		Revised: Date of Previous R	A,J,M,N,P,Q,R.		
		Date of Previous R	,		
C:	GEOLOGY 121 <b>D</b> : History of		<b>E:</b> 3		
	Subject & Course No. Descri	iptive Title	Semester Credits		
F:	Topics include: the origin of the Earth, origin and	arse is concerned with Earth history and the events that have shaped the development of the Earth.  Include: the origin of the Earth, origin and evolution of life, mass extinction events, dinosaurs, Ice Age  Is, and ancient climates. Techniques used to date and interpret events of the past and reconstruct ancient			
G: Allocation of Contact Hours to / Learning Settings  Primary Methods of Instruction Learning Settings:  Lecture / Lab	Allocation of Contact Hours to Type of Instructio / Learning Settings  Primary Methods of Instructional Delivery and/or Learning Settings:				
		None.			
	Number of Contact Hours: (per week / semester for each descriptor)	<b>J:</b> Course for wh	<b>J:</b> Course for which this Course is a Prerequisite		
	2 hours lecture per week / 2 hours lab per week	GEOL 320, 42	20.		
	Number of Weeks per Semester:	K: Maximum Cla	ss Size:		
	14	35			
L:	PLEASE INDICATE:				
	Non-Credit College Credit Non-Transfer				
	X College Credit Transfer:  SEE BC TRANSFER GUIDE FOR TRANSFER	Requested DETAILS (www.bccat.be	Granted X c.ca)		

# M: Course Objectives / Learning Outcomes

### A. Geology as a Science

- 1. Understanding the nature of science and its strategies
- 2. Understanding of the difference between experimental and historical (interpretive) sciences
- 3. Development of critical thinking skills in assessing evidence and interpretations
- 4. Understanding of the role of time perspective in geological investigations: time as the fourth dimension
- 5. Understanding of the cumulative nature of history: that each outcome provides the initial conditions for the next
- Understanding of the development, nature, and implications of Uniformitarian theory and differences from Catastrophism
- 7. Understanding the place of geology vis-Bvis other disciplines

#### **B.** Time Perspective and Context

- 1. Knowing "by heart" the geological time scale in terms of eons, eras, periods, and Cenozoic epochs
- 2. Knowing the history of important events and people involved in the development of the geological time scale
- 3. Knowledge of the character and overall historical context of the solar system

## C. Stratigraphy

- 1. Knowing the underlying principles of stratigraphy as applied to sedimentary successions (relative dating)
- 2. Understanding of the origins of sedimentary rocks and of stratified and cross-cutting igneous rocks
- 3. Understanding of the Principle of Fossil Succession
- 4. Knowing how the stratigraphic and fossil records served as the basis for an understanding of geological time (relative)
- 5. Understanding of the facies concept as applied to both rocks (sediments) and fossils
- 6. Understanding of the potential and procedures of paleoecological/paloenvironmental analyses
- Understanding of the role of analogy (use of modern analogues) in paleoenvironmental work, and limitations thereof

### D. Fossils

- 1. Familiarity with the major kingdoms and of the phyla of organisms typically encountered in the fossil record
- 2. Knowing how to identify examples of all these phyla, including a basic suite of fossils at the genus level
- 3. Development of skills in observation of diagnostic criteria as a basis for fossil identification
- 4. Development of ability to distinguish fossils

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Course Designer(s)	Education Council / Curriculum Committee Representative
Dean / Director	Registrar

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