Course Syllabus MAT 743 Technical Mathematics

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Sections, Classrooms, Class Times

Section 3: IC 135 Monday/Wednesday 7:30-8:55
Section 4: IC 120 Monday/Wednesday 1:30-255
Section 2: IC 120 Monday/Wednesday 3:05-4:35

Required Textbooks:

The text will depend upon your area. These 5 texts will be used for the respective sections/focus:

Practical Problems in Mathematics for Carpenters, 9th edition
Authors: Mark W. Huth and Harry C. Huth
Delmar Cengage Learning

Practical Problems in Mathematics for Electricians, 9th edition
Author: Stephen L. Herman
Delmar Cengage Learning

Practical Problems in Mathematics for Manufacturing, 4th edition
Author: Dennis D. Davis
Delmar Cengage Learning

Practical Problems in Mathematics for Welders, 6th edition
Author: Robert Chasan
Delmar Cengage Learning

Mathematics for the Automotive Trade, 5th edition
Authors: John C. Peteron and William J. deKryger
Delmar Cengage Learning

Catalog Description: Applied mathematics skills are reviewed and concepts in measurement, basic algebra, graphs, geometry, and trigonometry are covered

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Learner Outcomes: Upon Completion of this course students will be able to demonstrate proficiency in the practical mathematics skills related to building construction and carpentry trades. These skills will include:

1. Basic arithmetic operations with whole numbers, decimals and fractions; (CT Math a, c, d)
2. Use of a calculator to determine length, area and volume; (CT Math a, c)
3. Calculations of percent and percentages (CT Math all)
4. Basic trigonometric skills to determine indirect measurements; (CT Math a, b, c)
5. Principals of discount and interest and how to calculate each; (CT Math a, b, c)
6. Estimation of material costs and quantities. (CT Math a, b)

Attendance and Participation: Each student is expected to attend and participate in all scheduled classes. It is the student's responsibility to obtain any notes, handouts, assignments, and instructions, which were disseminated during any class missed.

Equipment & Materials: Calculator (with Trig functions): e.g. Graphing Calculator or Scientific Calculator

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Assignments/Projects/Papers: Students will be required to complete a variety of assignments, papers, and projects throughout the semester. All assignments and quizzes are expected to be handed in by the due date assigned by the instructor.

Course Structure: This class will be conducted with lecture, discussion, and group work. Class time will be spent in related activities and in working of the topic problems. .

Students will be expected to work cooperatively on activities and to complete homework assignments. The calculator will make some problems much easier to solve. There will be some problem impossible to complete without a calculator. A graphing calculator is ideal for some of the activities. Although students may share calculators while completing activities and homework, it will never be permissible for students to share calculators during exams. In addition, cell phones and other keyboard calculators will not be allowed during exams

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Exams: Students are expected to take exams during regularly scheduled times. Except in emergencies, NO MAKE UP test will be available, unless **prior approval** is given by the instructor.

EVALUATION:

The final grade for this course will be based on tests, final exam, projects, class attendance, homework, and class participation. A total of 1000 points will be the basis for determining the final grade. There will be bonus points on the tests so it is possible to accumulate more than the 1000 points. Adjustments in the total points possible may occur.

Evaluation	Points
3 unit tests @ 100 points each	300
3 unit projects @ 100 points each*	300
Participation/Attendance (5 points per day)*	160
Extended Thinking Problems	**40**
Total Points Basis	**800**
***Includes homework as well as group work.	

*There is a 10 point bonus for projects turned in early. Late projects will have a minimum of 25% deduction. Projects are an important part of the course and give you an additional opportunity to succeed. Take advantage of the opportunity!!!!

Grades will be awarded as outlined below:

Grade	**Equivalent**	**Points Needed**
A	90-100%	720
B	80-89%	640
C	70-79%	560
D	60-69%	480
F	0-59%	

Class Session Dates: Fall 2015

Fall Semester 2014 Mon. & Wed.			
Session	**Date**	**Session**	**Date**
1	Aug 26(Wed)	**17**	Oct 21 (Wed)
2	Aug 31 (Mon)	**18**	Oct 26 (Mon)
3	Sept 2(Wed)	**19**	Oct 28 (Wed)
4 No Class	Sept 7 (Mon) Labor Day	**20**	Nov 2 (Mon)
5	Sept 9 (Wed)	**21**	Nov 4 (Wed)
6	Sept 14 (Mon)	**22**	Nov 9 (Mon)
7	Sept 16 (Wed)	**23**	Nov 11 (Wed)
8	Sept 21 (Mon)	**24**	Nov 16 (Mon)
9	Sept 23 (Wed)	**25**	Nov 18 (Wed)
10	Sept 28 (Mon)	**26**	Nov 23 (Mon)
11	Sept 30 (Wed)	**27**	Nov 25 (Wed)
12	Oct 5 (Mon)	**28**	Nov 30 (Mon)
13	Oct 7 (Wed)	**29**	Dec 2 (Wed)
14	Oct 12 (Mon)	**30**	Dec 7 (Mon)
15	Oct 14 (Wed)	**31**	Dec 9 (Wed)
16	Oct 19 (Mon)	**32**	Dec 14 (Mon)*

TENTATIVE COURSE SCHEDULE with Activities & Projects

This is located in the Doc Sharing file in eCompanion. This schedule shows all sections as well as the respective area of concentration (carpentry, electricians, manufacturing, welding, and automotive trades). Students should refer back to this online document on a regular basis for updates and/or changes. The instructor reserves the right to alter the schedule as needed.

