

## Division of Engineering, Computer Programming, and Technology

#### **EGN 2312 – Engineering Analysis-Statics – CRN 32319**

## West Campus – Building 11 Room 236

**Syllabus – Summer 2016**

**Instructor:** Carmen J. Cadenas Vasquez, P.E.

**Email:** [ccadenasvasquez@valenciacollege.edu](mailto:ccadenasvasquez@valenciacollege.edu)

**Office Hours:** None. Time will be allocated in class for consulting purposes.

**Course Description:** Fundamental concepts of mechanics, including resultants of force systems, free-body diagrams, equilibrium of rigid bodies and analysis of structures.

**Prerequisites:** MAC 2311, PHY 2048C. **Co-Requisite:** MAC 2312.

**Class Time:** Monday and Wednesday 2:00 PM to 3:40 PM

**Textbook:** *Engineering Mechanics: Statics, R.C. Hibbeler, 14th Edition*. WITH MASTERING ENGINEERING CODE, Publisher: Pearson Prentice Hall.

Note: You may choose to buy the e-book and mastering engineering access from Pierson Publishing as a cheaper but somewhat more limited alternative.

**Student Performance Assessment and Grading Policy:**

The following grade scale will apply to this class

A: 90 - 100 %

B: 80 - 89.99 %

C: 70 - 79.99 %

D: 60 - 69.99 %

F: below 60 %

Your final class average will be determined using the following weightings:

Assignments: 10%

Quizzes: 30%

Tests: 30% (2 tests)

Final Exam: 30%

Your grade will be determined by your weighted average. The weight of each component of your grade is listed in the above table. Your weighted average is determined by the following formula. Each grade is expressed as a percentage:

**Weighted Average = (Average Assignment Grade \* 0.10) + (Average Quiz Grade \* 0.30) + (Average Test Grade \* 0.30) + (Final Exam Grade \* 0.30)**

DO NOT simply add up the points you have earned on each assignment and divide by the total number of points possible. This is not the correct way to determine your grade in this course.

**Disclaimer:**

Changes in syllabus and/or schedule of assignments may be made at any time during the term by announcement of the instructor. A revised syllabus and/or schedule of assignments may be issued at the discretion of the instructor.

**Attendance Policies:**

Each instructor must exercise professional judgment to determine if a student is actively participating in class. This policy will be used to determine grades as well as administrative withdrawals for lack of attendance.

1. Students may withdraw without academic penalty from any course by the established deadline published in the College’s calendar. This will result in a grade of “W” for the course and will not count against the student’s GPA.
2. It is the responsibility of the student wishing to withdraw from the course to do so by the date published in the College Academic Calendar. Any student wishing to withdraw from the course must do so himself or herself in accordance with current Valencia College procedures.
3. If you do not attend the class within the first days of class, you will be reported during the No Show reporting period (May 17, 2016 through May 26, 2016) and will be withdrawn from the course.
4. Students who abandon the course or do not withdraw themselves by the published deadline are subject to receiving a grade of F.
5. Showing up 15 minutes late or more from class will count as an absence and leaving prior to the end of class (unless agreed to in advance by the instructor) will also count as an absence.
6. It is the student’s responsibility to find out what was covered in class if absent.

**Classroom Policies:**

1. Classroom behavior will be governed by the “Student Code of Conduct”.
2. Turn off cellular phones and beepers before entering the classroom. Do not leave the classroom to answer cellular phone calls unless emergency. Do no text in class.
3. You are encouraged to ask relevant questions during class.
4. Grades will not be disclosed over the telephone or via e-mail, except through your Atlas account.
5. No audio recording or videotaping is allowed in this class.

**Late Work Policies:**

1. Assignments will be due at the beginning of the class on Mastering Engineering website (**course ID** is **MECADENAS32319**). All assignments will be from the Mastering Engineering website. **Assignments** **will not be** **accepted late.**
2. Internet connection problems are not an acceptable excuse for late work. You should have a plan in place for internet access in case your primary method is unavailable. I strongly recommend submitting assignments at least one full day early to allow time to recover from technical problems.

