

ENVT 111 Health and Safety for the Environment Industry

3 Credits, 1 Hour Lecture, 3 Hours Lab per week

This course provides an introduction to occupational health and safety and environmental topics to prepare students for entry into the workforce. The curriculum includes a series of modules and certifications to increase students' understanding of safe work practices and rights and responsibilities of employers and employees as related to analysis of problems and solutions in the environmental occupational sector. Students must demonstrate certifiable proficiencies in WHIMIS (Workplace Hazardous Materials Information System), Standard First Aid Level C, Wilderness Awareness, GPS basics (Global Positioning System), and other certifications as required by industry.

Instructor

Instructor: Neil O'Donnell
Office location : S209g
Phone number: 780-791-4821
[email neil.o'donnell@keyano.ca](mailto:neil.o'donnell@keyano.ca)

Office Hours (Fall 2019)

Monday 11:00 – 1:50 pm
Wednesday 10:00 – 11:50 am
Thursday 2:00 – 3:50 pm

Other times are possible, by appointment

Hours of Instruction

Monday	4:00 – 4:50 pm	(Lecture)	S 214
Friday	9:00 – 11:50 am	(Lab)	CC267

Required Resources

Documents to be supplied as required by instructor on Moodle site.

Course Outcomes

Upon successful completion of this course, students will be able to:

- Establish and explain particulars of course topics, as they apply to relevant current events, with emphasis on those of environmental concern.
- Use and apply safe work practices, occupational health rules, safety & environment topics, including legislation, due diligence, health hazards, hazard & risk assessment, incident investigation and HS&E management systems.
- Participate in workshops, and complete unit tests and a final examination.
- Successfully obtain seven related certifications.

Evaluation

Assignment	Percentage	Date
3 lecture assignments	10%	Weeks 2, 5, 8
3 lab workshops	15%	Weeks 3, 6, 9
Unit Test #1	10%	Week 7
Unit Test #2	10%	Week 13
Certifications	25%	various
Final Examination	30%	Week 15

Lab Sessions and Certificates

The labs will run 3 hours per week. Attendance is mandatory. To get credit for a lab, you must attend the scheduled lab session. If you are absent, the mark recorded will be zero.

Sessions for certificates ordinarily will run during a regular weekly lab period. The scheduling will depend on availability of venues and instructors. One certificate (H₂S Alive) requires a full day, and one (First Aid) require 2 days, likely on a weekend. The instructor will provide scheduling and dates as soon as confirmation is available. In order to pass this course, every assigned certificate must be obtained, and electronic copies submitted to the instructor via Moodle.

Most of the laboratory and assignment exercises in this course will be conducted in small teams. Observations, notes, and diagrams may be collective in nature, but your record must be made individually, i.e., no group submissions. All lab observations, notes, and diagrams must be completed in the lab, unless specified differently by the instructor. You must carry out any calculations yourself, and written answers must be in words composed uniquely by you.

Due Dates

Students present for the lab should hand in completed reports or assignments at the end of that lab session, or no later than two weeks following, with no penalty. After two weeks, a late penalty will be assessed, as outlined below.

- Due dates usually are set for two weeks following a lab, video assignment, report, field trip, or presentation.
- Otherwise, if submitted within one week (7 days) after the Due Date – 50% of regular mark.
- More than three weeks late – zero assigned.
- Unless specified differently by instructor, labs, reports, and assignments will be submitted electronically via Moodle.
- Any changes due to special circumstances will be communicated by instructor to students via Moodle.

Term Mark

- Mark will be determined from all the labs, reports, and assignments.
- Mark will be weighted average of all submissions.
- If all submissions have been handed in, the lowest mark will be excluded from the calculation.
- If one submission is missing, the calculation will be based on the weighted average of the others. In other words, you can miss one submission without penalty.
- If more than one submission is missing, the calculation will include the zeros for other missing items.
- If 20% or more of submissions (labs, reports, and assignments) are missing, student will not be allowed to write the final exam.
- The 25% for the certificates will not be prorated. All certificates must be obtained.

A grade of C- is required for progression or transfer.

Grading System

Descriptor	Alpha Grade	4.0 Scale	Percent	Rubric for Letter Grades
Excellent	A+	4.0	> 92.9	Work shows in-depth and critical analysis, well developed ideas, creativity, excellent writing, clarity and proper format.
	A	4.0	85 – 92.9	
	A-	3.7	80 – 84.9	
Good	B+	3.3	77 – 79.9	Work is generally of high quality, well developed, well written, has clarity, and uses proper format.
	B	3.0	74 – 76.9	
	B-	2.7	70 – 73.9	
Satisfactory Progression	C+	2.3	67 – 69.9	Work has some developed ideas but needs more attention to clarity, style and formatting.
	C	2.0	64 – 66.9	
	C-	1.7	60 – 63.9	
Poor Minimum Pass	D+	1.3	55 – 59.9	Work is completed in a general way with minimal support, or is poorly written or did not use proper format.
	D	1.0	50 – 54.9	
Failure	F	0.0	< 50	Responses fail to demonstrate appropriate understanding or are fundamentally incomplete.