SEMESTER TEST SCHEDULE

Section 3: Monday, December 15 8 a.m. – 10 a.m.
Section 4: Monday, December 15 1 p.m. – 3 p.m.
Section 2: Monday, December 15 3 p.m. – 5 p.m.

Syllabus Standard Policy Statements The following Syllabus Standard Policy Statements were revised 11/12/14

Academic Integrity Policy Academic freedom is a fundamental right in any institution of higher learning. Honesty and integrity are necessary preconditions of this freedom. Academic integrity requires that all academic work be wholly the product of an identified individual or individuals. Joint efforts are legitimate only when the assistance of others is explicitly acknowledged. Ethical conduct is the obligation of every member of the college community, and breaches of academic integrity constitute serious offenses. Refer to this section of the Student Handbook for further details.

Plagiarism Plagiarism is the representation of the words or ideas of another as one's own in any academic exercise. To avoid plagiarism, every direct quotation must be identified by quotation marks or by appropriate indentation and must be properly cited in the text or in a footnote or in a bibliography or works cited page. Acknowledgment is required when material from another source stored in print, electronic or other medium is paraphrased or summarized in whole or in part in one's own words. Refer to Student Handbook for examples of plagiarism.

Temporary Closing Policy Every effort will be made to keep the college open. However, should inclement weather or other emergencies necessitate closing the college or delaying the start of classes, the decision will be made between 5:00-5:30 a.m. and will be announced on the following:
(This information is also posted on Southwestern's website www.swcciowa.edu)

Radio Stations

KSIB-KITR	Creston	AM 1520 FM 101.3
KOAK/KCSI	Red Oak	AM 1080 FM 95.3
KMA	Shenandoah	AM 960 FM 99.1
WHO	Des Moines	AM 1040 FM 100.3 FM 107.5
KJAN	Atlantic	AM 1220
KSOM	Atlantic	FM 96.5 and 95.7
KSOI	Murray	FM 91.9

Television Stations

KCCI-TV8	Des Moines
WHO-TV13	Des Moines
WOI-TV5	Ames/Des Moines
KMTV-TV3	Omaha
WOWT-TV6	Omaha
KETV-TV7	Omaha

2-Hour Late Start Information

When inclement weather causes the college to have a two-hour delay, the following procedures will be followed: If the two-hour delay occurs on a Monday, Wednesday or Friday, then classes will start at 9:40 a.m. (7:30 a.m. and 8:35 a.m. classes will not meet). Offices will open at 9:00 a.m. If the two-hour delay occurs on a Tuesday or Thursday, then classes will start at 9:00 a.m. (7:30 a.m. classes will not meet). Offices will open at 9:00 a.m. Career and Technical courses do not follow the same 1 hr./1 ½ hr. schedule. Please refer to your instructor for more details. Nursing 4 hr. class will start at designated late start time (9:40 a.m. or 9:00 a.m.). The college also utilizes text messaging through e2campus™ as another means to notify students, faculty and staff of important announcements. Please refer to the student handbook for information about this service.

Cell Phone Policy

The college believes in providing an environment conducive to learning. For this reason, cellular phone use should be kept to a minimum on campus and conducted in appropriate locations only. Cell phone users should be respectful of others.

1. Students are to turn cell phones off or to silent mode upon entering any classroom, computer lab, library or auditorium.
2. If necessary, students may conduct short, quiet cellular phone conversations in the hallways, away from doorways or outside of the buildings.
3. Cellular phones with picture taking capabilities are not allowed in locker rooms or weight rooms.
4. Faculty members have the right to limit the use of cell phones with picture taking and text messaging capabilities in their classrooms.
5. Students who fail to comply with the above regulations will be referred to the Dean of Student Services and will be considered in violation of the student code of conduct.

Children on Campus Policy

The college strives to maintain a quality learning environment and has established the following guidelines regarding children on campus.

1. Students will not be allowed to bring children with them in the instructional setting which includes, but is not limited to, the classroom, library, student center, etc.
2. When children are present on campus, they must be under the direct supervision of a parent, legal guardian, registered student or other authorized adult.
3. This policy does not intend to conflict with Southwestern's programs designed for the involvement of children. For example: 8th grade career day, youth-camps, business contests, vocational open house, etc.
4. Students who fail to comply with the above regulations will be referred to the Dean of Student Services and will be considered in violation of the student code of conduct.

Nondiscrimination Statement

Southwestern Community College prohibits discrimination on the basis of race, color, national origin, sex, disability, age in employment, sexual orientation, gender identity, genetic information, creed, religion, veteran status, associational preference and actual or potential parental, family or marital status in its programs, activities or employment and personnel policies and practices. Southwestern also affirms its commitment to providing equal opportunities and equal access to its facilities. Inquiries regarding compliance with the nondiscrimination policy and the appropriate grievance procedure may be directed to: Educational Equity Coordinator, Southwestern Community College, 1501 W. Townline St., Creston, IA 50801, 641.782.1456 or 800.247.4023, ext. 456.

Accommodations

Southwestern is committed to the regulations of the American with Disabilities Act in making reasonable accommodations for students, staff, or patrons of the College in accessing its facilities. Any student with a disability wanting to request accommodations should notify the College administration of his/her needs, and the College will do what is reasonable to effect changes and assist the individual in being successful in the College environment. Steps for obtaining such accommodations are listed in the Student handbook (Disability/Special needs at Southwestern). For further assistance regarding accommodations or to identify special needs, students should contact Deb Pantini, Director of Student Development, Administration Center, at 641.782.1458.