**Quizzes, Tests and Exam Policies:**

1. Circle all quiz, test and/or exam answers for credit. **Show all your work for full credit.** Simply written down answers will not be given any credits and receive a grade of “0” (zero).
2. Quizzes, tests and exam are closed book and closed notes unless otherwise instructed.
3. **No tests will be dropped.** Lowest/missed quiz will be dropped.
4. **No make-up for quizzes, tests or final exam** without explicit consent of instructor, which will only be granted in case of documented extreme emergency. If you are out of contact and miss a quiz, test or exam due to an extenuating circumstance, I expect you to contact me as soon as possible to discuss the situation. No exceptions will be made to the above policies unless you can provide documentation of the situation that I consider adequate.
5. Quizzes (15 minutes) will be given **at the beginning** of the class. You will miss the quiz if you come late. Check the class schedule for the tentative dates.

**Extra Credit Policy:**

1. **No extra credit assignments and/or activities** will be available in this course.

**Other Critical Course Expectations:**

1. Students must read the appropriate book chapter prior to attending class.
2. Students are strongly encouraged to try the provided list of recommended problems. This selection may not give you sufficient practice. Consider your own level of understanding and practice additional problems as needed.
3. Even though most of the course material is from the textbook, the lectures may or may not necessarily follow the text word-by-word. Therefore, it is the student’s responsibility to be in class and take notes. Quizzes, tests and exam will cover all material covered in class, appropriate book chapter, power point slides, assignments and/or recommended problems.
4. I am here to help. Get help EARLY if you are struggling with the concepts. Do not wait for the first test. You should expect to spend at least 3 hours outside of class studying for every hour in class room in order to maximize your chance for success.
5. Check your Atlas account regularly for e-mails from instructor (changes by e-mails possible). Use [ccadenasvasquez@valenciacollege.edu](mailto:ccadenasvasquez@valenciacollege.edu) for any e-mail correspondence.
6. This course is not about your ability to use a calculator. It is about to excel and improve your abilities to correctly and properly think, analyze, process, and solve real problems as a future engineer.

**Important Dates:**

See the Academic Calendar: <http://valenciacollege.edu/calendar/>

Monday, May 30th Memorial Day. No class meeting.

Monday, July 4th  Independence Day. No class meeting.

Friday, July 8th Withdrawal deadline for “W” grade.

Monday, August 1st  Final Exam (2:00 pm).

Friday, August 5th Final Grades Viewable in Atlas

**Students with Special Needs or Disabilities:**

Students with special needs or disabilities who qualify for academic accommodations must provide a Notification to the Instructor (NTI) form from the **Office of Students with Disabilities** and discuss specific needs with the instructor, preferably during the first two weeks of class. The Office for Students with Disabilities (West Campus SSB - Room 102) determines accommodations based on appropriate documentation of disabilities.

Academic accommodations are not retroactive, and will apply only to future assignments. For this reason, it is critically important to discuss these issues with your instructor as early in the course as possible.

**Academic Honesty & Plagiarism:**

1. Each student is expected to comply with the College policy on academic honesty as set forth in the admissions catalog and student handbook. Cheating is prohibited. Any student guilty of dishonesty, plagiarism and/or cheating will receive zero on the test or assignment and the instructor has the right to withdraw the student from the class and recommend expulsion from the program.
2. Storing formulas, problems, notes, etc. in the calculator is considered **cheating**. The professor reserves the right to inspect the memory of the student’s calculator at any time during the semester. If inappropriate information is found store in the calculator during a quiz, test or exam, the student will receive a grade of “0” (zero) for that particular quiz, test or exam.

