



A POLYTECHNIC INSTITUTION

School of Manufacturing, Electronics & Industrial Processes

Program: Building Technology

Option: Building Science, Architectural, Economics

MSYS 3980
Plumbing Systems

Start Date:	January 3, 2006	End Date:	March 10, 2006
Total Hours:	20	Total Weeks:	10
Hours/Week:	2	Lecture:	1 hr
		Lab:	1.0 hr
		Shop:	
		Seminar:	
		Other:	
Term/Level:	4	Course Credits:	1.5

Prerequisites	is a Prerequisite for: Graduation
Course No.	Course Name

v Course Description

Encompasses a study of principles and practices of plumbing systems with a strong emphasis on achieving an acceptable level of proficiency in understanding components, materials and design layout as applied to potable water, storm and sanitary systems in buildings.

v Evaluation

(Course marks weighting is subject to adjustment)

Laboratory Assignments	10%	Comments:
Mid-Term Examination	40%	
Final Examinations	50%	Change may be allowed to suit specific purposes. Notices will be given should any change occur.
TOTAL	100%	

v Course Learning Outcomes/Competencies

Upon successful completion, the student will be able to:

1. Describe application, operation and construction of common plumbing systems.
2. Compare advantages and disadvantages of various piping materials for plumbing systems.
3. Layout water supply systems for potable water.
4. Identify cross connections in water supply systems.
5. Analyze piping systems using industry standard engineering procedures
6. Compare up-feed and down-feed potable water systems in high-rise buildings
7. Describe, layout, and analyze both sanitary and storm drainage systems
8. Describe operations of various private sewage disposal systems.

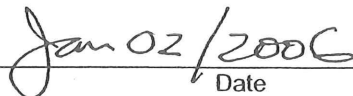
8. Describe operations of various private sewage disposal systems.

v **Verification**

I verify that the content of this course outline is current.

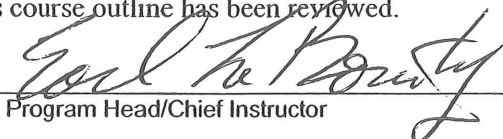


Authoring Instructor



Date

I verify that this course outline has been reviewed.



Program Head/Chief Instructor

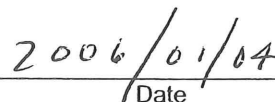


Date

I verify that this course outline complies with BCIT policy.



Dean/Associate Dean



Date

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

v **Instructor(s)**

Joseph Cheung	Office Location: SW9 202	Office Phone: 604 451 6831
Henk Rienks	SW9 205	604 451 8854
V. Limin		To be confirmed
	Office Hrs.: By Appointment only	E-mail Address: Joseph_Cheung@bcit.ca

v **Learning Resources**

Required:

BC Building Code 1998 Part 7 – Plumbing Services

Recommended:

Plumbing, L.V.Ripka, American Technical Publishers. ISBN 0-8269-0612-5

v **Information for Students**

Assignments: Late assignments, lab reports or projects will not be accepted. All assignment marks will be posted on the My.BCIT.ca Grade book. Students are responsible for checking their own marks on the grade book and will inform to the lab instructors in writing for any discrepancy with their assignment marks.

Makeup Tests, Exams or Quizzes: There will be **no** makeup tests, exams or quizzes. If you miss a test, exam or quiz, you will receive zero marks. Exceptions may be made for **documented** medical reasons or extenuating circumstances. In such a case, it is the responsibility of the student to inform the instructor **immediately**.

Ethics: BCIT assumes that all students attending the Institute will follow a high standard of ethics. Incidents of cheating or plagiarism may, therefore, result in a grade of zero for the assignment, quiz, test, exam, or project for all parties involved and/or expulsion from the course.

Attendance: The attendance policy as outlined in the current BCIT Calendar will be enforced. Attendance will be taken at the beginning of each session. Students not present at that time will be recorded as absent.

Illness: A doctor's note is required for any illness causing you to miss assignments, quizzes, tests, projects, or exam. At the discretion of the instructor, you may complete the work missed or have the work prorated.

Attempts: Students must successfully complete a course within a maximum of three attempts at the course. Students with two attempts in a single course will be allowed to repeat the course only upon special written permission from the Associate Dean. Students who have not successfully completed a course within three attempts will not be eligible to graduate from the appropriate program.

Course Outline Changes: The material or schedule specified in this course outline may be changed by the instructor. If changes are required, they will be announced in class.

Advancement: Students who fail three or more courses in a term cannot advance to the next term and may be asked to discontinue from the program.

v **Assignment Details**

Please bring the 1998 BC building Code and a set of highlighter with different colours for all labs.

Schedule

Week of/ Number	Outcome/Material Covered	Reference/ Reading	Assignment	Due Date
Week 1	Course outline/Introduction of plumbing systems			
Lab 1	Design exercise for plumbing system			
Week 2	Introduction Continue/storm drainage			
Lab 2	Review of plumbing systems in Buildings			
Week 3	Storm drainage system			
Lab 3	Design of storm drainage system			
Week 4	Plumbing fixtures			
Lab 4	Past exam review			
Week 5	Mid-Term exam – March 2, 2005			
Lab 5	Mid-term exam review			
Week 6	Sanitary drainage/ venting system			
Lab 6	Design of sanitary drainage and venting system			
Week 7	Venting system/Potable water system			
Lab 7	Design of venting system			
Week 8	Water Heating system			
Lab 8	Design of potable water system			
Week 9	Private sewage disposal system			
Lab 9	Past exam review			
Week 10	Review of plumbing systems			
Lab 10	Final Examination March 9, 06			