Emergency Notification Policy Statement

SWCC has a campus-wide emergency notification system (e2Campus) to send instant text messages and/or e-mail messages to all students, faculty, and staff who have elected to receive them. This system will be utilized to immediately notify the campus community upon the confirmation of a significant emergency or dangerous situation involving an immediate threat to the health or safety of students or employees occurring on campus. This service also allows users to receive messages when classes are canceled and/or messages when the college is closed due to weather. With this system in place, SWCC can instantly and simultaneously distribute brief time-sensitive messages in emergency situations. Although there is not one system that is 100 percent guaranteed effective, this is an important method of communication.
In order to alert students and employees that an emergency text has been sent, an Emergency Alert sound will be activated. This sound (as well as the tornado and fire alarm sounds) can be heard on the Emergency Notifications page on the SWCC Web site. If the **Emergency Alert sound** is activated on campus, students and staff should immediately check their text messages. Some carriers may charge for incoming text messages so keep this in mind should you decide to sign up. You may also sign up to receive the same messages via email with or without signing up your cell phone number. To sign up, students will need to log on to SWCC's Campus Connect system. New students will receive training on Campus Connect at Success Seminar, The College Experience course, and orientation.

Class Attendance Related to School-Sponsored Activities

The college recognizes that many students participate in school-sponsored activities that may conflict with class meeting times. These school sponsored-activities (excluding practices) may include athletic competitions, student academic competitions and conferences, student musical performances, class sponsored field trips, etc. Students involved in such activities must give written notice to the instructor at least three days in advance of the anticipated absence. Students will be given the opportunity to independently make up course work or work of equal value for the day(s) the event was scheduled and to take a scheduled exam at an alternative time. School-sponsored absences shall not result in a reduction in attendance or participation grades. In the event of a last minute schedule change, the student must notify all affected faculty members immediately. A relevant last minute schedule change could be, but is not limited to, inclement weather causing an event to be rescheduled with less than three days advance notice.

Syllabus Disclaimer Statement

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 by the instructor on an individual basis, and only for reasons that meet specific requirements.

MAT 743 Technical Math: Topics and Assignments

Complete Semester Revised: August 26, 2015 (check back often to see any changes)

Session Date	Carpentry (sect 3 IC 170 7:30-8:55)	Electricians (sect 3 IC 170 7:30-8:55)	Industrial Maintenance (sect 4 IC 120 1:30-2:55)	Welding (sect 4 IC 120 1:30-2:55)	AutomotiveTrade (sect 2 IC 120 3:05-4:35)
1 Aug 26 (Wed)	**Introduction to Course** **Carp** Objectives, Text/Material Requirements & Grades Session Guides Activities & Homework Text: Practical Prob. In Math Carpenters 9th ed. Cengage Delmar Student Interest/Perceived Aptitude Survey Student Learning Style Survey **Number Systems** Counting, Whole, Integers, Rational, Irrational (mention imaginary) , π, e, Division by zero—undefined **Section 1: Whole Numbers (1)** *Number systems (base 10, binary—244 of elect text)* ***Project 1: Math in Carpentry (due on Wednesday, Sept 9)*** **Unit 1** Addition of whole numbers (2) **Unit 2** Subtraction of whole numbers (8) *p. 3-7 odd; check add with calculator on 1-9* *p. 8-12 odd; check sub with calculator on 1-9* **Carp**	**Introduction to Course** **Elec** Objectives, Text/Material Requirements & Grades Session Guides Activities & Homework Text: Practical Prob. In Math Electricians 9th ed. Cengage Delmar Student Interest/Perceived Aptitude Survey Student Learning Style Survey **Number Systems** Counting, Whole, Integers, Rational, Irrational (mention imaginary) , π, e, Division by zero—undefined **Section 1: Whole Numbers (1)** *Number systems (base 10, binary—244 of elect text)* ***Project 1: Math in Electrical Work (due on Wednesday, Sept 9)*** **Unit 1** Addition of whole numbers (2) **Unit 2** Subtraction of whole numbers (7) *p. 3-6 odd* *p. 11-13 odd* **Elec**	**Introduction to Course** **Mfg** Objectives, Text/Material Requirements & Grades Session Guides Activities & Homework Text: Practical Prob. In Math for Manufacturing 4th ed. Cengage Delmar Student Interest/Perceived Aptitude Survey **Number Systems** Counting, Whole, Integers, Rational, Irrational (mention imaginary) , π, e, Fractions Division by zero—undefined **Section 1: Whole Numbers (1)** *Number systems (base 10, binary—244 of elect text)* ***Project 1: Math in Industrial Maintenance (due on Wednesday, Sept 9)*** **Unit 1** Addition of whole numbers (2) **Unit 2** Subtraction of whole numbers (5) *Odd number problems in Units 1-2* **Mfg**	**Introduction to Course** **Weld** Objectives, Text/Material Requirements & Grades Session Guides Activities & Homework Text: Practical Prob. In Math Welders 6th ed. Cengage Delmar Student Interest/Perceived Aptitude Survey **Number Systems** Counting, Whole, Integers, Rational, Irrational (mention imaginary) , π, e, Fractions Division by zero—undefined **Section 1: Whole Numbers (1)** *Number systems (base 10, binary—244 of elect text)* ***Project 1: Math in Welding (due on Wednesday, Sept 9)*** **Unit 1** Addition of whole numbers (1) **Unit 2** Subtraction of whole numbers (5) *Odd number problems in Units 1-2* **Weld**	**Introduction to Course** **AT** Objectives, Text/Material Requirements & Grades Session Guides Activities & Homework Text: Math for the Automotive Trade 5th ed. Cengage Delmar Student Interest/Perceived Aptitude Survey **Number Systems** Counting, Whole, Integers, Rational, Irrational (mention imaginary) , π, e, Fractions Division by zero—undefined **Section 1: Whole Numbers (1)** *Number systems (base 10, binary—244 of elect text)* ***Project 1: Math in Automotive Trade (due on Wednesday, Sept 9)*** **Chapter 1** Adding whole numbers (1) Subtracting whole numbers (9) Practice Problems 1-1 (p5 1,5,9,13,17,21,23,odd 25-41) Practice Problems 1-2 (p 11 1,5,9,13,17,21,23,odd 25-41) **AT**

