# Linn-Benton Community College, Machine Tool Technology Department

## **Course Syllabus**

Course name: Manufacturing Processes I-3

Credits: 2

Perquisite: none

Days, Hours: Friday, 9:00am-10:00am

Location: online

Instructor: Teryk Morris

Office: email, text, phone

Office hours: by appointment

Phone number: 541-246-0435

Email address: teryk.morris@linnbenton.edu

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

<u>Course learning outcomes:</u> Students successfully completing this course will be able to:

- Upon successful completion of this course, students 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.
- Make parts of an assembly within tolerance.

<u>Learning activities</u>: This course will include lectures, quizzes, tests, demonstrations, a machine shop project and a contest.

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 edgefinder
- Tooling for the mill
- 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 <u>CFAR Website</u> for steps on how to apply for services or call 541-917-4789.