A POLYTECHNIC INSTITUTION

Course Outline

School of Manufacturing, Electronics & Industrial Processes
Program: Mechanical Engineering Technology
Option: Manufacturing Technology

MANU 4412
Production Planning

Start Date: March 20, 2006 **End Date:** May 26, 2006

Total Hours:	40	**Total Weeks:**	10			**Term/Level:**	4	**Course Credits:**	2.5
Hours/Week:	4	**Lecture:**	2	**Lab:**	2	**Shop:**		**Seminar:**	**Other:**

Prerequisites

Course No.	Course Name
MANU 3310	Material Removal Processes
MANU 3312	Computer Aided Manufacturing
MANU 3314	Tool Design

MANU 4412 is a Prerequisite for Graduation

Course Description

Examines the relative merits of manufacturing processes. Process plans for manufacturing parts requiring multiple processes will be developed. The economics of manufacturing processes will be analyzed.

Evaluation

Lab Reports	30%
Midterm	30%
Final Exam	40%
TOTAL	100%

Comments: Written quizzes and lab reports may be used for student evaluation.

Course Learning Outcomes/Competencies

Upon successful completion, the student will be able to:

1. choose the most appropriate material removal tool for a given quantity of parts to be produced.
2. cost each operation given machine tool amortization and appropriate labor and overhead costs.
3. develop a process plan for a material removal process for a given part in a given situation.
4. assess the relative merits of the process in given situations.
5. estimate the time required to complete the material removal operation.

Verification

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

Dave Lowe — Authoring Instructor

March 21, 2006 — Date

I verify that this course outline has been reviewed.

Program Head/Chief Instructor

Mar 21/06 — Date

I verify that this course outline complies with BCIT policy.

Dean/Associate Dean

2006/03/21 — Date

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

Instructor(s)

Dave Lewis	Office Location:	SW9–201	Office Phone:	604-432-8925
	Office Hrs.:	As posted	E-mail Address:	Dave_Lewis@bcit.ca
Brian Ennis	Office Location:	SW9–202	Office Phone:	604-451-6830
	Office Hrs.:	As posted	E-mail Address:	Brian_Ennis@bcit.ca

Learning Resources

Required:

- Eye protection. It **MUST BE WORN IN THE SHOP AT ALL TIMES** wherever there is a danger of airborne particles.
- Suitable close-fitting clothing capable of protecting arms and legs **MUST BE WORN AT ALL TIMES** when in the workshop.
- Safety footwear, defined as CSA approved (green triangle) with puncture proof soles, steel toe protectors, and ankle support, **MUST BE WORN AT ALL TIMES** when in the workshop.
- Scientific calculator

Reference:

CoroKey – Sandvik Coromant Tooling selection Handbook – 7th Edition

Machinery's Handbook – E. Oberg, F.D. Jones, H.L. Horton.

Information for Students

Assignments: Late assignments, lab reports or projects may **not** be accepted for marking. Assignments must be done on an individual basis unless otherwise specified by the instructor.

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. Students must attend and complete 90% of all lab work in order to take the final exam. Attendance will be taken at all lab sessions. 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.