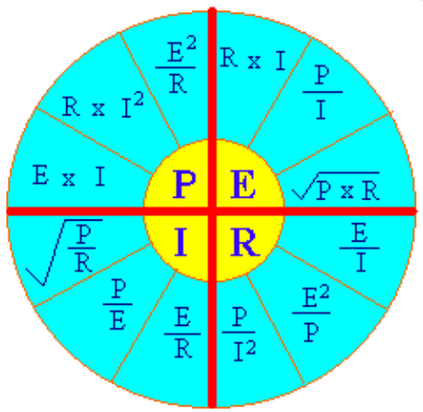
MAT 743 Technical Math: Topics and Assignments

Complete Semester Revised: August 26, 2015 (check back often to see any changes)

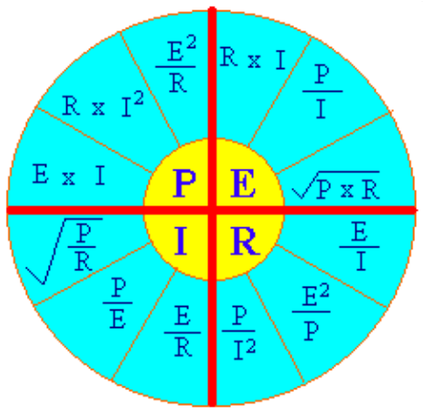
Session Date	Carpentry (sect 3 IC 170 7:30-8:55)	Electricians (sect 3 IC 170 7:30-8:55)	Industrial Maintenance (sect 4 IC 120 1:30-2:55)	Welding (sect 4 IC 120 1:30-2:55)	AutomotiveTrade (sect 2 IC 120 3:05-4:35)
2 Aug 31 (Mon)	**Review Whole Number Concept Carp** **Unit 3** Multiplication of whole numbers (13) **Unit 4** Division of whole numbers (17) **Unit 5** Combined operations with whole numbers (22) *p. 13-16 odd;* *p. 17-21 odd;* *p. 22-24 odd;* **Bonus Problem: Integer Circles**	**Review Whole Number Concepts Elec** **Unit 3** Multiplication of whole numbers (14) **Unit 4** Division of whole numbers (20) **Unit 5** Combined operations with whole numbers (26) *p. 16-19 odd* *p. 22-25 odd* *p. 26-29 odd* **Bonus Problem: Integer Circles**	**Review Whole Number Concepts Mfg** **Unit 3** Multiplication of whole numbers (9) **Unit 4** Division of whole numbers (15) *Odd number problems in Units 3-4* **Bonus Problem: Integer Circles**	**Review Whole Number Concepts Weld** **Unit 3** Multiplication of whole numbers (9) **Unit 4** Division of whole numbers (15) *Odd number problems in Units 3-4* **Bonus Problem: Integer Circles**	**Review Whole Number Concepts AT** Multiplying whole numbers (15) Dividing whole numbers (21) **Bonus Problem: Integer Circles** Practice Problems 1-3 (p17 1,5,9,13,17,21,25,29 odd 31-45) Practice Problems 1-4 *p25 1,5,9,13, 17, 21, odd 25-37*
3 Sept 2 (Wed)	*Analyzing word problems (cards)* **Carp** **Unit 6** Addition of common fractions (26) **Unit 7** Subtraction of common fractions (33) *p. 28 1,5,9,13,17,21, 29* *p. 33 1,5,9,17,21*	*Analyzing word problems (cards)* **Elec** **Unit 6** Addition of common fractions (32) **Unit 7** Subtraction of common fractions (42) *p.39 1,3, 7,11,15,17* *p.44-47 odd*	*Analyzing word problems (cards)* **Mfg** **Section 2: Common Fractions** **Unit 5** Addition of common fractions (17) **Unit 6** Subtraction of common fractions (22) *p.18 odd* *p.23 odd*	*Analyzing word problems (cards)* **Weld** **Section 2: Common Fractions** **Unit 5** Introduction to Common Fractions **(20)** **Unit 7** Addition of common fractions (39) **Unit 8** Subtraction of common fractions (46) *p.29 odd* *p43 odd* *p 48 odd*	*Analyzing word problems (cards)* **AT** **Chapter 3: Fractions** (47) Practice Problems 3-1 *p.53 1,5,9,13,17,21,25,27,31, odd 37-43* **3-2 Addition of Fractions (55)** Practice Problems 3-2 p.57 1,5,9,13,17,21,25,31,odd 35-43 **3-3 Subtraction of Fractions (59)** Practice Problems 3-3 p.61 1,5,9,13,17,21,25,31,odd 35-45
4 Sept 7 (Mon)	**Labor Day --- No Classes**				

