

Welcome to Biology 0011A!



Biology 0011A – Biological systems

Fall 2018 COURSE OUTLINE

Course description and objectives

Biology 0011A is designed to help students in Brescia preliminary year, achieve detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields. Subjects covered in the course and depth level is in accordance with the Grade 12 Biology curriculum as outlined for Ontario Secondary Schools. This course explores basic chemistry and the molecules of life, membrane and cell structure and function, enzymes and reactions, photosynthesis, DNA, protein synthesis, and mitosis and meiosis. The concepts and processes of biological systems up to the cellular level.

By the end of the course Biology 0011A students should be able to:

- Demonstrate knowledge of basic biological structures and concepts, on the cell level.
- Demonstrate critical analysis of literature and writing skills through a report on provided, selected articles ((**Brescia Competencies: critical thinking, communication**) (literacy, writing assignment)).
- Demonstrate ability to find relevant accurate sources for topics related to biology (lab. and literacy, presentation assignment).
- Summarize and present findings from research in popular and important contemporary issues (GMO, vaccines, ecology etc) ((**Brescia Competencies: communication skills**) (literacy, presentation assignment)).
- To be aware of different approaches and views on current life science related issues (**Brescia Competencies: social awareness and engagement**) (literacy, presentation assignment).
- To design hypothesis, and ways to test it, by critically thinking and analyzing the results (**problem solving, inquiry and analysis**) (labs 1 to 3, but in all other as well).

Course scheduling

Lectures: Wednesdays 8:30 to 10:30 in Ursuline hall room 27, Brescia

To achieve better retention and understanding of material, we will run active classrooms, so students, please arrive to lectures ready to engage, actively participate in discussions, work through example questions, etc. Participation in some of these activities will contribute to your mark.

Labs: Fridays 9:00 to 10:30 in North Campus Building (NCB) room 336,
Western campus

The Labs are mandatory. In case you have to miss the lab, make sure that you provide acceptable documentation (see below regulations), to avoid penalties for absence from a given lab. Labs are essential component of this course for developing practical and literacy skills.

Instructor Information

Anica Bjelica

Western campus, NCB 450/Brescia, Ursuline hall 215

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I will be available to help with lecture and lab material (office hours) as we arrange to best accommodate the schedule.

Course Materials

1. Website: <https://owl.uwo.ca/>. Log in with your username and password. Find more detailed course information and policies, get help, post questions, find syllabus, assigned readings, exam details, announcements, etc.

2. Suggested textbook: *Biology Today and Tomorrow*. Cecie Starr, Christine A. Evers, Lisa Starr. 2013. 4th edition.

3. Required Lab Materials: lab coat and lab notebook (available for purchase at the campus bookstore).

Assessment

The majority of course grade falls on the Term Test and Final Exam.

Course Component		Schedule*
Activities	5%	throughout the term, in class, in lab, online activities will be done (short answers, guided learning quizzes, discussions on articles etc).
Lab assignments	15%	Laboratory assignments are designed to test your performance and knowledge of laboratory material. Assignments for every lab are due at the end of that lab period.
Lab literacy	20%	3 assignments given throughout the term, equal mark value. <u>Research writing</u> , you will be writing short summary based on provided articles; due October 17 th . <u>Presentation</u> , on chosen topic reading of research articles and presentation, due last lab period December 7 th <u>Lab book</u> , due at the end of the last lab, December 7 th .
Mid-term test	20%	Multiple choice questions, short problem solving. Exact day and time TBA
Final exam	40%	Multiple choice, short answer, problem solving questions.

*on the OWL course website, more detailed description of the activities will be available at the start of the term

COURSE SCHEDULE

In the table is presented a **tentative** schedule for our lectures and labs. As the course progresses, depending on the rate at which we cover the individual topics, adjustments can be made.

Date	Lecture (Wednesdays 8:30 – 10:30)	Lab (Fridays 9:00-10:30)
Sep 12	Welcome! The Nature of Science	
Sep 14		Hypothesis, exp. design
Sep 19	Molecules of life	
Sep 21		Experiment
Sep 26	Cell structure and function	
Sep 28		Results, discussion
Oct 3	Membrane structure and function	
Oct 5		Microscopy
Oct 10	No Lecture _ Fall Reading Week	
Oct 12		No Lab _ Fall Reading Week
Oct 17	Enzymes and reactions	
Oct 19		Microscopy cont'd
Oct 24	Photosynthesis	
Oct 26		Photosynthesis
Oct 31	Respiration	
Nov 2		Cellular respiration
Nov 7	DNA structure and replication	
Nov 9		DNA isolation, gel separation
Nov 14	Protein synthesis	
Nov 16		DNA to protein practice
Nov 21	Mitosis	
Nov 23		Mitosis (microscopy)
Nov 28	Meiosis	
Nov 30		Meiosis
Dec 5	Overview/Debate	
Dec 7		Literacy: presentations
	Mid-year/Fall term examination period: Monday, December 10 - Thursday, December 21, 2018 final exam exact day and time TBA (Do not book travel during examination period)	

2018-19 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS**1. POLICY REGARDING MAKEUP EXAMS AND EXTENSIONS OF DEADLINES**

When a student requests academic accommodation (e.g., extension of a deadline, a makeup exam) for work representing 10% or more of the student's overall grade in the course, it is the responsibility of the student to provide acceptable documentation to support a medical or compassionate claim. All such requests for academic accommodation must be made through an Academic Advisor and include supporting documentation.

Academic accommodation for illness will be granted only if the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete her academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated.

