

Welcome to BICD 100 Genetics! This course aims to develop concepts of genetics, so that we can understand how information is stored, inherited, and utilized life. Fundamental concepts include gene and chromosome structure, genotype and phenotype, chromosome segregation and recombination, regulation of gene expression, random mutation, natural selection, and epigenetics. We will learn these concepts by examining their roles in biological systems and will apply our understanding to explore a wide range of biological and real-life phenomena including human health, evolution, biodiversity, archeology, and agriculture.

Learning goals

- Collaborate with fellow students and the instructional team to learn concepts in genetics
- Apply knowledge of genetics concepts to analyze data, explain phenomena, and solve problems
- Learn to draw conclusions and construct scientific arguments based on evidence and reasoning
- Develop skills in reading, understanding, and analyzing primary research articles

Learning in this course

BICD 100 is designed to be a collaborative environment for everyone to learn together and construct a shared understanding of the material. Active participation and contribution both in class and in discussion section are essential because many ideas that will be developed in these activities cannot be easily captured otherwise. Being able to communicate understanding, articulate confusion, and defend scientific arguments based on evidence and reasoning is both useful for learning¹ and critical to success in any discipline. To encourage collaboration and community building, class activities will be done in groups, and grades will not be assigned on a curve.

Instead of memorization, we will focus on developing an understanding of fundamental concepts as they apply to different examples. Exams will include questions that are based on solving problems in new contexts. We will use class time to construct and apply our knowledge, troubleshoot challenging topics, practice problem solving, and develop skills in critical thinking. There will often be pre-class assignments to prepare for the more challenging material in class.

¹ Smith et al (2009) Science 323: 122–124. <http://science.sciencemag.org/content/323/5910/122.short>

Course logistics

The core learning components in this course are comprised of collaborative activities both in class and in discussion sections, in addition to independent work on studying and completing assignments. Course material, announcements, and other important details will be available on the TritonEd (<https://triton.ed.ucsd.edu>). Please check the course website and your @ucsd email regularly for updates and relevant information.

To be part of the course, you should already be enrolled in a discussion section along with the lecture section. You must attend the discussion section that you are enrolled in to receive credit. We are not able to change the maximum number of enrolled students in a section. If a section is full, you must choose another one. If you cannot find one that suits your schedule, you will

unfortunately have to decide to enroll in the course another time or to forgo contribution and credit for the discussion section. The mandatory nature of discussion sections is non-negotiable.

Class	Day	Time	Location	Instructor	Email
B00	TuTh	6:30p-7:50p	HSS 1330	Stanley Lo, Ph.D.	sml@ucsd.edu

Section	Day	Time	Location	Instructional assistant	Email
B01	M	7:00p-7:50p	CENTR 203	Dane Malone	dmalone@ucsd.edu
B02	M	8:00p-8:50p	CENTR 203	Dane Malone	dmalone@ucsd.edu
B03	M	8:00a-8:50a	HSS 1305	Collin Pachow	cpachow@ucsd.edu
B04	M	9:00a-9:50a	HSS 1305	Aaron Collinworth	akcollin@ucsd.edu
B05	M	4:00p-4:50p	CENTR 203	Trevor Link	tdlink@ucsd.edu
B06	M	6:00p-6:50p	HSS 1305	Gautam Ramesh	gramesh@ucsd.edu
B07	F	8:00a-8:50a	HSS 1305	Amanda Calimlim	arcaliml@ucsd.edu
B08	F	9:00a-9:50a	HSS 1305	Angela Lee	acl003@ucsd.edu
B09	F	11:00a-11:50a	HSS 1305	Lynley Fernandez	lafernan@ucsd.edu
B10	F	12:00p-12:50p	HSS 1305	Albert Nguyen	amn026@ucsd.edu
B11	F	1:00p-1:50p	HSS 1305	Daanish Unwalla	dunwalla@ucsd.edu
B12	F	12:00p-12:50p	SOLIS 110	Chris Macrae	cmacrae@ucsd.edu

Office hours: Consider office hours to be more like study sessions or free-formed fireside chats, where we can talk about anything related to your academic and general experiences on campus. Dr. Lo's office hours are on a rotating schedule, so that more people can have an opportunity to come to office hours without scheduling conflicts. Please feel free to email Dr. Lo and set up a separate appointment if the following times do not work for you. The location for Dr. Lo's office hours is the Mandeville coffee cart (The Art of Espresso), and it is chosen to be a relatively central location for easy access from all over campus. Dr. Lo's office is in York 4070B, which is in Revelle College, and may be far away for students coming from the other ends of campus. Please note that dates are listed in US format of month/day. For example, 1/13 means January 13th.

Week	Day	Date	Time	Location
1	Friday	1/13	1:00p-1:50p	Mandeville coffee cart (Art of Espresso)
2	Friday	1/20	11:00a-11:50a	Mandeville coffee cart (Art of Espresso)
3	Friday	1/27	10:00a-10:50a	Mandeville coffee cart (Art of Espresso)
4	Thursday	2/2	9:00a-9:50a	Mandeville coffee cart (Art of Espresso)
5	Thursday	2/9	10:00a-10:50a	Mandeville coffee cart (Art of Espresso)
6	Wednesday	2/15	2:00p-2:50p	Mandeville coffee cart (Art of Espresso)
7	Wednesday	2/22	3:00p-3:50p	Mandeville coffee cart (Art of Espresso)
8	Wednesday	3/1	4:00p-4:50p	Mandeville coffee cart (Art of Espresso)
9	Tuesday	3/7	3:00p-3:50p	Mandeville coffee cart (Art of Espresso)
10	Tuesday	3/14	4:00p-4:50p	Mandeville coffee cart (Art of Espresso)

The instructional assistants have office hours at set times and locations each week. You are welcome to come to any instructional assistant's office hours and are not restricted to the instructional assistant of your discussion section.

