**En Ph 131 SYLLABUS**

COURSE NAME: Mechanics- En Ph 131  
DETAILS: 3 hour lectures, 1 hour Seminar, 3/2 lab sections  
TERM: Winter

COURSE DESCRIPTION

\*4.3 (fi 6) (either term, 3-1s-3/2). Kinematics and dynamics of particles; gravitation; work and energy; linear momentum; angular momentum; systems of particles; introduction to dynamics of rigid bodies. Prerequisites: MATH 100 or 117, and ENGG 130. Corequisite: MATH 101 or 118. Restricted to Engineering students. Other students who take this course will receive \*3.0.

REQUIRED MATERIAL

1. “Engineering Mechanics: Dynamics”, 14th ed., Hibbeler
2. “Fundamentals of Physics”, 10th ed., Halliday, Resnick and Walker
3. Lab Manual for Phys 130/EnPh 131.

LECTURE CONTENT

There are 11 weekly assignments. The assignments will neither be handed in nor be marked. However, they serve as very important practice materials for the seminars and the exams and should be completed carefully before the suggested due dates. Solutions to the assignments will be posted online on eClass after the due dates.

LAB CONTENT

There are 5 laboratories which introduce experimental procedures and report writing. Students must refer to http://uofa.ualberta.ca/physics/undergraduate-laboratories/schedules for lab information (e.g. schedule of experiments, etc.). A mark of at least 50% in the lab component is required to pass the lab. If a student has taken EN PH 131 in a previous term and has passed the lab portion but failed the course, he/she may apply for a transfer for the lab mark from the previous term. Applications should be submitted to the Physics General Office at the beginning of the term.

***Please note the deadline for lab-related on-line quizzes.***