



Discipline Information

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

Code: GSA5815 - 3 Type: POS
Name: Biostratigraphy - concepts, methods and applications.
Concentration area: Geotectônica (44141)

Approval dates:

CCP: 23/04/2014 CPG: 25/04/2014 CoPGr:

Activation date: 25/04/2014 Inactivation date:

Workload:

Total: 60 h Theory: 4 h Practice: 3 h Study: 3 h

Credits: 4 Duration: 6 weeks

Professors: 3501515 - Juliana de Moraes Leme Basso - 25/04/2014 until today

Content:

Theory Part: 1- Biostratigraphical concepts and fundaments. 2- Biostratigraphical Methods. 3- Geographic diversity of organisms – paleogeography and paleoecology. 4- Temporal diversity of organismos- organic evolution. 5- Different fossil groups used in Biostratigraphy. 6- Relationship of Biostratigraphy with other areas of Geology. 7- Taphonomy implications in Biostratigraphy. 8- Biostratigraphy and paleoecology. 9- Sequence Stratigraphy and Biostratigraphy. 10- Resolution scales on Biostratigraphy. 11- Biostratigraphy applied in oil exploration. 12- Biostratigraphy in Paleozoic basins and Brazilian marginal basins. Practical Part: 1- Critical analysis of examples of biostratigraphical zones. 2- Application of biostratigraphical zones to different situations (microfossils, macroinvertebrates, vertebrates, trace fossils, continental, coastal, marine deposits, etc.).

Bibliography:

BOGGS, S. 2001. Principles of sedimentology and stratigraphy. Prentice-Hall, 726p. BRIGGS, D.E.G. & CROWTHER, P.R. 2001. Palaeobiology II. Blackwell Science, Oxford, 583p. CECCA, F. 2002. Palaeobiogeography of Marine Fossil invertebrates: concepts and methods. Taylor & Fancis, Londres, 273p. CHALONER, W.G. & HALLAM, A. (Eds.) - 1989 - Evolution and extinction. Londres, The Royal Society, 248 p. COMISSÃO ESPECIAL DE NOMENCLATURA ESTRATIGRÁFICA - sbg - 1986 - Código Brasileiro de Nomenclatura Estratigráfica - Guia de Nomenclatura Estratigráfica. Revista Brasileira de Geociências, 16 (4): 370-415. DODD, J.R. & STANTON Jr., R.J. 1990. Paleocology, concepts and applications. John Wiley & Sons, 502p. EINSELE, G.; RICKEN, W.; SEILACHER, A. (esd) - 1991 - Cycles and events in stratigraphy. Berlin, Springer - Verlag, 955 p. MCGOWRAN, B. 2005. Biostratigraphy: Microfossils and Geological Time. Cambridge, 447p. KAUFFMAN, E.G. & HAZEL, J.E.. (Eds) - 1977 - Concepts and methods of Biostratigraphy. Stroudsburg, Dowden, Hutchinson & Ross, 658 p. KAUFFMAN, E.G. & WALLISER, O.H. (Eds.) - 1990 - Extinction events in Earth History. Berlin, Springer - Verlag, Lecture Notes in Earth Sciences, 432 p. LEMON, R.R. - 1990 - Principles of stratigraphy. Columbus, Merrill Publishing Co.; 559 p. MENDES, J. C. 1984. Elementos de Estratigrafia. São Paulo, T. A. Queiróz/EDUSP, 566p. POSAMENTIER, H. W. 1993. Sequence stratigraphy and facies associations. Blackwell Scientific Publications, Oxford, 644p. POWELL, A. J. & RIDING, J.B. 2005. Recent Developments in Applied Biostratigraphy. The Micropalaeontological Society Special Publication, 237p. REYMENT, R. A. 1980. Morphometric methods in biostratigraphy. London, Academic Press, 175p. RIBEIRO, H.J.P.S. 2001. Estratigrafia de Sequências. Fundamentos e Aplicações. Editora Unisinos, São Leopoldo, 428p. WALLISER, O.H. (Ed.) - 1986 - Global bio-events. A critical approach. Berlin, Springer-Verlag, Lecture Notes in Earth Sciences, 442 p.

