

Faculty Course SelfAssessment

Instructor: _____ Saeid Motavalli _____

Course: _____ CMGT 310 _____

Term: _____ Fall 2023 _____

Enrollment: _____ 25 _____

Text:

Course Summary Study of particles and rigid bodies in equilibrium: Applications to two dimensional and three dimensional structural systems using ordinary and vector algebra. Topics include freebody diagrams, force vectors, equilibrium of particles, force system resultants, equilibrium of rigid bodies, structural analysis, and friction.

Students should demonstrate the ability to:

- 1- Develop knowledge of vector mathematics and application to engineering mechanics.
- 2- Perform force analysis for external reactions computation.
- 3- Draw freebody diagrams and apply the concepts of particle and rigid-body equilibrium.
- 4- Analyze and design structural members subjected to tension, compression, torsion, bending and combined stresses.

Summary of student comments and course evaluations:

Summary of Faculty experience & observations

Students are having trouble with three dimensional analysis of forces. I am experimenting with using various visual tools to explain three dimensional problems with physical demonstration of the systems.

SUMMARY OF ACHIEVEMENT OF COURSE OUTCOMES

RECOMMENDED CHANGES

Recommended changes based on student course performance: use visual tools to explain three dimensional problems

Recommended changes based on student evaluations and comments: none

Recommended changes based on faculty experience & observations: Same as above

Other comments and recommended changes: