# BSC 2010 – Integrated Principles of Biology I

# Syllabus for section 7252

# Summer 2018

### Class Meetings

Tuesday, Wednesday, Thursday, & Friday 8:00 -9:00 am, NPB 1001

Ι.

II.

Online Exercises and Tutorials are continuously available; particular assignments will be posted regularly.

### Expectations

Each student is solely responsible for reading and following the instructions, guidelines and schedules in this syllabus and on the course webpage, or announced in class. Not having read the information in this syllabus or in instructor announcements will not constitute an excuse for missing an assignment, exam, or other assessment. Please set your preferences in Canvas so that you receive timely notifications of course announcements and other information.

### III. BSC Laboratory Courses

The BSC laboratory courses (BSC 2010L and BSC 2011L) are managed separately from the BSC lecture courses. Please read the information available at the BSC Website (<u>http://www.bsc.ufl.edu</u>) for more information on the laboratory courses.

### IV. Instructors

Christine Davis, Ph.D. Department of Biology Office: 620 Carr Hall Office Hours: immediately after class, or by appointment Email: Christine.davis@ufl.edu

### Bernard Hauser, Ph.D.

Department of Biology Office: 516 Bartram Hall Office hours: immediately after class, or by appointment Email: bahauser@ufl.edu

# Norm Douglas, Ph.D.

Department of Biology Office: 618 Carr Hall Office Hours: immediately after class or by appointment Email: nadouglas@ufl.edu

Bonnie Kircher (Online Instructor/TA) Department of Biology Office: CGRC 420 Office Hours: immediately after class or by appointment E-mail: kircherb@ufl.edu

# V. E-mail Communication

All e--mail correspondence to course instructors must **originate from your ufl.edu account, and include your section number.** E--mails not meeting these requirements may not be recognized by our e--mail filters, and thus may not be answered. It is easier to check all student emails if they are in one place.

All correspondence regarding the online assignments (*LaunchPad* and *Learning Catalytics*) must be sent to the Online Instructor (Ms. Bonnie Kircher).

### VI. Course Goals and Objectives

The primary goal of this course is to establish a coherent foundation of knowledge in biology and to prepare students for comprehension in advanced biology courses and science in general. Fundamental concepts discussed include the scientific methods by which we come to know things in science, the chemical composition and processes that make up all life, genetic processes and the means of inheritance of traits, the mechanisms and processes of natural selection, and adaptation and evolution of life on Earth An additional course goal is to develop critical thinking skills for development of reasoned thought and for evaluation of life experiences.

Objectives of the course will be achieved if, by its conclusion, students can:

- Describe a scientific hypothesis and identify testable predictions that logically follow
- Compare and contrast the components of prokaryotic and eukaryotic cells and the molecular processes driving cellular structure and functions
- Outline the process and molecular components of key metabolic pathways
- Describe the relationship between genotype and phenotype
- Predict the RNA and protein sequences that will be transcribed and translated from a given gene
- Predict the immediate and long term effects of specific gene mutations
- Discuss the evidence that all living things are descended from a common ancestor and have changed and diversified into species through time.
- Describe the primary mechanisms of evolutionary change
- Identify sources of genetic variation in populations and explain how this can be shaped in the presence of natural selection and other evolutionary forces
- Interpret and evaluate phylogenetic trees and use them to distinguish evolutionary predictions
- Outline major fundamental events in the history of life on Earth, including changes to biogeochemical cycles connected with major evolutionary transitions.

### VII. General Education Objectives for Biological Sciences

Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

The General Education objectives and the associated Student Learning Outcomes for Biological Sciences are achieved through lectures, in class discussion, interactive "clicker" response systems, and online activities and exercises. The learning objectives and SLOs are further reinforced by inquiry-based and active-learning exercises in the companion laboratory course, BSC 2010L. In particular, the companion lab expands upon development and testing of specific hypotheses.

### VIII. General Education Student Learning Outcomes

The general education student learning outcomes (SLOs) describe the knowledge, skills and attitudes that students are expected to acquire while completing a general education course at the University of Florida. The SLOs fall into three categories: **content**, **communication** and **critical thinking**.

