

GENETICS

Biology 2581B Course Outline/Syllabus Summer 2024

1. Course Information and Prerequisites:

The summer version of this course is offered entirely online:

- Lectures: All lecture content will be asynchronous through the Owl site
- Tutorials: There will be four (4) online tutorials with asynchronous content provided through the OWL site. Asynchronous completion of the tutorial assignments is required. During the first week of the course, TAs will schedule timeslots for *optional* live synchronous discussion of tutorial material via Zoom. You may choose whichever timeslots are convenient for your schedule.
- Tests: There will be three (3) 1.5h timed online tests (covering lecture and tutorial content) available through OWL, during a 3-day window, proctored via Proctortrack. There will also be one (1) 3h timed online Final Exam during the final exam period.

Not reading the syllabus is not a basis for appeal. You are expected to read the full syllabus at the beginning of the course.

List of Prerequisites

- Minimum mark of 60% in either Biology 1001A or Biology 1201A
- Minimum mark of 60% in either Biology 1002B or Biology 1202B or Integrated Science 1001X and
- Minimum mark of 50% in Biochemistry 2280A

Unless you have either the prerequisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Counselling) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees if you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Instructor

Dr. Daniel Jeffery Department of Biology

bio2581@uwo.ca

Q&A/Office hours for Dr. Daniel Jeffery

- Tuesdays at 5:30PM-6:30PM. Zoom meeting.
- Wednesdays at 4:30-5:30PM. Zoom meeting.
- Thursdays at 11:00AM-12:00PM. Zoom meeting.

Please note that these times are subject to change. They may occasionally be shifted, removed, or added to accommodate student or instructor needs.

See Zoom section in OWL for links to each session.

These are open, group office hours. Students can use these office hours to discuss course material or to answer questions on Genetics in general (like, what can I do with an education in Genetics?). Given that these are open, group meetings, we do not discuss private issues (e.g., health or mental health), which should instead be discussed with an Academic Counsellor.

Posting to the Forums

We encourage students to post questions to the forums, to discuss and answer peer questions when possible (or second them), while maintaining a collegial, polite and professional learning environment. The Instructor and/or TAs will monitor the forums and typically provide answers/confirmations/corrections (as needed) within 1-2 business days.

To improve access to the forums, they are broken into sections:

- For lecture material they are broken down into Lessons and Topics.
- Forums for the four tutorials are provided at the end of the list of forums.
- The tests are broken down into Tests 1-3: these forums will appear only after the writing period for that test has finished, please do not post about test questions until after the testing period has closed.

Please make sure that you post your question to the correct sub-forum. This will help students finding the posts for specific portions of the course and help us answer your queries. <u>Please include your question as the title of your post.</u>

Course e-mail protocols

Please use <u>bio2581@uwo.ca</u> for *personal queries* related to the course (this will go to the course instructor).

Email should **only** be used for questions related to the course that are *specific only to you* (e.g., something related to your individual grade, academic accommodations, etc). Course-content related questions should be posted in the appropriate forums.

Please use your Western (@uwo.ca) email addresses and provide an **informative subject heading** that includes "**Bio2581**" or it may be filtered as spam.

3. Course Description, Learning Outcomes, Schedule, Delivery Mode

Course Overview:

Biology 2581B is an introduction to Genetics. Genetics at its most basic level is the study of genome sequence variation. This course is about identifying and classifying genome sequence variation and using this variation to track transmission of genetic information, to identify important genomic information and to genetically dissect biological processes. This course will be a compressed 6-week online course, with asynchronous lecture content delivered by video on OWL and mixed asynchronous/synchronous online tutorials. The tutorial activities will enable you to engage with each other and your TA (should you choose to do so), while applying the concepts presented in the lecture material.

Course Description: The structure, transmission and expression of genetic elements in prokaryotic and eukaryotic organisms and populations.

