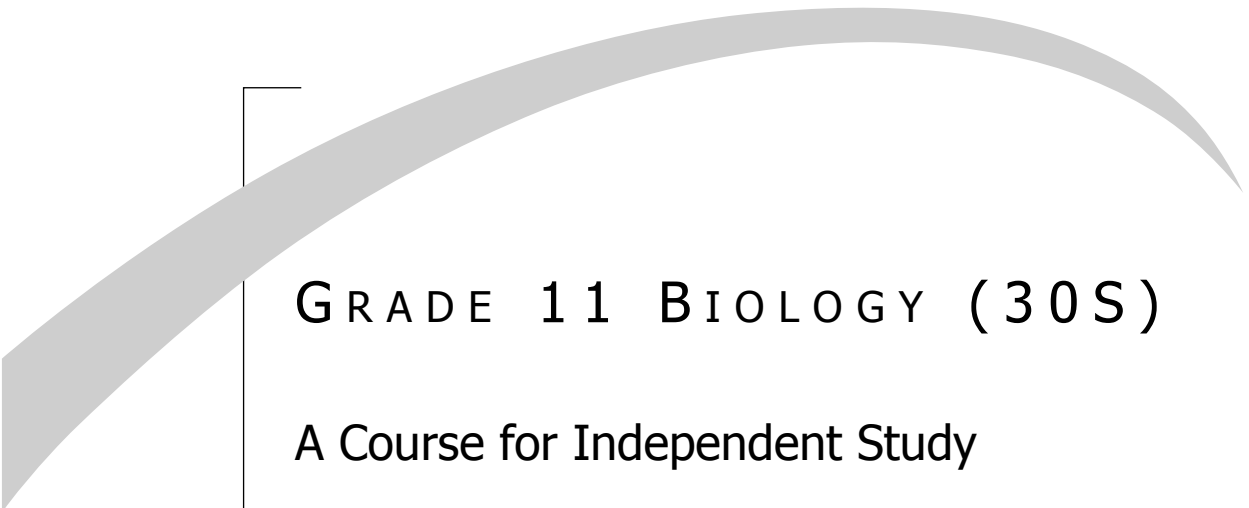


# **Grade 11 Biology (30S)**

A Course for  
Independent Study





GRADE 11 BIOLOGY (30S)

A Course for Independent Study

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Available in alternate formats upon request.

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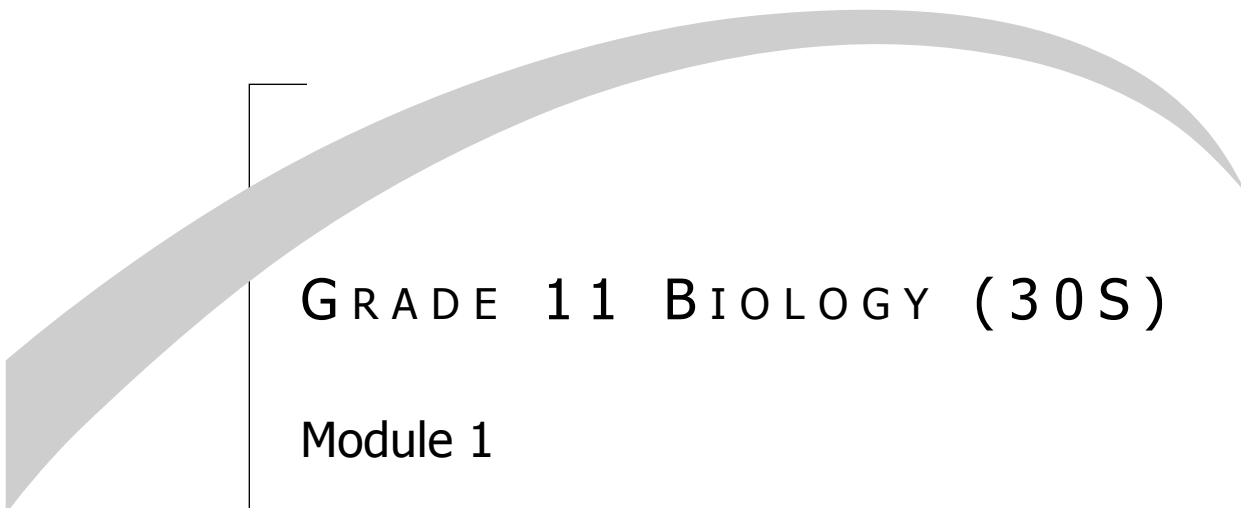
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# GRADE 11 BIOLOGY (30S)