**Every general education course must address all three SLOs.** Note that the <u>subject area objectives</u> (detailed above) describe the context within which the SLOs are achieved

Category	Institutional Definition	Institutional SLO
CONTENT	Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline.	Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.
COMMUNI CATION	Communication is the development and expression of ideas in written and oral forms.	Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.
CRITICAL THINKING	Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion.	Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.

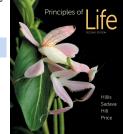
To asses student performance in meeting these student learning outcomes for this course, students are evaluated by a variety of instruments throughout the course: three exams during the semester, daily graded "clicker" questions used to encourage comprehension and reasoning, and graded on-line activities, exercises and assessments. Student Learning Outcomes are further assessed in BSC 2010L, the companion lab course. For example, the Communication SLO is assessed in graded written assessments and in oral presentations in the lab. In combination, BSC 2010 and BSC 2010L provide

assessments of all categories of the General Education Student Learning Outcomes.

# IX. Course Resources



*Principles of Life*, 2<sup>nd</sup> Edition, by Hillis, Sadava, Heller, & Price, Sinauer Associates and W.H. Freeman (publisher)



Students will have two options to gain access to *LaunchPad* for Principles of Life (which also includes the eBook text with study tools) when classes being in August: Students will have the choice to "opt-in" for a limited time to receive access to *LaunchPad* for a reduced price and pay for these materials through their student account. Students who do not choose this option will be able to purchase a standalone code through the UF Bookstore. Both options provide access to the same materials. The following link will take you to where you can "opt-in" to receive discounted course materials once logged in with your Gatorlink credentials.

There are current versions of the textbook on reserve at the Marston Science Library. Visit the Reserve Materials area to check out these copies.

	Author	Title	ISBN/EAN	Edition	New	Used
UF All Access	Hillis	Prin of Life (24m) UF All Access	9781319147136	2 <sup>nd</sup>	\$97.50	N/A
Loose Leaf Text	Hillis	Prin of Life (Print Upgrade)	9781319147129	2 <sup>nd</sup>	\$37.50	N/A
Access Code	Hillis	Prin of Life (24m Launchpad Access)	9781464184734	2 <sup>nd</sup>	\$124.50	N/A
Study Guide	Hillis	Study Guide for Prin of Life	9781464184758	2 <sup>nd</sup>	\$48.25	\$36.25

### https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED

### B. Online Resources and Electronic Textbook

Launchpad is an online assignments and tutorial system from the textbook publisher. It is required for this course and includes an e--book with purchase. Each new copy of the *Principles of Life* textbook comes automatically packaged with *Launchpad* and an e--book. If you purchase a used textbook you will still need to purchase access to *Launchpad*. Most students find that purchasing *Launchpad* as a standalone with the included e-book is the most economical option.

We link the student *LaunchPad* accounts with the Canvas course, so that students access the *LaunchPad* materials directly through Canvas. It is your responsibility to link your *LaunchPad* account with the Canvas course.

Follow these steps to get started.

- Go to <u>http://elearning.ufl.edu/</u> and log in.
- Find the course website. In the left sidebar, click on the area of Macmillan Learning.
- You will see the "Privacy Notice and Terms of Use ("Legal Terms") if this is the first time you have accessed a LaunchPad assignment through Canvas.
- Review the "Privacy Notice and Terms of Use ("Legal Terms") and select "I have read the Legal Terms."
- Click "I agree to the Legal Terms." Before proceeding, determine whether you already have a Macmillan account.

- If you do not have a Macmillan account, you should create an account first with your Gatorlink email address (NOT gmail, aol, hotmail, yahoo mail, etc). Then, you can choose your access option.
- If you have a Macmillan account, you should link your Macmillan account.
- Once you complete *LaunchPad* assignment, you should be able to see your grade on Canvas. If not, you should check out whether you linked the account properly.

For help with LaunchPad, contact LaunchPad Technical Support: 1-800-936-6899 (phone) or their online support form at <a href="http://www.macmillanlearning.com/Catalog/techsupport">http://www.macmillanlearning.com/Catalog/techsupport</a>.

