The Science of Everyday Life

Business Administration - Core

Course Number: GED5300
Applicable Program(s): Multiple Programs
Prepared by: David Stafford, Professor
Approved by: Kerry Surman, Chair, Business Administration
Approval Date: Monday, June 10, 2019
Approved for Academic Year: 2019-2020
Normative Hours: 42.00

Co-Requisites:
AAL:
Pre-Requisites:

EES 1 Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience. (T, A)
EES 2 Respond to written, spoken or visual messages in a manner that ensures effective communication. (T, A)
EES 4 Apply a systematic approach to solve problems. (T, A)
EES 5 Use a variety of thinking skills to anticipate and solve problems. (T, A)

Relationship to Essential Employability Skills

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

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

Course Description

The mysteries of science surround us constantly and play a significant role in everyone's daily life regardless of their level of awareness. Familiarity with the basic concepts of science in disciplines, such as biology, physics, and chemistry, helps students better understand the world in which they live, the attitudes and opinions of those with whom they interact, and the reasons why many things happen. By examining everyday occurrences, students are introduced to scientific ways of thought and to problem-solving methods used by scientists. A background in science and math is not required.
Course Learning Requirements/Embedded Knowledge and Skills

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

1.) Explore the evolution of the scientific method and demonstrate how it can be used to draw conclusions about contemporary scientific problems or issues.
   - Trace current scientific thinking to its historical antecedents.
   - Describe and provide examples of the scientific method.
   - Identify strategies to apply the scientific method to explain everyday phenomena:
     i. Record observations of specified occurrences.
     ii. Form a hypothesis that is consistent with what is observed.
     iii. Use the hypothesis to make predictions.
     iv. Modify the hypothesis in light of the results.
     v. Propose a theory that explains the observations.

2.) Locate, interpret, analyze and organize scientific information from a variety of sources.
   a. Identify reliable sources of scientific information.
   b. List factors that contribute to a source’s reliability.
   c. Collect information from the Internet and printed sources.
   d. Work with others to construct three Halls of Fame of Internet sites relevant to the major themes of the course.
   e. Write short reports that show how scientific knowledge affects everyday phenomena.

3.) Define and use selected terms and concepts related to the study of life sciences and physical sciences.
   a. Define and learn the meaning of various scientific terms used in the course contents.
   b. Make use of these terms when writing reports.
   c. Develop a strategy for interpreting new scientific words.
   d. Work with others to construct a course glossary of key scientific terms relevant to the course.
4.) Describe matter and energy within the broader context of science, identify selected key figures in science, and at least one significant contemporary issue.
   a. Identify key concepts and terms related to matter and energy.
   b. Identify current issues in matter and energy.
   c. Follow the principles of the scientific method to address given situations related to matter and energy.
   d. Write a short report that shows how scientific knowledge affects an everyday situation and/or contemporary issue.

5.) Describe earth science within the broader context of science, identify selected key figures in science and at least one significant contemporary issue.
   a. Identify key concepts and terms related to ecology.
   b. Identify current issues in the earth sciences and ecology.
   c. Use principles of the scientific method to address a given situation related to change as a result of human impact on the environment.
   d. Write a short report that shows how scientific knowledge affects an everyday situation and/or contemporary issue.

6.) Describe life science within the broader context of science, identify selected key figures in science and at least one significant contemporary issue.
   a. Identify key concepts and terms related to life science.
   b. Identify current issues in the life sciences.
   c. Use principles of the scientific method to address a given situation related to life sciences.
   d. Write a short report that shows how scientific knowledge affects an everyday situation and/or contemporary issue.

