

Syllabus of Mechanics

First Year, 2017 – 2018

Department of Physics, College of Science, Al-Nahrain University

Week	Subjects
1	Introduction to Units and Vectors <ul style="list-style-type: none">- Scalar and vector quantities- Vectors and resultant (graphical addition of vectors)- Vector components (component method for adding vectors)
2	<ul style="list-style-type: none">- Equilibrium under the action of concurrent forces- Equilibrium of rigid body under coplanar forces
3	Uniformly Accelerated Motion <ul style="list-style-type: none">- Motion along straight line- Acceleration due to gravity- Projectile problem
4	<ul style="list-style-type: none">- Newton's Laws- Law of Universal Gravitation
5	<ul style="list-style-type: none">- Work, energy, Power
6	<ul style="list-style-type: none">- Simple Machines
7	<ul style="list-style-type: none">- Impulse and Momentum
8	<ul style="list-style-type: none">- Angular Motion- Rigid body rotation
9	<ul style="list-style-type: none">- Simple Harmonic Motion
10	<ul style="list-style-type: none">- Exam

Text Book: College Physics, Schaum's Outline Series