Tech Support Hours (all times EST)

Monday – Thursday, 8:00 AM – 3:00 AM Friday, 8:00 AM – 12:00 AM Saturday, 12:00 PM – 8:00 PM Sunday, 12:00 PM –3:00 AM

### C. Classroom Response System (Clicker)

We will use the Learning Catalytics (LC) Classroom Response System (CRS) for quiz questions during class. LC allows students to use any **web-enabled device**, including laptops, smartphones, and tablets to participate in class. We will provide instructions on how to register for LC during the first week of class. For students that enroll in this class late, follow the instructions in the "LearningCatalytics\_Instruction" PowerPoint presentation found in the Files section on the course's Canvas website. For additional information on LC, visit

http://help.pearsoncmg.com/learning\_catalytics/student/en/Topics/lc\_looking\_for\_help.htm.

If you have problems with LC, visit <u>https://www.pearsonhighered.com/support/for-students.html</u>.

### D. Course Website (e-Learning)

Class material including the syllabus, exam results, some lecture slides, and other information related to the course will be posted on the course e--Learning website (<u>http://elearning.ufl.edu/</u>). The course is found under "e--Learning in Canvas". You are responsible for **all** announcements made in lecture and/or posted on the course website for this class. For help with e--Learning, call the UF Computing Help Desk at 352--392--4357, or visit the e--Learning support website: <u>http://helpdesk.ufl.edu/</u>.

### X. Supplemental Instruction

In Supplemental Instruction (SI), a trained student peer attends the class and then leads group sessions to focus on the challenging concepts and problems in the course. **SI is purely voluntary**; you can attend as often as you like, provided there is space (this is a first--come, first--served program). The sessions are collaborative, in that you will be working with classmates to better understand the material. The SI leaders will show you effective strategies for studying the course material, which you will have a chance to practice together, and the SI leaders will give you a chance to ask questions or pose your own concerns.

Refer to the SI e--Learning site for the locations and schedules of the SI sessions. More information is available at the UF Supplemental Instruction Home Page: https://teachingcenter.ufl.edu/supplemental\_instruction.html.

### XI. Getting Help

If you have a non-tech-support question about the course, check the following sources first to see if it is already answered, **before** e-mailing your instructors:

- Course Syllabus
- E-Learning Announcements (this is the primary means that your instructor has to communicate with you in a timely manner)
- E-Learning FAQ Discussion Boards

### A. Computing Problems

For issues with technical difficulties with E-Learning, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

See sections IX B and C above for information on how to get help with LaunchPad and Learning Catalytics.

# B. Questions about Grades in E-Learning, online assignments (LaunchPad), and in-class participation credit (Learning Catalytics)

All correspondence regarding the online assignments (LaunchPad), in-class participation (Learning Catalytics), and grades in E-Learning must be sent to the Online instructor/TA (Bonnie Kircher at kircherb@ufl.edu).

To facilitate actual discussion, a discussion forum will set up in E-Learning. Any questions regarding the lecture material or the online assignments should be posted there, so that your instructors, Ms. Kircher, or your fellow students will be able to provide answers. Don't be shy about asking questions; after all, if you are confused about the material there will almost certainly be other students with the same questions.

### Communication with Your Online Instructor/TA

When you have a question, check the following sources first to see if it is already answered, **before** e-mailing your Online Instructor/TA:

- o Course Syllabus
- E-Learning announcements (this is the primary means that your Online Instructor/TA has to communicate with you in a timely manner)
- o E-Learning Discussion FAQ
- E-Learning Discussion General Posts

If you still cannot find the answer to your questions:

- If it is a question that others might find useful to know the answer to as well, post it in the E-Learning Discussion section.
- If it is a question specific to you (e.g. account or grade specific), e-mail Ms. Kircher. Barring unusual circumstances, expect a reply with 24 hours during the work week (Monday – Friday at 5 pm). E-mails and E-Learning Discussion posts are checked at least once per day, but sometimes not more than that.