Learning Outcomes and Objectives:

Upon successful completion of this course, students should be able to:

- 1. Describe the mechanisms by which an organism's genome is passed on to the next generation, including bacteria, single-celled eukaryotes, animals and plants
- 2. Explain the molecular basis for how genotypes affect phenotypes
- 3. Analyze genomic data to identify sequence variation, functional DNA elements and predict gene functions
- 4. Interpret phenotypic data from genetic crosses to calculate probabilities of inheriting a trait, classify alleles, and determine gene functions
- 5. Calculate genomic and genetic metrics associated with genome coverage, recombination and map distance
- 6. Compare different types of mutations and describe their effects on genes, mRNA, proteins, and organisms as a whole
- 7. Relate and connect key concepts, such as transmission genetics, genotype/phenotype, and gene linkage, to the study of human genetics

Course delivery:

- Lecture material will be delivered asynchronously. The material will be provided in the course OWL site.
- Tutorials will be accessible asynchronously on OWL with an optional Zoom synchronous component led by the TAs. These will cover mainly lecture material with specific instructions provided on OWL.
- Regularly scheduled Synchronous Zoom Q&A/Office hours are available with Dr. Daniel Jeffery (see above).
- Teaching assistants will also be available to answer your questions and clarify content through the OWL forums and during their synchronous Zoom sessions. Please note that while the TAs are good resources for information and explanation, we do not accept appeals with statements like "but that is what my TA said". Please do not email TAs about the course.

Schedule:

Availability	Course Content	Suggested completion date	Description		
Monday,	Module 0	June 17	Course Orientation:		
June 10			Welcome & Getting Started		
onwards			Syllabus, Course Content Overview, Tutorial Overview, Test		
			Information		
		7 10 10	Proctortrack Onboarding quiz, due Jun 26		
	Module 1	Jun 18-19	Introduction and the tree of life:		
			Introduction and key definitionsGenome sequence variation		
			Origin of eukaryotic genomes		
		T 10	<i>c</i> , <i>c</i>		
	Module 2	Jun 19 June 20-21	• Tutorial 1 Task 1 (prep work) due Jun 19 Exploring the Genome:		
	Wiodule 2	Julie 20-21			
			Genome sequencing methods		
			Contigs and gaps God 11		
		T 20 21	Scaffold assembly & reference genome The state of t		
		Jun 20 or 21	Tutorial 1 Task 2 (live or asynchronous) due Jun 21		
	Module 3	June 24-25	Genome annotation and variation		
			• Genome annotation		
			TranscriptomeProteome		
			Comparative genomics		
	Self-Test 1	Jun 26	Interleaved Extra Practice Problems for Modules 1–3		
June 26-27	Test 1	Thursday	1.5h		
		June 27	Covers material from Modules 1, 2 & 3		
Monday,	Module 4	Jun 28	Origin of sequence variation		
June 10		& Jul 2	Types of mutation		
onwards			Origin of change T		
			TransposonsGWAS		
		Jul 2	Tutorial 2 Task 1 (prep work) due Jul 2		
	24 1 1 5		<u> </u>		
	Module 5	July 3-4	 Allele classification Mendelian and sequence-based classification systems 		
			Functional classification of alleles		
			Allele classification in cancer genetics		
		Jul 3 or 4	Tutorial 2 Task 2 (live or asynchronous) due Jul 4		
	Module 6	July 5 & 8	Regulation of gene expression in bacteria and eukaryotes		
	Wiodule 0	July 5 & 8	Regulation of gene expression		
			Genetic analysis of the regulation of gene expression		
			Analysis of regulatory sequences		
			Regulation at the level of splicing and translation		
	Self-Test 2	July 9	Interleaved Extra Practice Problems for Modules 4–6		
July 9-10	Test 2	Wednesday	1.5h		
		July 10	Covers mostly material from Modules 4, 5 & 6		
Monday,	Module 7	July 11-12	Genetics screens and making mutants		
June 10			Forward genetics		
onwards			Reverse genetics and transformation		
			RNA interference and miRNA		
			• CRISPR		