**Withdrawal Policy:**

Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), a student who withdraws from class before the withdrawal deadline will receive a grade of “W”. A faculty member is permitted to withdraw a student from the faculty member's class up to the beginning of the final exam period, for violation of the faculty member's attendance policy, as published in the faculty member's syllabus. A student is not permitted to withdraw after the withdrawal deadline. Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of “F”. For a complete policy and procedure overview on Valencia Policy 4-07 please got to:

<http://valenciacollege.edu/generalcounsel/policy/default.cfm?policyID=75&volumeID_1=4&navst=0>

**The professor will not withdraw any student for any reason (except when a student does not attend the class before the No Show reporting period); it is the responsibility of the student to withdraw themselves before the withdrawal deadline and to be aware of the date of the withdrawal deadline.**

Students on financial aid should consult an advisor or counselor before withdrawing from a course; there may be financial implications to the student which he or she must know about to make an informed decision before withdrawing from a course. Students with some scholarships who withdraw or are withdrawn from a class must pay the college for the cost of the class. Other scholarship sponsors may also require repayment.

**Valencia Student Core Competencies:**

The faculty of Valencia College have defined four Core Competencies that describe the learning outcomes for a Valencia graduate. They are: THINK, VALUE, COMMUNICATE, ACT. These competencies are outlined in the College website.

**Expected Student Conduct:**

Valencia College is dedicated not only to the advancement of knowledge and learning but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct.

The primary responsibility for managing the classroom environment rests with the faculty. Students who engage in any prohibited or unlawful acts that result in disruption of a class may be directed by the faculty to leave the class. Violation of any classroom or Valencia’s rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriate and authorized actions. You will find the Student Code of Conduct in the current Valencia Student Handbook.

Each student’s behavior in the classroom or Web course is expected to contribute to a positive learning/teaching environment, respecting the rights of others and their opportunity to learn. No student has the right to interfere with the teaching/learning process, including the posting of inappropriate materials on chat room or Web page sites. The instructor has the authority to ask a disruptive student to leave student to leave the classroom, lab, or Web course and to file disciplinary charges if disruptive behavior continues.

**Class Schedule:**

The following is a tentative schedule based upon class needs. The instructor reserves the right to make any schedule changes, if necessary.

|  |  |  |
| --- | --- | --- |
| **Date** | **Lecture on** | **Comment** |
| 05/09/2016 | Introduction, Chapter 2 Force Vectors |  |
| 05/11/2016 | Chapter 2 Force Vectors |  |
| 05/16/2016 | Chapter 2 Force Vectors |  |
| 05/18/2016 | Chapter 3 Equilibrium of a Particle | Quiz # 1 |
| 05/23/2016 | Chapter 3 Equilibrium of a Particle |  |
| 05/25/2016 | Chapter 3 Equilibrium of a Particle |  |
| 05/30/2016 | Memorial Day | No Class |
| 06/01/2016 | Chapter 4 Force System Resultants |  |
| 06/06/2016 | Chapter 4 Force System Resultants |  |
| 06/08/2016 |  | Test # 1 |
| 06/13/2016 | Chapter 5 Equilibrium of a Rigid Body |  |
| 06/15/2016 | Chapter 5 Equilibrium of a Rigid Body |  |
| 06/20/2016 | Chapter 5 Equilibrium of a Rigid Body |  |
| 06/22/2016 | Chapter 6 Structural Analysis | Quiz # 2 |
| 06/27/2016 | Chapter 6 Structural Analysis |  |
| 06/29/2016 | Chapter 7 Internal Forces |  |
| 07/04/2016 | Independence Day | No Class |
| 07/06/2016 |  | Test # 2 |
| 07/11/2016 | Chapter 7 Internal Forces |  |
| 07/13/2016 | Chapter 9 Centroids |  |
| 07/18/2016 | Chapter 9 Centroids |  |
| 07/20/2016 | Chapter 10 Moment of Inertia | Quiz # 3 |
| 07/25/2016 | Chapter 10 Moment of Inertia |  |
| 07/27/2016 | Chapter 8 Friction |  |
| 08/01/2016 | Final Exams Week | Final Exam |

LETTER FROM THE DEAN

**Expectations of a Valencia College**

**Engineering, Computer Programming, & Technology**

**Student**

Welcome to the ECPT Division of Valencia College’s West Campus; we are enthused to have this opportunity to assist you in achieving your educational goals. Higher education is a privilege and an opportunity; it is your responsibility to realize that you are in control of those behaviors and actions that can enable success in this course.