## Module 1

### Wellness and Homeostasis

This module contains the following:

- Introduction
- Lesson 1: How to Succeed in this Course
- Lesson 2: Personal Wellness
- Lesson 3: Introduction to Homeostasis
- Lesson 4: Cells and Homeostasis
- Lesson 5: Energy



# MODULE 1: WELLNESS AND HOMEOSTASIS

## Introduction

Welcome to the first module of Grade 11 Biology. This may be the most important course that you will ever take, because you will learn about your own body and how to stay healthy. You will study body systems, and complete your own wellness portfolio in which you will explore and reflect on your lifestyle and wellness.

This module is made up of 5 lessons. In Lesson 1, you will learn how to successfully complete this course. In Lessons 2–5, you will learn about wellness and homeostasis – the main themes of the entire course. Don't worry if you don't know what they mean. You will learn about them later in the course.

In order to complete this first module, you need to study Lessons 1 to 5, and complete the following assignments.

## Assignments



You will be completing the following 4 assignments, which you will be sending to your tutor/marker when you have completed the module.

### Assignment Checklist

- Lesson 1      *There is no assignment in this lesson.*
- Lesson 2      Assignment 1.1: Personal Wellness Goal
- Lesson 3      Assignment 1.2: A Walk in the Cold
- Lesson 4      *There is no assignment in this lesson.*
- Lesson 5      Assignment 1.3: Wellness and Homeostasis

---

## Notes

# LESSON 1: HOW TO SUCCEED IN THIS COURSE

## Introduction

This first lesson is like the first day of school. You'll learn about the different parts of the course and how you can learn as much biology as possible. More specifically, you will understand how this course is organized and what you need to do in order to complete it successfully.

This course is divided into six modules, organized as follows:

- Module 1: Wellness and Homeostasis
- Module 2: Digestion and Nutrition
- Module 3: Transportation and Respiration
- Module 4: Excretion and Waste Management
- Module 5: Protection and Control
- Module 6: Wellness and Homeostatic Changes

## What Will You Need?

You do not need a textbook to complete this course. All of the content is in this package. There are some lessons where website links are offered as sources of information or for supplementary reading. However, if you do not have access to a computer you can still complete the course.

You will need a notebook on which you will answer the questions in your learning activities.

It would also be very helpful if you had access to a photocopier. That way, you could make a copy of your assignments before sending them to your tutor/marker. So, if your tutor/marker wants to discuss an assignment with you over the phone, each of you will have a copy. It would also allow you to carry on studying or with further lessons while your original work is with the tutor/marker.

If you need help at any point in this course, contact your tutor/marker. There may be times when you do not know where to find information for a research topic. Likewise, you may be unsure if your choice of topic is appropriate. In these cases, your tutor/marker can help guide you in the right direction.

You will also need access to a copy of Canada's Food Guide, especially if you do not have access to the Internet. One has been included with this course. If you cannot find one, contact the Independent Study Option at 1-800-465-9915.

## How Will You Know How You're Doing?

You will know how well you are learning by your successful completion of the following course components.

### Learning Activities



One of the easiest and fastest ways to find out how much you have learned is by using the learning activities. These have been designed to let you assess yourself by comparing your answers with the answer keys at the end of each module. They are found in every lesson except this one. Some lessons have more than one. You will need a notebook to write your answers in.

