



PHYSICS
Science
Waves, Optics & Modern Physics
203-NYC-05 (all sections)
Winter 2019

Teachers	Basim Assaf 7A.14, local 4011, physi csone@gmail . com Alex Pronine 7A.24, local 4029, pro9physi cs@gmail . com Samad Rastikerdar 7A.22, local 4020, srastikerdar@dawsoncol lege. qc. ca Chris Roderick 7A.10, local 4008, croderi ck@dawsoncol lege. qc. ca Jaime Sandoval 7A.18, local 4016, j sandoval@dawsoncol lege. qc. ca Manuel Toharia 7B.21, local 4017, mtohari a@dawsoncol lege. qc. ca Helene Gaonac'h 7A.10, local 4902, hgaonach@dawsoncol lege. qc. ca (Cont'Ed) Emmanuel Thibau 7B.19, local 4236, ethi bau@dawsoncol lege. qc. ca (Cont'Ed)
Pre-requisites	Mechanics (203-NYA-05), Calculus I (201-NYA-05)
Co-requisites	Calculus II (201-NYB-05)
Ponderation	3-2-3 (3 hours of lecture, 2 hours of labs, and 3 hours of work outside class for each 5 hours of class time)
Course objectives	<p>To analyze various situations or phenomena associated with waves, optics and modern physics using basic principles. This course is intended to introduce the student to a broad range of physical phenomena involving waves (mechanical waves, sound waves, and electromagnetic waves), geometrical and physical optics, matter waves, and quantum physics.</p> <p>Detailed information regarding the objectives and standards for this course and the speci c performance criteria is available at https://www.dawsoncol lege. qc. ca/physi cs/program-documents/sci ence/.</p>
Course competencies	<p>This course will allow the student to fully achieve the competency:</p> <p>OOOUT: Analyze various situations or phenomena associated with waves, optics and modern physics using basic principles.</p> <ol style="list-style-type: none">1. Apply the basic principles of physics to the description of vibrations and waves and their transmission.

Reference
materials

1.1.

**Course
content**

The material to be covered is contained in the following chapters and sections of **Physics for Scientists**