



<b>Chapter 15</b>	<b>Pressure, buoyancy, fluid flow and viscosity.</b>
<b>Chapter 19</b>	<b>Charge, Coulomb's Law, electric field and conductors.</b>
<b>Chapter 20</b>	<b>Electric potential, capacitance, dielectrics and applications.</b>
<b>Chapter 21</b>	<b>Electric current, resistance, Ohm's Law, DC, AC and electrical energy. Resistors in series and parallel, Kirchoff's Laws and hazards.</b>
<b>Chapter 22</b>	<b>Magnetic Fields, magnetic forces and current-carrying conductors.</b>
<b>Chapter 23</b>	<b>Induction, Lenz's Law, generators and transformers.</b>
<b>Chapter 24</b>	<b>Reactance, RLC circuits and resonance.</b>
<b>Chapter 32</b>	<b>Nuclear energy, radioactivity, decay and applications.</b>

**TRANSFERABILITY: It is a University of Alberta Transfer Course**

\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

**GRADING CRITERIA:**

**GRANDE PRAIRIE REGIONAL COLLEGE**

**GRADING CONVERSION CHART**

<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>	<b>Designation</b>
<b>A<sup>+</sup></b>	<b>4.0</b>	<b>90 – 100</b>	<b>EXCELLENT</b>
<b>A</b>	<b>4.0</b>	<b>85 – 89</b>	
<b>A<sup>-</sup></b>	<b>3.7</b>	<b>80 – 84</b>	<b>FIRST CLASS STANDING</b>
<b>B<sup>+</sup></b>	<b>3.3</b>	<b>77 – 79</b>	
<b>B</b>	<b>3.0</b>	<b>73 – 76</b>	<b>GOOD</b>
<b>B<sup>-</sup></b>	<b>2.7</b>	<b>70 – 72</b>	
<b>C<sup>+</sup></b>	<b>2.3</b>	<b>67 – 69</b>	<b>SATISFACTORY</b>
<b>C</b>	<b>2.0</b>	<b>63 – 66</b>	
<b>C<sup>-</sup></b>	<b>1.7</b>	<b>60 – 62</b>	
<b>D<sup>+</sup></b>	<b>1.3</b>	<b>55 – 59</b>	<b>MINIMAL PASS</b>
<b>D</b>	<b>1.0</b>	<b>50 – 54</b>	
<b>F</b>	<b>0.0</b>	<b>0 – 49</b>	<b>FAIL</b>
<b>WF</b>	<b>0.0</b>	<b>0</b>	<b>FAIL, withdrawal after the deadline</b>

<b>EVALUATIONS:</b>	<b>Assignments</b>	<b>15%</b>	
	<b>Laboratories</b>	<b>20%</b>	
	<b>Mid-Term Examination</b>	<b>20%</b>	<b>(Feb. 13/13)</b>
	<b>Final Examination</b>	<b>45%</b>	<b>(TBA)</b>

**STATEMENT ON PLAGIARISM AND CHEATING:**

Refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at [www.gprc.ab.ca/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

**\*\*Note:** all Academic and Administrative policies are available on the same page.

**COURSE SCHEDULE/TENTATIVE TIMELINE:**

<b>Lecture</b>	<b>M W</b>	<b>10:00 - 10:50 a.m.</b>	<b>J202</b>
<b>Laboratory</b>	<b>R</b>	<b>2:30 - 5:20 p.m.</b>	<b>J103</b>

**LABORATORY COMPONENT**

<b>Lab #</b>	<b>Content</b>	<b>Week of</b>
<b>11</b>	<b>Fluid Properties</b>	<b>Jan. 14</b>
<b>12</b>	<b>Terminal Velocity</b>	<b>Jan. 21</b>
<b>13</b>	<b>Coulomb's Law</b>	<b>Jan. 28</b>
<b>handout</b>	<b>Inverse Square Law</b>	<b>Feb. 4</b>
<b>14</b>	<b>Mapping of Electric Fields</b>	<b>Feb. 25</b>
<b>15</b>	<b>Capacitance</b>	<b>Mar. 4</b>
<b>16</b>	<b>Simple Electric Currents</b>	<b>Mar. 11</b>
<b>17</b>	<b>e/m for Electrons</b>	<b>Mar. 18</b>
<b>18</b>	<b>Magnetic Fields</b>	<b>Mar. 25</b>
<b>handout</b>	<b>Balmer Series</b>	<b>Apr. 1</b>