

203-946-DW (all sections) Fall 2018

Teacher Chris Roderick 7A.10, local 4008, croderick@dawsoncollege.qc.ca

Pre-requisites Secondary IV Mathematics 563-404, Secondary V Physics 553-504

Co-requisites None

Ponderation 2-3-3 (2 hours of lecture, 3 hours of labs, and 3 hours of work outside class per week)

Course objectives

This course will cover some of the basic concepts of biomechanics. Students will learn the laws governing

Reference materials

1. Reference texts covering statics and materials can be found at:

Course content

The material to be covered is contained in the following chapters of the text.

Weeks	Topics	
0{1	Units, Vectors, and math review	
1{3	Forces, static equilibrium, applications to physical rehab	
4{7	Torque, equilibrium, more advanced applications	
8	Physics of solids and biological materials	
9{10	Energy and Power	
11{12	Waves and Sound: Properties of waves, propagation, superposition, resonance,	
	ultrasound therapy, etc.	
13{14	Electricity: Current, voltage, circuits, safety, AC/DC, electrotherapy	
15	Review	

Note: The above schedule is tentative.