From your professors, **you can expect** the following:

1. They will be prompt, courteous and respectful.
2. They will provide a professional learning environment throughout the entire scheduled instructional period.
3. They will provide an up-to-date syllabus; when changes need to be made, they will announce changes in a manner that is conveyed to all students in their class.
4. They will provide you with a course that is of necessary rigor to prepare you for the career you have chosen; your will be taught with the same academic expectations as you would find at a four-year university. The bonus of starting your education at Valencia, when compared to attending a four-year institution, is you will be able to get more personal attention with small class sizes and you will be able to save money; the classes are not easier.
5. They will offer time outside of class to discuss your questions.
6. They will be available to discuss your class concerns in private, outside of class time; you should try to resolve your class concerns with your professor before you try to voice your concerns with administrators.
7. They will respond to emails within 2 business days.
8. They will expect from you what they have expected from the many students who passed their classes in the past.

In return, this is **what your professor will expect from you**:

1. You will be prompt, courteous and respectful.

Prompt means you come to class on time, ready to work, with all assignments completed before you enter class or lab. It means that you have studied, that all conversations, texting and diversions come to a stop and that you are ready to contribute to a positive learning environment from the beginning of the class or lab.

Courtesy means you are polite in your attitude and behavior towards your professor and classmates.

Respectfulness means that you regard everyone’s classroom experience as valuable to them, that you accept your professor’s expertise and experience to create relevant course objectives and that you treat college and personal property with care.

1. You will read your syllabus; your syllabus is a contract between your professor and you. Be aware of deadlines to complete assignments on time and know your professor’s attendance policy. You will need to attend class for the full length of time allotted to your class and (if applicable) lab.
2. You will be aware of Valencia College policies and procedures found in the college catalog; ignorance of policies and procedures doesn’t mean they don’t apply.
3. You will be serious about learning; it is your responsibility to be an active participant in your own learning. You will need to devote sufficient time to learn the material presented by your professor; for most students, this means you will need to spend at least two hours studying for every hour of instruction. Learning is an action verb; you will need to do more than sit through class and reread your notes to be successful. To succeed in higher level classes, you must retain the information, concepts and skills you will learn; this can only happen if you work at learning to make the course content a part of your long term memory. Do not cram!!
4. You will be encouraged to produce your own study guides. Most college professors do not provide study guides, but they can give you tips that will help you produce your own study guides to gain a better understanding of the course content.
5. You will be expected to participate fully in classroom activities. The work you produce must be your own; cheating in any form is not tolerated and your professor will have specific consequences, in their syllabus, which will be enforced should cheating occur.
6. You will be expected to contribute to a positive learning environment. Avoid classmates who speak negatively, or who have a negative outlook, about your class or your professor. Instead, get to know your professor during office hours; you will learn much more with a positive attitude.
7. You will be held to a high standard of maturity and responsibility. Disruptive behaviors will not be tolerated in the classroom or lab. First time disruptions will be handled by your professor and may include a request that you leave the class or lab. Very serious or repeated disruptions will be reported, to the Dean of Engineering, Computer Programming, and Technology and the Dean of Students, with specific consequences that can include your permanent removal from the class. Disruptions include:

* Being noisy when arriving late to class or leaving early.
* Carrying on private conversations while the professor is talking.
* Disrespectful language, tone and mannerisms.
* Sleeping or attempting to sleep in class.
* Repeatedly asking unnecessary or irrelevant questions.

My wish is that you get the best learning value from the classes that you are taking. With everyone abiding by the expectations in this letter, your engineering, computer programming, and/or technology classes at Valencia should be the next step in achieving your academic dreams.

**Dr. Lisa Macon**

**Dean of Engineering, Computer Programming, & Technology**

**Valencia College**