

Course Outline

Environmental Technology

Fall, 2021

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, and other certifications as required by industry.

Instructor

Dr. Marie-France Jones Office location: S209E

Phone number: 780-791-8957

email: marie-france.jones@keyano.ca

Office Hours

 $\begin{array}{lll} \mbox{Monday} & 3:00 \ \mbox{pm} - 4:00 \ \mbox{pm} \\ \mbox{Wednesday} & 3:00 \ \mbox{pm} - 4:00 \ \mbox{pm} \\ \mbox{Thursday} & 2:00 \ \mbox{pm} - 4:00 \ \mbox{pm} \\ \mbox{Friday} & 3:00 \ \mbox{pm} - 4:00 \ \mbox{pm} \end{array}$

Hours of Instruction

Lecture: Thursday 4:00 pm - 4:50 pm (Location: S 214) Laboratory: Friday 9:00 am - 11:50 am (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 six related certifications.

Evaluation

Item	Percent	Date (Tentative)
Assignments	20%	Various
Midterm	10%	Oct 27
Certifications	40%	Various
Final Examination	30%	TBA

All assignments will be due 1 week after the lab/workshop. Late assignments will receive a grade of zero. Extensions are available if requested prior to the due date.

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.

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. 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.

Grading System

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

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Proposed Schedule of Topics (Lectures)

Date	Module	Topics
Sept 6 & 13	Module 1	Principles of H&S
	OH&S Overview	Safety Culture (policy, roles)
		Evolution of Safety Systems
		H&S Legislation Overview
Sept 20	Module 2	Definitions
	OH&S Diligence	Checklist to demonstrate
		Actions for supervisors and workers
Sept 27	Module 3	Legislation: Provincial— EPEA, Federal - CEPA
	Environmental Due	Penalties & enforcement
	Diligence	Environmental standards
		Ethical & Moral Responsibilities
Oct 4 & 11	Module 4	Environmental cycles
	Environmental Impacts	Soils
		Vapours/Gases (LDAR)
		Liquids
		Environmental control equipment
Oct 18	Module 5	Risk Management Process
	Hazard & Risk Management	Field Level Risk Assessment
		Workplace Inspection
		PPE (Use & Selection, Maintenance)
Nov 1	Module 6	Why investigate?
	Incident Reporting &	Collecting & Analyzing Evidence
	Investigation	Sequence of Events
		Identifying Cause
		Emergency Response
Nov 8	Module 7	Fire Safety
	Handling & Storage	Safe Handling and Storage
		Handling Hazardous Wastes
Nov 15	Module 8	Recognizing Occupational Health Hazards; EFAP
	Occupational Health	Records & Statistics
	Hazards	Workers' Compensation Act
		Return to Work / Duty to Accommodate
Nov 22 & 29	Module 9	CSA Z1000
	HS&E Management	ISO 14001 Overview
	Systems	Safe Work Procedures
		Preventative Maintenance

ENVT111 List of Certifications Fall 2021

#	Certificate / Training	Date
1	Workplace Hazardous Materials Information System (WHMIS)	Sept 10
2	Common Safety Orientation (CSO)	Sept 17
3	Construction Safety Training System (CSTS)	Sept 24
4	Bear and Wildlife Awareness	Oct 1, 8, 15
5	First Aid Level C	Oct 29, 30
6	H2S Alive	Nov 20

^{*}Date and time allotted to each topic is subject to change

Performance Requirements and Student Services

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 <u>Keyano College credit calendar</u>. 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.

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, <u>you must successfully complete</u> the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of <u>your instructors</u>. 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. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented through a model to respond to the restrictions in force at the time. In-person and virtual services will be offered. 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 College is closed for statutory holidays. If you require support outside of regular business hours, please inform the support service team, and we will do our best to accommodate your needs.

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 supports and to book an appointment, please contact 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

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. Students may access services virtually and in-person.

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

Individual appointments can be made by emailing 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 online and in-person throughout the semester. For a detailed list of library supports and services, go to www.keyano.ca/library. For all inquiries, please email askthelibrary@keyano.ca or chat with us online.

