

PEMP 102, Trades Science

2 credits

This course will provide an overview of simple machines, properties of matter, air and water. Topics also include review of energy and motion, temperature and heat, magnetism and electricity.

Instructor

Name
Office
Phone
Email

Office Hours

Hours of Instruction

October 9 – 13: Friday 1:00 – 4:00

October 16 – 20: Monday – Thursday 1:00 – 4:00; Friday 9:00 – 4:00

Required Resources:

Science for the Trades (2003), Grecki, ISBN: 0-9685027-7-6

Scientific calculator - Casio fx-260 solar is preferred

Pens, pencils, eraser, lined paper

Course Outcomes:

Upon successful completion of the course, the student shall be able to:

- Describe the basic structure of an atom and the subatomic particles that make an atom.
- Describe the properties of matter
- Describe how simple machines operate
- Describe the five forces and Newton's Laws
- Describe the concept of heat and explain its relationship to energy
- Compare temperature and heat
- Identify sources of heat and describe their effect
- Describe the basic principles of an electrical circuit
- Illustrate how electromagnets are produced

Evaluation:

Assignments	20%
Quizzes	30%
Final Exam (cumulative)	50%

A minimum pass is a grade of 65% (refer to Grading System below)

Grading System

Descriptor	4.0 Scale	Percent
Excellent	4.0	95 – 100
	3.7	90 – 94
Good	3.3	85 – 89
	3.0	80 – 84
	2.7	75 – 79
Satisfactory	2.3	70 – 74
	2.0	67 – 69
Minimum Pass **	1.7	65-66
	1.3	0 – 64
Failure	1.0	
	0.0	

NOTES: **A minimum pass is a grade of 65%

Proposed Schedule of Topics**Calendar of Important Events**

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	October 2	3	4	5	6
2	9 <i>Thanksgiving - College Closed</i>	10	11	12	13 <i>Science 1-4</i>
3	16 <i>Science 1-4</i>	17 <i>Science 1-4</i>	18 <i>Science 1-4</i>	19 <i>Science 1-4</i>	20 <i>Science 9-12 Science 1-4 Final Science Assessment</i>

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.

Student Attendance

- Apprentices may miss up to 18 hours (3 days) of class time without penalty.
- Apprentices missing more than 18 hours (3 days) of technical training classes may have their enrollment in technical training terminated.
- Each part of an hour missed from class will be recorded as 1 hour of missed time.
- Cell phone use in class is strictly prohibited. If caught with a cell phone during class time, the apprentice will be asked to leave for the remainder of the day and will be docked those hours as missed time.

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**Counselling and Accessibility Services**

Counselling Services provides a wide range of specialized counselling services to prospective and registered students, including personal, career and academic counselling.

SKILL Centre

The SKILL Centre is a learning space in the Clearwater Campus at Keyano College where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff.

The SKILL Centre, through a variety of delivery methods, provides assistance in skill development to Keyano students. Assistance is provided by instructors, staff and student tutors. Individuals wishing to improve their mathematics, writing, grammar, study, or other skills, can take advantage of this unique service.