

Physics 1201A Course Outline Fall 2026

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1 Course Information

Physics 1201A (0.5 course), Physics for the Sciences I, Fall 2026.

An introductory calculus-based laboratory course in physics covering the foundational principles of classical mechanics. Topics include force and motion, kinematics, energy, momentum, oscillations, waves, rotational motion, torque, equilibrium, angular momentum, and gravitation.

Note: This course, together with Physics 1202A/B, is a suitable prerequisite for modules having an introductory physics requirement (including modules in the Faculty of Science, modules offered by the basic Medical Science departments, and professional schools requiring a calculus-based laboratory course in physics).

	Section 001	Section 002	Section 003
Lectures	MWF 11:30 am – 12:20 pm; NSC 145	MWF 2:30 – 3:20 pm; NCB 101	MWF 2:30 – 3:20 pm; TC 205
Instructor	Baker	Baker	Jamal

Course coordinator: Baker

Note: Sections 001, 002 and 003 follow a common curriculum, with common assignments, midterms and final examination. **Lecture** sections are numbered 001–003; **laboratory/tutorial** sections are numbered 004–012 and are listed separately in the Lab and Tutorial Schedule. Your Gradebook shows both.

List of Prerequisites

12U Calculus and Vectors (MCV4U) or Mathematics 0110A/B.

Unless students have either the prerequisites for this course or written special permission from the Department of Physics & Astronomy to enroll in it, they may be removed and withdrawn from this course in accordance with university policy. This may be done after the add/drop deadline of the academic term, and the course will be marked as withdrawn (WDN) on their academic record. This decision may not be appealed.

Anti-requisites: Physics 1101A/B, Physics 1401A/B, Physics 1501A/B, the former Physics 1028A/B, or the former Physics 1301A/B.

Lectures: 3 in person lecture hours per week.

Tutorials: 2 in person hours on the weeks indicated in the Lab and Tutorial Schedule (in your lab timeslot).

Labs: 3 in person hours on the weeks indicated in the Lab and Tutorial Schedule.

2 Course Contact Information

Please contact the appropriate individual for your given question type to ensure the fastest, most accurate replies to your inquiries. Students must use their Western (@uwo.ca) email addresses when contacting their instructors.

General Course Questions (Non-Content Related)

Any general course questions (non physics specific course content related) should be directed to the following JIRA link: <https://help.sci.uwo.ca/servicedesk/customer/portal/8>

Due to the large number of students in the course, we use the JIRA ticket system to make sure questions are responded to in a timely manner. General questions sent to the JIRA link will be answered and/or filtered to the appropriate individual by the following course assistants:

Dr. Isabelle Cyr (Program Assistant)

Jennifer Tilston (Undergraduate Affairs Assistant)

All Lab Related Inquiries

All lab related inquiries should also be sent to the course JIRA link: <https://help.sci.uwo.ca/servicedesk/customer/portal/8>

These inquiries will be answered by the first year lab supervisor, Dr. Shailesh Nene, or someone else from the first year lab team. This team is responsible for all lab related inquiries, including grades and late submissions. The lab team email is physlab1@uwo.ca.

Specific Physics Content Questions

If you have specific course content questions (e.g. help with how to solve a certain physics problem), the first point of contact will be your tutorial TA. Please see the lab/tutorial schedule to determine your exact tutorial section and TA. The course TA team this Fall is:

Meerna Albert — malber7@uwo.ca	Zach Aubry — zaubry@uwo.ca
Debayan Das — ddas25@uwo.ca	Nick Frisella — nfrisell@uwo.ca
Areeba Iqbal — aiqba4@uwo.ca	Rina Rast — krast@uwo.ca
Patrick Sandoval — psandova@uwo.ca	James Smith — james.smith@uwo.ca
Iman Wasim — iwasim@uwo.ca	Liam Wilson — lwils66@uwo.ca

These TAs will not only be running your tutorial sessions, and will be available each week in a weekly office hour; they are happy to help answer your physics specific questions, so be sure to stop by these hours if you are struggling with the course content. Please see the TA Office Hour schedule on OWL for more information.