**Evaluation/Earning Credit**

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

Quiz(zes)/Test(s) (20%)

Validates Outcomes: CLR 1, CLR 2, CLR 4, CLR 5, CLR 6, EES 4, EES 5, EES 6, EES 11

Discussion Forum (40%)

Validates Outcomes: CLR 2, CLR 3, CLR 4, CLR 5, CLR 6, EES 1, EES 2, EES 7, EES 10, EES 11
Written Assignment(s) (30%)

Validates Outcomes: CLR 1, CLR 2, CLR 3, CLR 4, CLR 5, CLR 6, EES 1, EES 4, EES 5, EES 6, EES 7, EES 10, EES 11

Final Exam (8%)

Validates Outcomes: CLR 2, CLR 4, CLR 5, CLR 6, EES 1, EES 4, EES 7, EES 10, EES 11

Written Assignment(s) (2%)

Validates Outcomes: EES 1, EES 4

Students are expected to meet evaluation and completion deadlines as stated in course outline and course section information documents. In circumstances where evaluation and/or completion deadlines are missed or student performance has been affected by a temporary or permanent disability (including mental health), interim or retroactive accommodations may be considered. In such instances, please consult your course faculty member. For other situations where deferral of evaluations may be warranted, please refer to college policy AA21.

Learning Resources

All course notes are given in Bright Space with Internet links for additional information and examples. There is no text book to purchase. Electronic books used are

Vision Learning http://www.visionlearning.com/
Physical Geography http://www.physicalgeography.net/

Learning Activities

One face-to-face class meeting in week one of the course;
Managing your own time, learning and assessment through;
   Internet research;
   Online discussion using discussion boards;
   Collection of observations of data;
   On-going communication (via e-mail and discussion board) with the instructor and other participants in the course.
Learning activities may include
   Individual and Group Assignments, including personal reports and web quests,
   constructing glossaries of scientific terms and building a library of virtual science sites on the Internet.
Quizzes
Online Discussion (posting information to Discussion Boards and commenting on the postings of others)
Approximately every three to four weeks, you will be expected to
   make eight discussion board contributions,
   take up to three quizzes
write a one page report supported by Internet or printed resources
You will be expected to contribute to the class discussion boards.
The term is 15 weeks in duration with Week 8 included as Mid-Term Break.

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: Interview with a PLAR officer and presentation of documentation supporting a claim

Grade Scheme

<table>
<thead>
<tr>
<th>Final Grade</th>
<th>Mark Equivalent</th>
<th>Numeric Value</th>
<th>Final Grade</th>
<th>Mark Equivalent</th>
<th>Numeric Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90% - 100%</td>
<td>4.0</td>
<td>A</td>
<td>85% - 89%</td>
<td>3.8</td>
</tr>
<tr>
<td>A-</td>
<td>80% - 84%</td>
<td>3.6</td>
<td>B+</td>
<td>77% - 79%</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>73% - 76%</td>
<td>3.0</td>
<td>B-</td>
<td>70% - 72%</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>67% - 69%</td>
<td>2.3</td>
<td>C</td>
<td>63% - 66%</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>60% - 62%</td>
<td>1.7</td>
<td>D+</td>
<td>57% - 59%</td>
<td>1.4</td>
</tr>
<tr>
<td>D</td>
<td>53% - 56%</td>
<td>1.2</td>
<td>D-</td>
<td>50% - 52%</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0% - 49%</td>
<td>0</td>
<td>FSP</td>
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Course Related Information

Please refer to the Course Section Information (CSI) / weekly schedule for specific course-related information as provided by your professor.

Department Related Information

School of Business Procedures
The School of Business Procedures file is located under “Course Information” in your course Brightspace 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 Brightspace 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" and “Safe Assign” plagiarism detection software is in use in the School of Business. Professors may require students to submit their work for review. Students are accountable to 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, you are strongly encouraged to make an appointment at the Centre for Accessible Learning to identify your needs. Ideally, this should be done within the first month of your program, so that a Letter of Accommodation (LOA) can be provided to your professors. If you are a returning student, please ensure that professors are given a copy of your LOA each semester.

**Retroactive Accommodations**
Students are expected to meet evaluation and completion deadlines as stated in course outline and course section information documents. In circumstances where evaluation and/or completion deadlines are missed or student performance has been affected by a temporary or permanent disability (including mental health), interim or retroactive accommodations may be considered. In such instances, please consult your course faculty member. For other situations where deferral of evaluations may be warranted, please refer to college policy AA21.

**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 to 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 Mobile Devices in Class**
With the proliferation of small, personal mobile 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 Mobile 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.

*Note: It is the student’s responsibility to refer to the Algonquin College Policies website for the most current information at http://www.algonquincollege.com/policies/

**Legend**

- 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