### C. University Support Services

College can be a very stressful time in a person's life. Resources are available on campus to help students meet academic goals and solve personal problems, which may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. See "<u>A Self Help Guide for Students</u>" or contact on of the following services:

- 1. UF Counseling and Wellness Center, Radio Rd Facility, 392-1575
- 2. Dean of Students Office, 202 Peabody Hall, 392-1261
- 3. Career Resource Center, Reitz Union, 392-1601
- 4. CLAS Academic Advising Center, Farrior Hall, 100 Fletcher Drive, 392-1521

Also available is the The U Matter, We Care initiative, which is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

### XII. Assessments and Grading

#### A. Exams

There will be three "midterm" exams, but no cumulative "final" exam. The midterm exams will be administered during the normal semester and during the normal class meeting times. Each exam will cover material from lecture, the online discussions, and the assigned reading in the textbook. The exams will **not** be cumulative. Each exam will be worth approximately 28% of the course grade.

All exams will be multiple--choice and machine graded. Answer sheets will be provided and must be filled in using a #2 or softer pencil. Each student must take the exam during her/his registered section time. Each student must bring her/his Gator ID to class on exam days. No student will be allowed to start an exam after the first student to complete an exam leaves the classroom. All exams and answer sheets will be collected at the end of the exam period. No additional time will be given to complete an exam if you arrive late. Please be aware that filling in the scantron sheets is part of the exam; no extra time at the end of the class period will be given for filling out the scantron sheets.

Each exam MAY be curved using the following approach: The top 3% of the scores in the class will be averaged, and the difference from 100 points will be added to each individual exam score.

Scantrons will be available for review by appointment for one week after the exam date; *specific times for exam review will be announced following each exam*. Exams will **not** be available for review after the semester has ended.

*Make--up Exams*: No make--up exams will be given without prior permission or documentation of illness. Students that will be missing an exam due to a pre--arranged university--approved excused absence (sports, etc.) should let the instructor know **a minimum of two weeks in advance**. These students may be required to take the make--up exam *before* the scheduled in--class exam.

In case of illness on exam day, a letter from the student's primary care provider will be required in order to receive an accommodation email from the Dean of Students Office (P202 Peabody Hall). This letter must state that the student was unable to complete the exam on the scheduled date (i.e., a letter stating only that the student was seen in a clinic is not sufficient). A personal emergency that forces a student to miss an exam also requires a note from the Dean of Students Office. These notes must be

received within five business days after the exam. Make up exams may be short--answer or essay format.

#### B. Online Assignments: LaunchPad

Students will receive up to 12% of the total course points for participation in the online exercises, and for performance on online assessments. Additional information about the *LaunchPad* exercises and assessments will be provided by the Online Instructor (see also Section VII, above).

**NOTE**: if you already purchased *Launchpad* access in a different semester, you can log in using your existing username, which should be your Gatorlink email address. You will then be asked to provide your UFID number. If you have any questions or problems setting up your account, please contact Technical Support (#5, below). Technical support will need a technical support incident ID if you continue to have trouble, so be sure to save that ID when you report your issue.

Grading of Online Exercises. There are several different types of assignments for students to complete:

- **Quizzes**: students will be graded based on the number of questions answered correctly out of total number of questions on the <u>FIRST</u> quiz submission.
- All other assignment types (activities, tutorials, etc.): students will receive full credit upon completion.

Your grades on assignments and their status (e.g., complete, or due in x days) can be viewed in Canvas. The Launchpad home page is NOT a reliable way to determine which assignments remain to be completed.

There are many other resources available on *LaunchPad* to help you study material from your textbook, such as Learning Curve, Diagnostic quizzes, Flashcards, Interactive chapter summaries, etc. Items that are NOT listed in the Gradebook will not be graded, but we still strongly encourage you to use them to help you study.

**Important information about pace**. Some assignments may have a set time limit, so make sure you have time to devote to that assignment before you begin.

Once assigned, assignments are available online at all times, from the start of the given unit up until the deadline. It is especially important not to wait until just before the deadlines to complete *LaunchPad* assignments; problems usually happen at the last minute.