Instructor Specific Questions

The course instructors will be available to answer questions after each class, please come up to the front of the class after lecture if you have content or instructor specific questions. If you need to personally contact Baker, please email introphysics-baker@uwo.ca using your @uwo email. If you need to personally contact Jamal, please email jsakhr@uwo.ca using your @uwo email.

TA Office Hours

Day	Time	TA	Email
Monday	12:30 - 1:30 PM	Nick	nfrisell@uwo.ca
Monday	1:30 - 2:30 PM	Zach	zaubry@uwo.ca
Tuesday	4:30 - 5:30 PM	Iman	iwasim@uwo.ca
Tuesday	5:30 - 6:30 PM	Debayan	ddas25@uwo.ca
Wednesday	12:30 - 1:30 PM	Areeba	aiqba4@uwo.ca
Wednesday	1:30 - 2:30 PM	Patrick	psandova@uwo.ca
Thursday	9:00 - 10:00 AM	Liam	lwils66@uwo.ca
Thursday	10:00 - 11:00 AM	James	james.smith@uwo.ca
Thursday	11:00 AM - noon	Baker	introphysics-baker@uwo.ca
Friday	9:00 - 10:00 AM	Rina	krast@uwo.ca
Friday	10:00 - 11:00 AM	Meerna	malber7@uwo.ca

3 Course Syllabus, Schedule, Delivery Mode

Course delivery includes three weekly in-person lectures, tutorials, assignments, and a laboratory component.

Students are responsible for checking the course OWL Brightspace site (<https://westernu.brightspace.com/>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

Key Dates

- **Classes begin:** Wednesday September 9, 2026
- **Midterm 1:** Sunday October 4, 2026, 1:00pm–3:00pm
- **Fall Reading Week:** October 10 – 18, 2026 (from 6:00pm Friday October 9; includes Thanksgiving, Monday October 12)

- **Midterm 2:** Saturday November 7, 2026, 10:00am–noon
- **Classes end:** Wednesday December 9, 2026
- **Exam period:** December 11 – 22, 2026

Course Schedule (tentative)

The course is divided into three parts, with an exam occurring at the end of each part. Please note that more details on exams and exam preparation will be posted to OWL Brightspace before the first midterm.

The three parts below define the **examinable content** for each exam, and the lecture numbers should be used in preference to the topic titles when preparing. The topic groupings are approximate: some equations-of-motion material extends into Part 2, and some conservation-law material into Part 3. The course comprises 33 lectures in total.

Part 1 — Equations of Motion (Lectures 1–10), from Sept 9 to Oct 2

In Part 1 of the course we will focus on equations of motion in the branch of physics known as mechanics, primarily from Newton’s second law and the kinematic equations. General methods for solving related problems will be introduced.

Midterm 1 — Based on Part 1, Sunday October 4th from 1:00pm–3:00pm

Part 2 — Conservation Laws (Lectures 11–21), from Oct 5 to Nov 6

In Part 2 of the course we will focus on conservation laws in physics, in particular conservation of energy and conservation of momentum. We will briefly consider energy methods for determining equations of motion, and mechanics at high velocities.

Midterm 2 — Based on Part 2, Saturday November 7th from 10:00am–noon

Part 3 — Rotation and Gravitation (Lectures 22–33), from Nov 9 to Dec 9

In Part 3 of the course we will start by focusing on rotational physics, such as Newton’s second law for rotation and angular momentum. We will then finish the course with Newtonian gravitation.

Final Exam — Cumulative (all three parts) with emphasis on Part 3, scheduled within December 11 – 22, 2026

Course-level Learning Outcomes

The aim of this course is not only to gain a thorough understanding of the physics topics covered in class, but also to learn how to *think like a physicist* when describing phenomena or solving problems. Thus, by the end of this course, students should be able to:

#	General Learning Outcomes
1	Apply physics principles and systematic problem-solving strategies to formulate and solve familiar and unfamiliar physics problems.
2	Explain, predict, and justify physical phenomena using fundamental physics concepts and clear physical reasoning.
3	Evaluate the physical plausibility of results using conceptual reasoning, units and dimensional analysis, estimation, limiting cases, and order-of-magnitude reasoning.
4	Apply appropriate mathematical and calculus-based methods to formulate and solve physics problems and interpret the physical meaning of mathematical relationships.
5	Represent and interpret physical situations using verbal descriptions, diagrams, graphs, vectors, and mathematical equations, and translate between these representations.
6	Construct and use simplified physical and mathematical models to describe systems, make predictions, and evaluate the assumptions, applicability, and limitations of those models.
#	Content-Specific Learning Outcomes
7	Apply the kinematic equations to motion in one and two dimensions, including complete analysis of projectile motion (trajectory, range, maximum height, time of flight).
8	Apply Newton's laws of motion to single- and multi-body systems, for forces such as tension, normal forces, and friction, by constructing free-body diagrams and solving the resulting systems of equations.
9	Calculate the work done by constant and variable forces; apply the work-energy theorem and conservation of mechanical energy to systems involving gravity, springs, and friction.
10	Apply impulse, momentum conservation, and center-of-mass concepts to analyze collisions and multi-particle systems.
11	Analyze rotational motion using angular kinematics, moment of inertia, torque, conservation of angular momentum; apply Newtonian gravitation to orbital motion and Kepler's laws.
12	Describe how the equations of motion framework extends across physics, including oscillations and mechanical waves, Lagrangian and Hamiltonian formulations and their connection between symmetries and conservation laws.
#	Lab-Specific Learning Outcomes
13	Perform appropriate experimental set-up and data collection, propagate measurement uncertainties, and use graphical analysis to investigate physical relationships and assess agreement between measurement and theory.
14	Communicate experimental methods, analysis, and conclusions through structured written reports, and collaborate effectively on laboratory investigations, critically analyzing problems individually and as part of a team.

3.1 Course Materials

Costs of Textbooks and Other Learning Materials

The description and approximate cost of all required and recommended course learning materials are disclosed below.

Item	Cost	Required?
Physics Laboratory Manual 2026–2027 for Physics 1201A	\$66.00	Required
Course text (lecture notes), assignments, solutions, practice material and other content (Open Educational Resources)	Free on OWL	Required
Non-programmable calculator (for exams)	Varies	Required

There is **no textbook to purchase** for this course.

Course content: The course content will be delivered in the form of freely available Open Educational Resources (OER) on OWL Brightspace. Typed content associated to each lecture will be made available for free. This content is comprehensive and is the primary material to study from in the course. Additional course content posted for free includes assignments, assignment solutions, problem sets and solutions, as well as multiple choice format extra practice documents.

Lab Manual: Physics Laboratory Manual 2026–2027 for Physics 1201A, \$66.00 per student. **Purchase of this lab manual is mandatory.** It will be available for purchase on *Perusall*, or directly from the Western Bookstore. Please contact the course JIRA (<https://help.sci.uwo.ca/servicedesk/customer/portal/8>) if you have any difficulties obtaining this lab manual.

Technical requirements: You will need a reliable internet connection and a device capable of accessing OWL Brightspace and Gradescope. Assignment submissions must be uploaded as a single legible .pdf file, so you will need either a scanner, a phone camera with a scanning app, or a writing tablet. No specialised software is required and no additional cost is associated with these requirements beyond a non-programmable calculator for exams.

All course material will be posted to OWL Brightspace: <https://westernu.brightspace.com/>. Students are responsible for checking the course site on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL Brightspace site, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

4 Methods of Evaluation

The course grade has two parts: the **exams**, and a single **Pass or Defer** component covering all non-exam work.

Pass or Defer (labs, tutorials, assignments, Art Project)	23%
Midterm 1 - Sunday October 4 th from 1:00pm–3:00pm	22%
Midterm 2 - Saturday November 7 th from 10:00am–noon	22%
Final Exam (scheduled by Registrar’s Office)	33%

The Department of Physics & Astronomy may, in exceptional cases, adjust the final course marks to conform to departmental policy. As per university policy, final grades are calculated and weighted as described in the Course Outline, specified by the above table. After final grades have been released,

providing additional assessments and/or increasing individual student grades is inconsistent with university and departmental policy, thus all such requests cannot be granted.

Pass or Defer: How the 23% Works

Every non-exam component of this course (labs, tutorials, assignments and the Art Project) is graded **pass/fail** and is worth a number of **points**. There are 26 points available, and you need only 23 of them to receive the full 23%.