		Jul 12	Tutorial 3 Task 1 (prep work) due Jul 12
	Module 8	July 15-16	Epistasis and developmental genetics
			Epistasis
			Developmental genetics
			Evolution and development
		Jul 15 or 16	Tutorial 3 Task 2 (live or asynchronous) due Jul 16
	Module 9	July 17-18	Epigenetics and microbes (horizontal gene transfer in bacteria)
			Mechanisms of epigenetics
			Examples of epigenetics
	G 10.77	7.1.40	Microbes/horizontal gene transfer in bacteria
	Self-Test 3	July 19	Interleaved Extra Practice Problems for Modules 7–9
July 19-20	Test 3	Saturday	1.5h
		July 20	Covers mostly material from Modules 7, 8 & 9
Monday,	Module 10	July 22-23	Sex and meiosis
June 10			Recombination and negative interference
onwards			Tetrad analysis in fungi
		Jul 23	Heteroduplex formation and the synaptonemal complex Transit A Transit (green week) the Ivi 22
		Jul 23	Tutorial 4 Task 1 (prep work) due Jul 23
	Module 11	July 24-25	Chromosomal mutants
			Chromosome deletions and duplications
			Inversions and translocations
			Aneuploidy
		Jul 24 or 25	Polyploidy Tutorial 4 Task 2 (live or asynchronous) due Jul 25
			` ′
	Module 12	July 26	Sex determination and behavioural genetics
			Sex determination
	C-ICT / 4	L-1 20	Behavioural genetics Let a local Earth Participan Deliberation 10, 12
	Self-Test 4	July 29	Interleaved Extra Practice Problems for Modules 10–12
Final Exam	Exam		3h
TBD by	period		~60% questions mostly on material from Modules 10, 11 & 12;
registrar	Jul 29–		~40% equally from all others
	Aug 1		

4. Course Materials

Required 1	Equipment:	
(a	Stable internet connection	Laptop or computer with webcam
<u> </u>	Working microphone	

Recommended Textbook:

Benjamin A. Pierce, *Genetics a conceptual approach*, 7th edition. This is the textbook for the course, which contains content that will assist you in understanding genetics and build your knowledge. The textbook is not strictly required, as we will not be testing material that is exclusively discussed within the textbook. However, we provide specific readings from the textbook to supplement nearly every

lesson, enabling a deeper understanding of the material by providing additional examples to those discussed in the lecture videos, a second perspective, additional practice questions, and various additional learning tools that may significantly benefit your learning. The publisher also offers the online learning software Achieve as part of the textbook bundle, which you may find useful as another additional resource as it provides several useful tools including an up-to-date collation of each Module's recommended readings and self-quizzing functions associated with the relevant textbook chapters.

Note that, depending on which version of the textbook you purchase, the page numbers may differ slightly, so we always provide the <u>section headings</u> to assist you in finding the relevant sections. While we are using the 7^{th} edition for this semester, the section headings generally correspond with the 6^{th} edition, as well, which can be used as an alternative, if needed.

All course documents and information (syllabus, lecture files, instructional documentsetc.) will be posted to OWL Brightspace and students are responsible for checking the course OWL site (https://westernu.brightspace.com) on a regular basis for updates. If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk, which can be contacted by phone at 519-661-3800 or ext. 83800.

Personal Response Systems ("Clickers") are not used in this course.

5. Methods of Evaluation

Minimum percentage of the course assessments required to pass:

Irrespective of accommodations, students must complete at least 78% of the assessments in the course in order to pass. Meaning you must complete at least two Tests (worth 18% each), two Tutorials (worth 2% each) and the Final Exam (worth 38%). Failure to complete the minimum will result in an incomplete for the course (provided approval through academic counselling office) or failure of the course.