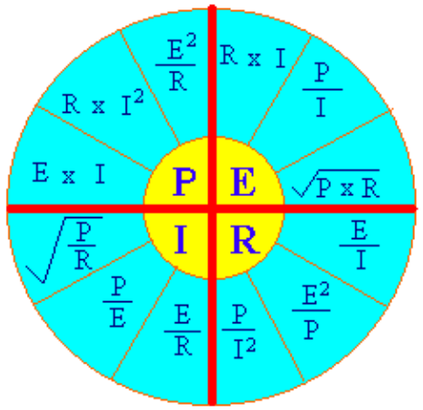
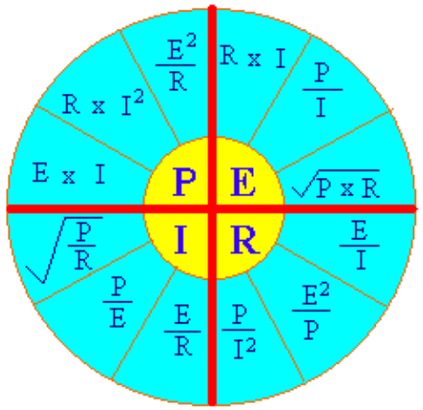
MAT 743 Technical Math: Topics and Assignments	**Complete Semester**	Revised: August 26, 2015 (check back often to see any changes)			
Session Date	**Carpentry** (sect 3 IC 170 7:30-8:55)	**Electricians** (sect 3 IC 170 7:30-8:55)	**Industrial Maintenance** (sect 4 IC 120 1:30-2:55)	**Welding** (sect 4 IC 120 1:30-2:55)	**AutomotiveTrade** (sect 2 IC 120 3:05-4:35)
5 Sept 9 (Wed)	***Review addition of mixed numbers*** **Unit 8** Multiplication of common **Carp** fractions (37) *fraction cheer; 3 ways to compare fractions* Venn Diagrams (lcm, gcf)-Activity **Unit 9** Division of common fractions (42) KCF **Unit 10** Combined Operations with Common Fractions (46) *p. 38 1,5,11,15,17,19,21,23,25* *p.43 1,3, odd 13 -25* *p.48 7,9* **Conversions—Baseball Pitch**	***Review addition of mixed numbers*** **Unit 8** Multiplication of common **Elec** fractions (48) *fraction cheer; 3 ways to compare fractions* Venn Diagrams (lcm, gcf)-Activity **Unit 9** Division of common fractions (52) KCF **Unit 10** Combined Operations with Common Fractions (55) *p. 50 odd* *p 53 odd* *p 57 11, 17* **Conversions—Baseball Pitch**	***Review addition of mixed numbers*** **Unit 7** Multiplication of common **Mfg** fractions (26) *fraction cheer; 3 ways to compare fractions* Venn Diagrams (lcm, gcf)-Activity **Unit 8** Division of common fractions (29) KCF **Unit 9** Combined Operations with Common Fractions (32) *p. 27 odd* *p. 29 odd* *p32 1,3 CT 1* **Baseball Pitch (conversion problem)**	***Review addition of mixed numbers*** **Unit 9** Multiplication of common **Weld** fractions (52) *fraction cheer; 3 ways to compare fractions* Venn Diagrams (lcm, gcf)-Activity **Unit 10** Division of common fractions (59) KCF **Unit 11** Combined Operations with Common Fractions (63) *p. 55 odd* *p. 60 odd* *p. 64 odd* **Baseball Pitch (conversion problem)**	***Review addition of mixed numbers*** **3-4 Multiplication of Fractions 63) AT** *fraction cheer; 3 ways to compare fractions* Venn Diagrams (lcm, gcf)-Activity Practice Problems 3-4 p. 67 1,5,9,13,19,23,27,odd 29-39 **3-5 Division of Fractions (69)** KCF Practice Problems p. 71 1,5,9,13,19,23,27,odd 29-39 **Baseball Pitch (conversion problem)**
6 Sept 14 (Mon	Measurement fundamentals V (tape measures)' https://www.youtube.com/watch?v=9caqSJ4sN8Y Micrometers: http://www.youtube.com/watch?v=i_jygJkJujE Vernier Calipers https://www.youtube.com/watch?v=ZUNoWWw6V10 Reading Dial Indicators https://www.youtube.com/watch?v=qMgXGedDffw	Measurement fundamentals **Elec** (tape measures) https://www.youtube.com/watch?v=9caqSJ4sN8Y Micrometers: http://www.youtube.com/watch?v=i_jygJkJujE Vernier Calipers https://www.youtube.com/watch?v=ZUNoWWw6V10 Reading Dial Indicators https://www.youtube.com/watch?v=qMgXGedDffw	Measurement fundamentals **Mfg** (tape measures) https://www.youtube.com/watch?v=9caqSJ4sN8Y Micrometers: http://www.youtube.com/watch?v=i_jygJkJujE Vernier Calipers https://www.youtube.com/watch?v=ZUNoWWw6V10 Reading Dial Indicators https://www.youtube.com/watch?v=qMgXGedDffw	Measurement fundamentals **Weld** (tape measures) https://www.youtube.com/watch?v=9caqSJ4sN8Y Measurement with Calipers & Micrometers Unit 6 (30-38) Micrometers: http://www.youtube.com/watch?v=i_jygJkJujE Vernier Calipers https://www.youtube.com/watch?v=ZUNoWWw6V10 Reading Dial Indicators https://www.youtube.com/watch?v=qMgXGedDffw	Measurement fundamentals **AT** (tape measures) https://www.youtube.com/watch?v=9caqSJ4sN8Y Micrometers: http://www.youtube.com/watch?v=i_jygJkJujE Vernier Calipers https://www.youtube.com/watch?v=ZUNoWWw6V10 Reading Dial Indicators https://www.youtube.com/watch?v=qMgXGedDffw Chapter 15 Measurement Tools Read and study explanations and examples Do odd numbers and check your answers if you need practice

