Discipline Information

The following dates are in (dd/mm/yyyy) format.

Code: GSA5796 - 5 Type: POS
Name: Geotectonic Evolution of the South American Continent
Concentration area: Geotectônica (44141)

Approval dates:
CCP: 20/07/2012 CPG: 20/08/2012 CoPGr:
Activation date: 20/08/2012 Inactivation date:

Workload:
Total: 90 h Theory: 3 h Practice: 3 h Study: 3 h
Credits: 6 Duration: 10 weeks

Professors: 21212 - Umberto Giuseppe Cordani - 20/08/2012 until today

Objectives:

The course aims to furnish fundamental notions on the geological structure and the geotectonic evolution of South America, through the study of its main tectonic units.

Rationale:

To provide pertinent and up-to-date informations to the graduate students interested on the regional tectonic evolution, at the largest scale, of the tectonic units inserted on the South-american continent.

Content:

1)Past and present Earth's tectonic regimes; 2) Present geodynamic pattern of South America; 3) Meso-Cenozoic times: Andean orogenic cycle and tectonic reactivation of the South American Platform; 4) Paleozoic: Andean orogêneses and the great syneclises of the South American Platform; 5) Neoproterozoic: Brasiliano-Pan African orogenic cycle; 6) Tectonic evolution of the São Francisco Craton; 7): Tectonic evolution of the Amazonian Craton; 8): Archean tectonics in South America; 9) South America within the Pangea, Gondwana and Rodinia supercontinentes; 10) The South American continental crust in geologic time.

Bibliography:

V.A.Ramos - 1999 - Plate tectonic setting of the Andean Cordillera - Episodes, Vol.22(3), 183-190. U.G.Cordani, E.J. Milani, A Thomaz-Filho & D.A. Campos (Eds.) - 2000 - "Tectonic Evolution of South América - 2000" Rio de Janeiro: 31st International Geological Congress, 856 p. U.G.Cordani & W. Teixeira - 2007 - "Proterozoic accretionary belts in the Amazonian Craton". In: Framework of Continental Crust, Geological Society of América Memoir 200, Chapter 14, 27-320. V.A.Ramos - 2008 - "Anatomy and global context of the Andes: Main geologic features and the Andean orogenic cycle - In: Backbone of the Americas, Geological Society of America, Memoir 204, 31-65. M.A.S.Basei, B.B.Brito Neves, O.Siga Junior, Marly Babinski, M.M.Pimentel, C.C.G.Tassinari, M.H.B.Hollanda, A.P.Nutman, & U.G.Cordani - 2010 - Contribution of SHRIMP U-Pb zircon geochronology to unravelling the evolution of Brazilian Neoproterozoic fold belts. - Precambrian Research 183 - 112-144. U.G. Cordani & V.A. Ramos (coordinators) – 2016 - Tectonic Map of South America – 2nd Edition – scale 1: 5 900 000 – with Explanatory Note – CGMW (Commission of the Geologic Map of the World)

Type of Assessment:

1), Seminar on a specific theme related to the discipline, and 2), Regular attendance and interaction during the

lectures.

Note:

Gerado em 21/02/2017 11:17:13