

COURSE SYLLABUS

Engineering Drafting Design Technology

EDDT2340 and EDDT2350 LAB

Manufacturing Processes Theory and Lab

Salt Lake Community College

Westpointe Workforce Training & Education Center

1060 North Flyer Way

Salt lake City, Utah

Instructor:

Office: [REDACTED]

Office Phone:

Cell Phone:

Office Hours:By appointment

E-Mail:

INTRODUCTION:

Manufacturing is the enterprise through which materials are processed into the millions of products we take for granted everyday. This course is designed to provide a general overview of manufacturing processes for basic materials such as metals, polymers, ceramics, and composites. Processes examined include casting, forming, molding, separating, conditioning, assembling and finishing. Regular textbook reading and homework problems will be assigned every week.

COURSE OBJECTIVES:

- Students will become familiar with the **Material Properties** of the following materials: metals, plastics, elastomers, ceramics, and composites.

- Students will understand the following material **Forming Processes**; Rolling, Spinning, Bending, Drawing, and Forging,
- Students will understand the following material **Casting Processes**; Sand Casting, Investment Casting, Full Mold Casting, Shell Mold Casting, Permanent Casting, and Centrifugal Casting
- Students will understand the following **Molding Process**; Injection molding, Blow molding, Thin Film Blow Molding, and Rotational Molding.
- Students will understand the following **Separating Processes**: Punching, Shearing, Turning, Milling, Grinding, Electro Discharge Machining, and Electro Chemical Machining.
- Students will understand the following **Conditioning Processes**: Heat Treating, Annealing, Tempering, Case hardening, plating, and Coating.

TEXT:

Introduction to Manufacturing Processes

By Mikell P. Groover

Published 2012, [cover screen shot link](#) [Download cover screen shot link](#)

GRADING:

EDDT2340 - Student's grades shall be determined by their performance on four tests, and a research report on Additive Manufacturing. Homework assigned is optional. Completed homework based on percentage completed will add from 0 - 10 points to each test taken. Attitude and participation will also be factored into the final grade.

Scores will be weighted, added, averaged and rounded to the nearest full percentage point with the final course grade as follows:

93 – 100% A	73 – 77.9% C
90 – 92.9% A-	70 – 72.9% C-
88 – 89.9% B+	68 – 69.9% D+
83 – 87.9% B	63 – 67.9% D
80 – 82.9% B-	60 – 62.9% D-
78 – 79.9% C+	< 59.9% E

EDDT2350 LAB – Student grade will be determined by their Attendance and Performance of 10 - 13 scheduled labs and lab reports. Attendance of the lab is a major factor in the final lab grade. During Lab the assigned projects are demonstrated, attendance of project demonstration is required before student can proceed. Clean-up and attitude can also influence course grade. Final course grad is as follows:

- A = 93% or above completed labs
- B = 92.9% - 83% completed labs
- C = 82.9% - 73% completed labs
- D = 72.9% - 63% completed labs
- E = 62.9% or less completed labs

POWER OUTAGE :

If the power goes out during class and the classroom becomes dark, class will move to areas of the building that have natural light or outside, class will not be canceled. If other classes have announce the cancellation of classes and you do not attend this class, you will be counted as absent, and you may not be allowed to make up missing assignments and projects. Normally, power is restored within half an hour.

SNOW STORM OR OTHER WEATHER CONDITION:

If weather conditions are severe and you wonder if the College will be open, you can get timely and accurate information by calling the information hotline from home. (801-957-INFO or 801-957-4636). Information is posted on this hotline at 5:00 a.m. and updated throughout the day as conditions change. Also, during large storms, local TV and radio stations may provide information about school closures.

If you are not in class and the school has not been officially closed you will be counted as absent and you may not be allowed to makeup missing assignments and projects.

EMERGENCY NOTIFICATION SYSTEM:

SLCC has an emergency alert system that allows the College to send alerts to students and employees simultaneously via familiar communications methods such as e-mail, text messaging, and phone (cell, mobile device, PDA, pager, etc.). When unexpected situations arise and timing is crucial, this system will help ensure that alerts reach the College community in a timely manner. **This service is free, but you must sign up** by going to your MyPage account, clicking on "Student," and then scrolling down to "Emergency Alert System" and providing the requested information. You can sign up at any time, to keep the account active, you must submit the information annually at the beginning of Fall Semester.

BUILDING EVACUATION:

The following points will be covered in class by you instructor when the syllabus is handed out. Make sure you understand each point. Ask you instructor for further clarification if needed.

- Classroom and building exits.
- Building Map.
- Use of elevators.
- Assembly location outside of the building.
- Individuals needing assistance during evacuation.

Other important student information is available using the [Institutional Syllabus](#).