

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.