



A POLYTECHNIC INSTITUTION

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 MANU 4412 is a Prerequisite for Graduation

Table with 2 columns: Course No., Course Name. Rows include MANU 3310, MANU 3312, and MANU 3314.

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

Table with 3 columns: Evaluation Item, Percentage, Comments. Rows include Lab Reports, Midterm, Final Exam, and TOTAL.

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.

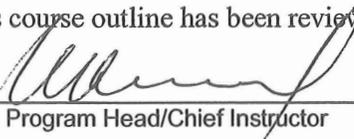


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Authoring Instructor



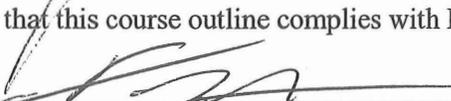
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Date

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.

## Instructor(s)

Dave Lewis	Office Location: SW9-201 Office Hrs.: As posted	Office Phone: 604-432-8925 E-mail Address: Dave_Lewis@bcit.ca
Brian Ennis	Office Location: SW9-202 Office Hrs.: As posted	Office Phone: 604-451-6830 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 – 7<sup>th</sup> 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.