

Basic Course Information				
Semester:	Fall 2023	Instructor Name:	Dr. Patrick S. Pauley	
Course Title & #:	Biology 100	Email:	patrick.pauley@imperial.edu	
CRN #:	10443/10470	Webpage (optional):	N/A	
Classroom:	Online (Canvas)	Office #:	Online (Email)	
	August 14, 2023 – December		Monday – Thursday 7AM –	
Class Dates:	08, 2023	Office Hours:	8AM	
Class Days:	Online (CANVAS)	Office Phone #:	(760) 355 - 6363	
Class Times:	N/A (Online)	Emergency Contact:		
Units:	4	Class Format/Modality:		

# **Course Description**

This is a comprehensive one semester general biology course for non-majors. Includes life from the molecular to the organismic level of both plants and animals and their interactions within the environment. Special emphasis is put on human biology within appropriate areas of study. Appropriate for general education as well as nursing, pre-professional, and higher-level biology courses. Includes a laboratory component. (CSU, and UC credit limited. See a counselor.)

# **Course Prerequisite(s) and/or Corequisite(s)**

Appropriate placement as defined by AB705; or MATH 098 or MATH 091 with a grade of "C" or better.

# **Student Learning Outcomes**

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate an understanding of the steps of the scientific method. (ILO2)

## **Course Objectives**

Upon satisfactory completion of the course, students with a grade of "C" or better will be able to:

- 1. Identify the basic characteristics of all living things.
- 2. Name basic chemical aspects that pertain to life and the concept of homeostasis
- 3. Describe the sub-cellular components for the cell including their structure and function.
- 4. Explain the light and dark reactions of photosynthesis.
- 5. Explain cellular respiration and its relations to the entire organism.
- 6. Demonstrate knowledge of the structure and function of DNA and RNA.
- 7. Explain protein synthesis and site the central dogma of cell biology.
- 8. Compare and contrast the fundamentals of asexual and sexual reproduction.
- 9. Define ecology and the overall impact of ecology to conditions in the environment.
- 10. Solve problems in general genetics and in human genetics and relate advances in genetics to social responsibility of geneticists.



- 11. Identify and relate the functions of the major systems of the human body, the interrelationship among body systems and nature of disease.
- 12. Classify organisms in the kingdoms of plants and animals; discuss their evolutions and their relationships. Identify and relate the functions of the major systems of the human body, the interrelationship among body systems and nature of disease.

## **Textbooks & Other Resources or Links**

Hoefnagels, Mariëlle. Biology: The Essentials 4th edition with Connect (Digital only) ISBN: 9781265505790

## **Course Requirements and Instructional Methods**

#### Exams:

There will be seven (7) exams covering chapters assigned. The power points have already been uploaded.

#### Assignments:

In addition, there will two (2) papers Fed Up and Fungi. As well as one big class assignment that is called Coronavirus (COVID-19).

#### **Discussions:**

I also will be doing weekly discussions. I do expect you to participate in these discussion boards. Discussions are an important component of many online classes. They replicate in-class (face-to-face) discussions, so they can be fertile ground for exploratory learning. They can also be fertile ground for self-assessment. When students are directed to consciously compare their ideas or their participation with other participants in the class, they may be able to adjust their participation (both quantity and quality) to meet the bar set by other students. A total of sixteen (16) discussions will take place online over the course of the semester.

## Labs:

Laboratory experiments will be conducted. A total of five (5) labs will be assigned over the course of the semester.

# **Course Grading Based on Course Objectives**

Class grading will be based on points accumulated in the following ways.

• Seven (7) Exams Covering Chapters Assigned - 100 points each

• One (1) Coronavirus (COVID-19) Assignment (I would like the paper to be typed, double spaced, font to be Helvetica or Ariel and 12pt) - 200 points

• Two (2) papers Fed Up and Fungi (I would like the paper to be typed, double spaced, font to be Helvetica or Ariel and 12pt) - 100 points each

- Five (5) Labs 50 points each
- Weekly Class Participation sixteen (16 weeks) 25 points each

\* Exams may include true/false, multiple choice and short answer questions. Missed quizzes and exams must be cleared with the professor to be made-up. Asking to make-up missed quizzes or exams is your responsibility and needs to be for a reasonable excuse. You have all day from 12:00AM to 11:59PM to take Exams/Quizzes. This is 24 hours so plan accordingly.

Grading: A = 100 – 90% B = 89 – 80% C = 79 – 70% D = 69 – 60% F = < 59%

Updated 6/2023



# Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

## **Course Policies**

#### What does it mean to "attend" an online class?

Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

- Student submission of an academic assignment.
- Student submission of an exam.
- Documented student interaction with class postings, such as weekly discussions.
- A posting by the student showing the student's participation in an assignment created by the instructor.
- A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters.
- An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

#### Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.

#### What is online netiquette?

Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.

Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11)

## **IVC Student Resources**

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.

