Mechanics Fall 2024

PHYS 121

Published

Class Schedule

Course	Meet Days	Meet Time	Location	Instructor(s)
PHYS 121 001 [LEC]	**Tue, Thu** *Sep 4 - Dec 3*	11:30AM - 12:50PM	AL 116	R. Epp *rjepp@uwaterloo.ca (mailto:rjepp@...*
PHYS 121 002 [LEC]	**Tue, Thu** *Sep 4 - Dec 3*	08:30AM - 09:50AM	AL 113	R. Epp *rjepp@uwaterloo.ca (mailto:rjepp@...*
PHYS 121 201 [TST]	**Tuesday** *Nov 12*	07:00PM - 08:50PM		R. Epp *rjepp@uwaterloo.ca (mailto:rjepp@...*
	Thursday *Oct 10*	07:00PM - 08:50PM		K. Cummings *karenc@uwaterloo.ca (mailto:karenc...*

schedule data automatically refreshed daily

Instructor & TA (Teaching Assistant) Information

Lecture Facilitator	***Contact***	
Prof. Richard Epp	rjepp@uwaterloo.ca PHY 243	
Workshop Facilitator	***Contact***	
Prof. Karen Cummings	karenc@uwaterloo.ca PHY 371	
Teaching Assistants (TAs)	***Contact***	***Duties***
Ahmed Mohamed	asalah@uwaterloo.ca	Workshop
Nithin Aaron	n2aaron@uwaterloo.ca	Workshop
Sonell Malik	s96malik@uwaterloo.ca	Workshop
Zhiyao Wang	z2425wan@uwaterloo.ca	Workshop
Ziyuan Yang	ydyang@uwaterloo.ca	Workshop
Aney Kapadia	A6KAPADI@uwaterloo.ca	Mastering Physics & Tutorial Centre Office Hours
Aroosa Ijaz	A4IJAZ@uwaterloo.ca	Mastering Physics & Tutorial Centre Office Hours
Sean Dougherty	s2doughe@uwaterloo.ca	Mastering Physics & Tutorial Centre Office Hours
Batia Friedman-Shaw	bfriedmanshaw@uwaterloo.ca	physepp@uwaterloo.ca email & other admin tasks

Do NOT send emails to Profs. Epp or Cummings, or the TAs directly. Please direct ALL course questions and concerns to the COURSE EMAIL: physepp@uwaterloo.ca (physepp@uwaterloo.ca) **, or preferably, the PIAZZA WEBSITE: https://piazza.com/uwaterloo.ca/fall2024/phys121_karenc_rjepp_1249** (https://piazza.com/uwaterloo.ca/fall2024/phys121_karenc_rjepp_1249) **.**
The TAs and your peers, as well as the instructors---time permitting, will be monitoring Piazza and replying to the posts. Unlike emails, these posts benefit ALL students; Piazza is much more helpful to everyone than emails. The TAs will also reply promptly to physepp emails. If the TAs cannot address your question or concern, they will forward your email (or Piazza post) to the instructors. Only if your question or concern is of a private or sensitive nature, should you email Profs. Epp or Cummings directly. We typically receive too many emails each day to be able to respond in a timely fashion.

Office Hours
Prof. Epp: Tuesday/Thursday 10:00 - 11:30 am (room TBD) or any available time by appointment. Please email three suggested times.
Prof. Cummings: Monday/Wednesday 2:30 - 4:00 pm (Physics Tutorial Centre: PHY 308) or any available time by appointment. Please email three suggested times.
Both instructors love helping students. Please make use of this important learning resource! You are welcome to see either or both instructors.
Teaching Assistants: Some TAs will also have office hours, likely scheduled at the **Physics Tutorial Centre**. Details to be announced on LEARN.