Component	Points each	Number	Total
Lab 1 — Measurements (online), single lump sum	2.5	1	2.5
Pre-lab quizzes (Labs 2–4)	0.5	3	1.5
Lab reports (Labs 2–4)	2	3	6
Labs subtotal			10
Tutorials	1	6	6
Assignments — initial submission	1	6	6
Assignments — resubmission	0.5	6	3
Art Project	1	1	1
Total points available			26
Points required for the full 23%			23

One point is worth one percent of your course grade. The rule is simple:

- If you earn 23 points or more, you receive the full 23% for this component.
- If you earn fewer than 23 points, you receive one percent for each point you earned, and **the shortfall is added to the weight of your final exam.**

This is why the component is called *Pass or Defer*: any part of the 23% you do not earn during the term is not lost, it is **deferred** to the final exam, where you have a second opportunity to earn it.

Example. Suppose you earn 20 points. You receive 20% for Pass or Defer, and the remaining 3% is added to your final exam, which becomes worth 36% instead of 33%. If instead you earn 24 points, you receive the full 23% and your final exam stays at 33%.

You cannot lose by deferring. Points are only deferred when they were not earned in the first place, so the deferred weight is a second chance at marks you would otherwise have scored zero on. A strong final exam can only help you.

No Academic Consideration request is required for any missed or failed component covered by Pass or Defer. The calculation is applied automatically and identically for every student in the course. There is no need to obtain medical documentation to manage a missed lab, tutorial, assignment or Art Project.

There is no cap on the final exam. Because missed midterms also defer to the final (see below), it is possible for the final exam to carry the entire course grade. A student who completes and fails three labs, does nothing else all term, and sits neither midterm would have a final exam worth 100% of the course grade.

Assignments

Each assignment has two parts: 1) an initial submission [**1 point**], and 2) a resubmission [**0.5 points**]. All assignments and resubmissions need to be submitted as a single .pdf file on Gradescope to their respective folders by their deadline. This can be done in the form of scanning a paper copy, or producing a digital copy on a writing tablet or computer. Please ensure the submitted scan is clearly legible, with all pages in order and in the correct (upright) orientation. Both parts are graded pass/fail. The requirements for each part are as follows:

- **For the initial submission [1 point]**, a list of assignment questions will be posted roughly a week before the initial deadline. To receive a pass you must make an honest attempt at each of the problems — attempting each problem is all that is required here, the initial submission is not graded based on the percentage of problems which are correct. The point here is to have a stress-free attempt to try each problem to the best of your ability, without worrying about grade implications.
- **For the resubmission [0.5 points]**, after the initial submission deadline has passed, a complete set of typed solutions to each problem will be posted. These will both have the mathematical steps, and explanations to each step, for you to compare to your initial submission. Any incorrect parts from the initial submission you must re-do for your resubmission. You do not need to repeat correct questions, or correct parts of questions, from the initial submission. Even if you were 100% correct on the initial submission, you need to submit a resubmission file: either re-upload your initial submission, or a .pdf page that simply states “No corrections needed”.

Art Project [1 point], there will also be an Art Project announced sometime in the first half of the course. This counts for 1 point, the same amount as an initial submission. Any form of art is allowed (e.g., drawings, paintings, memes, computer generated images, poems, songs, videos, sculptures, play scripts, etc.) — but it must somehow be related to the course! Collaborations are allowed, just make sure everyone submits the same file (up to 10 people in a group — contact me if you have a reason to need more). All submissions must be submitted by the due date to Gradescope, which is the default location for the Art Project. *All art projects that cannot be submitted as a .pdf (e.g., videos or audio files) must be submitted on OWL Brightspace rather than Gradescope.*

Late Assignments, because we are releasing solutions after the assignment deadline, late assignments cannot be accepted; the Pass or Defer system, with flexible 23/26 point system provides substantial built-in flexibility to account for multiple missed deadlines.

Assignment and Resubmission Deadlines

All deadlines are at 11:59pm. There is one submission due most Tuesdays of the term, alternating between initial submissions and resubmissions. There is nothing due during Fall Reading Week.