7 Sept 16 (Wed)	Ratios: **Carp** Opie and ratios http://www.youtube.com/watch?v=YrPD55FVd4o Irrational Number Size-Activity (appendix) Order of Operations--Activity Golden Ratio Activity Slope Slope activity	Ratios: **Elec** RatiosOpie and ratios http://www.youtube.com/watch?v=YrPD55FVd4o **Unit 31 Ratio (170)** Irrational Number Size-Activity (appendix) Order of Operations--Activity Golden Ratio Activity Slope Slope activity	Ratios: **Mfg** Opie and ratios http://www.youtube.com/watch?v=YrPD55FVd4o Irrational Number Size-Activity (appendix) Order of Operations--Activity Golden Ratio Activity	Ratios: **Weld** Opie and ratios http://www.youtube.com/watch?v=YrPD55FVd4o Irrational Number Size-Activity (appendix) Order of Operations--Activity Golden Ratio Activity Slope Slope activity	Ratios: **AT** Opie and ratios http://www.youtube.com/watch?v=YrPD55FVd4o **Chapter 6-1(107) Ratios and Rates** Odd p. 111
8 Sept 21 (Mon)	Proportions **Carp** http://www.youtube.com/watch?v=P_aQPxr2G_4 http://www.youtube.com/watch?v=XiRVUDFMyq8	Proportions **Elec** http://www.youtube.com/watch?v=P_aQPxr2G_4 http://www.youtube.com/watch?v=XiRVUDFMyq8	Proportions **Mfg** **Section 7 Ratio and Proportion** **Unit 30** Ratio (116) **Unit 31** Direct Proportion (119) http://www.youtube.com/watch?v=P_aQPxr2G_4 http://www.youtube.com/watch?v=XiRVUDFMyq8	Proportions **Weld** http://www.youtube.com/watch?v=P_aQPxr2G_4 http://www.youtube.com/watch?v=XiRVUDFMyq8	Proportions (Direct and Indirect) **AT** **Chapter 6-2 (113)** Odd p.115 http://www.youtube.com/watch?v=P_aQPxr2G_4 http://www.youtube.com/watch?v=XiRVUDFMyq8
9 Sept 23 (Wed)	Percents & percentages **Carp** Basics of Percent https://www.youtube.com/watch?v=JeVSmq1Nrpw Percent of a Number https://www.youtube.com/watch?v=rR95Cbcjzus Percent Application (discounts) http://www.youtube.com/watch?v=RJmWJmoZFpg **Unit 16 (72)** odd **Unit 17 (79)** odd **Unit 18 (83)** odd	Percents & percentages **Elec** **Unit 32** Proportion (173) **Unit 33** Combined operations with Ratio & Prop. Basics of Percent https://www.youtube.com/watch?v=JeVSmq1Nrpw Percent of a Number https://www.youtube.com/watch?v=rR95Cbcjzus Percent Application (discounts) http://www.youtube.com/watch?v=RJmWJmoZFpg	Percents & percentages **Mfg** Basics of Percent https://www.youtube.com/watch?v=JeVSmq1Nrpw Percent of a Number https://www.youtube.com/watch?v=rR95Cbcjzus Percent Application (discounts) http://www.youtube.com/watch?v=RJmWJmoZFpg **Unit 32** Discounts (124) odd *Is over of equals percent over 100 PROPORTION* **Section 6: Percents and Graphs** **Unit 28** Percent (116) odd **Unit 29** Interpreting Graphsodd	Percents & percentages **Weld** Basics of Percent https://www.youtube.com/watch?v=JeVSmq1Nrpw Percent of a Number odd https://www.youtube.com/watch?v=rR95Cbcjzus Percent Application (discounts) http://www.youtube.com/watch?v=RJmWJmoZFpg **Section 4: Percent and Percentage** **Unit 20** Averages (112) odd **Unit 21** Percents and Percentages (115) odd	Basics of Percent **AT** https://www.youtube.com/watch?v=JeVSmq1Nrpw Percent of a Number https://www.youtube.com/watch?v=rR95Cbcjzus Percent Application (discounts) http://www.youtube.com/watch?v=RJmWJmoZFpg **Chapter 6-3 (117) Percentages** Odd p. 121-124
10 Sept 28 (Mon)	Con't Percent Applications **Carp** Review for test #1	Continue Percent Applications Review for test #1Review for test #1	Continue Percent Applications **Mfg** Review for test #1Review for test #1	Continue Percent Applications **Weld** Review for test #1Review for test #1	Continue Percent Applications **AT** Review for test #1Review for test #1

