

Linn-Benton Community College, Machine Tool Technology Department

Course Syllabus

Course name: Manufacturing Processes I

Credits: 2

Prerequisite: none

Days, Hours: Friday, 9:00am-11:50am

Location: IB103

Instructor: Samuel Studach

Office hours: by appointment

Office Phone Number: 541-917-4252

Email address: studacs@linnbenton.edu

Catalog description: This course provides training and learning experiences in basic machining operations. Students will be using lathes and milling machines to complete projects.

Course learning outcomes: Students successfully completing this course will be able to:

- Demonstrate a solid basic understanding of safe machine shop practices.
- Understand speeds and feeds.
- Set-up and operate lathes and mills.

Learning activities: This course will include lectures, quizzes, tests and demonstrations.

Assessment tasks: A student's progress will be evaluated as follows:

- Attendance, participation and quizzes 100%

Course Content

The following topics will be covered in this course:

- Machine shop safety
- Measuring tools including rulers and calipers
- Practical considerations related to speed, feed and depth of cut
- Safe operation and set-up of vertical milling machines
- How to use an edge finder
- Tooling for the mill
- Precision lay out at the surface plate using a height gage
- Safe operation and set-up of engine lathes
- Turning a part to a precise specification
- Using a live center
- Drilling using the tailstock
- Lathe tooling
- Basic blueprint interpretation
- Use of a Digital Read Out (DRO)

Request for Special Needs or Accommodations

Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

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Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the [CFAR Website](#) for steps on how to apply for services or call 541-917-4789.