



***Engineering Statics: FALL 2016***  
***Course #: MAT K211 T1 CRN 32493***  
***Wednesdays: 6:00 PM – 8:45 PM, Room D115***

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**Course Prerequisite:** Calculus I (which may be taken concurrently)

**Course Text:** *Engineering Mechanics - Statics*, by R.C. Hibbler, 13<sup>th</sup> edition  
Publisher: Pearson

**Course Instructor:** Mark Vesligaj

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OFFICE HOURS: Tuesdays: 11:00 am – 12:30 pm at QVCC  
Wednesdays: 3:30 pm – 5:00 pm at QVCC

**Course Description:** This course is an introduction to engineering mechanics via vector approach to static forces and their resolution. Topics include: properties of force systems, free-body analysis, first and second moments of areas and mass, and static friction. Applications to trusses, frames, beams, and cables included.

**Course Support:** Tutorial services. Peers. Office hours with instructor.

**Course Portfolio:** All students are required to maintain an online learning portfolio using a TRCC designed template. Through this electronic tool, students can see their own growth in college-wide learning. The student can keep and continue to use the *Digication* account after graduation. A Three Rivers General Education Assessment Team will select random works to improve the college experience for all. No names will be attached to the assessment work; it will remain private and anonymous for college improvement purposes. In class outlines, students will find recommended assignments which support various college-wide learning abilities. The student will have a tool which can integrate their learning from the classroom, school, and life and allow for another opportunity of learning at TRCC! Students will be able to make multiple portfolios.

**Class Cancellation:** In case of increment weather, check the college website for class cancellations or call 860-215-9000 for recorded message.

**MyCommNet Alert:** *MyCommNet* is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather. All students are encouraged to sign up for *MyCommNet* Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site.  
[http://www.trcc.commnet.edu/div\\_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html](http://www.trcc.commnet.edu/div_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html)

**Disabilities Statement:**

If you have a question regarding a disability that may affect your progress in this course, please contact one of the college's Disability Service Providers as soon as possible. Kathleen Gray (215-9248) generally works with students who have physical, visual, hearing, medical, mobility, and psychiatric disabilities. Matt Liscum (215-9265) also works with students who have disabilities. If you will need accommodations for this class, you must contact the Disabilities Counseling Services. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. *The instructor cannot provide accommodations until an accommodation letter from the Disabilities Counselor is received.*

**Academic Integrity:**

At TRCC, we expect the highest standards of academic honesty. The Board of Regents' Student Conduct Policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism.

**Attendance:**

Attendance is required to succeed in this course. If you miss class on the day of a quiz or exam you will not be allowed to make it up. Attendance will be taken for all classes.

**Withdrawal:**

A student who finds it necessary to discontinue a course must complete a "Withdrawal Request Form" available in the Registrar's office within the time limits of the semester calendar. Students who do not withdraw, but stop attending will be assigned an "UF" which may impact their financial aid status. The last day to withdraw from classes can be found on the Academic Calendar the college website.

**Grading Policy:**

*Quizzes:*

There will be short quizzes throughout the semester. Quizzes will be administered at the beginning of class or will be take home from the end of lecture. Those students arriving late will not be allowed extra time to complete the quiz.

*Exams:*

There will be three scheduled exams throughout the semester.

*Final Exam:*

There will be a cumulative final exam.

Your final grade in this course is determined by weighting the above three components in the following manner:

Quizzes	20%
Exams (3 Total)	60%
Final Exam	20%
<b>TOTAL</b>	<b>100%</b>

### **Grading Equivalents:**

Your final letter grade will be determined according to the following equivalents:

A: 93 – 100, A-: 90 – 92  
B+: 87 – 89, B: 83 – 86, B-: 80 – 82  
C+: 77 – 79, C: 73 – 76, C-: 70 – 72  
D+: 67 – 69, D: 63 – 66, D-: 60 – 62  
F: below 60  
N: if the student completed less than 60% of work.

### **Chapter Readings and Topics:**

- Math Review
- Chapter 1 – General Principles
- Chapter 2 – Force Vectors
- Chapter 3 – Equilibrium of a Particle
- Chapter 4 – Force System Resultants
- Chapter 5 – Equilibrium of a Rigid Body
- Chapter 6 – Structural Analysis
- Chapter 7 – Internal Forces
- Chapter 8 – Friction
- Chapter 9 – Center of Gravity and Centroid
- Chapter 10 – Moments of Inertia