

**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: Dr. Sirajum Munira  
Office location: S209C  
Phone number: 780-791-4816  
[email: sirajum.munira@keyano.ca](mailto:sirajum.munira@keyano.ca)

**Office Hours (Fall 2020)**

Monday	12:00 pm – 12:50 pm
Tuesday	10:00 am – 11:50 am
Thursday	11:00 am – 11:50 am
Friday	12:00 am – 12:50 am

Other times are possible, by appointment

**Hours of Instruction**

Tuesday 9:00 am – 10:00 pm (Lecture) Location: S 214  
Friday 9:00 am – 11:50 am (Lab) Location: CC 267

**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 (Tentative)
2 lecture assignments	10%	Sept 22, Nov 20
3 lab workshops	15%	Oct 16, 23 and Nov 20
Mid-term	15%	Oct 27
Certifications	30%	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 (H<sub>2</sub>S 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 one week following, with no penalty. A late penalty will be assessed, as outlined below.

- Due dates usually are set for one week 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 two 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.
- If 20% or more of submissions (labs, reports, and assignments) are missing, student will not be allowed to write the final exam.
- The 30% for the certificates will not be prorated. All certificates must be obtained.

**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 <b>Progression</b>	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 <b>Minimum Pass</b>	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.

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

**Proposed Schedule of Topics (Lectures)**

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

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

<b>ENVT111 Certifications Fall 2020</b>
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 – lecture and hands-on field training
Certification #7 H2S Alive

Date	Lab/Workshop/Training	Online/Weekend Training
Sept 4	No Lab	
Sept 11	WHMIS (must complete by Sept 15)	
Sept 18	Bear safety	
Sept 25	Self-Online training/Assignment	BSO (3hrs)
Oct 2	GPS	
Oct 9	Plan Due Diligence GARDA Security	
Oct 16	Workshop #1 GARDA	Oct 17-18, First Aid (16hrs)
Oct 23	Workshop #2 Incident Investigation	
Oct 30	Assignment	CSTS (4hrs)
Nov 6	No lab	Nov 7 Sat H <sub>2</sub> S alive (8hrs)
Nov 13	Reading Day (No lab)	
Nov 20	Workshop #3 Human Spotlight	
Nov 27	Discussion	

**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](#). The Keyano College credit calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

**Laboratory Safety**

In the science laboratories, safety is important.

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 student's 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 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; and
- 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 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 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](http://ilearn.keyano.ca). Then print the certificate, sign it, and show it to each of your instructors. Your course work may not be graded until you show this signed certificate.

### Specialized Supports

The Student Services department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano College. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented differently this semester by being provided mostly virtually. In-person service can be requested as needed. All Alberta Health Services guidelines will be followed for in-person appointments—wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30. The Library has evening and weekend hours. Please check [keyano.ca/library](http://keyano.ca/library) for current hours.

**Accessibility Services:** provides accommodations for students with disabilities. Students with documented disabilities, or who suspect a disability, can meet with a Learning Strategist to discuss their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact us to request them for the semester. Please note that requesting accommodations is a process and requires time to arrange. Contact us as soon as you know you may require accommodations. For accessibility services supports and to book a virtual appointment, please contact [accessibility.services@keyano.ca](mailto:accessibility.services@keyano.ca).

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing [accessibility.services@keyano.ca](mailto:accessibility.services@keyano.ca)

**Academic Success Coaching:** offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano. [Academic.success@keyano.ca](mailto:Academic.success@keyano.ca) is the best way to access resources during virtual service delivery.

**Wellness Services:** 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. All individual appointments will continue virtually.

Wellness Services welcomes students to participate in any of the virtual group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual virtual appointments can be made by emailing [wellness.services@keyano.ca](mailto:wellness.services@keyano.ca).

**Library Services:** provides students with research and information supports as they engage in their studies. Library staff are available to support you both virtually and in person during the fall semester. For library service supports and inquiries, please email [askthelibrary@keyano.ca](mailto:askthelibrary@keyano.ca).

[Individual support with the Information Librarian will be provided virtually. Appointments can be requested by email or by placing a Book a Librarian request](#) using the online form found [here](#).

Research and Subject Guides are helpful resources when conducting research or addressing your information needs. To view a subject or course specific guide, use the following [Subject Guides link](#)

To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the [Research Help Library page](#).

**Skill Centre:** provides academic support services to students registered in credit programs at Keyano College in the form of tutoring, writing support groups, facilitated study groups, workshops and study space. Tutoring services are **free** to Keyano students. Tutoring is available for Math, Writing, English, and Science subject areas.

While most courses are being offered online, the Skill Center will be offering mostly virtual tutoring services and in-person sessions as requested. Please email [Skill.centre@keyano.ca](mailto:Skill.centre@keyano.ca) to get in contact with our tutoring staff.

For the most up to date information on how to book a tutoring session, please view the [Keyano Skill Centre homepage](#).

## E-Learning

Technology and internet will impact your online learning experience. It's important that you are able to watch an online video and other course materials, take online quizzes, and participant in a live class with your instructor and other students.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important. Here's a list of recommended system requirements for Fall 2020.

**Internet Speed**

Minimum Internet speeds of 5 Mbps.  
 Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home).  
 Check your internet speed with Fast.com.

**System requirements:**

Microsoft Windows	Apple
<p><b>Minimum Requirements:</b></p> <p>A Windows 10 <b>computer/laptop</b></p> <ul style="list-style-type: none"> <li>· Minimum 4GB of RAM.</li> <li>· 10GB+ available hard drive storage.</li> <li>· Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). <a href="#">Microsoft Office</a> software is free to all Keyano students and employees.</li> <li>· Microphone, webcam and speakers. A headset with a microphone is recommended.</li> <li>· System updates must be regularly installed.</li> <li>· Anti-Virus / Anti-Malware software</li> </ul>	<p><b>Minimum Requirements:</b></p> <p>A Macintosh (V10.14 and above) <b>computer/laptop</b></p> <ul style="list-style-type: none"> <li>· Minimum 4GB of RAM.</li> <li>· 10GB+ available hard drive storage.</li> <li>· Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). <a href="#">Microsoft Office</a> software is free to all Keyano students and employees.</li> <li>· Microphone, webcam and speakers. A headset with a microphone is recommended.</li> <li>· System updates must be regularly installed.</li> <li>· Anti-Virus / Anti-Malware software.</li> </ul>
<p><b>Recommended Requirements</b></p> <ul style="list-style-type: none"> <li>· 8GB of RAM</li> <li>· A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.</li> </ul>	<p><b>Recommended Requirements</b></p> <ul style="list-style-type: none"> <li>· 8GB of RAM</li> <li>· A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.</li> </ul>
<p>Chromebooks are <b>not</b> recommended as they are not compatible with testing lockdown browsers.</p> <p>A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.</p>	

**Specific department requirements:**

Business and OA programs require Windows 10.

Other programs may utilize Windows based tools as well.

**Computer Software**

Students will be able to get access to Microsoft Office 365 for Free using Keyano Credentials by [clicking here](#).

**Recording of lectures and Intellectual Property**

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not publish any of the lectures or lecture materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to publish or sell instructor notes without formal written permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property.

**ITS Helpdesk**

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing [its.helpdesk@keyano.ca](mailto:its.helpdesk@keyano.ca) or calling 780-791-4965.

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