Make sure you complete each learning activity. Besides giving you feedback, it will help you practice what you have learned and prepare you to successfully complete your assignments and examinations. Many of the questions on the examinations will be similar to the questions in the learning activities. **Do not mail learning activities to your tutor/marker.**

### Assignments



Every module contains assignments that you will be sending to your tutor/marker for assessment. The assignments are worth 60% of your final mark. In order to do well on your assignments, you should complete all Learning Activities first and check your answers in the Answer Key provided. Remember to keep all assignments that have been marked and returned to you, as some will become part of your Wellness Portfolio.

### Midterm and Final Examinations



The course contains a midterm examination and a final examination. You will write them both under supervision. The midterm examination is based on Modules 1 to 3 and is worth 20% of the final mark of the course. You will write it when you have completed Module 3. In order to do well on the midterm examination, you should review all of the work that you have completed from Modules 1 to 3, including all Learning Activities and Assignments.

The final examination is based on Modules 4 to 6 and is worth 20% of the final mark of the course. You will write it when you have completed Module 6. In order to do well on the final examination, you should review all of the work that you have completed from Modules 4 to 6, including all Learning Activities and Assignments.

You are responsible to make arrangements to have the examinations sent to the proctor from the Independent Study Option office. Contact the Independent Study Option office at 1-800-465-9915 if you need help arranging this.

In order to write your examinations, you will first need to apply for them. Here is how you can do that.

- **If you are attending school**, ask your school's ISO Facilitator to add your name to the ISO examination eligibility list. Do this at *least three weeks prior* to the next scheduled examination week.
- **If you are not attending school**, check the **Examination Request Form** for options available to you. The Examination Request Form was mailed to you with this course. Fill in this form and mail or fax it *three weeks before* you are ready to write your examination. The address is

ISO Registration  
555 Main Street  
Winkler MB R6W 1C4  
Fax: 204-325-1719  
Toll-Free: 1-800-465-9915

## What is a Typical Lesson Like?

The lessons in this course contain the following parts:

- **Introduction:** The introduction sets the stage for the lesson. It may draw upon prior knowledge or briefly describe the organization of the lesson. It also lists the outcomes for the lesson. These describe what you will learn.
- **Body of the Lesson:** The body of the lesson develops the concepts. It contains explanations, diagrams, and fully completed examples.
- **Learning Activity:** Most lessons have a Learning Activity. These include questions that you should complete in order to help you practice or review what you have just learned. Once you have completed a learning activity, you should check your answers with the answer key.
- **Assignments:** Assignments are found at the end of most lessons. In total, all assignments will be worth a total of 60% of your final mark. You will send these to your tutor/marker at the end of every module.

## What if You Need Help?

There are two people who can help you be successful in your course.

### Your Tutor/Marker

The first person who can help you is your tutor/marker. Tutor/markers are experienced teachers who tutor ISO students and mark assignments and examinations. If you are having difficulty at any time during this course, be sure to contact your tutor/marker. They are there to help you. If you are not sure how to contact your tutor/marker, phone the Independent Study Option office at 1-800-465-9915.

### Your Learning Partner



The next person who can help you with your course is your learning partner. A learning partner is **someone you choose** who will help you learn. It may be someone who knows something about biology, but it doesn't have to be. A learning partner could be someone else who is taking this course, a teacher, a parent, a sibling, a friend, or anybody else who can help you. Most importantly, a learning partner should be someone you feel comfortable with and who will support you as you work through this course.

Your learning partner can help you keep on schedule, check your work, help you make sense of assignments, read your course with you, or look at your learning activities and respond to them. You may even study for your examination with your learning partner.

## How Much Time Will You Need?

Learning through independent study has several advantages over learning in the classroom. You are in charge of how you learn and can choose how quickly you will complete the course. You don't have to wait for your teacher or classmates, and you can work as quickly as you want. You can also complete as many lessons at a time as you want. Read the next few pages to get an idea of how to pace yourself.

## Chart A: Semester 1

Here is a *suggested timeline* that you can follow if you start your course in September and need to complete it by the end of January.

