

REEDLEY COLLEGE - IT 205 - SPRING 2022

FOUNDATION SKILLS IN INDUSTRIAL TECHNOLOGY

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SECTION: 59124

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OFFICE: IND 22
CLASSROOM: IND 17
LAB: IND 16 & 19
CLASS TIMES: Monday - Friday, 1:30 P.M. - 3:00 P.M.
UNITS: 2

DESCRIPTION: This course will cover the foundation skills in Industrial Technology and supply the basic skills and orientation to enter Reedley College's manufacturing program. Safety, measuring, use of shop tools and power equipment are among the skills that will be introduced and reinforced. Also includes field trips to local manufacturing industry. **ADVISORIES:** Mathematics 201.

EXPECTED

OUTCOMES: IT-205 SLO1: Recognize the various types of tools, materials, and processes as they relate to manufacturing technology.

IT-205 SLO2: Students will be able to describe basic functions within a manufacturing career pathway of their choice.

COURSE

OBJECTIVES:

- Practice using appropriate tools, equipment and materials used in manufacturing.
- Practice the safe use of selected shop equipment
- Make clear, knowledgeable choices when choosing career opportunities.

BASIC SKILLS

ADVISORIES: ELIGIBILITY FOR MATH 201

PREREQUISITES: NONE

MINIMUM STUDENT

MATERIALS: 1. SAFETY GLASSES

2. 3 RING BINDER

HOW CLASS WILL BE

CONDUCTED:

1. LECTURE - TOURS - DEMONSTRATIONS
2. INDIVIDUAL INSTRUCTION - SHOP WORK
3. ASSIGNMENTS AND QUIZZES

COURSE OUTLINE:**Lecture Content:**

- I. Shop Safety
 - A. Hand tools
 - B. Power Tools
 - C. Chemical
 - D. MSDS
- II. Measurement
 - A. Rules
 - B. Micrometers
 - C. Calipers
- III. Machine Shop
 - A. Lathe
 - B. Mill
- IV. Welding Shop
 - A. Arc Welding
 - B. Shearing and Cutting metal
- V. Shop Math
 - A. Four Basic Math functions
 - B. Decimals
 - C. Fractions

Lab Content:

- I. Shop safety
 - A. Evaluate dangerous situations
 - B. Eye, ear, skin protection
- II. Measurement
 - A. Use of Micrometers
 - B. Use of Rules
 - C. Use of calipers
- III. Machine Shop
 - A. Lathe set up
 - B. Mill set up
- IV. Welding Shop
 - A. Cutting metals to size
 - B. Electric welding setup
- V. Materials
 - A. Metals
 - B. Fasteners
 - C. Abrasives
- VI. Hand tools
 - A. Cutting tools
 - B. Striking tools

GRADING:

	NUMBER	POINTS EACH	TOTAL POINTS	PERCENT
SAFETY TEST	1	50	50	10.00%
FINAL EXAM	1	200	200	40.00%
HOMEWORK	6	20	120	24.00%
PARTICIPATION	13	10	130	26.00%
TOTAL POINTS POSSIBLE			500	100.00%

DAILY POINT SYSTEM:	POINTS POSSIBLE PER DAY	4
	MORNING TARDY	-1
	BREAK TARDY	-1
	EARLY LEAVE	-1

GRADING SCALE:	500	TO	450	A
	449	TO	400	B
	399	TO	350	C
	349	TO	300	D

FINAL:

Wednesday May 18, 2022 1:30 PM - 3:00 PM

ESSENTIAL

INFORMATION: ANY ASSIGNMENT TURNED IN UP TO ONE WEEK LATE WILL RECEIVE 50% CREDIT.

HOME WORK WILL NOT BE ACCEPTED MORE THAN ONE WEEK LATE.

EXTRA POINTS MAY BE EARNED DURING THE SEMESTER BY ATTENDING FIELD TRIPS, DOING RESEARCH PAPERS, OR EXTRA SHOP WORK OUTSIDE OF SCHEDULED LABORATORY TIME.

