

**1. Course Title:**

**Machining  
MET 255 – 4 Credits**

Two hours lecture and four hours laboratory per week.

MET Core Program Requirement

Prerequisite: None

This is a Technical content course under ABET Criterion 5

**2. Faculty Member Information:**

Instructor: William Cattin  
Office: Hogue 30  
Phone: 509- 963-  
E-mail: cattinw@cwu.edu

**3. Course Description:**

Basic operations and technical information concerning common metal working machines and metal machining processes.

**4. Textbook and other required materials for the course:**

Machine Tool Technology, Repp & McCarthy; McKnight & McKnight  
MET 255 Course Pack, available CWU Bookstore

**5. Specific Learner and Expressive Outcomes and Assessment Strategies:**

ABET Outcome Criteria #	Learner Outcomes	Assessment
	Upon completing the course, the student will be able to	
3a 9g,n	Perform simple and accurate turning operations using an engine lathe	Assessed through written homework and lab demos.
3a	Operate an engine lathe to cut threads	Assessed through lab demos.
3a,f 9g	Setup and perform simple milling operations on a vertical milling machine	Assessed through written homework assignments and examinations and lab demos.
3b, 9e	Use hand tools to accurately layout part feature locations	Assessed through lab demos.
3b 9g,n	Measure part features using precision instruments accurately	Assessed through written homework and lab demos.
3f, 9e,g	Create an operations process document for a simple machining job	Assessed through written homework assignments and examinations and lab demos.
3f	Demonstrate a complete understanding of safety procedures in theory and in practice while using lab equipment	Assessed through written homework assignments and examinations and lab demos.

**6. Course Topics and Schedule:**

**7. Grading:**

Assignment	Weight	
Attendance:	20% (1% per day)	
Course Pack:	10%	
Final Clean Up:	5%	
Threaded piece:	15%	
Hole Punch:	50%	Button: 20.00%
Total	100%	Base/ Guide: 20.00
		Misc. Parts/ Assembly: 10.00

A	100-92%	A-	90-92%		
B+	88-90%	B	82-88%	B-	80-82%
C+	78-80%	C	72-78%	C-	70-72%
D+	68-70%	D	62-68%	D-	60-62%

**8. ADA Statement:**

Students who have special needs or disabilities that may affect their ability to access information and or material presented in this course are encouraged to contact me or Robert Harden, ADA Compliance Officer, Director, ADA Affairs and Students Assistance on campus at 963-2171 for additional disability related educational accommodations.

Prepared by Roger Beardsley June 24, 2009