Geology of the Ottawa Area

Business Administration - Core

Course Number: GEN2009  
Co-Requisites: N/A  
Pre-Requisites: N/A  
Applicable Program(s): Multiple Programs  
AAL: Multiple Levels  
Core/Elective: Multiple Core/Elective  
Prepared by:  
Approved by:  
Approval Date:  
Approved for Academic Year: 2015-2016  
Normative Hours: 45.00

Course Description

This general education course leads students back through the record of time. Moving first by centuries, then millennia, taking time in ever increasing bites until the origin of the planet is discussed. A digital photo library explores local sites of interest which reveal the principles of geology. The building blocks of rocks, from minerals to atoms, are explained with a minimum of jargon using only the key words necessary to unlock the world of science. Students develop the ability to appreciate the genesis of mountains, and speculate intelligently on the age and mineralogy of a pebble from their shoe. The dynamics of the ever-shifting continents and their impact upon the Ottawa area are explored.

General Education Theme Area(s)

This is a General Education course that supports learning in the following theme area(s)

Relationship to Essential Employability Skills

This course contributes to your program by helping you achieve the following Essential Employability Skills:

EES 4  Apply a systematic approach to solve problems. (T,A)  
EES 8  Show respect for diverse opinions, values, belief systems and contributions of others. (T,A)

Course Learning Requirements/Embedded Knowledge and Skills

When you have earned credit for this course, you will have demonstrated the ability to:

1.) Grasp the meaning of the basic building blocks of rocks starting at the atomic level.
   • Develop a simple understanding of how atoms combine to create molecules, crystals and rocks.

2.) Explain the natural processes which tend to return rocks to their atomic components.
   • Develop knowledge of the role played by sun, water, gravity, wind and organisms in the processes of weathering and erosion.
   • Appreciate the basics of soil and groundwater.

3.) Trace Ottawa’s recent geological history.
• Appreciate the role of subtle climatic variations in the deep burial of this area, first by ice, then sea water.

4.) Become familiar with the concept of extreme time as learners understand the origin of the bedrock beneath this city.
   • Learn to recognize ancient sea-level variations by means of their sedimentary record.
   • Delve into the principles of radioactive decay and their use in determining geologic time.

5.) Explore beneath Ottawa’s bedrock in a study of the crystalline rocks of the Canadian Shield.
   • Comprehend the genesis and lithology of the principal igneous and metamorphic rock types found locally.

6.) Develop a deeper appreciation of the Earth and the irresistible forces which conjure up volcanoes and earthquakes, and slide the continents about.
   • Discern the principles of continental drift.
   • Relate these principles to the Earth’s varied rock types and landforms.
   • Perceive the basic types of faults, the genesis of a volcano, and the folding of sea-bottom sludge into a slate mountain top.

7.) Identify the basic concepts of the origin of the Universe and follow the natural development of this planet back to the current time.
   • Comprehend the simple combination of speed, gravity and matter to create this planet and all the known Universe.
   • Discover Earth’s early history and the potential origin of life.
   • Follow the fossil evidence of the development of life from a single cell, 3 ½ billion years ago, to that of humankind.

Evaluation/Earning Credit
The following list provides evidence of this course's learning achievements and the outcomes they validate:

Learning Resources

*All course notes are given in Blackboard with internet links for enriched study.

*The following maps are used in this course:

They are available online or can be purchased at the bookstore. Using the maps online can be complex and tedious.

1506A Surfical Geology Map of Ottawa - used for one lesson
1508A The Generalized Bedrock Geology Map of Ottawa - used for two lessons and two assignments

Learning Activities

• One face-to-face class meeting
• Internet research
• Reading of maps
• On-going communication (via e-mail and discussion board) with the instructor and classmates

Learning activities may include:
• Assignments involving assessments and map reading
• Quizzes which may involve analysis and critical thinking skills
• Discussion board communication
• Understanding reading and research assignments

You will be expected to complete an assignment and/or quiz approximately every two weeks.
You will also be expected to contribute to the class discussion boards.

Prior Learning Assessment and Recognition

Students who wish to apply for prior learning assessment and recognition (PLAR) need to demonstrate competency at a post-secondary level in all of the course learning requirements outlined above. Evidence of learning achievement for PLAR candidates includes:
• Other: Provide evidence of completion of a post-secondary geology course.

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<th>Mark Equivalent</th>
<th>Numeric Value</th>
<th>Final Grade</th>
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<tr>
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Note: 10% of the mark will be deducted PER DAY for late assignments. Special extensions of assignment due dates due to family/personal emergencies will require notification and official supporting documentation within 72 hours.

Course Related Information

School of Business Procedures
The School of Business Procedures file is located under “Course Information” in your course Blackboard site. These procedures are specific to School of Business programs and either cover issues not included in College Policies and Directives or elaborate on them.

Student Academic Responsibilities
Each student is responsible for:
• Knowing the due dates for marked out-of-class assignments.
• Knowing the dates of in-class marked assignments and exercises.
• Maintaining a folder of all work done in the course during the semester for validation claims in cases of disagreement with faculty.
• Keeping both paper and electronic copies of all assignments, marked and unmarked, in case papers are lost or go missing;
• Regularly checking both Blackboard announcements as well as one's Algonquin e-mail account for important messages from both professor and college administration.
• Participating in on-line and classroom exercises and activities as required.