Getting Help with Technology

Unfortunately, the instructors (Epp and Cummings) and TAs cannot help with technical issues. Fortunately, good technical support is available for the software we are using. You just need to contact the right people. If you have a question or need help, please contact:

LEARN & iClicker (integrated with LEARN)	learnhelp@uwaterloo.ca (mailto:learnhelp@uwaterloo.ca) or https://uwaterloo.c (https://uwaterloo.ca/learn-help/students)
Mastering Physics	https://support.pearson.com/getsupport/s/ (https://support.pearson.com/getsu
Crowdmark	https://crowdmark.com/help/ (https://crowdmark.com/help/)

Course Description

> *Calendar Description for PHYS 121:*
>
> An introductory course in physics for students intending to concentrate their future studies in the physical sciences, optometry, or mathematics; includes vectors (dot and cross products), particle kinematics and dynamics, forces in nature, work and energy, conservation of energy and linear momentum, rotational kinematics and dynamics, and conservation of angular momentum.
>
> View requirements for PHYS 121 (https://acal.fast.uwaterloo.ca/course/1249/PHYS/121)

Overview of PHYS 121:

- **Six Modules:** The course is divided into **six** 2-week modules. The modules start on a Thursday lecture (first one September 5th) and run for two-weeks, ending on a Tuesday lecture (four lectures with the two workshops in between them). First workshop is **Friday, September 6th** (for those with Friday workshops) or **Monday, September 9th** (for those with Monday workshops).

- **Lectures:** Lectures are a crucial learning resource in this course. GO TO LECTURES. By far the biggest problem students have in this course is not recognizing, soon enough, that PHYS 121 is NOT a repeat of high school physics. It is a significant notch up both in conceptual depth and mathematical sophistication. Lectures focus on this difference. They cover the main physics concepts, as deeply as time permits, and provide powerful problem-solving strategies, to help you begin to "think like a physicist." Lecture notes will be posted on LEARN. It is recommended you either take and study your own lecture notes, or print out the posted lecture notes, bring them to class, and annotate them during the lecture, for later study.
  IMPORTANT: iClickers will be used in class to encourage lecture attendance, and we may do some iClicker questions in class. However, this attendance credit will be awarded only if you also complete both the **pre-test** and the **post-test**. More details below.

- **Workshops:** Workshops are a crucial learning resource in this course. GO TO WORKSHOPS. Prof. Cummings facilitates these workshops and has posted, on LEARN, a separate outline describing them. Be sure to go to your first workshop to learn more about them.

- **Mastering Physics Problem Sets:** There is one problem set for each module, due at midnight on the first Monday after the module ends (first one due Monday, September 23). These are assigned and completed through an online textbook-based homework system called Mastering Physics (MP). See the information posted on LEARN. This important learning resource, based on end-of-chapter textbook problems, is designed to help you practice and master your problem-solving skills and self-evaluate your understanding. You will get immediate feedback as to whether your submitted answer is correct and multiple follow-up attempts are allowed to aid in learning. The goal is not to "get them done for grades," but to learn as much as possible in the process.
  IMPORTANT: In each MP problem set, one problem will be chosen for you to solve on paper (or an electronic device) and submit via Crowdmark for grading. To receive the maximum grade, you must demonstrate a rich set of problem solving skills: draw useful, properly labelled diagram(s), predict an approximate solution, start with general equations and then specialize to the case at hand, analyze algebraic solution for correct dimensions and extreme cases, generate reasonable numbers and insert these at the end, indicate interesting things you observed/learned, etc. Details will be posted on LEARN. It is strongly recommended that you exercise these skills for ALL of the MP problems you solve, since this is what you will be tested on in the two midterm tests and final exam.

- **Textbook Readings:** The textbook reading assignments for the term are given below. The lectures and workshops cannot cover all of the details of the material in the course., and the textbook is an excellent resource to fill in any missing details, or go over lecture/workshop material at your own pace. It is strongly recommended that you study the assigned textbook chapters as early as possible in each module so that you arrive at lectures and workshops prepared with questions, and knowing what you don't understand and need help with. It is important to learn how to learn by reading a textbook, a skill that becomes ever more important as your courses become more advanced in future terms. A good textbook is a great learning resource!