The assignments have been listed in an order that complements the lecture, and we recommend either going over the material for a given chapter:

- before the lecture, which may help you understand the lecture in greater detail, or
- after each lecture to help reinforce the material and prepare for the exam.

You can always go back and re-do the assignments after you have submitted them for a grade, as a study aid.

**Due Dates**. Note that all due dates for assignments are clearly posted on the Canvas Assignments page, in the *LaunchPad* Gradebook and Calendar, and the schedule at the end of the syllabus, and reflect the most up-to-date information. The deadline for assignments is 11:55 p.m. on the specified date, (Mondays for the first two units, but check dates for unit 3!). All assignments must be completed by the stated due date and time for credit. There are NO make- ups available for *LaunchPad* assignments.

Extensions for LaunchPad assignment sets will only occur in extreme circumstances. A Dean of Students note verifying documentation of illness or a personal matter must be provided for <u>at least five of the</u> seven days of the week of the assignment's deadline for accommodations to be considered. **Extensions** 

# will NOT be given because of technical or personal issues that occur within 24 hours of the assignment deadline.

### C. In-Class Quiz "Clicker" Questions

Students will receive 5% of the total course points for participation in the in--class quizzes that are to be answered using the classroom response system (Learning Catalytics, see above). Specifically, 18 points total will be awarded for Learning Catalytics (LC) quizzes; 6 points from each lecture unit of the course. The points earned will reflect the proportion of LC questions answered correctly in class. Each question posed will be scored as 0.75 LC points for a correct answer with an additional 0.25 LC points for participation. For each course lecture unit, full in--class quiz credit (6 course points) will be awarded to all students achieving 75% of the total possible LC points from that unit; those achieving less than 75% will receive course points in proportion to their achieved LC points (e.g. 50% of LC points earned = 3 course points for one lecture unit).

Students may **not** make up LC questions, regardless of the reason (e.g., absence, malfunctioning cell phone, forgot to register, etc.). It is the student's responsibility to regularly check (i.e., daily or weekly) their gradebook in LC to ensure that their submissions were correctly received, and to contact LC support to resolve any issues with submissions not being properly recorded in the LC gradebook in a timely manner.

### D. Extra Credit

Each instructor will offer exactly 2 points of extra credit, which will apply to the appropriate exam, post curve. The extra credit assignments will be posted by the instructor near the end of each course unit. There will be no extra credit tailored to individual students. There will be NO opportunities to make up extra credit.

Assessment	Points per Unit	Total Point	% of Total Points
Exams	100	300	83.3
LaunchPad	14	42	11.7
Learning Catalytics	6	18	5.0
TOTAL	120	360	100.0

#### E. Grading

F.

All grades will be posted on e--Learning (in terms of course points, i.e., the point scheme above), and it is the responsibility of the student to check their grades on e--Learning and make sure they match their grades on LaunchPad and Learning Catalytics. If there is a discrepancy you must let us know within ONE week of the grade being posted on eLearning.

Minimum grade cutoffs are listed below. Because each exam is curved individually (see section IX--A, above), the scores for the course as a whole will not be curved (i.e. these grade cutoffs will not be lowered or raised) except under extremely rare circumstances (i.e., unless we tell you otherwise). In

Point Range (%)	Letter Grade
≥ 90.00	А
≥ 86.66	A–
≥ 83.33	B+
≥ 80.00	В
≥ 76.66	В-
≥ 73.33	C+
≥ 70	С
≥ 66.66	C–
≥ 63.33	D+
≥ 60	D
≥ 56.66	D-
< 56.66	E

other words, if you receive 90% of the possible points, you are guaranteed to earn an A grade. **Final scores will NOT be rounded** (i.e., 89.99% is not 90%).

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

### F. Special Treatment

Please do not request individual special treatment regarding grading at the end of the semester; **we do not adjust grades for individuals for any reason**. Plan to do well on all exams and other assessments from the beginning of the semester; if you are having difficulty in the class, please let your instructors know *before* the exams rather than after.

### XIII. Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

In addition, on all work submitted for credit the following pledge is either required or implied:

"On my honor I have neither given nor received unauthorized aid in doing this assignment."

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty.

