STATICS SYLLABUS

MICHAEL BUTROS

SPRING 2020

COURSE INFORMATION

Section Number: 74762
Course Number and Title: Physics 230 - Statics
Lecture Days and Times: Monday - Wednesday 9:35 - 11:00 AM

INSTRUCTOR INFORMATION

Name: Michael Butros
Office: Science Building - Room 14
Office Hours:
Monday and Wednesday - 4:00 - 5:30 PM
Tuesday - 9:30 - 11:00 AM
Phone: 760.245.4271 Ext. 2506
E-mail: Michael.Butros@vvc.edu
Instructor's Page: https://www.butros.info

IMPORTANT DATES:

Semester Begins: February 18, 2020
Spring Break: April 13-17, 2020
Memorial Day Holiday: May 25, 2020
Semester End: June 13, 2020

GENERAL CLASS INFORMATION:

Prerequisites: Physics 201 and Math 227.

Textbook: Engineering Mechanics: Statics, by Hibbeler, R, C. (Optional).
There is an online component to this class through the CANVAS course management system.

Course Description: This class is concerned with the analysis of forces on physical systems in static equilibrium. Topics include: Force and moment vectors, resultants, principles of statics and free-body diagrams, applications to simple trusses, frames and machines, distributed loads, internal forces in beams, properties of areas, second moments, and laws of friction.

Student Learning Outcomes:

Upon completion the student will be able to:

- Draw complete free-body diagrams and write appropriate equilibrium equations from the free-body diagrams.
- Apply the concepts of equilibrium to various structures.
- Calculate moments, centers of mass, and forces for particular structures.

Course Content:

The following topics will be covered in lecture

- Force Vectors
- Equilibrium of a Particle
- Force System Resultants
- Equilibrium of a Rigid Body
- Structural Analysis
- Internal Forces
- Friction
- Center of Gravity and Centroid
- Moments of Inertia

Attendance Policy: Regular attendance to lecture is strongly recommended.

Grading Policy:

The grading for this class will consist of the following components:

Component	Percentage of Final Grade
Online Assignments	15 %
Worksheets	20 %
Quizzes	20 %
Exam One	15 %
Exam Two	15 %
Exam Three	15 %

The final grade will be earned according to the following scale:

Total Percentage	Final Grade Earned
90 - 100 %	A
80 - 89 %	B
70 - 79 %	C
60 - 69 %	D
0 - 59 %	F

IMPORTANT NOTE: Students with disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class, are encouraged to contact Disabled Student Program & Services as soon as possible to ensure that such accommodations are implemented in a timely fashion.
Authorization from DSPS is required before any accommodations can be made.

CLASS CONDUCT POLICIES:

- Anyone caught cheating will receive a grade of "F" for the course, in addition, I will pursue the strongest disciplinary action available at the college.
- Only those registered for the class are allowed in the classroom during lectures and labs
- It is expected that the sound features on all cell phones will be turned off before class or lab begins. If you have to answer a call or a text

message, then you should leave the classroom and return when your call or message is done.

- You are encouraged to work in groups on homework and practice problems, but each student should turn in their own work.
- All assignments and exams are to be completed on the assigned due dates. There will be no make up homework assignments, quizzes, or exams. It is your responsibility to inform the instructor if you are going to be absent on a day when an assignment or exam is due.
- You are encouraged to ask questions.