

Manufacturing Fundamentals

TEMT - 1000 102

Course Description

An introductory course to basic procedures and machining operations encountered in the machine shop manufacturing industry. Topics include essential safety practices, SDS, use of basic measuring tools, and applications of alphabet of lines, interpreting title block data, reading dimensions, tolerances, surface finish, and interpreting multiple-view drawings, with sectional, auxiliary and projected views.

Course Student Learning Outcomes

- Identify safe practices in a machine shop.
- Identify correct clean-up procedures.
- Interpret a Safety Data sheet (SDS).
- Identify basic hand tools and their usage.
- Identify appropriate PPE.
- Demonstrate environmental awareness.
- Perform basic layout procedures.
- Perform basic measurements with calipers and micrometers.
- Perform basic mathematical calculations.

Engagement Plan

Example language:

- I will respond to email within one calendar day. I will offer feedback on major assignments within one calendar day. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting interactive announcements which will offer specific opportunities for class questions and extra credit every other week.
- Additionally, I will be participating in the discussion forums with you to share my perspective within the discipline and to offer some nuances of interpretation that may not be present in your textbook.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

Keys for Success (how to succeed in the course)

Attendance is required, and mandatory in order to succeed in this class.

Brief Description of Assignments/Exams

We will lecture daily for about an hour, and then we will complete lab assignments daily.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Module 1: Lab 1 Check-in	Assignment	0

Due Date	Assignment Name	Assignment Type	Points
	Module 1: Lathe Parts Quiz	Quiz	6
	Module 1: Machinist Profession Quiz	Quiz	8
	Module 10: Lab 10 Check-in	Assignment	0
	Module 10: Lab Final 3 Check-in	Assignment	20
	Module 11: Lab 11 Check-in	Assignment	0
	Module 11: Lab Final 4 Check-in	Assignment	14
	Module 12: Written Exam 2 Form A	Quiz	32
	Module 2: Feeds and Speeds Quiz	Quiz	6
	Module 2: Lab 2 Check-in	Assignment	0
	Module 3: Calipers Instrument Reading Quiz	Quiz	7
	Module 3: Calipers Instrument Reading Quiz	Quiz	7
	Module 3: Lab Final 1 Check-in	Assignment	10
	Module 3: Lab Final 1 Check-in	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
	Module 3: Labs 3 & 4 Check-in	Assignment	0
	Module 3: Measuring Tools Quiz	Quiz	7
	Module 3: Measuring Tools Quiz	Quiz	7
	Module 3: Micrometers Instrument Reading Quiz	Quiz	7
	Module 3: Micrometers Instrument Reading Quiz	Quiz	7
	Module 3: Written Exam Form A	Quiz	39
	Module 3: Written Exam Form A	Quiz	42
	Module 3: Written Exam Form B	Quiz	42
	Module 3: Written Exam Form B	Quiz	42
	Module 6: Blueprints and Instructions	Assignment	0
	Module 6: Lab Final 1 Check-in	Assignment	20
	Module 6: Written Exam 1 Form A	Quiz	52

Due Date	Assignment Name	Assignment Type	Points
	Module 6: Written Exam 1 Form B	Quiz	52
	Module 9: Lab Final 2 Check-in	Assignment	20
	Module 9: Labs 8 & 9 Check-in	Assignment	0

Grading Scale

95-100%=A

80-94%=B

less than 80%=E

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

[Advising and Counseling Support Services](#)

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

[Student Academic Calendar](#)

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)