



**PHYSICS**  
**Science**  
**Electricity & Magnetism**  
203-NYB-05 (all sections)  
Summer 2019

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<b>Teachers</b>	<b>Marie-Pier Neault</b> 7A.16, local 4785, mpneault@dawsoncollege.qc.ca (Cont'Ed) <b>Emmanuel Thibau</b> 7B.19, local 4236, ethibau@dawsoncollege.qc.ca (Cont'Ed)
<b>Pre-requisites</b>	Mechanics (203-NYA-05), Calculus I (201-NYA-05)
<b>Co-requisites</b>	Calculus II (201-NYB-05)
<b>Ponderation</b>	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)
<b>Course objectives</b>	<p>The aim of this course is to analyze different physical situations and phenomena in terms of the fundamental laws of electricity and magnetism. This includes an analysis of: physical situations involving static electric charge, direct current circuits, magnetic fields and magnetic induction, alternating current circuits as well as experimental verification of some of the laws of electricity and magnetism.</p> <p>Detailed information regarding the objectives and standards for this course and the specific performance criteria is available at <a href="https://www.dawsoncollege.qc.ca/physics/program-documents/science/">https://www.dawsoncollege.qc.ca/physics/program-documents/science/</a>.</p>
<b>Course competencies</b>	<p>This course will allow the student to fully achieve the competency:</p> <p>OOUS: Analyze various situations and phenomena in physics using the basic laws of electricity and magnetism.</p> <ol style="list-style-type: none"><li>1. Analyze situations in physics associated with static electric charge and electric current.</li><li>2. Analyze situations in physics associated with magnetism and magnetic induction.</li><li>3. Apply the laws of electricity and magnetism.</li><li>4. Verify experimentally a number of laws of electricity and magnetism.</li></ol> <p>This course also contributes to partially achieve the competency:</p> <p>OOUU: Apply acquired knowledge to one or more subjects in the sciences.</p> <ol style="list-style-type: none"><li>1. Recognize the contribution of more than one scientific discipline</li><li>3.</li><li>3.</li></ol>



**Policy on  
religious  
observance**

Students who intend to observe religious holidays must inform their teachers, in writing, within the first two weeks of the semester as prescribed in the ISEP Policy on Religious Observances. (ISEP, Section IV D). This includes any religious holidays that occur during the final exam period. Please refer to the academic calendar for the exact dates. Forms for this purpose are available from your teacher. Your teacher will inform you of any modifications to planned course activities resulting from the teacher's own religious observance.