

Physics 20 – Fall 2019
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Resources:

-Custom Course Notes and Worksheets

Required Student Materials:

-Scientific Calculator

Course Overview and Timeline:

Physics 20 is the study of classical physics, otherwise known as Newtonian Mechanics. The course is both conceptual, and mathematical in nature. Physics 20 will be broken into 4 main units of study.

Unit A – Kinematics (15%)

A study of the consequences of motion on objects, and the predictions that can be made from initial conditions.

Unit B – Dynamics (25%)

Examining Forces, the causes of motion, and the implications of unbalanced forces on objects.

Unit C – Circular Motion and Energy Conservation (30%)

The implications of objects whose motion follows a circular path. Examining thermodynamic principles related to mechanical energy.

Unit D – Oscillatory Motion and Waves (30%)

Study of periodic/repeating motion, springs and mechanical waves.

Laboratory Work and Skills (Ongoing)

Physics is both a theoretical and an applied science. Students are required to develop familiarity with laboratory methods and procedures in addition to possessing a theoretical understanding of concepts.

Student Expectations:

As your instructor, it is my goal to help you achieve success, but you must be willing to put in the amount of work required to reach the standards set out by the province, and treat the course with immense seriousness. I am always willing to provide extra help, but it is unrealistic to expect me to put more work into the course than you do.

Education in Alberta aims to honour cultural diversity and promote intercultural understanding. Students are able to build on foundational knowledge about First Nations, Metis and Inuit peoples. The program of studies provides opportunities for students to develop a knowledge and understanding of, and respect for, the histories, cultures, languages, contributions, perspectives, experiences and contemporary contexts of First Nations, Metis and Inuit.

Grading Procedures:

Assessment for Learning Policy:

Formative assessments may be marked in class, and some may receive written constructive comments for improvement from the teacher. These will not count towards the course grade. It is expected that students complete all of these assignments.

Assessment of Learning Policy:

Major assignments, quizzes, and exams are all types of assessments that will be used in calculating a final grade for each student. All grades in the course are cumulative.

Grade Determination:

Term grade determination: Grade will be based upon evaluations conducted throughout the course. This portion of the grade will reflect the student's most consistent level of achievement throughout the course.

Final grade determination: Grade will be based on the accumulation of term grade evidence and a final examination written at the end of the course.

Grade Breakdown:

Assignments	15%
Quizzes	15%
Unit Exams	50%
Final Exam	20%

Grading Policies:

- a) **Reassessment:** Reassessments will happen only in extenuating circumstances, at the sole discretion of the teacher.
- b) **Grade Challenges:** If there are mistakes with marking or totals on an exam, students are encouraged to bring these mistakes to the teacher's attention, but changes will only be made on the day the assessment is returned to a student.
- c) **Secured Exams:** You are welcome to look at your old tests at any time within the classroom, but you are not permitted to take them out of the classroom or reproduce them in any way.

Cheating and Plagiarism:

Instances of academic dishonesty will result in a grade of zero being awarded for an assessment. In these cases, there will be no opportunities to redo the assessment.