



Physics 30

Course Outline 2023-2024

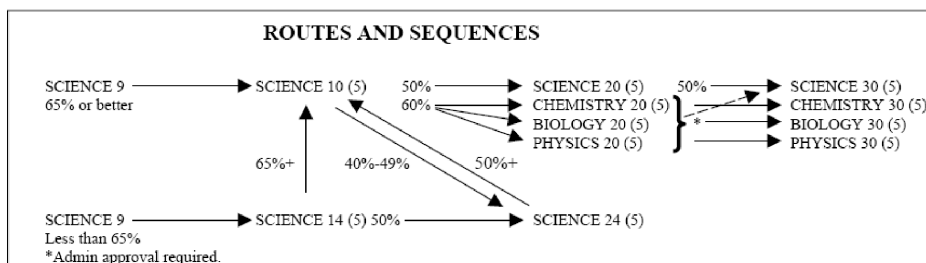
Physics 30 is offered as an **independent learning** course at the Learning Centres. Students can optimize their learning experience through in-person interactions, Google Meets, phone calls, texts, and email communication with their teacher. Throughout the duration of the course, teachers will collaborate with students to formulate a personalized timeline for their academic journey. This tailored approach to scheduling aims to accommodate each student's unique learning pace, goals, and commitments, fostering an environment of flexibility and empowerment.

Accessing Content and Required Course Work

Students will complete the course by working through modules. Modules are comprised of lessons which include various resources that allow the student to actively engage in the learning process. Course content and resources are provided online through the **Physics 30 Google Classroom**. Before you ask for help on the assignment, be sure to review all available resources including the practice problems on the course Google Classroom. Students require their unique first name.last name@edu.sturgeon.ab.ca account for course completion. An approved calculator (ie. a Ti-84) is required for this course.

Progression Through Course Sequences

Successful completion of Physics 20. There are no prerequisites for mature students. A mature student, for Alberta High School Diploma purposes, is one who as of September 1 of the current school year, is 19 years of age or older; or the holder of a previously-awarded high school diploma from the province of Alberta; or an equivalent high school diploma from a jurisdiction acceptable to the Minister.





Unit Topics and Evaluation

Physics 30 consists of four units of study: A. Momentum and Impulse B. Forces and Fields C. Electromagnetic Radiation D. Atomic Physics The focus is on helping students understand the scientific principles behind the natural events they experience and the technology they use in their daily lives. Students will be encouraged to develop positive attitudes that support the responsible acquisition and application of knowledge related to science and technology.

The major themes allow connections to be drawn between the four units of this course and between all eight units in Physics 20-30. Physics 30 is composed of the following four units broken up into sixteen modules.

UNIT NUMBER	UNIT TITLE	ASSIGNMENT	WEIGHTING
A	Momentum and Impulse	Assignment 1	10%
		Assignment 2	
B	Forces and Fields	Assignment 3	25%
		Assignment 4	
		Assignment 5	
		Assignment 6	
		Assignment 7	
A-B	Midterm Exam (Supervised)		10%
C	Electromagnetic Radiation	Assignment 8	30%
		Assignment 9	
		Assignment 10	
		Assignment 11	
		Assignment 12	
D	Atomic Physics	Assignment 13	15%
		Assignment 14	
		Assignment 15	
		Assignment 16	
A-D	Final Exam (Supervised)		10%

A schedule of unit due dates will be set up with your teacher as part of your registration. Timelines vary from student to student, depending on when you start the course and how well you grasp the material presented. Keep in mind that in a typical high school classroom, students receive approximately 80 minutes of class time everyday for an entire semester. You should **plan for 125 hours of coursework** to complete the course.



As this is a diploma exam course, for the 2023-2024 school year, 70% of your **school awarded mark** (calculated using the weightings above) will be combined with 30% of your diploma exam mark to calculate your final Physics 30 mark.

The diploma exam is administered by Alberta Education and is a separate exam from the course based final exam. You must write **both the course based exams and the diploma exam** to obtain a final mark for Physics 30.

Marks can be viewed on PowerSchool. Pay attention to comments included with your marks. This could mean there are things that your teacher would like to review with you before finalizing the mark on the assignment. Take the time to come see your teacher and discuss what must be completed or redone. Note: due to course deadlines, corrections will need to be completed in a timely manner as determined by you and your teacher.

Study Sheet

In addition to their formula sheet, students are permitted access to a single-sided, 8 ½ by 11 STUDY SHEET for the midterm exam and the final exam (**excludes the diploma exam**).

Required Materials:

- 1) An approved scientific calculator: [Approved Calculator List](#)
- 2) [Physics 30 Data booklet](#)
- 3) Pearson Physics Textbook
- 4) Physics 30 Workbook
- 5) Pencils, pens, paper or PDF editing software such as KAMI

Are you re-writing the diploma exam?

If you are rewriting the diploma a rewrite fee applies. Please see the LC staff regarding the due date for rewrite submission as it is early in the semester and you must register yourself to rewrite using MyPass.ca.



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Additional Information and Expectations

All students and staff are expected to treat each other with respect. For more information, please refer to our website: www.sturgeonlearning.ca.

