



MAT101 Technical Math I Syllabus

Course Information

Credits	3
Campus	Washburn Institute of Technology
Address	5724 SW Huntoon
City/State/Zip	Topeka, Kansas 66604
Office Fax	785-273-7080

Description

This course will enable the student to gain confidence with the use of basic math, measurements, and signed numbers. The concepts learned in this course will build problem solving skills that are critical in the workplace. These concepts develop a solid foundation for success in the use of technology.

Textbooks

Dale Ewen and C. Robert Nelson. *Elementary Technical Mathematics*. Brooks/Cole, Cengage Learning. 2011. Edition: 10th. ISBN: 978-1-4390-4689-0.

Student Learning Outcomes:

- A. Communicate effectively
- B. Integrate technology
- C. Learn effectively
- D. Demonstrate cooperative teamwork skills
- E. Apply safety in the workplace
- F. Think critically and creatively
- G. Demonstrate responsible work ethics

Competencies

1. Add, subtract, multiply, and divide whole numbers.
2. Apply rounding and estimating principles.
3. Apply divisibility rules.
4. Use exponential notation.
5. Apply order of operations.
6. Recognize types of fractions.
7. Create equivalent fractions.
8. Add, subtract, multiply, and divide fractions.
9. Convert between fractions and decimals.
10. Round decimals.
11. Add, subtract, multiply, and divide decimals.
12. Convert among fractions, decimals, and percent.

13. Solve percent applications.
14. Add, subtract, multiply, and divide signed numbers.
15. Convert and use American units of measure.
16. Convert and use metric units of measure.
17. Convert between American and metric units of measure.
18. Add, subtract, multiply, and divide polynomials.
19. Solving algebraic equations and formulas

Guidelines for Success

Assessment Plan

Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution's technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Exams are given periodically, usually at the end of each chapter. The Final Exam will be cumulative and is required for course completion. The Final Exam score will replace all previous exam scores that are lower.

Grading Rationale and Grading Scale

A	100% – 90%
B	89% – 80%
C	79% – 70%
D	69% – 60%
F	59% – lower

The overall course grade will be calculated from 40% homework, 30% exams, 10% attendance/participation, and 20% final exam. As noted earlier, the final exam score will replace all other exam scores that are lower.

Homework is valuable practice for the understanding of the course materials. Students can expect homework assignments for each class period that will be due at the beginning of the next class. Late work will be accepted no later than two (2) days after the due date at 75% credit.

Attendance

Classroom attendance is required and recorded daily. Excused absences will be determined solely by the instructor. Material missed must be made up with instructor. Class participation is encouraged during class time which can include involvement with discussions, appropriate questions and topics and, especially, helping fellow students.

Disability

The Special Support Services (SSS) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator

Phone: 785-228-6356

E-Mail: ssscoordinator@washburn.edu

