A. CATALOG DESCRIPTION
1. Credits: 1
2. Hours/Week: 1/16
3. Prerequisites (Course discipline/number): None
4. Co-requisites (Course discipline/number): CAD 1230, MATH 1015
5. MnTC Goals (if any): None

This course describes the basic components of a manual lathe and all the equipment required to safely use a lathe.

B. DATE LAST REVISED (Month, year): April, 2009

C. OUTLINE OF MAJOR CONTENT AREAS:
1. What is a Lathe?
2. Types of Lathes
3. Parts of the Engine Lathe
4. Lathe Size
5. The Headstock
6. The Spindle
7. The Lathe Bed
8. The Carriage
9. The Tailstock
10. Cutting Tools
11. Workholding Devices
12. Outer-Diameter Cutting Operations
13. Inner-Diameter Cutting Operations
14. Cutting Variables

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
Understand, describe, and use the basic components of a manual lathe.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Online Learning
2. Successful completion of online lessons
3. Successful completion of online assignments

G. RCTC CORE OUTCOME(S) ADDRESSED:
- Communication
- Critical Thinking
- Global Awareness/Diversity
- Civic Responsibility
- Personal/Professional Accountability
- Aesthetic Response

H. SPECIAL INFORMATION (if any):
All numbered courses ending with a 5 (Example: 0005) will be online classes provided by Tooling U. Please see link below http://www.toolingu.com/class-150115-basics-of-the-engine-lathe.html