# **Anticipated Class Schedule/Calendar**

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
<b>Week 1</b> August 14 - 18	Module 0: Orientation Module 1 (Week 1): Chapter 1 - Scientific Study of Life	Chapter 1 - Pages 2 – 19 Discussion: About You – August 18 Self-Check Quiz – August 18 Student Self-Evaluation – August 18
Week 2	Module 2 (Week 2): Chapter 2 - The Chemistry	Chapter 2 - <b>Pages 20 - 47</b>
August 21 - 25	of Life	Exam 1: Chapters 1 & 2 – August 24



Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
		Discussion: Health Risk – August 25
		Student Self-Evaluation – August 25
Week 3	Module 3 (Week 3): Chapter 3 - Cells	Chapter 3 - <b>Pages 48 - 67</b>
August 28 - 31		Exam 2: Chapters 3 – August 31
		Discussion: Human Health Risk – September 1
		Student Self-Evaluation – September 1
Week 4	Module 4 (Week 4): Fungi	Assignment: Fungi – September 8
September 5 - 8		Labs: Laboratory - Genetics – September 8
		Discussion: 5-second Rule – September 8
		Student Self-Evaluation – September 8
Week 5	Module 5 (Week 5): Chapter 7 - DNA Structure	Chapter 7 - Pages 112 – 137
September 11-	and Gene Function	Discussion: Mask Wearing and its Effects –
15		September 15
		Student Self-Evaluation – September 15
Week 6	Module 6 (Week 6): Chapter 8 - DNA Replication	Chapter 8 - <b>Pages 138 – 153</b>
September 18 -	and Cell Division	Exam 3: Chapters 7 & 8 – September 21
22		Discussion: Mental Health – September 22
		Student Self-Evaluation – September 22
Week 7	Module 7 (Week 7): Chapter 10 - Patterns of	Chapter 10 – <b>Pages 170 – 195</b>
September 25 -	Inheritance	Labs: Laboratory - Earthworm Dissection –
29		September 29
		Discussion: Screen Time and The Brain –
		September 29 Student Self-Evaluation – September 29
		Student Sen-Evaluation – September 29
Week 8	Module 8 (Week 8): Chapter 25 - The Endocrine	Chapter 25 – Pages 502 – 515
October 2 - 6	System	Exam 4: Chapters 10 & 25 – October 5
		Discussion: Raw Sewage – October 6
		Student Self-Evaluation – October 6
Week 9	Module 9 (Week 9): Fed Up – Part 1	Labs: Laboratory - Measuring A Pulse – October 13
October 9 - 13		Discussion: Healthy Eating – October 13
M/		Student Self-Evaluation – October 13 Assignment: Fed Up – October 20
Week 10	Module 10 (Week 10): Fed Up – Part 2	Discussion: Exercise – October 20
October 16 - 20		Student Self-Evaluation – October 20
Week 11	Module 11 (Week 11): Chapter 28 - The	Chapter 28 – Pages 556 – 579
October 23 - 27	Digestive and Urinary Systems	Exam 5: Chapters 28 – October 26
		Discussion: Moods and Colors – October 27
		Student Self-Evaluation – October 27
Week 12	Module 12 (Week 12): Chapter 9 - Sexual	Chapter 9 – <b>Pages 154 – 169</b>
October 30 –	Reproduction and Meiosis	Discussion: Fact or Fiction – November 3
November 3		Labs: Laboratory - Frog Dissection - November 3
		Student Self-Evaluation – November 3
Week 13	Module 13 (Week 13): Chapter 27 - The	Chapter 27 – Pages 534 – 555
November 6 - 9	Circulatory and Respiratory Systems	Exam 6: Chapters 9 & 27 – November 9
		Discussion: Emotional Factors – November 9



Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
		Student Self-Evaluation – November 9
<b>Week 14</b> November 13 - 17	Module 14 (Week 14): Coronavirus (COVID-19)	Assignment: Coronavirus (COVID-19) – <b>November</b> <b>17</b> Discussion: Deadly Coronavirus – <b>November 17</b> Student Self-Evaluation – <b>November 17</b>
November 20 -	NO SCHOOL	
24		
Week 15	Module 15 (Week 15): Chapter 23 - Animal	Chapter 23 – <b>Pages 460 – 475</b>
November 27 – December 1	Tissues and Organ Systems	Labs: Laboratory - Pig Dissection – <b>December 1</b> Discussion: Vector Control – <b>December 1</b> Student Self-Evaluation – <b>December 1</b>
Week 16	Module 16 (Week 16): Chapter 30 - Animal	Chapter 30 – Pages 598 – 621
December 4 - 8	Reproduction and Development	Final Exam: Chapters 23 & 30 – December 7
		Discussion: It's Closing Time – <b>December 8</b> Student Self-Evaluation – <b>December 8</b>

\*\*\*Subject to change without prior notice\*\*\*