### XIV. Attendance

Attendance is not required, but students are expected to attend all classes and are responsible for all material covered during the lecture, including announcements. Students are strongly encouraged to read the assigned chapters before coming to class as this will make it easier to comprehend the lecture material. If you miss class, visit the e-Learning site for any lecture notes and course announcements.

While attendance is not mandatory, we will be using "Learning Catalytics" for attendance monitoring. At the beginning of lecture, we open a session and ask that each student select their attendance. We use attendance data to monitor the effectiveness of our teaching.

### XV. Time Commitment

The UF College of Liberal Arts and Sciences expects that each student will devote 3-4 hours per week per credit-hour to each course, including time in lectures and labs. Because BSC 2010 is 3 credits, each student should therefore expect to devote 9-12 hours per week to this course. A recommended time allocation is below.

Activity	Hours per Week
Lectures	3
Online Exercises	1-2
Textbook Readings	2-3
Review and Study	2-4

If you find yourself spending more than 12 hours per week on average on these activities, discuss this with your course instructor to see if you can refine your study habits. If you find yourself spending less than 9 hours per week on average, you should recognize that you may have difficulty learning and comprehending the material in this time, and this will probably be reflected in poor performance on the various assessments, causing you to receive a lower overall course grade.

### XVI. Conduct in Class

Please be courteous and do not talk during lecture. This can be distracting to other students and the instructor.

Use of electronic devices in class to take notes or otherwise participate in classroom activities is approved. Approved electronic devices are laptop computers, cell phones, smart phones, tablets, and voice recording devices. Other uses of these devices or the use of unapproved devices will be considered disruptive and students will be asked to discontinue use of such devices immediately. Unapproved electronic devices include video recorders, digital cameras and MP3 players. Multiple disruptions will be considered grounds for the assignment of a failing grade.

### XVII. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida

Disability Resources website for more information at: <u>http://www.dso.ufl.edu/drc/</u>. Note that the student should provide documentation of a requirement for accommodation as soon as possible in the semester, so that arrangements can be made with the DRC. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

# XVIII. Course Evaluation

To improve the teaching and learning of this important course, **students are required to submit a teaching evaluation for each instructor electronically via this website**: <u>https://evaluations.ufl.edu/evals/</u> Evaluations are stored and reported in a completely anonymous manner. Authentication for evaluation submission is only to ensure that only one evaluation is submitted per student per instructor.

# XIX. Lecture Schedule

Day	Date	Lecture	Торіс	Chapter	LaunchPad assignments due	
1	Dr. Davis's Molecules and Cells Unit					
Tues	15-May		Introduction/overview of course			
Weds	16-May	Lecture 1	Life on Mars? What is life, anyway?	1		
Thurs	17-May	Lecture 2	Water and the chemistry of life	2		
Fri	18-May	Lecture 3	Macromolecules 1	2/3		
Mon	21-May		No class		Activity 2.1, Animated Tutorial 2.2, Animated Tutorial Quiz 2.2, and Summative Quiz Ch 2	
Tues	22-May	Lecture 4	Macromolecules 2	2/3		
Weds	23-May	Lecture 5	Macromolecules 3	2/3		
Thurs	24-May	Lecture 6	Macromolecules 4	2/3		
Fri	25-May	Lecture 7	What does it take to be a cell?	4		
Mon	28-May		No class		Activity 3.2, Animated Tutorial 3.2, Animated Tutorial Quiz 3.2, Animated Tutorial 3.3, Animated Tutorial 4.1, Animated Tutorial Quiz 4.1, Animated Tutorial 4.2, Animated Tutorial Quiz 4.2	
Tues	29-May	Lecture 8	Membranes (structure/function)	5		
Weds	30-May	Lecture 9	Endomembrane system, cell signalling	5		
Thurs	31-May	Lecture 10	Energy flow and metabolism	6		
Fri	1-Jun	Lecture 11	Cellular respiration	6		

Lecture topics for this course are listed below. This is a tentative schedule; the dates and coverage of specific topics are subject to change.

