

Spring 2015
Introduction to Engineering
EGR*K111, Section-1, CRN-13136

Class Hours: MONDAYS from 6:30 - 9:15 PM

Class Location: D126

Class Textbook: Introduction to Engineering Analysis, 4th Edition, by Kirk Hagen

Instructor Info: Name: Mark Vesligaj
Office: E183B (QVCC Danielson campus)
Office Hours: Mondays after class, TRCC campus
Tuesdays (9:00am – 10:00am, QVCC Danielson campus)
Thursdays (3:30pm – 6:30pm, QVCC Danielson campus)
(Please set appointments in advance)
Phone: 860 932 4167 (office)
Email: mvesligaj@qvcc.comnet.edu (**preferred contact method**)

Prerequisite: Intermediate Algebra (MAT*137)

Course Description: Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, materials testing, manufacturing technologies and fundamentals of engineering economics.

Course Goals:

- Understand different types of engineering fields and their functions
- Understand the research process through case studies and technical journals
- Demonstrate data acquisition and documentation skills
- Understand and implement the design process
- Demonstrate basic problem solving techniques for engineering systems
- Understand team-based project work for engineering problems
- Demonstrate an awareness of pathways to engineering majors/ careers

Special Needs: Any student in the class who may have special needs should feel free to contact me. I am interested in any situation which may impact your ability to be successful in this course. If you are a student with a disability and you believe you will need accommodations for this class, it is your responsibility to please contact one of the college's Disability Service Providers as soon as possible. Chris Scarborough (860/215-5751) generally works with students who have learning disabilities or attention deficit disorder. Kathleen Gray (860/210-

9248) generally works with students who have physical, visual, hearing, medical, mobility, and psychiatric disabilities. Matt Liscum (860/215-9265) 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.* Please see me if you have any questions.

Digication:

All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.

Academic Integrity: Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor.

Homework:

There will be regular homework assignments for this course. The assignments will be checked, collected, and/or reviewed during class. Additionally, much of the homework will be reading assignments which will match the sequencing of lectures and topics for the semester. Additionally, there will be short quizzes administered in class or as a take-home; it is up to the student to keep pace with the material. Homework submitted late is subject to a late penalty. Quizzes missed are not allowed a make-up.

Design Project:

There will be a team-based design project.

Presentation:

There will be a final presentation on an engineering topic.

Portfolio: There will be a portfolio review for each student.

Participation: Active learners succeed. It is essential in an exploratory course such as this one to participate and evaluate the material; it is essential. Additionally, attendance is required for participation to engage your classmates and enable a dynamic interaction in class. It is even more crucial in a once-per-week meeting course format. Finally, students will practice the skills needed to work effectively in teams and as an individual. All members of teams will be expected to contribute to the team project and will be peer evaluated.

Grading: Your final grade in this course will be determined as follows:

Homework & Quizzes	40%
Design Project	20%
Presentation & Portfolio	30%
Participation	10%
Total	100%