



**CAMPUS NAME:** Ankeny

Course TITLE: Engine Lathe Operations Lab II

**COURSE NUMBER: MFG 253-1, MFG 253-2** 

**SECTION NUMBER & CRN:** 

Section 1 20976 Section 2 21028

INSTRUCTOR INFORMATION

NAME: Dennis Knittel

EMAIL ADDRESS: dwknittel@dmacc.edu

**PHONE NUMBER:** 515-964-6451

**FAX NUMBER:** 515-964-6815

**OFFICE LOCATION:** Building 3E 104B

**OFFICE HOURS/APPOINTMENTS: M-R** 7:00-2:30 / F 11:00-2:00

**INSTRUCTOR INTRODUCTION:** 

**INSTRUCTOR WEB PAGE ADDRESS:** 

BLACKBOARD: https://secure.dmacc.edu/myonlinelearning/login.aspx

### **COURSE INFORMATION**

SEMESTER/YEAR: Spring 2017

DATE SYLLABUS CREATED AND/OR REVISED: 11/28/16

DAYS & TIME & LOCATION: MTWR 9:05-11:50 Rm 103

START / END DATES: Jan. 9, 2017 - Mar. 6, 2017 (Section 1)

MAR. 7, 2017 - MAY. 4, 2017 (SECTION 2)

http://go.dmacc.edu/students/pages/academiccalendar.aspx

Course description & credits: 3 Credit Class

PREREQUISITES: MFG 250 CO-REQUISITES: MFG 252 COURSE COMPETENCIES:

# During this course, the student will be expected to:

1. "Off-Hand" grind cutting tools for lathe.

2. Layout work pieces.

- 3. Operate a lathe.
  - 3.1 Perform daily maintenance requirements.
  - 3.2 Setup the following accessories four-jaw chuck, collet, steady rest, follower rest quick-change tool holder.
  - 3.3 Perform common operating procedures: facing, drilling, turning, chamfering, knurling, taper turning, form turning, single point threading, internal single point threading, aligning centers, boring, and boring tapers.
  - 4. Maintain <u>all</u> tooling and equipment (student or school property) in accordance with each individual manufacture.

### **PROJECTS**

To receive a grade, the project must be completed and function.

# **CRITERIA FOR A "100"**

Each of these elements must be met without exception!!

- \* dimensions within tolerance
- \* no sharp edges
- \* no burrs
- \* no restarts
- \* no welds
- \* no marks, that grinding will not clean up

TO EARN AN "A" 97% (no restarts)

Given one exception, meets criteria for a "100". each out of

tolerance dimension, or each burr, or each sharp edge, etc. counts as an exception

project 1 C Clamp handle

TO EARN A "B" 90% (not more than 1 restart)

given two exceptions, meets criteria for "A"

**TO EARN A "C" 83%** (not more than 2 restarts) given three exceptions, meets criteria for an "A".

TO EARN A "D" 75% (not more than 3 restarts)

given four exceptions, meets criteria for an "A".

TO EARN AN "F" 70%

Graded 50pts

given five exceptions, meets criteria for an "A".

### **Projects**

Graded 100pts	project 2	C Clamp Screws
Graded 100pts	project 3	C Clamp Caps
Graded 200pts	project 4	Mill Jacks
Graded 100pts	project 5	Yoke Clamp Screws
Graded 10pts	project 6	Yoke Clamp Caps
Graded 10pts	project 7	Metric Tap Guide
Graded 50pts	project 8	Vise Pin Retainer

# **TEXTBOOKS & MATERIALS**

REQUIRED TEXTBOOKS & ISBN: Machine Tool Practices 10th Edition

**ISNB**: 978-0-13-291265-5 **0-**13-291265-1

REQUIRED MATERIALS: Pencils, Calculator, Safety Glasses

**OPTIONAL OR RECOMMENDED BOOKS/MATERIALS:** 

**SOFTWARE APPLICATIONS:** 

Software notice: "All the software used in this class is copyrighted; therefore, it is not for distribution, copying, or personal use. This software is the property of Des Moines Area Community College."

### **COURSE POLICIES**

**ATTENDANCE/PARTICIPATION:** Students are required to attend and be in class on time. If student misses class the student must call and inform the instructor of his/her absence. Students missing 10% or more of the classes will receive a failing grade. Students that do not call in to notify the instructor of his/her absence will not be allowed makeup time.

### **GRADING CRITERIA:**

Tool & Die scale

A = 96.00% - 100% A- = 94.00% - 95.99% B+ = 91.90% - 93.99% B = 89.80% - 91.89% B- = 87.80% - 89.79% C+ = 85.70% - 87.79% C = 81.80% - 85.69% C- = 79.80% - 81.79% D+ = 77.70% - 79.79% D = 74.81% - 77.69% D- = 72.80% - 74.80%

CLASSROOM CONDUCT: https://go.dmacc.edu/handbook

Conduct/discipline policy/academic standards, etc.

**MISSED EXAMS:** No Exams.

**LATE ASSIGNMENTS:** 10% reduction, no credit after 3 days

EXTRA CREDIT: None CLASSROOM ATTIRE

SHORTS ARE NOT ALLOWED IN THE LAB. STUDENTS WHO COME TO CLASS IN SHORTS WILL NOT BE ALLOWED IN THE LAB. STUDENTS ALSO NEED WEAR SAFETY GLASSES AT ALL TIMES WHILE IN THE LAB. NO SANDALS OR OPEN FOOT WEAR.

