

Integrative Biology 100: Biology in Today's World FALL 2019 Syllabus

Course Instructor: Dr. Li-Qing Chen, ib100onl@life.illinois.edu

Office Hours: by appointment in 379 ERML

Teaching Assistants: TBD

Prerequisites: NA

Credit Hours: 3 credit hours

Requirements Met: Gen Ed; credit is not given for both Integrative Biology 100 and 101

Course Description: Integrative Biology 100 ONL is a general education course designed to introduce you to the biology topics that are likely to be meaningful to you during your life. The course includes an in-depth focus on three contemporary issues in modern biology: the environment, traditional and molecular genetics, and evolution. You will learn the biological concepts that will help you make informed decisions in the market place, the voting booth, your doctor's office, or a school board meeting.

Required Textbook: Anne Houtman, Megan Scudellari, and Cindy 2018. *Biology Now*, Second Edition. W. W. Norton & Company, Inc.

Course Goals: Upon completing this course, students will be able to:

- Describe the relationships among organisms and the natural and human-influenced environments around you.
- Describe the availability and use of energy and matter by organisms in the natural environment, including the food you eat yourself.
- Describe how you got your genetic information from your parents and how you may pass that information on to your children.
- Explain the role of your genes in the development of a healthy human body and describe how genetic problems can lead to inherited disorders and cancer.
- Describe the ways in which populations of plants, animals and disease organisms evolve in changing natural and human-influenced environments.
- Distinguish between scientific theories used to explain genetic changes in populations and the evolution of new species and popular pseudo-scientific explanations that attempt to discredit or disprove the process of evolution.

Course Structure: IB 100 ONL is an ONLINE course with no face-to-face class meetings. All lessons, learning activities, assignments, and assessments will be conducted asynchronously in the Moodle Course Management System (CMS). You will participate in a once weekly synchronous online discussion using Blackboard Collaborate Ultra. You should dedicate approximately 9–12 hours per week to working on the course itself, but actual time commitments will vary, depending on your input, needs, and personal study habits.

Course Outline:

- Module 1: What is Biology? What is Science?
- Module 2: Populations and Communities
- Module 3: Energy Flow and Matter Cycling
- Module 4: Cell Reproduction and Heredity
- Module 5: Molecular Genetics
- Module 6: Evolution
- Module 7: Biotechnology

COPYRIGHT©2019Li-Qing Chen and Wendy H.Yang. All rights reserved. The content of the syllabus, lectures, and other class materials for this course is copyrighted or re-used with permission from the original sources. The content is intended for IB 100 students' private use. It is expressly forbidden to make copies of course materials without the express written permission of the University of Illinois Board of Trustees.

Course Grading:

Grade	Percent
A+	100.00+
A	94.00–99.99
A-	90.00-93.99
B+	87.00–89.99
B	84.00–86.99
B-	80.00–83.99
C+	77.00-79.99
C	74.00–76.99
C-	70.00–73.99
D+	67.00-69.99
D	64.00–66.99
D-	60.00–63.99
F	0.00–59.99

Activity Categories	Weight
Orientation Activities	4 %
Lesson Videos	14 %
Reading Quizzes (InQuizitives)	24 %
Synchronous Discussion Session Attendance and Activity	14 %
Discussion Forums	12 %
Assignments	12 %
Final Video Project	20 %
Total	100 %

All course activities have due dates and contribute to earning points towards the overall course grade. No activities will be accepted past their due dates.

Academic Integrity: Academic dishonesty will not be tolerated. Should an incident arise in which a student is thought to have violated academic integrity, the student will be processed under the disciplinary policy set forth in the Illinois Academic Integrity Policy. If you do not understand relevant definitions of academic infractions, contact the instructor for an explanation within the first week of class. Ignorance of the course or University policies on academic integrity is no excuse.