**Exemptions**
Exemptions may be granted to students who have successfully passed an equivalent course at a post-secondary institution. If you wish to apply for an exemption contact the coordinator of the course for academic advice. To apply for an exemption, you must contact the Registrar’s Office before the deadline listed on your timetable.

**Withdrawing From The Course**
The last date for withdrawing from courses without academic penalty is printed on your timetable. The student is responsible for notifying the instructor and completing the appropriate form for withdrawal with the College Registrar.

**Software Copyright**
In the past few years, the Copyright Act has been updated to cover computer software. If the police lay charges against someone infringing copyright, the maximum penalties for a summary conviction are "a fine not exceeding $25,000 or imprisonment for a term not exceeding six months or both." The maximum penalties for an indictable conviction are "a fine not exceeding one million dollars or imprisonment for a term not exceeding five years or both." Making a copy of software package for your own use, other than a backup copy of package that you have purchased as allowed in your license agreement, would make you liable for the above penalties.

**Harassment/Discrimination/Violence**
Harassment, discrimination and violence will not be tolerated. Any form of harassment (sexual, racial, gender or disability related), discrimination (direct or indirect), or violence, whether towards a professor or amongst students, will not be tolerated on the college premises. Action taken will start with a formal warning and proceed to the full disciplinary actions as outlined in Algonquin College policy. For further information, refer to the Student Instaguide or get a copy of the official policy statements from the Student Association (Directive A8).

**Plagiarism Detection Software**
"Turnitin" plagiarism detection software is in use in the School of Business. Professors may require students to submit their work for review. Scores higher than 20% are subject to review under Plagiarism Policy AA20 found at http://www2.algonquincollege.com/directives/policy/plagiarism/

**Retention of Student Work**
Students are advised that original, electronic, or copied samples of their work may be retained for the purpose of program quality review by assessment panels. Unless students have otherwise granted permission, anonymity will be respected for all work retained for the purpose of quality review. Original work samples, may be retained with student agreement and will be returned to students upon request.

**Academic Probation or Withdrawal from Academic Program**
As per College Policy AA14, which can be found at http://www3.algonquincollege.com/directives/policy/aa14-grading-system/
"A student is on academic probation when the term cumulative grade point average falls below 1.7, or when a student carries 2 or more "F" grades. A student on academic probation may continue in the program, subject to conditions set by the Academic Administrator. In some cases, there may be program specific progression requirements which supersede the foregoing.

The transcript message reads:
Academic Probation - Please see your Program Coordinator"

"A student on probation may be required to:
a. reduce his/her course load,
b. withdraw from full-time status within the program, or
c. withdraw completely from the program.

A student required to withdraw completely from Level 01 must reapply through the Ontario College Application Services. A student required to withdraw from an advanced level of the program must have the approval of the Academic Administrator prior to resuming his/her studies."

**College Related Information**

**Email**
Algonquin College provides all full-time students with an e-mail account. This is the address that will be used when the College, your professors, or your fellow students communicate important information about your program or course events. It is your responsibility to ensure that you know how to send and receive e-mail using your Algonquin account and to check it regularly.

**Students with Disabilities**
If you are a student with a disability, it is strongly recommended that you identify your needs to your professor and the Centre for Students with Disabilities (CSD) or Student Services, by the end of the first month of the semester in order that necessary accommodations or support services can be arranged for you.

**Academic Integrity & Plagiarism**
Adherence to acceptable standards of academic honesty is an important aspect of the learning process at Algonquin College. Academic work submitted by a student is evaluated on the assumption that the work presented by the student is his or her own, unless designated otherwise. For further details consult Algonquin College Policies AA18: Academic Dishonesty and Discipline and AA20: Plagiarism

**Student Course Feedback**
It is Algonquin College’s policy to give students the opportunity share their course experience by completing a student course feedback survey for each course they take. For further details consult Algonquin College Policy AA25: Student Course Feedback

**Use of Electronic Devices in Class**
With the proliferation of small, personal electronic devices used for communications and data storage, Algonquin College believes there is a need to address their use during classes and examinations. During classes, the use of such devices is disruptive and disrespectful to others. During examinations, the use of such devices may facilitate cheating. For further details consult Algonquin College Policy AA32: Use of Electronic Devices in Class

**Transfer of Credit**
It is the student’s responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.
### Legend

**Terms**
- ALO: Aboriginal Learning Outcome
- Apprenticeship LO: Apprenticeship Learning Outcome
- CLR: Course Learning Requirement
- DPLO: Degree Program Learning Outcome
- EES: Essential Employability Skill
- EOP: Element of Performance
- GELO: General Education Learning Outcome
- LO: Learning Outcome
- PC: Program Competency
- PLA: Prior Learning Assessment
- PLAR: Prior Learning Assessment and Recognition
- VLO: Vocational Learning Outcome

**Assessment Levels**
- T: Taught
- A: Assessed
- CP: Culminating Performance