Remote Proctoring:

Tests and examinations in this course will be conducted using a remote proctoring service, Proctortrack. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca

Scheduled Tests:

We have scheduled three (3) non-cumulative term Tests to help ensure you do not fall behind and are not overwhelmed when coming to study for one or two large midterm tests. Tests 1-3 are designed to be completed in 1 hour and 30 minutes or less, worth 18% each. To accommodate varied schedules, Tests will be available for a period of 3 days, between the hours of 9 AM and 7 PM Eastern Time each day. You will be able to start at any time within the scheduled test period. Once started, you will have 1 hour

and 45 minutes to complete the Test (1.5h expected to write the exam and 15 minutes extra in case of technical difficulties/slow loading, etc). This flexibility in when you choose to write your tests is meant to account for differences in your personal schedules and any unexpected computer or temporary health issues. Therefore, there will **not be a makeup** for the scheduled tests. If you do not write the Test, the weight will automatically be re-weighted to the Final Exam (no academic consideration or email necessary). However, you must complete at least two Tests to complete the requirements of the course. So, you should plan to write each Test during the first or second day of availability, using the third day only as your **emergency backup** in case something goes wrong. For example, if you decide to wait until the third day to write your test and then get severely sick, you will not have an opportunity to write a makeup. If this happens more than once, you will not be able to complete the course. If given an incomplete, you will need to make up the missing components the next time the course is offered.

All tests and the final exam will be written individually, closed book, with no aids except a non-programmable calculator. Although we acknowledge that the majority of students are not tempted to engage in cheating, we are nonetheless required to monitor for cheating to maintain the integrity of the marks in the course. We will monitor all three tests and the final for cheating and will collect evidence of any cheating in order to pursue an accusation of academic misconduct, should the case arise. Remember that cheating is an academic offence that can lead to expulsion from the university. Also, professional schools often ask you to release your Western academic file upon applying. Although some students may find cheating a tempting option, the downsides of cheating outweigh any benefits.

Access to test results is an important tool for learning. In this course after the test period has closed and marks are collated, you will be given access to your answers, the test questions, and the correct answers.

Tutorials:

Each tutorial you complete to a satisfactory level will earn you 2% on your final grade, for a total of 8%. In addition, approximately 6-8% of questions in the Tests and Final Exam will directly address the concepts covered in tutorials.

Final examination:

The Final Exam is a 3h cumulative test consisting of 50 questions worth 38% of the final grade. It will be scheduled by the registrar's office during the final exam period, with a 10h window of availability (from 9 AM to 7 PM). For those who miss the exam for legitimate documented reasons, a makeup exam of the same format will be scheduled in August, **subject to academic consideration approval**. Failure to write the final exam makeup on this date (again with academic consideration approval) will require the student to write the final examination the next time the course is offered.

What can you have during the tests and final examination:

You will need a non-programmable calculator (or use your computer's calculator). It should be a scientific calculator with log functions.

Mark breakdown:

- Test 1 18%
- Test 2 18%
- Test 3 18%

- Tutorials 8%
- Final 38%

Academic appeals:

The dates for receiving appeals of Tests 1-3 follow the Senate guidelines: A request for relief against a mark or grade must be initiated with the instructor as soon as possible after the mark is issued. In the event that the instructor is not available to the student, or fails to act, or if the matter is not resolved satisfactorily with the instructor, a written request for relief must be submitted to the Chair of the department within three weeks from the date that the mark was issued.

Course grades:

We follow the Senate grade description below.

University-wide grade descriptors:

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
В	70-79	Good work, meeting all requirements, and eminently satisfactory
\mathbf{C}	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Requests for grade adjustments:

We do not consider requests for grade adjustments based on you not meeting a threshold mark that affects your GPA, module requirement, pass/fail, or other grade-associated issues. To be fair to everyone, we can only mark you based on the merit of your performance in the course assessments. We do not offer alternative/extra assessments beyond those provided to all students in the class. The mark you earn in this course is your responsibility and yours alone.

Following university senate guidelines, for Final Grades with decimals of 0.45 or higher, we will round up to the nearest full integer. Anything below 0.45 is rounded down.