Students must submit their documentation along with a request for relief specifying the nature of the accommodation being requested no later than two business days after the date specified for resuming responsibilities. In cases where there might be an extended absence or serious issue, students should submit their documentation promptly and consult their Academic Advisor for advice during their recovery period. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Appropriate academic accommodation will be determined by the Dean's Office/Academic Advisor in consultation with the student's instructor(s). Academic accommodation may include extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty

Please note that personal commitments (e.g., vacation flight bookings, work schedule) which conflict with a scheduled test, exam or course requirement are not grounds for academic accommodation.

A UWO Student Medical Certificate (SMC) is required if a student is seeking academic accommodation on medical grounds. This documentation should be obtained at the time of the initial consultation with the physician/nurse practitioner or walk-in clinic. A SMC can be downloaded from: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf . The student must request documentation sufficient to demonstrate that her ability to meet academic responsibilities was seriously affected. Please note that under University Senate regulations documentation stating simply that the student "was seen for a medical reason" or "was ill" is not adequate to support a request for academic accommodation.

The full policy on requesting accommodation due to illness can be viewed at:
http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal challenge that is interfering with your work, contact your instructor and Academic Advisor as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. Retroactive requests for academic accommodation on medical or compassionate grounds are not normally considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult your Academic Advisor. If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines (refer to the Registrar's website, <http://brescia.uwo.ca/academics/registrar-services/> or the list of official sessional dates in the Academic Calendar, see the Sessional Dates tab at <http://www.westerncalendar.uwo.ca/index.cfm?SelectedCalendar=Live&ArchiveID=>). You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP eligibility and/or Entrance Scholarship eligibility.

3. ABSENCES

Short Absences: If you miss a class due to a minor illness or other problems, check your course outline for information regarding attendance requirements and make sure you are not missing a test or assignment.

Cover any readings and arrange to borrow notes from a classmate. Contact the course instructor if you have any questions.

Extended Absences: If you have an extended absence, you should contact the course instructor and an Academic Advisor. Your course instructor and Academic Advisor can discuss ways for you to catch up on missed work and arrange academic accommodations, if appropriate and warranted.

It is important to note that the Academic Dean may refuse permission to write the final examination in a course if the student has failed to maintain satisfactory academic standing throughout the year or for too frequent absence from the class or laboratory (http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading_68).

4. 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, at: http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20 .

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Note that such offences include plagiarism, cheating on an examination, submitting false or fraudulent assignments or credentials, impersonating a candidate, or submitting for credit in any course without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course in the University or elsewhere. Students are advised to consult the section on Scholastic Discipline for Undergraduate Students in the Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Academic Dean's Office, or the Registrar. A claim that "you didn't know it was wrong" is not accepted as an excuse.

The penalties for a student guilty of a scholastic offence (including plagiarism) include refusal of a passing grade in the assignment, refusal of a passing grade in the course, suspension from the University, and expulsion from the University.

Plagiarism:

Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence.

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 Tests/exams:

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating. Software currently in use to score computer-marked multiple-choice tests and exams performs a similarity review as part of standard exam analysis.

5. PROCEDURES FOR APPEALING ACADEMIC EVALUATIONS

All appeals of a grade must be directed first to the course instructor. If the student is not satisfied with the decision of the course instructor, a written appeal is to be sent to the School Chair. If the response of the Chair is considered unsatisfactory to the student, she may then submit a written appeal to the Office of the Dean. If the student is not satisfied with the decision of the Dean, she may appeal to the Senate Review Board Academic (SRBA), if there are sufficient grounds for

the appeal. For information on academic appeals you can consult your Academic Advisor or see the Student Academic Appeals – Undergraduate in the

Academic Calendar

http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14.

Note that final course marks are not official until the Academic Dean has reviewed and signed the final grade report for the course. If course marks deviate from acceptable and appropriate standards, the Academic Dean may require grades to be adjusted to align them with accepted grading practices.

6. PREREQUISITES

Unless you have either the prerequisites for a course or written special permission from the Dean to enroll in it, you will be removed from the course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisite(s).

7. SUPPORT

Support Services

The Brescia University College Registrar's website, with a link to Academic Advisors, is at <http://brescia.uwo.ca/academics/registrar-services/> . The website for the Student Development Centre at Western is <http://www.sdc.uwo.ca/> .

Mental Health and Wellness

Students may experience a range of issues that can cause barriers to your learning, such as increased anxiety, feeling overwhelmed, feeling down or lost, difficulty concentrating and/or lack of motivation. Services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about mental health and wellness at Brescia at <http://brescia.uwo.ca/life/mental-health-wellness/>. Students who are in emotional/mental distress should refer to Health and Wellness at Western, http://uwo.ca/health/mental_wellbeing/index.html, for information about how to obtain help for yourself or others.

Sexual Violence

All members of the Brescia University College community have a right to work and study in an environment that is free from any form of sexual violence. Brescia University College recognizes that the prevention of, and response to, Sexual Violence is of particular importance in the university environment. Sexual Violence is strictly prohibited and unacceptable and will not be tolerated. Brescia is committed to preventing Sexual Violence and creating a safe space for anyone in the Brescia community who has experienced Sexual Violence.

If you or someone you know has experienced any form of Sexual Violence, you may access resources at <http://brescia.uwo.ca/life/sexual-violence/>.

Portions of this document were taken from the Academic Calendar, the Handbook of Academic and Scholarship Policy and the Academic Handbook of Senate Regulations. This document is a summary of relevant regulations and does not supersede the academic policies and regulations of the Senate of the University of Western Ontario