臺大土木工程學系
Department of Civil Engineering
National Taiwan University

SYLLABUS
CIE 1013-02 (501 11010) APPLIED MECHANICS 1

DESCRIPTION: This course addresses the analysis of fundamentally static problems in terms of engineering mechanics and is the foundation of upper-level engineering courses.

OBJECTIVES:
1. Static equilibrium for particles and rigid bodies
2. Static equilibrium of simple structures
3. Static equilibrium considering friction
4. Moment of inertia
5. Virtual work

KEYWORDS Statics; static equilibrium; friction; moment of inertia; virtual work

PREREQUISITES: None

TEXTBOOK: R. C. Hibbeler, "Engineering Mechanics: Statics." Prentice Hall, 14th Edition in SI Units.

REFERENCES: Prof. Wayne Whiteman of Georgia Institute of Technology offers three courses on the MOOCs platform "Coursera":
- Introduction to Engineering Mechanics

web link: https://goo.gl/Ylvg84
- Applications in Engineering Mechanics

web link: https://goo.gl/QxmMbZ
- Engineering Systems in Motion: 2D Dynamics

web link: https://goo.gl/Cu0wTs

GRADING POLICY:
1. Homework assignments (30%)
2. Four quizzes (20%)
3. Midterm exam (20%)
4. Final exam (30%)

INSTRUCTOR: Wu, Tung-Yu 吳東諭
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LECTURES: Tuesday 10:20 am - 12:10 am
Core Subjects Classroom Building Room 403 (普 403)

OFFICE HOURS: Thursday 10:00 am - 11:00 am or by appointment

TENATIVE LECTURE SCHEDULE – FALL 2020

Week	Date	Hours	Tentative Sections	Assignments
1	9/15	2	2.1-2.8	
2	9/22	2	2.9; 3.1-3.4	Homework 1 due
3	9/29	2	**Quiz (9/15 - 9/22)** 4.1-4.4	
4	10/6	2	4.5-4.8	Homework 2 due
5	10/13	2	4.9; 5.1-5.4	Homework 3 due
6	10/20	2	**Quiz (9/29 – 10/13)** 5.5-5.7	
7	10/27	2	6.1-6.6	Homework 4 due
8	11/3	2	Review	Homework 5 due
9	11/10	2	**Midterm Exam (9/15 - 11/3)**	
10	11/17	2	7.4	
11	11/24	2	8.1-8.2	Homework 6 due
12	12/1	2	8.3; 8.5; 9.1	Homework 7 due
13	12/8	2	**Quiz (11/17 - 12/1)** 9.2-9.3	
14	12/15	2	9.4-9.5; 10.1	Homework 8 due
15	12/22	2	10.2-10.4; 10.8	Homework 9 due
16	12/29	2	**Quiz (12/8 – 12/22)** 11.1-11.2	
17	1/5	2	11.3 and Review	Homework 10 due
18	1/12	2	**Final Exam (9/15 - 1/5)**	