Proposed Schedule of Topics (Lectures)

Introduction and Course Organization
Module 1 OH&S Overview <ul style="list-style-type: none"> Principles of H&S Safety Culture (policy, roles) Evolution of Safety Systems H&S Legislation Overview
Module 2 OH&S Due Diligence <ul style="list-style-type: none"> Definitions Checklist to demonstrate Actions for supervisors and workers <i>Workshop #1: Due Diligence</i>
Module 3 Environmental Due Diligence <ul style="list-style-type: none"> Legislation: Provincial– EPEA, Federal - CEPA Penalties & enforcement Environmental standards Ethical & Moral Responsibilities
Module 4 Environmental Impacts <ul style="list-style-type: none"> Environmental cycles Soils Vapours/Gases (LDAR) Liquids Environmental control equipment
TEST (Modules 1-4) Week 7

<p>Module 5 Hazard & Risk Management</p> <ul style="list-style-type: none"> • Risk Management Process • Field Level Risk Assessment • Workplace Inspection • PPE (Use & Selection, Maintenance) • <i>Workshop #2: FLRA</i>
<p>Module 6 Incident Reporting & Investigation</p> <ul style="list-style-type: none"> • Why investigate? • Collecting & Analyzing Evidence • Sequence of Events • Identifying Cause • Emergency Response • <i>Workshop #3: Incident Investigation</i>
<p>Module 7 Handling & Storage</p> <ul style="list-style-type: none"> • Fire safety • Safe handling and storage • Handling Hazardous Wastes
<p>Module 8 Occupational Health Hazards</p> <ul style="list-style-type: none"> • Recognizing Occupational health hazards; EFAP • Records & Statistics • Workers' Compensation Act • Return to Work / Duty to Accommodate
<p>TEST Modules 5-8 Week 13</p>
<p>Module 9 HS&E Management Systems</p> <ul style="list-style-type: none"> • CSA Z1000 • ISO 14001 overview • Safe Work Procedures • Preventative Maintenance
<p>Final Exam (All modules 1-9) Week 15</p>

ENVT111 Certifications Fall 2019
Certification #1: WHMIS, plus lab extra - Workplace Hazardous Materials Information System
Certification #2 BSO - basic Safety Orientation
Certification #3 CSTS – Construction Safety Training System
Certification #4 GPS Basics
Certification #5 First Aid Level C
Certification #6 Bear and Wildlife Awareness – 2 certificates – lecture and hands-on field training
Certification #7 H2S Alive

Please Note:

Date and time allotted to each topic is subject to change.

Performance Requirements

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College credit calendar.

More specific details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

Laboratory Safety

In the science laboratories, safety is important and therefore students must complete the *WHMIS for Students* online training course on Moodle before entering the science laboratories.

Students must comply with the mandatory laboratory safety rules for this course as provided in the laboratory manual. Failure to do so will result in progressive discipline such as a verbal warning, refused entry into the laboratory, or suspension from the College.

Before entering the lab, students are responsible reviewing the lab manual and relevant Safety Data Sheets for the purpose of evaluating risks associated to health. Some hazards used in the laboratory may have additional risks to those with pre-existing medical conditions.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a students' learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and / or notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own
- The use of unauthorized aids in assignments or examinations (cheating)
- Collusion or the unauthorized collaboration with others in preparing work
- The deliberate misrepresentation of qualifications
- The willful distortion of results or data
- Substitution in an examination by another person
- Handing in the same unchanged work as submitted for another assignment
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. Your course work will not be graded until you show this signed certificate.

Specialized Supports

The Student Academic Support Services (SASS) department: Accessibility Services, Skill Centre, Wellness Services and Student Life Department work together to support student success at Keyano College.

Accessibility Services (CC167) supports student success through group and individualized instruction of learning, study and test taking strategies, and adaptive technologies. Students with documented disabilities, or who suspect a disability, can meet with the Learning Strategists to discuss accommodation of the learning barriers that they may be experiencing. Students who have accessed accommodations in the past are encouraged to visit our office at their earliest opportunity to discuss the availability of accommodations in their current courses. Individual appointments can be made by calling 780-791-8934.

Skill Centre (CC119) provides a learning space where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff. Students visiting the centre have access to one-to-one or group tutoring, facilitated study groups, and assistance in academic writing. The Skill Centre's Peer Tutor program provides paid employment opportunities for students who have demonstrated academic success and want to share what they have learned. Tutoring is available free to any students registered at Keyano College on a drop in basis, from 8:30 am to 5:00 pm Monday through Friday. Additional evening hours are subject to tutor availability and are posted in the Skill Centre.

Wellness Services (CC260) offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. The Mindfulness Room in CC260 is available as a quiet space for students to relax during regular office hours. Wellness Service welcomes students to participate in any of the group sessions offered throughout the academic year addressing such topics as Mindfulness and Test Anxiety. Individual appointments can be made by calling 780-791-8934.

Student Life Department (CC210) is a place for students to go when they don't know who else can answer their questions. The staff will help students navigate barriers to success and if they don't know the answer, they will find it out. Student success is directly affected by how connected a student feels to their college. The student life department is there to help students get connected.

Please watch your Keyano email for workshop announcements from our Student Academic Support Services team.