Mon	4-June		No class		Animated Tutorial 5.1, Animated Tutorial Quiz 5.1, Animated Tutorial 5.2, Animated Tutorial Quiz 5.2, Animated Tutorial 5.4, Animated Tutorial Quiz 5.4, Animated Tutorial 6.1, Activity 6.7, and Summative Quiz Ch 6
Tues	5-Jun	Lecture 12	Photosynthesis	6	
Weds	6-Jun	Lecture 13	Catch up day		
Thurs	7-Jun		EXAM 1 – in class		
			Dr. Hauser's Gene	etics Unit	
Fri	8-Jun	Lecture 1	Mendel's Laws	8	
Mon			No class	7	
Tues	12-Jun	Lecture 2	Meiosis	7	
Weds	13-Jun	Lecture 3	Cell Cycle, Mitosis, and Chromosomal Theory	7	
Thurs	14-Jun	Lecture 4	Non-Mendelian Genetics	8	
Fri	15-Jun	Lecture 5	Non-Mendelian Genetics II	8	
Mon					Animated Tut. Quiz 7.2 Activity 7.1 Sexual Life Cycle Summative Quiz Ch. 7 Animated Tut. Quiz 8.2 Animated Tut. Quiz 8.3 Summative Quiz Ch. 8
Tues	19-Jun	Lecture 6	Search for the Genetic Material	9	
Weds	20-Jun	Lecture 7	DNA Replication	9	
Thurs	21-Jun	Lecture 8	Transcription	10	
Fri	22-Jun	Lecture 9	Translation	10	
Mon			No class		
Tues	26-Jun		No class - summer break		
Weds	27-Jun		No class - summer break		
Thurs	28-Jun		No class - summer break		
Fri	29-Jun		No class - summer break		
Mon			No class		Animated Tut. Quiz 9.1 Animated Tut. Quiz 9.4 Animated Tut. Quiz 10.5 Animated Tut. Quiz 10.4 Ch10 Summative Quiz
Tues	3-Jul	Lecture 10	Mutation	9	

Weds	4-Jul		No class - Independence day		
Thurs	5-Jul	Lecture 11	Gene Expression in Prokaryotes	11	
Fri	6-Jul	Lecture 12	Gene Expression in Eukaryotes	11	
Mon			No class		Ch9 Summative Quiz Animated Tut. Quiz 11.1 Animated Tut. Quiz 11.2 Animated Tut. Quiz 11.3 Ch 11 Summative Quiz
Tues	10-Jul	Lecture 13	Biotechnology	13	
Weds	11-Jul		EXAM 2 - in class		
			Dr. Douglas's Evolu	tion Unit	
Thurs	12-Jul	Lecture 1	History of evolutionary thought	15	
Fri	13-Jul		How does natural selection work?	15	
Mon			No class	15	
Tues	17-Jul	Lecture 3	Different "modes" of selection	15	Activity 15.1, Media Clip 15.1, Animated Tut. Quiz 15.1
Weds	18-Jul	Lecture 4	Hardy Weinberg and Genetic Drift	15	
Thurs	19-Jul	Lecture 5	How do gene sequences evolve?	15	
Fri	20-Jul	Lecture 6	Adaptations	15	
Mon			No class		
Tues	24-Jul	Lecture 7	Sex and evolution	15	Animated Tut. Quiz 15.2, Animated Tut. Quiz 15.3, Ch. 15 Summative Quiz
Weds	25-Jul	Lecture 8	What are species?	17	
Thurs	26-Jul	Lecture 9	How do new species form?	17	
Fri	27-Jul	Lecture 10	How do we study the tree of life?	16	Animated Tut. 17.1 Quiz, Animated Tut. 17.2 Quiz, Animated Tut. 17.3 Quiz, Summative Quiz Chapter 17
Mon			No class		
Tues	31-Jul	Lecture 11	Building phylogenies	16	
Weds	1-Aug	Lecture 12	How are phylogenies used?	16	Activity 16.1, Animated Tut. 16.2 Quiz, Summative Quiz Chapter 16, Animated Tut. 18.1 Quiz,
Thurs	2-Aug	Lecture 13	History of Life	19	
Fri	3-Aug		EXAM 3 - in class		