- **Long-Answer Problems:** For each module, usually two "long-answer problems" with full solutions will be posted on LEARN. It is strongly recommended that, at the end of each module, you work through these carefully, on your own, pretending they are test/exam problems. Work through them first without consulting the solutions, then study the solutions carefully. These problems are for self-study/self-assessment to help you prepare for the tests and exam. Some of these long-answer problems will also sometimes be used during the workshops.

- **Testing:** There will be **two** midterm tests and one final exam. More details below.

- **Bonus Marks:** There is an opportunity to earn up to 5% bonus marks on your PHYS 121 grade by completing and submitting five of the "Rocket Science" exercises (each worth 1%, graded 0, 1, 2, or 3 out of 3). These are challenging worksheets that apply PHYS 121 concepts in more advanced (and interesting!) contexts. Details will be posted on LEARN and discussed by Prof. Cummings in the workshops.

Learning Outcomes

By the end of this course students should be able to:

Demonstrate conceptual understanding of physics significantly beyond that of a typical high school physics course. For example:

--- a general, calculus-based understanding of kinematics that goes beyond the constant acceleration case
--- using only the two fundamental kinematical relations to solve problems (not the "five kinematical formulas" often taught in high school)
--- mastering angular momentum and angular momentum conservation (the most important topic not often covered in high school)
Demonstrate mastery of mathematical skills significantly beyond that used in a typical high school physics course. This includes:
--- solving and analyzing problems algebraically (no numbers)
--- mastering the use of vectors, including component and non-component calculations, dot product, and cross product in three-dimensional space
--- being able to solve multiple equations in multiple unknowns with techniques beyond just "substitution"
Demonstrate advanced problem-solving skills significantly beyond that used in a typical high school physics course. This includes:
--- drawing useful, properly labeled diagrams to help visualize the physics
--- learning to begin with general equations, then specializing to the case at hand
--- learning to predict and check solutions, both by dimensional analysis and analysing extreme cases
Some specific learning outcomes include:
--- Derive and apply kinematical equations for constant acceleration in one and two dimensions. Distinguish between constant and variable acceleration situations and comment on the use of calculus to derive general kinematical equations.
--- Discuss Newton's Laws, draw free body diagrams and convert the diagrams into equations of motion. Solve equations of motion for problems of various complexity.
--- Define work, kinetic energy, potential energy and internal energy. Explain and use the conservation of energy to solve problems in mechanics, and compare the forces and energy approaches.
--- Discuss the conservation of linear momentum and relate the change in momentum to the net force acting over time on an object. Apply the conservation of linear momentum to situations of various complexity.
--- Discuss and calculate torque using different representations. Define and explain the significance of moment of inertia, and solve problems in rotational dynamics using equations of motion and energy considerations.
--- Discuss the conservation of angular momentum and relate the change in angular momentum to the net torque acting over time on an object. Discuss and apply the conservation of angular momentum to situations of various complexity.
--- Represent rolling motion as a rotation about a moving axis and as a rotation about the momentarily stationary point of contact. Apply both torque-angular acceleration and energy considerations to rolling motion, and understand the role of friction in accelerated rolling motion. Also use angular momentum considerations to solve rolling problems.
--- Define equilibrium; distinguish between static and dynamic equilibrium. Apply the conditions for static equilibrium to identify and calculate unknown support forces acting on the parts of a structure.

Tentative Course Schedule

Reading Assignments

You should read productively/study the textbook for 2 hours in preparation for the start of a new two-week module. This will not be enough time for most students to read entire chapters in the textbook. You should experiment with ways to get the most out of your two-hour reading block.