Begin your research with the <u>Library's FIND page</u>. Search for information and sources for your assignments using the OneSearch, the Library's Catalogue, or by searching in a specific database selected from the A-Z Database List.

Individual support with us is available. For support with citations, research and other information needs, appointments can be booked using the online <u>Book A Librarian Calendar</u>. For support with Moodle, educational tools for assignments, Microsoft Office, Zoom, Teams and more, book an appointment using the online <u>Educational Technology Support Calendar</u>.

Research and subject guides are helpful resources when beginning your research, assignment, using new educational technology, or addressing other information needs. To view a subject or course-specific guide, check out the complete listing of online <u>Subject Guides</u>.

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

The Loanable Technology collection is available to support students in their learning pursuits, whether online, in person or both. Items available for borrowing include mobile projectors, webcams, noise-cancelling headphones, Chromebooks, and laptops. For an up-to-date list of technology available for borrowing as well as support available, go to the Library's <u>Loanable Technology webpage</u>.

Academic Success Centre: The Academic Success Centre is a learning space in the Clearwater Campus (CC-119) at Keyano College. Students can gather to share ideas, collaborate on projects, get new perspectives on learning from our Academic Content Specialists, or use the Centre's educational resources. The Academic Success Centre provides academic support services to students registered in credit programs at Keyano College in the form of individual tutoring, writing support groups, facilitated study groups, workshops, and study space. Services are **free** to Keyano students.

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Academic Content Specialists are available in the areas of Math, Science, Human Services, and English/Humanities. This covers all courses offered at Keyano. The Academic Success Coach can also be found in the Academic Success Centre.

For the most up to date information on how to book a session, please view the Keyano Academic Success Centre homepage.

Academic Integrity: The goal of the Academic Success Centre is to foster a student's ability to learn effectively and independently. Students registered at Keyano College are welcome to drop by the Centre to visit with any of our Academic Content Specialists to discuss their academic concerns.

Availability: Monday to Friday: 8:30 a.m. – 4:30 p.m. Flexible times may be available upon request. Virtual and in-person sessions, please email to get in contact with our Academic Content Specialists. For the most up to date information on how to book a session, please view the Academic Success Centre homepage.

Academic Success Coach: 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 is the best way to access resources during blended service delivery. The Academic Success Coach is located in the Skill Centre in CC-119 at the Clearwater Campus.

E-Learning

Technology and internet will impact your online learning experience. It's important that you can watch an online video and other course materials, take online quizzes and participate in a live class with your instructor and other students. Live/virtual classes will be hosted in Microsoft Teams or Zoom.

For all course delivery types, you will access your course resources on Keyano's learning management system, **Moodle (iLearn)**. Login in using your <u>Keyano username and password</u>.

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.

Internet Speed

Minimum Internet speeds of 10 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home).

Check your internet speed with Fast.com.

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 <u>clicking</u> <u>here</u>.

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System requirements:

Microsoft Windows Apple Minimum Requirements: Minimum Requirements:

A Windows 10 computer / laptop

- Minimum 4GB of RAM.
- 10GB+ available hard drive storage.
- · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees.
- Microphone, webcam and speakers. A headset with a microphone is recommended.
- · System updates must be regularly installed.
- Anti-Virus / Anti-Malware software

Recommended Requirements

- 8GB of RAM
- 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.

A Macintosh (V10.14 and above) computer / laptop

- Minimum 4GB of RAM.
- 10GB+ available hard drive storage.
- Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees.
- Microphone, webcam and speakers. A headset with a microphone is recommended.
- System updates must be regularly installed.
- Anti-Virus / Anti-Malware software.

Recommended Requirements

- 8GB of RAM
- 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.

Chromebooks are **not** recommended as they are not compatible with testing lockdown browsers.

A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.

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 share, distribute, or publish any of the lectures or course materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to share, distribute, publish or sell course related content (instructor, or students) without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The Academic Integrity Policy provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

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