Assignment	Assignment Deadline	Resubmission Deadline
Assignment 1	Tues Sept 15 at 11:59pm	Tues Sept 22 at 11:59pm
Assignment 2	Tues Sept 29 at 11:59pm	Tues Oct 6 at 11:59pm
Assignment 3	Tues Oct 20 at 11:59pm	Tues Oct 27 at 11:59pm
Assignment 4	Tues Nov 3 at 11:59pm	Tues Nov 10 at 11:59pm
Assignment 5	Tues Nov 17 at 11:59pm	Tues Nov 24 at 11:59pm
Assignment 6	Tues Dec 1 at 11:59pm	Tues Dec 8 at 11:59pm
Art Project	Thurs Nov 26 at 11:59pm	No resubmission for the Art Project

Tutorials

Six tutorials [1 point each]. Tutorials are required in this course, and occur on the weeks indicated in the Lab and Tutorial Schedule, in your lab timeslot. Grades are pass/fail. Each tutorial runs as follows:

1. Each tutorial will begin with an introduction from your tutorial TA that will cover content related to the specific tutorial.
2. The TA will then introduce a set task list for the week, which is required to complete the tutorial. This is an escape room style format: once you complete the weekly tasks, you receive the point for that week's tutorial and get to leave. You can refer to your course lecture notes to help solve the problems, but not the internet, AI, or any other notes you brought with you. You are also welcome to work with other students in the class, and ask your TA questions, during this time.

In tutorials: a) using any source other than the course lecture notes and text is not allowed, and b) using notes from someone who already completed the tutorial is not allowed. If you use a) or b), you will receive a maximum of 0.5 points for that week's tutorial.

Tutorial Cycles

The following cycles indicate the date of the first and last session of each tutorial (many sessions operate between these dates). Please see the Lab and Tutorial Schedule, together with your Section number and Subsection letter in Grades on OWL Brightspace, to determine your specific date, time and room. If you have to miss your regular tutorial, you are allowed to attend another before the last tutorial session of that cycle: please inform the TA of your regular section and TA to get credit.

Tutorial	First Tutorial Session	Last Tutorial Session
Tutorial 1	Weds Sept 9	Thurs Sept 17
Tutorial 2	Mon Sept 21	Thurs Oct 1
Tutorial 3	Mon Oct 5	Thurs Oct 22
Tutorial 4	Mon Oct 26	Thurs Nov 5
Tutorial 5	Mon Nov 9	Thurs Nov 19
Tutorial 6	Mon Nov 23	Thurs Dec 3

Tutorial Schedule

Find your **Section number** and **Subsection letter** in Grades on OWL Brightspace. The section number gives the day and time of your labs and tutorials; the subsection letter gives your TA. **Room locations are not listed here because they change on a few dates;** see the separate Lab and Tutorial Schedule for the room and date of every session.

Section	Day	Tutorial time	Subsection A/C	Subsection B/D
004	Monday	6:30 – 8:30 pm	Areeba	Nick (<i>B only</i>)
005	Tuesday	9:30 – 11:30 am	Rina	Liam
006	Tuesday	2:30 – 4:30 pm	Debayan	Liam
007	Tuesday	6:30 – 8:30 pm	Debayan	Zach
008	Wednesday	2:30 – 4:30 pm	Patrick	Iman
009	Wednesday	6:30 – 8:30 pm	James	Zach
010	Monday	2:30 – 4:30 pm	Nick	Meerna
011	Thursday	6:30 – 8:30 pm	Nick (<i>C only</i>)	—
012	Thursday	2:30 – 4:30 pm	Patrick	James

Exams

Two Midterms and a **Final Exam**. Two 22% Midterm Exams will occur on Sunday October 4, 2026 (1:00pm–3:00pm) and Saturday November 7, 2026 (10:00am–noon). A 33% cumulative Final Exam will be scheduled by the Registrar’s Office during the December examination period, December 11 – 22, 2026.

Midterms — Flexible Completion. Both midterms are designated *flexible completion* assessments. **There is no makeup test for a missed midterm.** Instead:

- If you **miss** a midterm, its entire 22% weight shifts automatically to your final exam.
- If you **write** a midterm but your final exam grade is **higher** than your midterm grade, that midterm’s 22% weight also shifts to your final exam.

In other words, a midterm can only ever help you. **You do not need to request Academic Consideration for a missed or poorly written midterm; the reweighting is done automatically for every student.** You are strongly encouraged to write both midterms even if you are not at your best; there is no penalty for having tried.

