

Note: Bio 1223, taught through the Department of Biology, helps build a suitably strong background for those intending to continue in various Biology-related undergraduate and professional programs. Bio 1223 content is similar to that of Bio 1222. Bio 1222 and Bio 1223 provide identical academic credits as first-year Biology courses.

However, Bio 1223 is restricted to students who: 1) did no senior high school biology
or 2) had less than 80% in senior high school biology
or 3) took senior high school biology more than three years ago.

Lecturers: Richard Gardiner <rgardine@uwo.ca> (Bio 1223 Chair)
 Dan Lajoie <dlajoie@uwo.ca>

Please visit
<http://webct.uwo.ca/>
 for lecture notes and course information

Required: - **Text:** *Biology: Exploring the diversity of life*, 1 ed.
 P. J. Russell et al (~\$160 three volumes)
 - **Lab manual.**, (~\$32), - **Clicker** (~\$50)

<http://instruct.uwo.ca/biology/1222-23/>
 for much more.

Lectures: UW/001 Mon/Wed/Fri 10:30 am. (NSB 145)

IMPORTANT: Activate your UWO email address.
Bio 1223 and many UWO offices may not answer personal enquiries from non-UWO accounts.

Laboratories and Tutorials

This course offers a series of practical laboratory and tutorial sessions that alternate each week; laboratories are 3 hours, tutorials are 1 hour. Starting the week of September 21, half of the Bio 1223 class will begin their series with Laboratory 1, the other half of the class will begin their series with Tutorial 1. Whether your series begins with Laboratory 1 or Tutorial 1 depends on your Lab Section as indicated on your official Western timetable. Find your Lab Section in the table below to confirm your particular laboratory/tutorial schedule.

Find your lab section below and circle it.

If your lab section is listed in this box, La/ 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76 you will have Laboratory 1 the week of September 21 and Tutorial 1 the week of Sep 28.	If your lab section is listed in this box, La/ 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91 you will have Tutorial 1 the week of September 21 and Lab 1 the week of Sep 28.
Laboratories meet in one of three rooms: NCB 309, 310, 320	Tutorials meet in one of three rooms: NCB 285, 296, 340
To find out when and where your lab section meets for laboratory, please consult Bio 1223 WebCT Home page, <Course Information> <Lab Schedule> or http://instruct.uwo.ca/biology/1222-23/inform/lab/schedule/ or Hallway bulletin board near NCB 318	To find out when and where your tutorial section meets for tutorials, please consult Bio 1223 WebCT Home page, <Course Information> <Tutorial Schedule> or http://instruct.uwo.ca/biology/1222-23/inform/tutorial/schedule/ or Hallway bulletin board near NCB 318

Term Tests, Examinations And Mark Distribution

Term Test 1 (15%) **Saturday, October 31, 2009**, 7:00 pm – 9:00 pm

Term Test 2 (15%) 2 hr, TBA during the Dec Exam Period (Dec 11–22) **Do not plan travel during this time.**

Term Test 3 (15%) **Saturday, March 6, 2010**, 10:00 am – 12:00 pm.

Final Exam (35%) 3 hr, TBA during the Final Exam Period (Apr 12–30) **Do not plan travel during this time.**

Lab Assignments (10%) Average of ten lab assignments (lab attendance is mandatory)

Tutorials (5%) Based on literacy assignments

Participation (5%) Based on clicker responses in lecture throughout the year

Use of Clickers in Biology 1223

A personal response unit (commonly known as a “clicker”) is a small radiofrequency transmitter that resembles a TV remote. You purchase your clicker in the Bookstore, program it with your unique UWO UserID and then use it in all classes using this technology.



In class, instructors can ask a variety of structured questions to which you may respond by pressing the appropriate button on your respective clicker. Individual responses are collected and displayed as a graph at the front of the room. If the instructor chooses, these responses may also be saved for future analysis.

In this course, clickers will be used primarily to promote engagement during lecture. They will also provide you with credit and feedback on your lecture preparation and/or participation. The information below provides further details.

Clicker Responsibility

It is your responsibility to ensure that your clicker is functioning properly. See the instructions in the box or the <presswestern.uwo.ca> site for details of how to program your Western UserID into the unit and confirm that it is working properly. (Your “userID” is the section of your UWO email address before the “@uwo.ca”.) If you have problems with your clicker, consult the ITS Help Desk. Since all clickers on campus look identical, it may be best for you to customize yours in ways that make it identifiable to you. Questions or comments regarding clicker use should be posted to the course WebCT Discussion Board.

Clicker Academic Record

In this course, your clicker use will be recorded in class and will become part of your academic record. As such, your clicker record will be afforded the same degree of confidentiality, security and transparency that is customary for test marks etc.