If you believe you have detected an *error* in the calculation of your test, tutorial, final exam, or course grades, please don't hesitate to let us know as soon as possible at bio2581@uwo.ca

6. Student Absences

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

Assessments worth less than 10% of the overall course grade:

For the Tutorials (worth 2% each), you do not need to provide documentation for your absence or, indeed, any justification, unless your circumstances have caused you to miss more than the required 78%

of the assessments for the course. For up to two tutorial absences, the 2% will be automatically reweighted to the associated Test or Final Examination. Absences beyond two, will receive a mark of zero unless all of the tutorial absences are approved for academic consideration from the academic counselling office.

Assessments worth 10% or more of the overall course grade:

If you miss one of the term Tests, the weight will automatically be re-weighted to the Final Exam, no email to the instructor or academic consideration is necessary. However, if you miss *more than one Test*, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration, as soon as possible, in order to be eligible to complete the missing course components in a <u>future iteration of the course</u>. For further information, please consult the University's medical illness policy at

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

The Student Medical Certificate is available at

https://www.uwo.ca/univsec/pdf/academic policies/appeals/medicalform.pdf.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences must be submitted to the Academic Counselling office of a student's Home Faculty.

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

*You do not need to email the course instructor pending approval or after receiving approval because the course instructor will automatically receive notification of your approval from the academic counselling office. We will then add you to the list of those writing the Special Exam and change your final grade in OWL to SPC until you have completed the Special Exam. You will receive a general announcement with the date/time and writing locations for the Special Exam during the first week of August, at the latest.

7. Accommodation and Accessibility

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

https://multiculturalcalendar.com/ecal/index.php?s=c-univwo.

Accommodation Policies:

Students with disabilities work with Accessible Education (formerly SSD), 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 Accommodation disabilities.pdf,

8. Academic Policies

The website for Registrarial Services is http://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.

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.

Copyright infringement: All video and assessment material posted to this OWL site are the intellectual property of Dr. Anthony Percival-Smith or Dr. Daniel Jeffery and are made available to students registered in the course for their use alone. This means the material is not yours to do with as you like. It is a copyright infringement to post material, for profit or not, to another site without the express permission of the copyright holders Dr. Anthony Percival-Smith or Dr. Daniel Jeffery. Copyright infringement is theft and will be treated as such under the Western code of conduct, which can result in expulsion from the university. In addition, copyright infringement is illegal in Canada.

Some of the remote learning sessions for this course may be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

Articifial Intelligence (AI) tools: For this course, you are welcome to utilize AI programs, such as ChatGPT, DALL-E, etc., as learning aids for idea generation, clarification and further exploration of concepts, and as a tool to help you complete your tutorial assignments. However, it is important to exercise caution and critical thinking when using AI-generated content and you should be aware that material generated by AI programs may contain inaccuracies, omissions, or offensive content. It is your responsibility to double-check and verify the information generated to ensure its accuracy and appropriateness, as you will be fully responsible for any work you submit. You should be prepared to explain (verbally or in writing) the meaning behind your work and how you completed it. Remember that AI tools can be used to supplement your learning process, but they should not replace your independent thinking, analysis, and creativity. Put simply, AI-generated content is not explicitly forbidden in your tutorial submissions. However, it is essential to thoroughly understand the work being submitted to accurately answer related questions during tests and exams, where only a calculator is allowed as an aid.

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

http://www.uwo.ca/univsec/pdf/academic policies/appeals/scholastic discipline undergrad.pdf

Completion of this course will require you to have a reliable internet connection and a device that meets the system requirements for Zoom. Information about the system requirements are available at the following link:

https://support.zoom.us/hc/en-us

*Please note that Zoom servers are located outside Canada. If you would prefer to use only your first name or a nickname to login to Zoom, please provide this information to the instructor in advance of the test or examination.

Professionalism & Privacy:

Western students are expected to follow the <u>Student Code of Conduct</u>. Additionally, the following expectations and professional conduct apply to this course:

- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed
- All recorded sessions will remain within the course site or unlisted if streamed

9. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters:

https://www.uwo.ca/sci/counselling/.