Reading Schedule

Module #	Topic(s)	Module Start and End Date	Suggestions in *University Physics* (choose from)
1	**Kinematics:** Units, Vectors, Position, Velocity and Acceleration, Constant Acceleration Motion, Projectile Motion, Circular Motion, Relative Motion. Also dimensional analysis.	Sept. 5 - Sept. 18	Chapters 1,2,3 Chapter 4 Sec. 1-4
2	**Dynamics:** Types of Forces, including Static and Kinetic Friction, Newton's Three Laws, Free Body Diagrams and Solving Force Problems,	Sept. 19 - Oct. 2	Chapters 4 and 5
	Reading Week	**Oct. 14 -18**	
	Midterm Test 1	**Thursday, Oct. 10 7:00 - 8:50 pm**	
3	**Energy:** Work, Kinetic Energy, and the Work-Kinetic Energy Theorem, Potential Energy and Internal Energy, and Conservation of Energy.	Oct. 3 - Oct. 23 (Incl. Reading Week)	Chapter 6 and 7

4	**Linear Momentum:** Linear momentum, Center-of-Mass, Impulse-Momentum Theorem, Conservation of Linear Momentum, Collisions.	Oct. 24 - Nov. 6	Chapter 8
	Midterm Test 2	**TENTATIVE DATE: Tuesday, Nov 12 7:00 - 8:50 pm**	
5	**Rotational Motion:** Rotation of Rigid Bodies, Rotational Kinematics and Dynamics, Angular Velocity and Acceleration, Moment-of-Inertia, Torque. Also Rolling Motion.	Nov. 7 - Nov. 20	Chapters 9 and 10
6	**Angular Momentum:** Angular Momentum, Conservation of Angular Momentum, Also Equilibrium.	Nov. 21 - Dec. 3	Chapters 10 and 11

Texts / Materials

Title / Name	Notes / Comments	Required
University Physics, 15th Ed. by Young and Freedman		No
Subscription to Mastering Physics on-line homework system.		Yes
Scientific Calculator		Yes

- Notes on Textbook:
  - This is an important learning resource. Recommend to get it ASAP and use it.
  - Same book used in PHYS121, PHYS122 and PHYS124. A great deal!
  - Get at UW Bookstore (eText comes bundled with Mastering Physics).
  - Can substitute with any calculus-based introductory physics textbook (and buy MP separately, below), but this is not recommended.
- Notes on Mastering Physics:
  - This is an important learning resource to do practice problems (which are worth course grades). Get it ASAP and use it.
  - Cost covers access for PHYS121, PHYS122 and PHYS124 when taken within 12 months of start date. A great deal!
  - Get ONLY at UW Bookstore (don't try to get it elsewhere online - it won't work!))
  - $50 is the cheapest you will find anywhere, and making this component mandatory (for this price) is within university regulations.

Student Assessment

Component	Value
Workshops (20% total):	
--- TA Evaluation	10
--- Learning Artifact	5
--- Project	5
Biweekly Mastering Physics Problem Sets (15% total):	
--- Answers submitted through Mastering Physics	10
--- One problem solution per module submitted to Crowdmark	5
Midterm Test 1 (Thursday, Oct 10, 7:00 - 8:50 pm)	15
Midterm Test 2 (Date TBD)	15
Final Exam	30
Participation* (iClicker attendance in class)	5
* Must submit pre-test and post-test to receive Participation grade	
Rocket Science Bonus Marks	5

Participation Credit

iClickers will be used in class to register attendance. This is FREE. Simply go to this link: https://join.iclicker.com/OTNN (https://join.iclicker.com/OTNN) to create an account. Then go to LEARN and click on the iClicker link to access your iClicker account. More details will be posted on LEARN.
IMPORTANT: In order to receive the iClicker participation credit, you must submit both the **pre-test** and the **post-test**. These are assessments of conceptual understanding and problem-solving skills that do NOT contribute to your course grade. The pre-test helps you self-assess your level of readiness for this course, and also helps to generate well-functioning groups in the workshops. The information from both tests is used, in an aggregate fashion, to improve the course in future offerings. More details will be provided on LEARN and will be discussed by Prof. Cummings in your first workshop.
IMPORTANT: To accommodate for occasional absences and small technical issues, full marks (100% credit) will be allocated for students who register at least a 75% attendance through the iClicker system. A sliding scale will be applied to response rates below the 75% level. If you send an email about iClicker problems to physepp@uwaterloo, your problem will be recorded and, if you are below the 75% threshold, will be dealt with at the end of the term (not during the term).