If you miss or underperform on both midterms, the entire 44% shifts to the final exam (provided the final exam is an improvement, this shift can only help you).

The only exception to the no-makeup rule is an **early sitting**, available solely for a university-sanctioned schedule conflict or a religious accommodation. See *Alternate Sitzings* in Section 5.2. No other circumstance, including illness, qualifies.

Final Exam. The final exam is the one assessment in this course that falls outside flexible completion. It must be written. As per university policy, an absence from the final examination requires supporting documentation submitted through the Student Absence Portal (SAP). See Section 5.1, Student Absences, for details on the Special Examination.

Labs

Four labs [10 points in total]. See the lab information sheet on OWL Brightspace for all lab related info. Lab 1 (Measurements) is completed online and is graded as a single 2.5 point lump sum. Labs 2, 3 and 4 each carry a **pre-lab quiz worth 0.5 points** and a **lab report worth 2 points**.

The lab component of the course is under the responsibility of Dr. Shailesh Nene. The lab team is responsible for all lab related items, including answering questions, setting deadlines, grading,

etc. Any questions about the labs should be addressed to the lab team via a JIRA ticket (<https://help.sci.uwo.ca/servicedesk/customer/portal/8>) or at the email physlab1@uwo.ca. Lab requirements, deadlines and related details will be communicated by the Lab Team both in lab and in a separate document posted on OWL Brightspace.

Lab points feed into the Pass or Defer total in exactly the same way as every other component: if you miss or fail a lab, no Academic Consideration request is required, and the points you did not earn are deferred to your final exam. **This is separate from the minimum completion requirement below, which is a condition of passing the course rather than a matter of grades.**

Essential Learning Requirements

The practical skills assessed in the **laboratory component** are essential to this course. They involve experimental set-up, data collection, uncertainty propagation and graphical analysis, and they cannot be assessed through the midterms or the final exam.

You must complete a minimum of 3 of the 4 labs in order to pass this course. If you complete fewer than 3 labs, you will not have met the requirements of the course and will be withdrawn (WDN) from it. You may appeal to the Associate Dean (Academic) for reinstatement with an Incomplete (INC) standing as per policy; where an appeal for INC is granted, your maximum course load may be reduced during the term in which you complete the outstanding requirements.

This requirement concerns completion only, and is entirely separate from your grade. A lab that you complete but do not pass still counts towards your 3-lab completion total. Attending and submitting is what satisfies the requirement; how well you did determines only how many points you earn towards Pass or Defer.

No other component of this course carries this “essential learning requirement” to pass stipulation.

5 Academic Policies and Support Services

5.1 Student Absences

Nearly every component of this course is designated *flexible completion*: the midterms, the assignments, the tutorials and the labs. This means that if you miss one, **you do not need to submit an Academic Consideration request at all** — the reweighting or flex-credit rule described in Section 4 is applied automatically and identically for every student. You do not need to obtain medical documentation to manage a missed midterm, assignment, tutorial or lab.

As per university policy, the only absence in this course requiring supporting documentation and the use of the Student Absence Portal (SAP) is the final examination. The final exam is the single assessment that falls outside flexible completion.

General Information About Missed Coursework

Students must familiarize themselves with the *University Policy on Academic Consideration — Undergraduate Students in First Entry Programs* posted on the Academic Calendar:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult Accessible Education (http://academicsupport.uwo.ca/accessible_education/).

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:

https://registrar.uwo.ca/academics/academic_considerations/

Where an Academic Consideration request is required (that is, for the final examination), it must be made within 48 hours after the assessment date.

Absences from Final Examinations — Special Examination (SPC)

Per university policy, an Academic Consideration request with supporting documentation is required for the final examination, which is scheduled during the official examination period by the Registrar's Office. If you miss the final exam, contact the Science Academic Advising office as soon as you are able (<https://www.uwo.ca/sci/advising/>).

If you have been approved by the Academic Advising Office to write a Special Examination (SPC), and the final exam is your only outstanding course component, an SPC will be assigned and scheduled per university policy. You may also be eligible for an SPC if you are in a "Multiple Exam Situation" (e.g., more than 2 exams in a 23-hour period, more than 3 exams in a 47-hour period).