11 Sept 30 (Wed)	Test #1 **Carp**	Test #1 **Elec**	Test #1 **Mfg**	Test #1 **Weld**	Test #1 **AT**
12 Oct 5 (Mon)	**Project 2—Heron's Formula** **Carp** **Review Pythagorean Formula** **Unit 19 (88) odd #'s** Linear Measure Bonus: 800 m run Pythagorean	**Project 2—Heron's Formula** **Elec** **Review Pythagorean Formula** **Unit 21 (101) odd #'s** Combined Problems on Percents, Averages, Estimates Bonus: 800 m run Pythagorean	**Project 2—Heron's Formula** **Mfg** **Review Pythagorean Formula** **Unit 17 (70) & 18 (73) odd #'s** Equivalent Units of Length Measurement Angular Measurement Bonus: 800 m run Pythagorean	**Project 2—Heron's Formula** **Weld** **Review Pythagorean Formula** **Unit 25 (146) odd #'s** Perimeter of Squares & Rectangles; Order of Operations Bonus: 800 m run Pythagorean	**Project 2—Heron's Formula** **AT** **Review Pythagorean Formula** **Chapter 4-1 (73)** Geometry Angle Measurement Odd p77-79 **Chapter 4-2 (81)** Circular Measures Odd p85-86 Bonus: 800 m run Pythagorean
13 Oct 7 (Wed)	**Work on project 2** **Carp** **Units 20 (95) & 21 (100) odd #'s** Working with Feet and Inches Square Measure	**Work on project 2** **Elec** **Units 22 (106) & 23(112) odd #'s** Powers Roots 	**Work on project 2** **Mfg** **Unit 19 (80) odd #'s** Square Measure	**Work on project 2** **Weld** **Units 26(150) & 27 (156) odd #'s** Area of Squares, Rectangles Area of Triangles, Trapezoids	**Metric System review 4-3** **AT** **Chapter 8 (147)** Completing Repair Orders See Appendix A Odd p153-155
14 Oct 12 (Mon)	**Complete Project 2: Heron's** **Carp** **Formula and put in drop box** **Go over problems from Wed**	**Complete Project 2 on Heron's** **Elec** **Formula and put in drop box** **Go over problems from Wed**	**Complete Project 2 on Heron's** **Mfg** **Formula and put in drop box** **Go over problems from Wed**	**Complete Project 2 on Heron's** **weld** **Formula and put in drop box** **Go over problems from Wed**	**Complete Project 2 on Heron's** **AT** **Formula and put in drop box** **Go over problems from Wed**
15 Oct 14 (Wed)	**Review Project 2** **Carp** **Units 22 (105) & 23 (110) odd #'s** Surface Measurement—Triangles The Framing Square	**Review Project 2** **Elec** **Unit 24 (118) odd #'s** Combined Operations with Powers and Roots	**Review Project 2** **Mfg** **Unit 20 (82) odd #'s** Area of Squares, Rectangles, Parallelograms	**Review Project 2** **Weld** **Units 30 (176) & 31 (181) odd #'s** Circumference, Permeter of Semicircular-shapes Area of Circular and Semicircular shapes	**Chapter 9 (157)** The Automotive Engine (odd 1st half) **AT**

16 Oct 19 (Mon)	**Units 24 (114) & 25 (121) odd #'s** **Carp** Surface Measurement—Irregular Figures Surface Measurement—Circles Bonus: Order of Operations	**Unit 25 (121) odd #'s** **Elec** Metric Measure and Scientific Notation Bonus: Order of Operations	**Unit 21 (86) odd #'s** **Mfg** Area of Triangles & Trapezoids Bonus: Order of Operations	**Units 28 (162) & 29 (169) odd #'s** **Weld** Volume Cubes, Rectangular Volume Rectangular Container Bonus: Order of Operations	**Chapter 9 (157)** The Automotive **AT** Engine (odd 2nd half) Bonus: Order of Operations
17 Oct 21 (Wed)	**Units 26 (125) & 28 (135) odd #'s** **Carp** Volume Measurement—Cubes and Rectangular Solids Volume Measurement—Cylinders Bonus: Staggered Start	**Units 26 (130) & 27 (140) odd** **Elec** Length Measure Area Measure Bonus: Staggered Start	**Units 22 (89) & 23 (91) odd #'s** **Mfg** Area Circular Forms Area Cylindrical Forms Bonus: Staggered Start	**Unit 32 (186) odd #'s** **Weld** Volume Cylindrical Shapes Bonus: Staggered Start	**Chapter 10 (179)** Automobile **AT** Engine Systems (odd 1st half) **Auto fundraisers-excused** Bonus: Staggered Start
18 Oct 26 (Mon)	Bonus: Painted Cubes **Carp** **Units 27 (132) & 29 (139) odd #'s** Board Measure Weight Measure	Bonus: Painted Cubes **Elec** **Unit 28 (149) odd #'s** Volume & Mass Measure	Bonus: Painted Cube **Mfg** **Units 24 (95) & 25 (98) odd #'s** Volume Rectangular Solids Volume Cylindrical Solids	Bonus: Painted Cubes **Weld** **Unit 33 (191) all #'s** Volume of Cylindrical and Complex Containers	Bonus: Painted Cubes **AT** **Chapter 10 (179)** Automobile Engine Systems (odd 2nd half)
19 Oct 28 (Wed)	**Units 30 (146) & 31 (149) odd #'s** **Carp** Applications of Exponents in Formulas Using Square Root to Find Sides of Right Triangles	**Unit 29 (160) odd #'s** **Elec** Energy & Temperature Measure	**Units 26 (101) & 27 (103) odd #'s** **Mfg** Mass (Weight) Measure Volume of Fluids	**Unit 34 (196) all #'s**; **Weld** Mass (Weight) Measure	**Chapter 11 (193)** Automobile **AT** Electrical Systems (odd 1st half)
20 Nov 2 (Mon)	**Units 32 (158) & 33 (164) odd #''s** **Carp** Girders, Sills, and Floor Joists Wall Plates	**Unit 30 (166) odd #'s** **Elec** Combined Problems on Measure Conversion tables p 131, 141,150,160	**Units33 (129) & 34 (137) odd #'s** **Mfg** Thread Calculations http://theoreticalmachinist.com Gear Calculations	**Unit 35 (202) odd #'s** **Weld** Angle Development	**Chapter 11 (193)** Automobile **AT** Electrical Systems (odd 2nd half)