Module	Completion Date
Module 1	mid-September
Module 2	mid-October
Module 3 and Midterm Examinations	mid-November
Module 4	early December
Module 5	mid-December
Module 6 and Midterm Examinations	mid-January

## Chart B: Semester 2

Here is a *suggested timeline* that you can follow if you start your course in January and need to complete it by June.

Module	Completion Date
Module 1	mid-February
Module 2	mid-March
Module 3 and Midterm Examinations	early April
Module 4	late April
Module 5	mid-May
Module 6 and Final Examinations	late May

## Chart C: Full School Year (Not Semestered)

Here is a *suggested timeline* that you can follow if you have registered for this course in September and would like to complete it by June.

Module	Completion Date
Module 1	late September
Module 2	mid-November
Module 3 and Midterm Examinations	mid-December
Module 4	late January
Module 5	mid-March
Module 6 and Final Examinations	late May

Do not wait until the last minute to complete your work, since your tutor/marker may not be available to mark it. Make sure that you leave enough time for your work to travel through the mail, as it might take over a week. It may also take a few weeks for your tutor/marker to mark everything and send the marks to your school.

If you need this course to graduate this school year, remember to schedule and complete your final examination by June 1.

## When and How Do You Send in Your Assignments?

You'll be mailing your assignments to your tutor/marker six times during this course – at the end of each module.

### Mailing your Assignments



Each time you mail something, you must complete and attach the appropriate Cover Sheet. All Cover Sheets are found at the end of this lesson. If you can, make a photocopy of your assignments before sending them to your tutor/marker.

### Emailing Your Assignments

If you have email access, you may be able to email your assignments to your tutor/marker, as long as you have arranged it in advance. Please be advised that this option is not appropriate for some assignments and your tutor/marker will permit it at his or her discretion.

#### ■ **Attending Students**

Please notify your ISO School Facilitator (person who signed your ISO registration/admission form) to receive permission to email your assignments and to determine your school's procedure for emailing assignments.

#### ■ **Non-attending Students**

Please discuss with your tutor/marker to arrange in advance permission to submit work electronically.

### **How to submit your work** (files must not exceed 5 MB)

Depending on the file type, please submit your work as shown below:

- **Written work:** Microsoft Word (doc) or as an rtf
- **Spread sheet assignments:** Microsoft Excel (xls)
- **Picture and graphic files:** jpeg, gif
- **Scanned file:** pdf (save multiple pages on one file)
- **Audio file:** compressed wav (zipped)
- **Video file:** wmv

## How to send your email

1. Use the following format to compose your email.

<b>To:</b>	distance.learning@gov.mb.ca
<b>Cc:</b>	(email address from your ISO school facilitator—if required)
<b>Subject:</b>	Jane Doe Grade 10 Science
<b>Attach:</b>	lesson 1_mod 1_assign 1.doc
Message:	
	Lesson 1, Module 1, Assignment 1.1, 1.2 and 1.3
	My tutor/marker is _____
	My school is _____

2. Attach your files (files must not exceed 5 MB).
3. Email your assignments to <distance.learning@gov.mb.ca> only. Do NOT email your assignments directly to your tutor/marker. Emails sent directly to tutor/markers will be returned unread.

**Your tutor/marker will electronically mark your work and email it back to you.**

## What are the Guide Graphics For?

Graphics have been placed inside the margins of the course to identify a specific task. Each graphic has a specific purpose to guide you. A description of each graphic is described below:



**Assignment:** This is an assignment that you complete and send to your tutor/marker. You will be sending in your assignments at the end of every module.



**Internet:** If you have access to the Internet, you can use it to get more information. Internet access is not required for this course.



**Learning Activity:** Complete this learning activity to help you review or practice what you have learned and prepare for your assignment and examination. You will not send learning activities to your tutor/marker.



**Mail-in:** It is now time to mail in your assignments.



**Examination preparation:** This graphic alerts you to when it is time to write an exam.



**Learning Partner:** This is a good time to ask your learning partner for help.

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## **A Note to Classroom Teachers**

The specific learning outcomes for each lesson are listed in the appendix found at the end of this course.