If you miss your SPC exam and are approved for Academic Consideration, you will be withdrawn (WDN) from the course without academic penalty. If you experienced extenuating circumstances such as prolonged illness, you may appeal to the Associate Dean (Academic), on a case-by-case basis, for the opportunity to write the final exam the next time the course is offered. An outstanding SPC will reduce your course load for the term in which the exam is deferred. If you miss your SPC exam and Academic Consideration is not approved, or was not requested, you will receive a grade of zero on the exam.

5.2 Accommodation, Accessibility and Academic Policies

Religious Accommodation

When a recognized religious holiday either requires you to be absent from the University, or requires or prohibits an activity that makes it impossible for you to complete an academic requirement scheduled that day, you are entitled to accommodation. No student will be penalized for an absence for religious reasons, and an alternative means of satisfying the requirement will be arranged. This accommodation is provided in accordance with the University's policy on Accommodation for Religious Holidays:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf

Requests should be submitted through the Student Absence Portal (SAP), identifying the conflict and the specific course component(s) affected.

Midterms: if a religious observance conflicts with a midterm test, you must submit your request **no later than one week before the test**. An early sitting of the test will be arranged. As set out above, no makeup test is offered for any other reason; this early sitting is available specifically for this accommodation.

Final Examination: if a religious observance conflicts with the final exam, you must submit your request **no later than two weeks before the exam**. A Special Examination will be arranged, to take place no later than one month after the end of the examination period.

Students are responsible for finding out what was covered in any class they miss due to a religious observance, and for taking the appropriate steps to keep up with the course.

If a suitable arrangement cannot be reached, you should consult the Undergraduate Chair of the Department of Physics & Astronomy, and if necessary the Associate Dean (Academic) of the Faculty of Science.

For a list of recognized religious observances, please visit the calendars posted on the Equity, Diversity & Inclusion website: <https://www.edi.uwo.ca> (About Us → Resources → Additional Resources → Calendars).

Alternate Sitzings and Make-Up Tests

Both midterms in this course are weighted at 22%, above the 16% threshold at which the Faculty of Science requires an **alternate (early) sitting** to be offered. In this course an early sitting of a midterm is available **only** in the following three situations:

- a conflict with another scheduled class, laboratory or tutorial;
- a university-sanctioned varsity or institutional event; or
- a religious holiday or religious commitment that prevents you from writing at the scheduled time.

If you require this accommodation you must notify the instructor **in writing no later than one week before the test**. Varsity student-athletes travelling with a team are accommodated by arranging to write on the road, in coordination with their coach.

No other circumstance, including illness, qualifies for an early sitting or a make-up test. All other missed midterms are handled through the automatic reweighting to the final exam described in Section 4.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic%20Accommodation_disabilities.pdf

Academic Policies

The website for Registrar Services is <https://www.registrar.uwo.ca/>.

In accordance with policy, https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf, the centrally administered e-mail account provided to students will be considered

the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

Requests for Relief (formerly “Appeals”)

What were previously called “appeals” are now referred to as **Requests for Relief**. The term “appeal” is now reserved for complaints regarding procedural errors at the Senate Review Board Academic (SRBA).

Policy on Request for Relief from Academic Decisions:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/requests_for_relief_from_academic_decisions.pdf

Procedures on Request for Relief from Academic Decisions (Undergraduate):

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/undergrad_requests_for_relief_procedure.pdf

Scholastic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically the definition of what constitutes a Scholastic Offence:

Policy on Scholastic Offences: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_offences.pdf

Procedures on Scholastic Offences (Undergraduate): https://www.uwo.ca/univsec/pdf/academic_policies/appeals/undergrad_scholastic_offence_procedure.pdf

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Computer-marked multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Exam Conduct. You are responsible for confirming your assigned room ahead of each exam and for writing in that room; where seats are assigned, you must sit in your assigned seat and may be asked to move if you are in the wrong place. All electronic devices must be turned off and stored in your bag for the duration of the exam, and smart glasses may not be worn at any point, even when turned off. You must follow all instructions given by the proctors. Washroom breaks must be signed out and back in with a proctor and are not guaranteed, so please go before the exam begins; absences of five minutes or longer will be recorded and may be reviewed. If you have a medical condition that may require longer or more frequent breaks, contact Accessible Education or the instructor in advance.

