Mechanics Physics 3200 Fall 2014 Section: 55858 TY11

**Instructor: Raymond Tung** 

E-mail: rtung@brooklyn.cuny.edu

Office & Hours: 1415NE New Ingersoll, 1:30-3 PM, Tuesday

## **Course Description:**

The course covers the following topics: vector treatment of static equilibrium of rigid bodies, static analysis of trusses and other mechanical structures, vector treatment of kinematics of particles and rigid bodies, forces and motion, analysis of rotational motion, and moments of inertia.

Textbook: Beer, Johnston, Mazurek, Cornwell, Vector Mechanics for Engineers, 10<sup>th</sup> Ed., McGraw Hill

**Course Website:** 

Course material: <a href="http://academic.brooklyn.cuny.edu/physics/tung/bcp3200f14">http://academic.brooklyn.cuny.edu/physics/tung/bcp3200f14</a>

Lectures: 11:00AM - 12:15 PM Tuesday; 11:00AM - 1:05 PM Thursday; Rm 3143N

**Grades:** 

Classwork: 25%, Lecture Exams (2): 15%, 25%, Final Exam: 35%

You must show computation neatly and clearly on classwork and exams to receive credit.

## **Exams and Dates:**

Exam #1 Ch. 2-4: **Oct. 9**; Exam #2 Ch. 5,6,9,14,15: **Nov. 20**;

Final Exam covers entire semester: Tuesday Dec. 23 10:30 – 12:30 AM

No make-ups for exams. For absences in exam due to medical condition with doctor's note, 90% of the score from the student's following exam will be used as the score for the missed exam.

## **Lecture Plan (Tentative):**

Ch. 2, Statics of Particles	8/28, 9/2
Ch. 3, Rigid Bodies: Equivalent Systems of Forces	9/4, 9, 11
Ch. 4, Equilibrium of Rigid Bodies	9/16, 18, 30
Ch. 5, Distributed Forces: Centroids and Centers of Gravity	10/2, 7
Ch. 6, Analysis of Structures	10/14, 16, 21
Ch. 9, Distributed Forces: Moment of Inertia	10/23, 28
Ch. 14, Systems of Particles	10/30, 11/4, 6
Ch. 15, Kinematics of Rigid Bodies	11/11, 13, 18
Ch. 16, Plane Motion of Rigid Bodies: Forces and	11/25, 12/2, 4
Ch. 17, Plane Motion: Energy and (time permitting)	12/9, 11

Note: no classes on Sept. 23, 25, Nov. 27

Last day to drop w/o W: 9/17; last day to drop W: 11/6.