

CASPER COLLEGE COURSE SYLLABUS  
**Course Number and Title** – MCHT 1610-60 MACHINE TOOL TECHNOLOGY I

**Semester/Year:** Fall 2015

**Lecture Hours:** 1

**Lab Hours:** 2

**Credit Hours:** 2

**Class Time:** 2:00 pm – 4:50 pm  
8/25/15- 10/15/15

**Days:** T TH

**Room:** WT 142/143

**Instructor's Name:** Mark McCool

**Instructor's Contact Information:** Office 129A

**Office Phone:** 307-268-2508

**Email:**  
mccoolm@caspercollege.edu

**Office Hours:** Monday through Thursday: 7:00am -8:00am  
Mondays and Wednesdays: 12:30pm-1:00pm

**Course Description:** An introduction to machine tools and processes. Includes theory and operation of the engine lathe, boring, sawing, tool grinding, threading, layout, and machine maintenance.

**Statement of Prerequisites:** None  
(Safety glasses are required.)

**Goal:** Demonstrate a degree of skill in the use of basic hand and machine tools common to the metal machine tool industry.

**Outcomes:** Demonstrate in writing and shop practice a grasp of technical and related information, pertaining to basic hand tools, engine lathe, drill press, saws, and grinders.

**Methodology:** Two lecture/labs per week. Demonstrations coupled with laboratory exercises will comprise the bulk of the class experience.

**Evaluation Criteria:** Students will be evaluated on the quality of lab work completed and by two written tests. All course work and final grade will be determined by a total of test percentage as follows:

90% & above = A  
80% - 89% = B  
70% - 79% = C  
60% - 69% = D  
59% & below = F

**Required Text, Readings, and Materials:**

No text will be required at this time.

REFERENCES: Machinery's Handbook, Industrial Press  
Technology of Machine Tools, 5<sup>th</sup> Edition, Krar-Check, McGraw Hill  
Standard Plant Operator's Manual, Steve Elonka, McGraw Hill  
Tool Book, Stephan Clark & Daniel Lyman, Galahad Books

**Class Policies: Last Date to Change to Audit Status or to Withdraw with a W Grade:**

*Last Date to Change to Audit Status:* See current Casper College catalog.

*Last Date to Withdraw With a W Grade:* See current Casper College catalog.

**Student Rights and Responsibilities:** Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Chain of Command:** If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

**Academic Dishonesty:** (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:** Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly.

**ADA Accommodations Policy:** If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, [bheuer@caspercollege.edu](mailto:bheuer@caspercollege.edu). The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

**Calendar or schedule indicating course content:**

*TOPIC OUTLINE*

WEEK:	1 – 2	Safety Basic shop math Basic Blueprint reading Basic Measurement Use and care of hand tools Simple layout Power saws
	3 – 7	Engine lathe: Cleaning & lubrication Nomenclature of machine Speeds and feeds Setup and operation of machines Turning Grooving Grinders Carbide tool grinding and tool geometry Mounting and dressing grinding wheels
	8	Final Testing

**Attendance Policy:** *Attendance is of utmost importance. Unexcused absences in the excess of 4 will result in the loss of one letter grade. Due to the consideration of the instructor and students, you must be present at the designated starting class time or you will not be allowed to participate unless prior arrangements with the instructor have been made.*