GRANDE PRAIRIE REGIONAL COLLEGE

DEPARTMENT OF SCIENCE

EG 231 ENGINEERING MECHANICS II 4(3-2) UT(4) W 91-92

Lectures:	**M W F**	**11:00 - 11:50 a.m.**
Laboratory:	**M**	**3:00 - 4:50 p.m.**

INSTRUCTOR: Dr. R. Hunt

OFFICE: D314

PHONE: 539 - 2008/532-1338

TEXT: Hibbeler, Engineering Mechanics, Statics and Dynamics.

COURSE CONTENT:

Centroids and Centres of Gravity; Forces in Beams and Cables: Force and Moment Diagrams; Distributed Forces; Second Moments of Area; and Kinematics: Rectilinear and Curvilinear Motion of Particles; Kinetics of Particles; and Energy and Momentum Methods.

PREREQUISITE: EG 230 and MA 212.

COURSE OUTLINE:

Statics

Chapter 7 Force, Shear, and Moment Diagrams for Beams: Cables.

Chapter 9 Centre of Mass and Centroids; Fluid Statics.

Chapter 10 Moment of Inertia: Product of Inertia

Dynamics

Chapter 12 Kinematics of Particles

Chapter 13 Kinematics of Particles: Force and Acceleration

Chapter 14 Kinetics of Particles: Work and Energy

Chapter 15 Kinetics of Particles: Impulse and Momentum.

DISTRIBUTION OF MARKS FOR FINAL GRADE

Laboratory Assignments	10%
Problem Assignments	15%
Mid-Term Test	25%
Final Examination	50%

Midterm exam will be held in the lab period on February 21, 1992. Final exam will be scheduled by Registrar's Office (3 hours).

EG 231 ENGINEERING MECHANICS II

PROBLEM ASSIGNMENT SETS

Set #	Problems in Text				Due Date
1	7/18	7/34	7/43	7/73	Jan. 13
2	7/77	7/90	7/93	9/18	Jan. 22
3	9/28	9/52	9/55	9/78	Jan. 31
4	9/75	9/84	9/89	10/7	Feb. 7
5	10/21	10/30 I	10/55	10/63	Feb. 14
6	10/67*	10/82	10/87 I	12/6	Mar. 13
7	12/23	12/66	12/73	12/93	Mar. 23
8	12/106	12/121	12/143	13/23	Mar. 30
9	13/56	13/84	14/5	14/13	Apr. 6
10	14/63	15/29	15/59	15/62	Apr. 13

* Use Mohr Circle

GRADING GUIDELINES:

Percent (Approx.)	Grade
90 - 100%	9
80 - 89%	8
72 - 79%	7
65 - 71%	6
57 - 64%	5
50 - 56%	4
45 - 49%	3
26 - 44%	2
0 - 25%	1