&Space/plate\\_tectonics.html](http://www.gpc.edu/~pgore/Earth&Space/plate_tectonics.html)

**Course Outcome**

The student is expected to study the basic concepts of continental drifting and plate tectonic theories. He also suppose to know the following:

1. Student can be able to know the properties, models of internal structures of earth.
2. Student can know the continents and oceans.
3. Student can discuss hypotheses and models concerning crust.
4. Student can manipulate the revolution of earth sciences using development of technology.