Instructor’s Name: Nancy Michael  
Office: 204C Woolf Hall  
Office Telephone Number: 817-272-1258  
Office Hours: 12:30 – 1:30 Tuesday/Thursday  
Email Address: michael@uta.edu

Course Number, Section and Title: MAE 1312 – 001, Engineering Statics  
Time and Place of Class Meetings: Nedderman Hall 111, T, Th, 10:30am – 12:20pm, Jun 5 – Aug 14, 2017

Description of Course Content: Fundamental principles, Forces, Force Components, Statics of Particles, Moments, Couples, Equivalent Force-Couple Systems, Distributed Forces, Equilibrium of Rigid Bodies, Structural Analysis, Internal Forces of Structural Members, Friction, Centroid, Center of Gravity, Moments of Inertia.

The course content will include:
1. Introduction
2. Force vectors
3. Equilibrium of a particle
4. Moment of forces
5. Equilibrium of a rigid body
6. Truss analysis: Methods of joints and sections
7. Frame and machine analyses
8. Internal forces and distributed forces
9. Friction
10. Centroid and center of gravity

Prerequisites: C or better in each of the following ENGR 1300 (or 1250), MATH 1426 (or HONR-SC 1426) and PHYS 1443

Student Learning Outcomes: To present the principles of engineering mechanics as it pertains to engineering statics and to the study of forces and force systems, resultants and components of force systems, forces due to friction, conditions of equilibrium, forces acting on members of trusses and frame structures, internal forces, centroids and moments of inertia, and to introduce the mathematics of vectors and index notation.

Required Textbooks and Other Course Materials:
• Engineering paper for homework.
• Scientific calculator, such as TI-30XA, 30IIS, 30XS, Casio FX-82M-S, FX-85M-S, or Sharp EL-531.

Class website is on Blackboard. [http://elearn.uta.edu](http://elearn.uta.edu) Log in with your NetID and password. Grades will be posted.

Grading Policy:
Exam 1: 30%  
Exam 2: 30%  
Final Exam: 30%  
Homework: 10%

Course grade:
A: ≥ 90.0% of full credit  
B: 80.0 - 89.9%  
C: 70.0 - 79.9%  
D: 60.0 - 69.9%

Homework: Homework will be assigned during class and due the following Tuesday, unless otherwise announced to accommodate tests and holidays. Homework is to be submitted in class, prior to the beginning of class, on the due date. Homework submitted after class has started is late. Late homework may be submitted at my office up to 5pm on the due date for 50% of the earned points. Homework must be submitted using the class format. Failure to follow the format will result in up to 50% off of the earned points. Two problems will be randomly chosen from each homework assignment for grading. Solutions will be provided for you to verify your own work. Please keep a copy of your homework assignment.

Exams: Major exams will be closed book/closed notes. During exams, no caps/hats may be worn, students may not leave the classroom for any reason (no bathroom breaks), seating will be assigned, and book bags, phones, and other electronic devices must be left at the front of the room. The only electronic device which may be allowed for exams and quizzes is a scientific calculator, such as TI-30XA, 30IIS, 30XS, Casio FX-82M-S, FX-85M-S, or Sharp EL-531. Phones and other unauthorized electronic devices found at the test seat (including in pockets) after the exam begins will be referred to student conduct.
Quiz: In class quizzes may be announced or unannounced. These quizzes can add up to 3 bonus points toward your grade. There is no provision for a missed quiz.

Make-up Exam Policy: There is no provision for a missed exam. The exam schedule is included in this syllabus.

Course schedule and description of major assignments and examinations:
Exam 1: Thursday, June 28
Exam 2: Thursday, July 19
Final Exam: Tuesday, August 14

Tentative course schedule. As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. Specific reading and homework assignments will be given in class throughout the semester.

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<th>Date</th>
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<th>Material</th>
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<tr>
<td>5-Jun</td>
<td>T</td>
<td>Syllabus, Intro, ch 1</td>
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<td>7-Jun</td>
<td>R</td>
<td>Ch 2</td>
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<td>12-Jun</td>
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<tr>
<td>14-Jun</td>
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<tr>
<td>19-Jun</td>
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<td>Ch 3</td>
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<td>21-Jun</td>
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<td>26-Jun</td>
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<td>Ch 4</td>
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<td>28-Jun</td>
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<td>Exam 1</td>
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<td>3-Jul</td>
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<td>10-Jul</td>
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<td>17-Jul</td>
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<td>31-Jul</td>
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<td>2-Aug</td>
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<td>7-Aug</td>
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<td>9-Aug</td>
<td>R</td>
<td>Ch 10, Q and A</td>
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<td>14-Aug</td>
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<td>Final Exam</td>
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Attendance Policy: UTA allows instructors to set the attendance policy. For this course, attendance is required. Students are responsible for material covered in class, assignments, and announcements. This is not constructed as an online class, and as such, not all materials will be available on blackboard.

Classroom Etiquette: It is rude to text, email, wear earbuds, enter class late, make excessive noise, or use your tablet or laptop for anything other than course materials during class. Doing any of these things may result in your being asked to leave the classroom.
Syllabus for MAE 1312 – 001 Summer 2018
Engineering Statics

Academic Integrity: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code: I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Title IX: The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Grade Grievance: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. http://catalog.uta.edu/academicregulations/grades/#undergraduatetext
Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located downstairs. Exit the room and turn left toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals if needed.