Student Time on Tasks

You should expect to spend about 10 hours per week on this course. Some students may find that they need more time than this to complete tasks. However, it is important to keep track of how much time you are spending on your work and to keep your time expectations reasonable. All of your courses will require a lot of work. You can visit the Student Success Office (SSO) for tips on how to improve your time management and study skills, as well as reduce test-taking anxiety. This may be the most important step you can take towards becoming a successful student!

Adjustments for Late or Missing Work

In general, there is no make-up work in this course. However, every student will be allowed:

1. **One excused absence from the workshops**. This means that you will be excused from A) a zero on your "Learning Artifact" from the missed meeting and 2) a zero on your TA/Instructor evaluation.

2. **10 dropped points from the total number of Mastering Physics points for the term**. This effectively allows you to drop questions from various assignments or to minimize the effect of an assignment that is missed completely. Late Mastering Physics assignments are given a late penalty, on a sliding scale that goes down to zero after three days (72 hours) past the deadline.

Note: You do not need to notify us of missed work or requests for drops regarding the Workshops or Mastering Physics problem sets. We will automatically drop lowest grades under this policy so that your final grade is maximized. **No VIF/absence declaration is required for this drop policy and a VIF/absence declaration will not result in additional excused work, except in extenuating circumstances**. If you have more than one VIF/absence declaration associated with a chronic or extended illness resulting in more than 1 absence from the workshops, or more than one missed Mastering Physics assignment, please contact physepp@uwaterloo.ca. Workshops cannot be made-up later under any circumstance.

Missed Midterm Tests

Normally, a missed midterm test results in a grade of zero.

There are two exceptions:

1. If you have a midterm test time conflict with an official university event (e.g., you are on a university sports team and have a tournament), you may be able to write a deferred midterm test **provided** you let us know (send an email to physepp@uwaterloo.ca (mailto:physepp@uwaterloo.ca)) at least **two weeks** in advance of the test and provide sufficient documentation of said event.

2. If you miss a midterm test due to illness or other emergency, with appropriate documentation, the grade weight of the test may be shifted to the final exam. All University rules governing VIFs and absences from midterm tests are applied in this course. It is your responsibility to familiarize yourself with these rules. If you wish to be excused from a missed test, based on a VIF or other excused absence, you MUST email physepp@uwaterloo.ca (mailto:physepp@uwaterloo.ca) within 3 days (72 hours) of the missed test and provide the following information: your name and student number; a copy of the VIF or absence, and the date range over which it applies.

Missed Final Exam

Normally, a missed final exam results in a grade of DNW (course failed; did not write final exam).

If you have a valid academic excuse, please contact Prof. Epp in withing within 3 days (72 hours) of the missed exam to explain the situation. This is what will happen:

1. Prof. Epp will consider your excuse and accompanying documentation (VIF, absence declaration, or other extenuating circumstances) and decide if this is a valid academic excuse. If so, and if you would obtain a passing grade with a100% final exam, the grade will be changed from DNW to INC (Incomplete).

2. You will be given the option to write a deferred PHYS 121 final exam on one of the (usually two) Fall exam make-up dates in January of the following Winter term arranged by the Faculty of Science. The grade on this exam will be combined with your other course grades to determine your earned numerical grade, which will replace the INC grade.

3. If you do not choose option #2, you will need to contact the online Winter PHYS 121 course instructor and request to write their final exam in April. If the instructor agrees to this accommodation (this is NOT guaranteed), the grade on this exam will be combined with your other course grades to determine your earned numerical grade, which will replace the INC grade. IMPORTANT: If you choose option #3, you will be removed from any Winter courses requiring PHYS 121 as a prereq, such as PHYS 122, PHYS 124, PHYS 175. The next opportunity to take PHYS 122 will be the online PHYS 122 course in the following Spring term. This option is NOT recommended.

