

## **GEOLOGY 422K - PALEOBIOLOGY**

### **READING AND REFERENCE LIST**

Lecture Textbook: \*Prothero, D.R. 2003. *Bringing Fossils to Life: An Introduction to Paleobiology* (2nd ed.). McGraw-Hill, New York, 503 p. (paperback).

Lab Manual: Walton, A.H. and Sprinkle, J. 1984, 2002. *Lab Manual for Paleobiology*. Jenn's Copy & Binding, Austin, 119 p.

Other Readings (\* contains reading assignment):

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Ausich, W.I. and Lane, N.G. 1999. *Life of the Past* (4th Ed.). Prentice-Hall, Inc., Upper Saddle River, NJ, 321 p. (paper.).

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\*Beerbower, J.R. 1968. *Search for the Past* (2nd Ed.). Prentice-Hall, Inc., Englewood Cliffs, N.J., 512 p.

Benton, M.J. (ed.). 1993. *The Fossil Record 2*. Chapman and Hall, London, ~832 p.

Black, R.M. 1988. *Elements of Palaeontology* (2nd Ed.). Cambridge University Press, Cambridge, England, 404 p. (paperback).

Boardman, R.S., Cheetham, A.H., and Rowell, A.J. (eds.). 1987. *Fossil Invertebrates*. Blackwell Scientific Publications, Palo Alto, CA, 713 p.

\*Bottjer, D.J. and Droser, M.L. 1992. Paleoenvironmental patterns of biogenic sedimentary structures, p. 130-141. In: Maples, C.G. and West, R.R. (eds.), *Paleontological Society Short Courses in Paleontology no. 5*, 238 p.

Briggs, D.E.G. and Crowther, P.R. (eds.). 2001. *Palaeobiology II*. Blackwell Scientific Publications, Oxford, 583 p.

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Broadhead, T.W. (ed.). 1980-88. *Notes for a Short Course*. Univ. Tenn. Dept. Geol. Sciences, *Studies in Geol.* nos. 3 (Echinoderms, 1980), 5 (Lophophorates, 1981), 6 (Foraminifera, 1982), 7 (Sponges & Spongiomorphs, 1983), 8 (Mammals, 1984), 13 (Molluscs, 1985), 15 (Land Plants, 1986), 18 (Prokaryotes & Protists, 1987), and 19 [Short Courses in Paleontology no. 1] (Molecular Evolution, 1988).

\*Chen, J., Bergstrom, J., Lindstrom, M., and Hou, X. 1991. The Chengjiang Fauna - oldest soft-bodied fauna on earth. *Research and Exploration*, v. 7, no. 1, p. 8-19, no. 2, p. 238-239.

- Clarkson, E.N.K. 1993. *Invertebrate Palaeontology and Evolution* (3rd ed.). Chapman and Hall, London, 434 p. (paperback).
- Conway Morris, S. 1998. *The Crucible of Creation: The Burgess Shale and the Rise of Animals*. Oxford University Press, Oxford, 242 p.
- \*Conway Morris, S. and Whittington, H.B. 1979. The animals of the Burgess Shale. *Scientific American*, v. 241, no. 1, p. 122-133 (July).
- Culver, S.J. (ed.). 1989-95. *Paleontological Society Short Courses in Paleontology*, nos. 2 (Age of Dinosaurs, 1989), 3 (Arthropod Paleobiology, 1990), 4 (Analytical Paleontology, 1991), 5 (Trace Fossils, 1992), 6 (Taphonomic Approaches to Time Resolution ..., 1993), 7 (Major Features in Vertebrate Evolution, 1994), 8 (Siliceous Microfossils, 1995).
- Donovan, S.K. (ed.). 1989. *Mass Extinctions: Processes and Evidence*. Columbia University Press, New York, 266 p. (paperback).
- \*Eicher, D.L. 1976. *Geologic Time* (2nd Ed.). Prentice-Hall, Inc., Englewood Cliffs, N.J., 150 p. (paperback).
- \*Eldredge, N. and Gould, S.J. 1972. Punctuated equilibria: an alternative to phyletic gradualism, p. 85-115. In: Schopf, T.J.M. (ed.), *Models in Paleobiology*. Freeman, Cooper and Co., San Francisco, 250 p.
- Fairbridge, R.W. and Jablonski, D. (eds.). 1979. *The Encyclopedia of Paleontology*. Dowden, Hutchinson & Ross, Inc., Stroudsburg, PA, 886 p.
- Finsley, C. 1996. *A Field Guide to Fossils of Texas* (2nd Ed.). Gulf Publishing Company, Houston, 211 p. (paperback).
- \*Foote, M. and Miller, A. I. 2006 (2007). *Principles of Paleontology* (3<sup>rd</sup> ed.). W. H. Freeman and Co., New York, 354 p.
- \*Freeman, S. and Herron, J.C. 2001. *Evolutionary Analysis* (2nd Ed.). Prentice-Hall, Inc. Upper Saddle River, NJ, 704 p.
- \*Glaessner, M.F. 1984. *The Dawn of Animal Life*. Cambridge University Press, Cambridge, England, 244 p. (paperback).
- \*Gould, S.J. 1975. Review of: Stauffer, R.C. (ed.), *Charles Darwin's Natural Selection*. *Science*, v. 188, no. 4190, p. 824-826.
- \*Gould, S.J. 1991. Opus 200. *Natural History*, v. 100, no. 8, p. 12-18 (August).
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- Jablonski, D., Erwin, D.H., and Lipps, J.H. (eds.). 1996. *Evolutionary Paleobiology*. University of Chicago Press, Chicago, 484 p. (paperback).
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- Laporte, L.F. (ed.) 1978. *Evolution and the Fossil Record*. W.H. Freeman and Co., San Francisco, 222 p. (Scientific American articles by Glaessner, Seilacher, Newell, and Bakker).
- \*Laporte, L.F. 1979. *Ancient Environments (2nd Ed.)*. Prentice-Hall, Inc., Englewood Cliffs, NJ, 163 p. (paperback).
- Levi-Seti, R. 1993. *Trilobites (2nd Ed.)*. Univ. of Chicago Press, Chicago, 342 p.
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- \*Martin, P.S. 1973. The discovery of America. *Science*, v. 197, no. 4077, p. 969-74.
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- \*Mayr, E. and Ashlock, P.D. 1991. *Principles of Systematic Zoology (2nd Ed.)*. McGraw-Hill Book Co., Inc., New York, 475 p.
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- \*Newell, N.D. 1972. The evolution of reefs. *Scientific American*, v. 226, no. 6, p. 54-65 (reprint 901).
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- \*Paul, C.R.C. 1985. The adequacy of the fossil record reconsidered. *Special Papers in Palaeontology*, No. 33, p. 7-15.
- \*Raup, D.M. 1986. Biological extinction in earth history. *Science*, v. 231, no. 4745, p. 1528-1535.
- \*Raup, D.M. and Sepkoski, J.J., Jr. 1982. Mass extinctions in the marine fossil record. *Science*, v. 215, no. 4539, p. 1501-1503.
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- \*Stanley, S.M. 1973. An ecologic theory for the sudden origin of multicellular life in the Late Precambrian. *Proceedings of the National Academy of Science USA*, v. 70, no. 5, p. 1486-1489.
- \*Stanley, S.M. 1975. A theory of evolution above the species level. *Proceedings of the National Academy of Science USA*, v. 72, no. 2, p. 646-650.
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