ATTENDANCE AND PARTICIPATION IS VERY IMPORTANT. YOU MUST BE IN CLASS IN ORDER TO PARTICIPATE AND COMPLETE ALL OF THE WORK.

IN THE EVENT OF CLASS BEING CANCELLED YOU WILL BE NOTIFIED WITH A SIGN ON THE DOOR.

CHEATING AND/OR PLAGIARISM WILL NOT BE TOLERATED. A STUDENT WILL RECEIVE NO CREDIT FOR THE ASSIGNMENT IF, IN THE OPINION OF THE INSTRUCTOR, THE INDIVIDUAL HAS CHEATED.

IF YOU CARRY A CELLULAR PHONE OR PAGER, YOU NEED TO HAVE THE RINGER SET

IMPORTANT DATES:	JANUARY 10	M	START OF SPRING SEMESTER
	JANUARY 17	M	MARTIN LUTHER KING, JR. DAY - NO CLASS
	JANUARY 21	F	LAST DAY TO DROP A FULL-TERM CLASS FOR REFUND
	JANUARY 28	F	LAST DAY TO REGISTER FOR A FULL-TERM FALL CLASS
	JANUARY 28	F	LAST DAY TO DROP A FALL FULL-TERM CLASS TO AVOID A "W"
	FEBRUARY 18	F	LINCOLN DAY - NO CLASS
	FEBRUARY 21	M	WASHINGTON DAY - NO CLASS
	MARCH 11	F	LAST DAY TO DROP A FULL-TERM CLASS
	APRIL 11-14	M-TH	SPRING RECESS - NO CLASS
	APRIL 15	F	GOOD FRIDAY - NO CLASS
	MAY 16-20	M-F	FINAL EXAM WEEK
	MAY 20	F	END OF SPRING SEMESTER
	MAY 30	M	MEMORIAL DAY - NO CLASS

POLICIES AND

PROCEDURES: FAILURE TO ATTEND CLASS

FAILURE TO ATTEND CLASS ON A REGULAR BASIS WILL ADVERSELY AFFECT YOUR PERFORMANCE IN THIS COURSE. PLAGIARISM OR CHEATING OF ANY KIND WILL RESULT IN A GRADE OF "F" FOR THIS COURSE. THERE ARE NO MAKEUP EXAMS WITHOUT PRIOR PERMISSION OF THE INSTRUCTOR.

REQUIRED READING

REQUIRED READING SHOULD BE COMPLETED BEFORE THE CORRESPONDING LECTURE/DEMONSTRATION. ALL GRADES ARE FINAL UNLESS AN ERROR IN MATH HAS BEEN MADE BY THE INSTRUCTOR. THE INSTRUCTOR RESERVES THE RIGHT TO ADJUST THE COURSE OUTLINE, SCORING, GRADING, AND CONTENT AS NEEDED.

HAVING TROUBLE?

IF AT ANY TIME YOU FIND YOU ARE HAVING TROUBLE SUCCEEDING IN THIS COURSE WHETHER BECAUSE OF A CHANGE IN YOUR LIFE CIRCUMSTANCES OR BECAUSE OF SOMETHING YOU DO NOT UNDERSTAND ABOUT THE MATERIAL - PLEASE SEE ME. THERE ARE A NUMBER OF SERVICES AVAILABLE TO ASSIST REEDLEY COLLEGE STUDENTS TO SUCCEED IN THEIR COURSE WORK. I WOULD BE HAPPY TO RECOMMEND ONE OF THESE TO YOU.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:

IF YOU HAVE NEEDS AS ADDRESSED BY THE AMERICANS WITH DISABILITIES ACT (ADA), OR SECTION 504 OF THE REHABILITATION ACT, PLEASE NOTIFY ME IMMEDIATELY. REASONABLE EFFORTS WILL BE MADE TO ACCOMMODATE YOUR NEEDS.

KEEP TRACK OF RETURNED WORK. YOU SHOULD SAVE ALL OF YOUR WORK UNTIL THE END OF THE SEMESTER SO YOU CAN DOUBLE CHECK THE FINAL GRADE EARNED AS RECORDED BY THE INSTRUCTOR.