Comment on PHYS 121 Grades

Many Physics students find PHYS 121 their most challenging 1A course, and the course in which they get the lowest grade. This is often because they assume the course will be a repeat of their high school physics course, and don't realize it's not until it's too late, and the amount of catch up work they need to do is overwhelming. Nevertheless, historically, the average grade in PHYS 121 is in the low 70s, typically with an under 10% failure rate. If you find that you passed the course, but got an average grade of less than 50% on the two midterm tests and final exam, please be aware that you may not be well prepared for PHYS 122 or PHYS 124. Consult with your academic advisor for strategies to succeed.

Assignment Screening

No assignment screening will be used in this course.

Administrative Policy

Territorial Acknowledgement: The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is centralized within the Office of Indigenous Relations (https://uwaterloo.ca/indigenous)

Generative AI

This course includes the independent development and practice of specific skills, such as **[fill this in with your discipline-specific skills]**. Therefore, the use of Generative artificial intelligence (GenAI) trained using large language models (LLM) or other methods to produce text, images, music, or code, like Chat GPT, DALL-E, or GitHub CoPilot, is not permitted in this class. Unauthorized use in this course, such as running course materials through GenAI or using GenAI to complete a course assessment is considered a violation of Policy 71 (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71) (plagiarism or unauthorized aids or assistance). Work produced with the assistance of AI tools does not represent the author's original work and is therefore in violation of the fundamental values of academic integrity including honesty, trust, respect, fairness, responsibility and courage (ICAI (https://academicintegrity.org/images/pdfs/20019_ICAI-Fundamental-Values_R12.pdf), n.d.).

You should be prepared to show your work. To demonstrate your learning, you should keep your rough notes, including research notes, brainstorming, and drafting notes. You may be asked to submit these notes along with earlier drafts of their work, either through saved drafts or saved versions of a document. If the use of GenAI is suspected where not permitted, you may be asked to meet with your instructor or TA to provide explanations to support the submitted material as being your original work. Through this process, if you have not sufficiently supported your work, academic misconduct allegations may be brought to the Associate Dean.

In addition, you should be aware that the legal/copyright status of generative AI inputs and outputs is unclear. More information is available from the Copyright Advisory Committee: https://uwaterloo.ca/copyright-at-waterloo/teaching/generative-artificial-intelligence (https://uwaterloo.ca/copyright-at-waterloo/teaching/generative-artificial-intelligence)

Students are encouraged to reach out to campus supports if they need help with their coursework including:

- Student Success Office (https://uwaterloo.ca/student-success/resources) for help with skills like notetaking and time management
- Writing and Communication Centre (https://uwaterloo.ca/writing-and-communication-centre/services-0/services-undergraduate-students) for assignments with writing or presentations
- AccessAbility Services (https://uwaterloo.ca/accessability-services/students) for documented accommodations
- Library (https://uwaterloo.ca/library/research-supports/quick-start-guide) for research-based assignments

University Policy

Academic integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check the Office of Academic Integrity (https://uwaterloo.ca/academic-integrity/) for more information.]

Grievance: A student who believes that a decision affecting some aspect of their university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4 (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70). When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for their actions. [Check the Office of Academic Integrity (https://uwaterloo.ca/academic-integrity/) for more information.] A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71). For typical penalties, check Guidelines for the Assessment of Penalties (https://uwaterloo.ca/secretariat/guidelines/guidelines-assessment-penalties).

Appeals: A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70) (other than a petition) or Policy 71, Student Discipline (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71) may be appealed if there is a ground. A student who believes they have a ground for an appeal should refer to Policy 72, Student Appeals (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-72).

Note for students with disabilities: AccessAbility Services (https://uwaterloo.ca/accessability-services/), located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

Turnitin.com: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit alternate assignment.