# **Credit for Prior Learning Examination**

## EGT 340 – Applied Dynamics

#### **Course Description**

EGT 340 – Applied Dynamics (3 credits)

PREREQ: EGT 300, PHY 211 or PHY 220, and MAT 129 or MAT 227

Theories and applications of dynamic mechanics, including Newton's laws, work, kinetics, impulse, and momentum.

### **Exam Details**

Students will be assessed on their ability to attain the outcomes below:

- 1. Relate motion to force and energy
- 2. Explain the law of conservation of energy and how to apply it to dynamics
- 3. Describe the law of conservation of momentum and apply it to dynamics
- 4. Define rectilinear, angular and plane motion
- 5. Apply the relationships and laws to a) Predict motion resulting from applied forces, released energy, or collisions b) Determine the forces or energy required to produce desired motion

Exam is comprised of two parts - Theoretical Questions and Practical Problems. Part one, Theoretical Questions, is closed-book, no calculator, or phone, or other electronic gadgets. Part two, Practical Problems, is open book and students may use their calculators or study guides.

#### Text:

Walker, Keith M.: "Applied Mechanics for Engineering Technology" 8th Ed. Upper Saddle River, NJ: Prentice Hall, 2007



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