**STUDY EXPECTATIONS:** Students are expected to practice with and familiarize themselves with the machine daily. If students have finished their project they will be allowed to work on personal projects and long as they conform to DMACC policy. (No Weapons) On personal projects students and required to furnish their own materials.

**WEATHER POLICY**: Individual circumstances such as health, childcare, rural roads, distance from the College, etc. can vary greatly among students and staff. It is always DMACC's goal to provide safe learning conditions, as well as provide the opportunity for students to attend classes when the vast majority is able to safely attend. The final decision to come to

College can only be made by the individual student based on their specific extenuating circumstances that may make it unsafe for them to travel. During adverse weather, DMACC faculty is considerate of students who are unable to attend classes due to unique extenuating circumstances. Notification of Campus/College closures will be sent out through the DMACC RAVE Alert System, posted to the DMACC webpage at <a href="https://www.dmacc.edu">www.dmacc.edu</a>, and where possible sent to local media.

**CLASS CANCELLATION PROCEDURE:** It is the responsibility of each faculty member to notify their students (in addition to their dean or provost) through some predetermined means if they must postpone or cancel a specific class.

**ACADEMIC DISHONESTY/PLAGIARISM:** Students are required to do their own work. Students caught cheating or turning in someone else's work will receive a failing grade for that assignment.

It is important for you to be familiar with and follow DMACC's Academic Misconduct policy. Students are encouraged to review DMACC's Academic Misconduct Policy on-line at <a href="https://go.dmacc.edu/handbook/polprocedures/pages/academicmisconduct.aspx">https://go.dmacc.edu/handbook/polprocedures/pages/academicmisconduct.aspx</a> or in the DMACC Student Handbook.

**COURSE SPECIFIC (LAB) SAFETY PROCEDURES:** 

### **DMACC INFORMATION**

**INSTRUCTOR HOME PAGES:** http://www.dmacc.edu/instructors

ADD/DROP DATES: <a href="https://go.dmacc.edu/registration/pages/add\_drop.aspx">https://go.dmacc.edu/registration/pages/add\_drop.aspx</a>

Last day to drop classes: October 31, 2014

**REFUND POLICY:** https://go.dmacc.edu/registration/Pages/refund.aspx

# SUPPORT SERVICES

### **SERVICES FOR STUDENTS WITH DISABILITIES:**

https://go.dmacc.edu/student\_services/disabilities

Any student with a documented disability who requires reasonable accommodation should contact the Disability Services Coordinator at **515-964-6850** or the counseling & advising office on any campus to apply for services.

# **COURSE SYLLABUS**

**DISCLAIMER:** "This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change without notice. Any potential exceptions to stated policies and requirements will be addressed on an individual basis, and only for reasons that meet specific requirements. If you have any problems related to this class, please feel free to discuss them with me."

**Nondiscrimination Policy:** Des Moines Area Community College shall not engage in or allow discrimination covered by law. This includes harassment based on race, color, national origin, creed, religion, sex (including pregnancy and marital status), sexual orientation, gender identity, age, disability and genetic information. Veteran status in educational programs, activities, employment practices, or admission procedures is also

included to the extent covered by law. Individuals who believe they have been discriminated against may file a complaint through the College Discrimination Complaint Procedure (ES4645). Complaint forms may be obtained from the Campus Provost's office, the Academic Dean's office, the Judicial Officer, or the EEO/AA Officer, Human Resources. For Title IX questions and concerns contact 515-964-6850.

Students who wish additional information or assistance may refer to Student Services procedure ES 4645 located at <a href="https://go.dmacc.edu/student\_services/int">https://go.dmacc.edu/student\_services/int</a>. Click Policies & Procedures.

Employees and applicants who wish additional information or assistance may contact the **EEO/AA Officer**, Human Resources, Bldg. 1 on the Ankeny Campus, or refer to HR Procedures 3000, 3005, 3010, 3015, and 3020 at http://www.dmacc.edu/hr/hrpp.asp

**Accommodations**: The Program Development/Academic Support Services Director is the official Student Accommodation Officer/Section 504/ADA Coordinator for DMACC. The ADA Coordinator's office is located in Bldg. 6-10E on the Ankeny Campus and may be contacted by voice (515-964-6857). The ADA Coordinator is responsible for ensuring that the college complies with federal regulations that guarantee qualified students with disabilities equal access to all programs and services. Any student, faculty, or staff member may contact the ADA Coordinator's office for clarification of federal regulations, appeal of a grievance, or resolution of a disability-related problem.

# SYLLABUS ADDENDUM

To access additional information related to DMACC policies and procedures that impact the classroom (i.e. use of technology, weather-related cancellations, classroom conduct, etc.), the DMACC student handbook, registration information (including add/drop dates and refund dates), student service information (including counseling and advising), the DMACC academic calendar, and campus-specific resources (i.e. Academic Achievement Center, library, computer, labs, etc.), go to <a href="https://go.dmacc.edu/handbook">https://go.dmacc.edu/handbook</a> and click "Syllabus Addendum" in the left navigation.

If you do not have access to a computer and need a printed version of any of the information described above, contact your instructor.

COURSE SCHEDULE Week or Date Assignment Due Date			
Week or Date	Assignment	Due Date	
1			

This workforce solution is funded by the IHUM Consortium which is 100% financed through a \$15,000,000 grant from the U.S. Department of Labor's Employment & Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