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 the Student Development Centre (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/.

Additional student-run support services are offered by the USC, https://westernusc.ca/services/.

10. Strategies for Successful Online Learning

Approach to online courses

You can treat an online course like a traditional, in-person course. Start the term by reviewing the course syllabus, including the learning outcomes and objectives, as these indicate what you are expected to know, value, or be able to do at the end of the course. In order to successfully complete the course, be sure you know all the course requirements, including technology, assessment, and participation. You will need to dedicate a significant amount of time to your course and the requirements that you are expected to complete.

Be accountable

At the beginning of the term create a major goal for your course(s). Write the goal down, keep that piece of paper close to your workspace so that you see it and are reminded of it often, and share the goal with others. The online learning process requires a great deal of self-discipline, working at your own pace, commitment and creating your own work environment. You are expected to login to OWL and your UWO email on a regular basis, as well as

check for information or updates on other sites specified by your professor. Throughout the term, be sure to review your course material, summarize lecture and textbook material, revise your plan as needed, and repeat.

To watch recorded content, you may want to form a study group that watches the material together (over Zoom) such that you are accountable to other people. Taking in the material is the first step in learning the material.

Maximize your productivity

In your plan and schedule, be sure to include time for both academic and non- academic tasks. Schedule academic tasks during the time of day that you feel most productive (morning, afternoon or the early evening), and be sure to include non-academic tasks, such as sleeping, eating, exercise, being outdoors. These are essential for your wellness and are advantageous for your courses. Also, check in with your classmates, teaching assistants, and professors on your progress, and ask for help when needed.

Create a study space

You want your study space to be distraction free. Ideally, it's great to have a space dedicated solely for studying, but if you are using a multi-purpose space, identify blocks of time that you need it and hopefully others will respect your time to focus on your courses and coursework. Reducing distractions by having an organized study space is helpful. When you sit down to work have everything that you need, such as laptop, textbook, notebook, pen, glass of water, and a snack. This will allow you to sit down and focus on your work and reduce the number of times you have to get up to gather items.

Tips for conquering online classes

Do you want to know how to be successful in an online course? Here are the study tips you need.

Treat It Like a 'Real' Class

Online classes are still classes. You need to have the discipline to sit down and say, "I am going to work on this", as well as the dedication to actually follow through.

Consciously choose to 'show up'; absorb the content; schedule in assignments, lectures and tasks; and, set yourself up for success. Set daily goals and make checklists to help you succeed and work efficiently and independently. Have a 'success' mindset!

Manage Your Time Carefully

People generally do better in a structured environment. So why not make it even easier for yourself? Scheduling flexibility is very important to a lot of students. It is important to think of 'flexibility' as the right to create your own schedule, not to abandon schedules altogether.

Without a professor actively reminding you, it's up to you to make sure you've allotted enough time to complete the work. You will be more productive by setting aside designated periods throughout the week to view lectures, do your readings and complete coursework.

If you're having trouble holding yourself responsible, pair up with a fellow classmate or enlist the help of a family member to check in as an accountability partner.

Have a Designated Study Space and Stay Organized

Unfortunately, your bed is generally a bad place to do work! Set up a dedicated study space. By completing your work there repeatedly, you'll begin to establish a routine.

Setting up a regular workspace or office will also help you stay organized. Knowing exactly where to find all your important dates, files, syllabi, books and assignments, will help keep you on track.

11. Equity, Diversity, Inclusion and Decolonization (EDID):

Land Acknowledgement: I acknowledge that Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Chonnonton Nations, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. I respect the longstanding relationships that Indigenous Nations have to this land, as they are the original caretakers. I acknowledge historical and ongoing injustices that Indigenous Peoples (First Nations, Métis and Inuit) endure in Canada, and I accept responsibility as part of a public institution to contribute toward revealing and correcting miseducation as well as renewing respectful relationships with Indigenous communities through my teaching, research and community service.

12. Acknowledgements

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