You can earn course credit through clicker participation as follows. Clicker participation questions will be asked during lecture as instructors decide. At various times during the term, we will determine the total number of clicker questions asked. The proportion of questions that you answered will determine the fraction of the available participation grade (5%) that you earned as shown above. Clicker participation requires only that you try; you don't

% Questions Answered	Participation Grade
1 – 20	1
21 – 40	2
41 – 60	3
61 – 79	4
80 and above	5

have to get the questions right to get this part of your course grade. Notice that you can miss 20% of the clicker questions (for any reason) without affecting your grade. You can monitor your cumulative clicker record as described in class. **Please Note:** Since each lecture in Biology 1222 is offered twice, you can choose to attend and click in either one. However, if you click in both offerings of a given lecture, only the second session will be recorded.

Clicker Privacy

Although clickers may be used in the classroom for polling opinions and/or collecting some types of personal data (e.g. How many people have ever seen a manatee?) such responses will not become part of your academic record and will not “count” toward clicker participation grade. Such non-academic data will either be recorded anonymously or not at all. (A simple anonymization exercise will invite you to swap clickers with a neighbour for the moment.)

Clicker Research

Your clicker data will not be used for research or non-academic purpose without your consent. For any research study in which you are invited to participate, you will be provided with a Letter of Information with an opportunity to give or withhold consent. Such research will not replace the usual end of term Course Evaluation given by the University.

Conflicts/Problems see Dan Lajoie NCB 301 <dlajoie@uwo.ca>

- 1) Conflict with a term test, please see us at least **three days before** the test.
 - 2) Missing a term test because of illness, accident, etc., please notify us **ASAP**.
 - 3) Requiring religious accommodation, please notify us at least **two weeks before** the test.
- Makeup tests occur 5 or 6 days after the regularly scheduled test. If a makeup cannot be arranged, all other grades will be reweighed as outlined on WebCT.
 - We do require **WRITTEN DOCUMENTATION** which may be verified through your Dean's Office as outlined on WebCT.

Academic Integrity

Plagiarism is a serious academic offence. Please review the definition of plagiarism and its penalties as outlined by the general UWO policy and the specific Bio 1223 policies as outlined on WebCT. Furthermore, computer marked multiple-choice tests use software that will flag unusual coincidences in answer patterns that may indicate cheating.

The use of a clicker with a UserID other than your own is an academic offense. In a test, lab, lecture or tutorial, possession of more than one clicker, or one programmed with the UserID of another student, will be interpreted as intent to commit an academic offense.

Week of	Bio 1223 Tentative Lecture Topics 2009/10	Instructor
Sep 07	Course Intro (<i>Fri lecture only this week</i>)	Gardiner/Lajoie
Sep 14	Light, Cells	Gardiner/Lajoie
Sep 21	Cell cycle, Mitosis, Meiosis	Gardiner
Sep 28	Mendel	Gardiner
Oct 05	Chromosomes, DNA	Gardiner
Oct 12	DNA (<i>Wed, Fri lectures only this week</i>)	Gardiner
Oct 19	Proteins, Regulation	Gardiner
Oct 26	DNA technology (<i>Mon</i>), Population genetics (<i>Wed, Fri</i>)	Gardiner/Lajoie
	Oct test - Sat, Oct 31, 7:00-9:30 pm, Rooms TBA	
Nov 02	Microevolution	Lajoie
Nov 09	Natural selection	Lajoie
Nov 16	Macroevolution	Lajoie
Nov 23	Population ecology	Lajoie
Nov 30	Community ecology	Lajoie
Dec 07	Ecosystems, Biosphere (<i>Mon, Wed lectures only this week</i>)	Lajoie
Dec 11-22	<i>Dec Exam Period (do not plan travel within these dates)</i>	
Jan 04	Bioenergetics, Enzymes	Gardiner
Jan 11	Photosynthesis	Gardiner
Jan 18	Mitochondrial respiration	Gardiner
Jan 25	Light & Organisms	Gardiner/Lajoie
Feb 01	Form and function	Gardiner/Lajoie
Feb 08	Gas exchange	Gardiner/Lajoie
Feb 15	Conference Week (<i>no classes</i>)	
Feb 22	Circulation	Gardiner/Lajoie
Mar 01	Nutrition	Gardiner/Lajoie
	Mar test - Sat, Mar 6, 10:00 am-12:30 pm, Rooms TBA	
Mar 08	Excretion, Osmoregulation	Gardiner/Lajoie
Mar 15	Endocrinology	Gardiner/Lajoie
Mar 22	Immunology	Gardiner/Lajoie
Mar 29	Movement	Gardiner/Lajoie
Apr 05	Summary, Review	Gardiner/Lajoie
April 12-30	<i>Final Exam Period (do not plan travel within these dates)</i>	