21 Nov 4 (Wed)	**Units 34 (167)** **Carp** **& 37 (179) odd #'s** Bonus: Poison Candy Pop Quiz on Monday's assignment? Studding & Fire-Stops or Draft Stops Sheathing & Subflooring	**Unit 34 (180) & 35 (185) odd Elec** Bonus: Poison Candy Pop Quiz on Monday's assignment? Representation in Formulas Rearrangement in Formulas  	**Units 35 (142) & 36 (146) odd #'s** Bonus: Poison Candy Pop Quiz on Monday's assignment? Speed & Feed Calculations for Cylindrical Tools Taper Calculations	**Units 36 (209) & 37 (214) odd Weld** Bonus: Poison Candy Pop Quiz on Monday's assignment? Angular Measurement Protractors	**Chapter 12 (209)** Automobile **AT** Drive Train (odd) Bonus: Poison Candy Pop Quiz on Monday's assignment?
22 Nov 9 (Mon)	**Units 35 (172)** **Carp** **& 36 (175) odd #'s** **& Units 38 (182)** Common Rafters Hip Rafters Trim	**Unit 36 (190) odd #'s** **Elec** General Simple Formulas	**Unit 37 (151) & 38 (155) odd #'s Mfg** Powers Square Roots	**Unit 38 (218) all** **Weld** Bends & Stretch-outs of Angular Shapes	**Chapter 13 (223)** **AT** The Automobile Chasis **1,3,5,7,19,23,27,31,35,39,43,47,51, 55,59**

23 Nov 11 (Wed)	**39 (186) odd #'s** **Carp** **& Units 40 (189)** Doors Windows Roofing Last session problem 3 answer of 12.8 feet x 4 Answer book used 14 x 4 = 56. Question should have asked what is total length of boards that you would have to purchase.	**Unit 37 (200) odd #'s** **Elec** OHM's Law Forumulas **Unit 38 (207) odd #'s** Power Formulas  Ohms Law Wheel	**Mfg** **Unit 39 (157)odd #'s &** **Units 40 (162)** Expressions & Equations Circles & Polygons	**Weld** **Unit 39 (224) all** Bends & Stretch-outs of Circular/Semicircular Shapes	**Chapter 14 (243)** Automobile Heating, Ventilation, and Air Conditioning (odd 1st half) **AT**
24 Nov 16 (Mon)	**41 (194) odd #'s &** **Carp** **Unit 42 (199) odd #'s** Siding Stairs	**Unit 39 (210) odd #'s** **Elec** Combined Problems on Formulas Power Formulas **Ohms Law Wheel**  	**41 (173) odd #'s &** **Mfg** **Unit 42 (180) all** Perimeters and Bend Allowances Geometric Construction	**Unit 40 (229) odd #'s** **Weld** **Unit 41 (235) odd #'s** Economical Layouts of Rectangular Plates Economic Layout of Odd-Shaped Pieces; Take-Offs	**Chapter 14 (243)** Automobile Heating, Ventilation, and Air Conditioning (odd 2nd half) **AT**

25 Nov 18 (Wed)	**Carp** **Gift Box Geometry Bonus & Project** **Review for Test 2**	**Elec** **Gift Box Geometry Bonus & Project** **Review for Test 2**	**Mfg** **Gift Box Geometry Bonus & Project** **Review for Test 2**	**Weld** **Gift Box Geometry Bonus & Project** **Review for Test 2**	**AT** **Gift Box Geometry Bonu S & Project** **Review for Test 2**
26 Nov 23 (Mon)	**Test 2** **Carp** **Units 19-42**	**Test 2** **Elec** **Units 21-30; 34-39**	**Test 2** **Mfg** **Units 17-27; 33-42**	**Test 2** **Weld** **Units 25-41**	**Test 2** **AT** **Ch. 4 -14**
27 Nov 25 (Wed)	Project 3--online	Project 3--online	Project 3--online	Project 3--online	Project 3--online
28 Nov 30 (Mon)	Trigonmetry Will work from Handout—not addressed in Text Class will not meet (on-line handout)	Trigonmetry Will work from Handout—addressed in Section 9 of Text Class will not meet (on-line handout)	Trigonmetry Will work from Handout—addressed in Section 11 of Text Class will not meet (on-line handout)	Trigonmetry Will work from Handout—not addressed in Text Class will not meet (on-line handout)	Trigonmetry Will work from Handout—not addressed in Text Class will not meet (on-line handout)
29 Dec 2 (Wed)	Trigonmetry Will work from Handout—not addressed in Text	Trigonmetry Will work from Handout—addressed in Section 9 of Text	Trigonmetry Will work from Handout—addressed in Section 11 of Text	Trigonmetry Will work from Handout—not addressed in Text	Trigonmetry Will work from Handout—not addressed in Text
30 Dec 7 (Mon)	Trigonmetry Will work from Handout—not addressed in Text	Trigonmetry Will work from Handout—addressed in Section 9 of Text	Trigonmetry Will work from Handout—addressed in Section 11 of Text	Trigonmetry Will work from Handout—not addressed in Text	Trigonmetry Will work from Handout—not addressed in Text
31 Dec 9 (Wed)	**Finish Trig segment** **Review for Test 3**	**Finish Trig segment** **Review for Test 3**	**Finish Trig segment** **Review for Test 3**	**Finish Trig segment** **Review for Test 3**	**Finish Trig segment** **Review for Test 3**
32 Finals Dec 14	**Test 3 for all sections and all areas of study** **Section 3: Monday, December 14 8 a.m. – 10 a.m.** **Section 4: Monday, December 14 1 p.m. – 3 p.m.** **Section 2: Monday, December 14 3 p.m. – 5 p.m.**				