**Linn-Benton Community College, Machine Tool Technology Department**

**Course Syllabus SPRING 2020**

Course name: Manufacturing Processes 2

Course number: MA3.397B 01

Credits: 2

Prerequisite: Manufacturing Processes 1

Days, Hours: Monday, 6:00pm to 8:50pm

Location: REMOTE/DISTANCE LEARNING

Instructor: Chris Berry

Office hours: via Zoom by Appointment

Phone number: Office 541-917-4509 / Cell 503-931-7728 (Text Only)

Email address: berryc@linnbenton.edu

Catalog description: This course provides training and learning experiences in machining operations. Students will NOT be operating lathes and milling machines in person due to COVID-19 response. Machining theory and skills for successful employment are emphasized.

Course learning outcomes:

* Set-up and operate the vertical milling machine and the engine lathe.
* Apply safe shop practices.
* Understand the relationship between cutting speed, feed rate and depth of cut.
* Understand tool geometry and use a bench grinder to sharpen a tool bit for threading.
* Make accurate measurements with a ruler, micrometer, caliper and thread gages.
* Understand tolerances and clearances as they relate to an assembly.
* Demonstrate precision lay-out skills.

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

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

* Class participation and quizzes 40%
* Midterm Exam 30%
* Final Exam 30%

Course content

The following topics will be covered in this course (subject to change):

* Safety in the machine shop
* Basic blueprint interpretation as it relates to threads
* ANSI thread specifications
* How to calculate thread pitch
* Single point threading on a lathe
* How to sharpen a lathe tool for threading
* Using thread gages
* The three wire method for measuring thread pitch diameter

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.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see [Board Policy BP-1015](http://www.linnbenton.edu/faculty-and-staff/administrative-information/policies/board-policies-and-administrative-rules/1000-series-the-college/board-policy-series-number-1050-equal-opportunity-statement.php). Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: [linnbenton-advocate.symplicity.com/public\_report](http://linnbenton-advocate.symplicity.com/public_report)

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](https://linnbenton.edu/cfar) for steps on how to apply for services or call 541-917-4789.