Examples of academic dishonesty include the following:

- Cheating
- Fabrication
- Facilitating infractions of academic integrity
- Plagiarism
- Bribes, favors, and threats
- Academic interference
- Examination by proxy
- Grade tampering

Special Accommodations: If you are unable to complete an assignment because of professional or personal obligations or emergency situations, you should notify the instructor IMMEDIATELY and provide documentation verifying the situation as soon as you can. You may be able to submit the activity after the due date, with decisions made on an individual basis. Do not wait until < 24 hours before an activity is due to notify the instructor unless an emergency prevents you from doing so.

If you need to request disability accommodations, please schedule an appointment with Dr. Chen or email your DRES letter to Dr. Chen at the start of the course.

Course Schedule

* Weeks shown for Fall/Spring Semester. There are no course activities during the week of Fall Break (Week 5 during Fall Semester) or Spring Break (Week 2 during Spring Semester).

**All deadlines are at 11:55 PM Central Time.

Week*	Due date**	Activity	Points
1/1	Monday	ORIENTATION LESSON VIDEO Read Chapters 1 and 2; Take Chapters 1 and 2 InQuizitives	30 20
	Tuesday	ORIENTATION QUIZ Watch Module 1 Lesson Video	20 20
	Wednesday	ACADEMIC INTEGRITY LESSON Attend Module 1 Synchronous Discussion Session (SDS) Complete Module 1 SDS Activity	30 10 10
	Thursday	Complete Module 1 Assignment	30
	Friday	Take Module 1 Self Assessment	20
2/2	Monday	Read Chapters 19 and 20; Take Chapters 19 and 20 InQuizitives	20
	Tuesday	Watch Module 2 Lesson Video	20
	Wednesday	Attend Module 2 Synchronous Discussion Session (SDS) Complete Module 2 SDS Activity	10 10
	Thursday	Complete Module 2 Assignment	30
	Friday	Take Module 2 Self Assessment	20
3/3	Monday	Read Chapters 5, 18 and 21; Take Chapters 5, 18 and 21 InQuizitives	30
	Tuesday	Watch Module 3 Lesson Video	20
	Wednesday	Attend Module 3 Synchronous Discussion Session (SDS) Complete Module 3 SDS Activity	10 10
	Thursday	Complete Module 3 Assignment	30
	Friday	Take Module 3 Self Assessment	20
4/4	Monday	Read Chapters 6, 7, and 8; Take Chapters 6, 7, and 8 InQuizitives	30
	Tuesday	Watch Module 4 Lesson Video	20
	Wednesday	Attend Module 4 Synchronous Discussion Session (SDS) Complete Module 4 SDS Activity	10 10
	Thursday	Complete Module 4 Assignment	30
	Friday	Take Module 4 Self Assessment	20
5/6	Monday	Read Chapters 9 and 10; Take Chapters 9 and 10 InQuizitives	20
	Tuesday	Watch Module 5 Lesson Video	20
	Wednesday	Attend Module 5 Synchronous Discussion Session (SDS) Complete Module 5 SDS Activity	10 10
	Thursday	Complete Module 5 Assignment	30
	Friday	Take Module 5 Self Assessment	20
6/7	Monday	Read Chapters 11, 12 and 13; Take Chapters 11, 12 and 13 InQuizitives	30
	Tuesday	Watch Module 6 Lesson Video	20
	Wednesday	Attend Module 6 Synchronous Discussion Session (SDS) Complete Module 6 SDS Activity	10 10
	Thursday	Complete Module 6 Assignment	30
	Friday	Take Module 6 Self Assessment	20
7/8	Monday	Read <i>Never Out of Season</i> excerpt; Take Module 7 Reading Quiz	10
	Tuesday	Watch Module 7 Lesson Video	20
	Wednesday	Attend Module 7 Synchronous Discussion Session (SDS) Complete Module 7 SDS Activity	10 10
	Date TBD	Final Video Project	200

COPYRIGHT©2019 Li-Qing Chen and Wendy H. Yang. All rights reserved. The content of the syllabus, lectures, and other class materials for this course is copyrighted or re-used with permission from the original sources. The content is intended for IB 100 students' private use. It is expressly forbidden to make copies of course materials without the express written permission of the University of Illinois Board of Trustees.