

**NOTE: Please feel free to use the most recent edition of textbooks referenced in this list**  
**NOTA : Utilisez l'édition la plus récente des manuels cités dans cette liste.**

**18-Geol-A1 Mineralogy and Petrology**

Raymond, L.A., Petrology, The study of igneous, sedimentary, and metamorphic rocks. 2<sup>nd</sup> Ed., McGraw Hill, 2002.

Perkins, D. and K. Henke, Minerals in Thin Section. 2<sup>nd</sup> Ed. Prentice Hall, 2004.

MacKenzie, W.S. and A.E. Adams, A Color Atlas of Rocks and Minerals in thin Section. J. Wiley, 1994.

Nesse, William D., Introduction to Optical Mineralogy. Oxford University Press, 2003.

Philpotts, Anthony R., Petrography of Igneous and Metamorphic Rocks. Prentice Hall, 2003.

Klein, C., Dutrow, B., The Manual of Mineral Science (after James D. Dana), 23rd Ed., John Wiley and Sons, New York, 20082.

Blatt, H. and R.J. Tracy, Petrology: Igneous, Sedimentary and Metamorphic. 2<sup>nd</sup> Ed., W.H. Freeman and Co., 1996.

Prinz, Martin, George E. Harlow, and Joseph Peters, eds. Simon and Schuster's Guide to rocks and minerals, Simon & Schuster, 1978.

**18-Geol-A2 Hydrogeology**

Freeze, R. Allan, and John A. Cherry, Groundwater, 604 pp. (1979). Online at:  
<http://hydrogeologistswithoutborders.org/wordpress/textbook-project/>

Schwartz, F.W., and H. Zhang, Fundamentals of Ground Water, Wiley, 2003.

Domenico, P.A., and F.W. Schwartz, Physical and Chemical Hydrogeology. 2<sup>nd</sup> Ed., Wiley, 1998.

**18-Geol-A3 Sedimentation and Stratigraphy**

Boggs, S., Principles of Sedimentology and Stratigraphy. 3<sup>rd</sup> Ed., Prentice Hall, New York, 2001.

**18-Geol-A4 Structural Geology**

Fossen, Haakon, Structural geology, Cambridge University Press, 2016.

van der Pluijm, Ben A., and Stephen Marshak, Earth Structure: An Introduction to Structural Geology and Tectonics. New York, W.W. Norton, 2004.

Davis, G.H., and S.J. Reynolds, Structural Geology of Rocks and Regions. 2<sup>nd</sup> Ed., New York, John Wiley and Sons, Inc., 1996.

**18-Geol-A5 Rock Mechanics**

Hoek, Evert and John Bray, Rock Slope Engineering. London: Institution of Mining and Metallurgy, 1981.

Hoek, Evert and Edwin T. Brown, Underground Excavations in Rock. London: Institution of Mining and Metallurgy, 1982.

**18-Geol-A6 Soil Mechanics**

Coduto, D.P., Component: Geotechnical Engineering: Principles and Practices. Prentice Hall, NJ, 1999.  
Lambe, T.W., Soil Testing for Engineers. BiTech Publishers, Vancouver, 1991.

**18-Geol-A7 Applied Geophysics**

Sharma, P.V., Environmental and Engineering Geophysics. Cambridge University Press, 1997.  
Reynolds, J.M., An Introduction to Applied and Environmental Geophysics. Wiley, 1997.  
Kearey, P., M. Brooks and I. Hill, An Introduction to Geophysical Exploration. 3<sup>rd</sup> Ed., Blackwell Science, 2002.

**18-Geol-B1 Contaminant Hydrogeology**

Fetter, C.W., Contaminant Hydrogeology. 2<sup>nd</sup> Ed., MacMillan Publishing Co., New York, 1999.  
Bedient, Philip B., Hanadi S. Rifai, and Charles J. Newell, Ground Water Contamination: Transport and Remediation, 2<sup>nd</sup> edition. Upper Saddle River, NJ: Prentice Hall, 1999. <https://www.amazon.ca/Ground-Water-Contamination-Transport-Remediation/dp/0130138401>.  
Council, National Research, Contaminants in the Subsurface: Source Zone Assessment and Remediation, 2004. <https://www.nap.edu/catalog/11146/contaminants-in-the-subsurface-source-zone-assessment-and-remediation> .  
Domenico, P.A., and F.W. Schwartz, Physical and Chemical Hydrogeology. 2<sup>nd</sup> Ed., Wiley, 1998.