Use of Electronic Devices During Assessments

In courses offered by the Faculty of Science, the possession of unauthorized electronic devices during

any in-person assessment (such as tests, midterms and final examinations) is **strictly prohibited**. This includes, but is not limited to: mobile phones, smart watches, smart glasses, hidden cameras and wireless earbuds.

Unless explicitly stated otherwise in advance by the instructor, the presence of any such device at your desk, on your person, or within reach during an assessment will be treated as a scholastic offence, **even if the device is not in use**.

Effective September 2026, the typical penalty for this offence is a failing grade in the course AND a 12-month prohibition on retaking the course.

Only devices expressly permitted by the instructor may be brought into the assessment room. For this course, the only permitted device is a **basic non-programmable calculator**. It is your responsibility to review and comply with these expectations.

Use of Generative AI Tools

The use of generative AI tools (e.g. ChatGPT, Microsoft Copilot, Google Gemini, or similar platforms) is restricted in this course as follows:

- **Exams (both midterms and the final exam): generative AI may not be used whatsoever.** Any use of a generative AI tool during an exam will be treated as a scholastic offence. Note also that the devices needed to access such tools are themselves prohibited in the assessment room, as described above.
- **Assignments and labs: generative AI may not be used to generate the file you submit for grading.** The work you upload must be your own. Using such a tool to produce, in whole or in part, the solutions, write-up, figures or lab report that you submit will be treated as a scholastic offence.
- **Tutorials:** as stated in Section 4, only the course lecture notes may be consulted during a tutorial. Generative AI and the internet are not permitted.

Using generative AI for content generation, code writing, problem solving, translation or summarization, when not explicitly allowed, will be treated as a scholastic offence. If you are unsure whether a particular use is permitted, it is your responsibility to ask before using the tool.

AI Use By Course: We have developed an AI chat bot that has all course materials built into it, which may be available on OWL for periods during the term. It has been designed to help with student learning, and be very specific about course notation, breadth, style, etc. which cannot be replicated with traditional AI LLM models; it is recommending to use this instead of generic LLMs for study purposes. For purposes of academic integrity, AI may also be used to scan submissions. You are not required to include your name, student number or any identifying information on assignment submissions, this information is provided by your Western log in. If you have any questions about this please contact introphysics-baker@uwo.ca, or speak to Baker after class.

University statement on generative AI. Unless otherwise stated, the use of generative AI tools (e.g., ChatGPT, Microsoft Copilot, Google Gemini, or similar platforms) is not permitted in the completion of any course assessments, including but not limited to: assignments, lab reports, presentations, tests, and final examinations. Using such tools for content generation, code writing, problem solving, translation, or summarization when not explicitly allowed will be treated as a

scholastic offence. If the use of generative AI is permitted for a particular assessment, the conditions of use will be specified by the instructor in advance. If no such permission is granted, students must assume that use is prohibited. It is your responsibility to seek clarification before using any AI tools in academic work.

Instructor use of generative AI. In the interest of transparency: an AI-assisted system is used to generate personalized written feedback on assignment submissions, as described in Section 4. AI tools have also been used to help draft practice questions for the course. All course lecture content, assignment questions and exam questions are written by the instructor.

5.3 Support Services

Academic Advising. Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic consideration for absences, requests for relief, exam conflicts and other academic matters: <https://www.uwo.ca/sci/advising/>

Mental Health Support. Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (<https://learning.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

Student-run support services are offered by the University Students' Council (<https://westernu.sc.ca/services/>) and the Science Students' Council (<https://www.westernssc.ca>).

This course is supported by the Science Student Donation Fund. If you are a student registered in the Faculty of Science or Schulich School of Medicine and Dentistry, you pay the Science Student Donation Fee. This fee contributes to the Science Student Donation Fund, which is administered by the Science Students' Council (SSC). One or more grants from the Fund have allowed for the

purchase of equipment integral to teaching this course. You may opt out of the Fee by the end of September of each academic year by completing the online form linked from the Faculty of Science's Academic Advising site. For further information on the process of awarding grants from the Fund or how these grants have benefitted undergraduate education in this course, consult the Chair of the Department or email the Science Students' Council at ssc@uwo.ca.