**18-Geol-B2 Terrain Analysis**

Mollard, J.D. and J.R. Janes, Airphoto Interpretation and the Canadian Landscape. Energy, Mines and Resources Canada, 1984. ISBN 0-660-11591-3

Required Materials for Examination:

- 1 pocket stereoscope + plates from Mollard and Janes (1984) p. 187-399 only.

**18-Geol-B3 Site Investigation**

Hunt, Roy E., Geotechnical engineering investigation handbook, CRC Press, 2005.  
Hunt, Roy E., Geologic hazards: a field guide for geotechnical engineers, CRC Press, 2007.  
Canadian Geotechnical Society, Canadian Foundation Engineering Manual. 3<sup>rd</sup> Ed. Canadian Geotechnical Society, Technical Committee on Foundations, BiTech Publishers Ltd., Richmond, British Columbia, 1992.  
Nielsen, David M., (ed.). Practical Handbook of Ground-Water Monitoring. Lewis Publishers Inc., Chelsea, Michigan, 1991.

**18-Geol-B4 Geomorphology and Pleistocene Geology**

Easterbrook, D.J., Surface Processes and Landforms. 2<sup>nd</sup> Ed., Prentice-Hall, 1999.  
Trenhaile, AS, Geomorphology: A Canadian Perspective. Oxford University Press, 1998. ISBN 0-19-541277-X

Fulton, RJ, (ed.), Quaternary Geology of Canada and Greenland. Geological Survey of Canada, 1989. ISBN 0-660-13114-5 (Any one section of Part I (Sect. 1-5), and Part II: Sect. 11, 12.)

**18-Geol-B5 Environmental Geology**

Keller, Edward A. (2011) Environmental Geology (9<sup>th</sup> ed.) Pearson.  
Merritts D, Menking K, and DeWet A (2014) Environmental Geology: An Earth Systems Approach (2<sup>nd</sup> ed.) Macmillan.

**18-Geol-B6 Resource Geology**

Select ONE from:

**18-Geol-B6-1 Petroleum Deposits**

Gluyas, J.G. and R.E Swarbrick, Petroleum Geoscience. Blackwell, 2004.

Hunt, J.M., Petroleum Geochemistry and Geology. 2nd Edition, Freeman, New York, 1996.

**18-Geol-B6-2 Coal Deposits**

Not available at this time.

**18-Geol-B6-3 Metallic and Industrial Mineral Deposits**

Evans, Anthony M., Ore Geology and Industrial Minerals - An Introduction. 3<sup>rd</sup> Ed., Blackwell Science, Oxford, UK, 1993.

**18-Geol-B7 Petroleum Development**

Dake, L.P., The Practice of Reservoir Engineering. Elsevier, 1994.

**18-Geol-B8 Resource Economics & Valuation**

Gentry, D.W. and T.J. O'Neill, Mine Investment Analysis. Society of Mining Engineers, American Institute of Mining, Metallurgical, and Petroleum Engineers, New York, 1984.

Rudenno, V., The Mining Valuation Handbook. Wrightbooks, Australia, 1998.

**18-Geol-B9 Exploration & Mining Geology**

Evans, Anthony M., Ore Geology and Industrial Minerals - An Introduction. 3<sup>rd</sup> Ed., Blackwell Science, Oxford, UK, 1993.

Evans, Anthony M., and William L. Barrett, Introduction to Mineral Exploration. Blackwell Publications, UK, 1995.

Peters, W.C., Exploration and Mining Geology. 2<sup>nd</sup> Ed., John Wiley & Sons, Inc, 1987.

**18-Geol-B10 Geophysical Exploration Methods**Select ONE from:**18-Geol-B10-1 Gravity and Magnetic Fields**

Telford, W.M., L.P. Geldart, and R.E. Sheriff, Applied Geophysics. Cambridge University Press, 1990.

Sharma, P.V., Environmental and Engineering Geophysics. Cambridge University Press, 1997.

**18-Geol-B10-2 Electrical Methods**

Telford, W.M., L.P. Geldart, and R.E. Sheriff, Applied Geophysics. Cambridge University Press, 1990.

Sharma, P.V., Environmental and Engineering Geophysics. Cambridge University Press, 1997.

**18-Geol-B10-3 Exploration Seismology**

Telford, W.M., L.P. Geldart, and R.E. Sheriff, Applied Geophysics. Cambridge University Press, 1990.

Sharma, P.V., Environmental and Engineering Geophysics. Cambridge University Press, 1997.