Instructional assistant	Day	Time	Location
Aaron Collinworth	Tu	10:00a–10:50a	Geisel Library 2nd Floor Active Learning Lab
Albert Nguyen	Th	10:00a–10:50a	Muir Biology 5135/5125A
Amanda Calimlim	F	1:00p–1:50p	Sun God Lounge
Angela Lee	Th	2:00p–2:50p	Biomedical Library
Christopher Macrae	F	10:00a–10:50a	Biomedical Library 2nd floor
Collin Pachow	M	9:00a–9:50a	HSS 1145A
Daanish Unwalla	Tu	9:30a–10:20a	Hi Thai
Dane Malone	M	5:00p–6:50p	Bonner Hall 3146
Gautam Ramesh	F	12:00p–12:50p	Hi Thai
Lynley Fernandez	F	12:00p–12:50p	Muir Woods Coffee Shop
Trevor Link	M	5:00p–6:50p	To be determined

We also encourage you to take advantage of the Dine-With-a-Prof or the Coffee-With-a-Prof program in the colleges (<https://students.ucsd.edu/academics/advising/academic-success/dine-with-a-prof.html>). These can be used with any professor or graduate instructional assistant.



Course material: See the last page for more information on the textbook. Assigned readings for this course will be from Klug et al. *Essentials of Genetics*, 9th edition, and other relevant research articles from the primary literature posted on TritonEd. We will not be using *Mastering Genetics* (online homework module associated with this textbook), so you do not need to purchase an access code or purchase a new book to get this access code. Instead, a substantial portion of learning will be from primary research articles, and assignments will be designed to support this more complex level of learning.

Participation and contribution in class and in discussion section will be mainly through clicker questions and short writing activities. To participate in clicker-based discussions in class, please have an iClicker2 registered on TritonEd. Short writing activities will be done in class and in discussion sections, so please bring paper and pens or pencils.

Podcast: Whenever possible, classes will be recorded and made available online as a resource for learning (<http://podcast.ucsd.edu/>). However, participation and contribution are highly encouraged, as substantial portions of class time will be interactive. Many important concepts and ideas that will be developed collaboratively in these activities, which cannot be easily captured on video. Therefore, podcasts are provided as for the purpose of review and should not be used solely to substitute for active engagement in class meetings.

Technology: Students are welcome to bring laptop computers, tablets, or similar technology to class and to discussion section for note-taking purposes. Please see this research study, which shows that multi-tasking on computers in class is likely to decrease not only your own grade but also the grades of people around you who can see your screen!² For this reason, please be considerate to your fellow classmates, and we ask that you do not flip between relevant course material and irrelevant activities on the internet. The use of cell phones, computers, or any other electronic communication devices is not permitted during exams. Use of these devices during an exam is considered a violation of academic integrity and can result in a failing grade in the course.

² Sana et al (2013) *Computers and Education* 62: 24–31
<http://www.sciencedirect.com/science/article/pii/S0360131512002254>

Grading

Our course has the following grading components: contribution (15%), writing assignments (25%), midterm exams (30%), final exam (25%), professionalism (2%), and extra credit (0.5%). Because different people may excel in different aspects of the course, the higher component between writing assignments and the final exam for each individual will be scaled from 25% to 28%, bringing the total to 100%.

The following general grading scheme will be used. Exact grade boundaries will be determined based on final grade distributions: Because course assessments are not perfectly precise, grade cutoffs will be identified by large gaps in between individual scores. For example, grade cutoffs may vary based on different relative percentages: 93.25 (A), 93.21 (A), (big relative difference), 92.91 (A-), 92.89 (A-) vs. 93.25 (A), 93.00 (A), 92.99 (A), (big relative difference), 92.78 (A-).

The course is not graded on a curve (i.e. 20% of students getting A, B, C, and such). Thus, the ability to do well in this course is not dependent on others doing poorly.

A+	97–100%	B+	87–90%	C+	77–80%	D+	67–70%	F	0–60%
A	93–97%	B	83–87%	C	73–77%	D	63–67%		
A-	90–93%	B-	80–83%	C-	70–73%	D-	60–63%		

Contribution: Active participation and contribution both in class and in discussion section are essential to learning in this course. There will be many contribution items, including pre-class assignments, clicker questions and writing activities in class, and writing activities in discussion

section. Contributions will be graded for thoughtful completion on a scale 0, 0.5, and 1. Because individual students may have different competing schedules and life events, completing 85% or more of all contribution items will earn the full contribution grade. For example, if there are 40 contribution items, completing 34 items will result in 34/40, whereas completing 33 items will result in 33/40 for the contribution grade.

For most classes, there will be reading assignments and associated writing assignments to be completed before class. Check TritonEd regularly for details and due dates. These pre-class assignments are designed to: (1) engage students in exploring new concepts and ideas, so we are prepared for class and can have productive discussions, and (2) help the instructional team know prior to class what material students are struggling with, so we can adjust accordingly to use our class time as efficiently as possible. In class, there will be clicker questions and writing activities on a regular basis. Be sure to bring paper and pens or pencil for the writing activities. Please also note that it is a violation of academic integrity policies to use someone else's clicker in class.

In discussion section, we will engage in collaborative work, analyze research data from primary literature, construct scientific arguments based on data and reasoning, and practice solving problems in preparation for exams. The discussion sections also provide opportunities to build relationships with fellow students and your instructional assistant. Writing activities in discussion sections are structured so that we will get practice for the graded writing assignments.

Before discussion section, some assignments will be made available on TritonEd to prepare you for the collaborative work. It is critical that you genuinely attempt the assignments before coming to discussion section, so that you and your fellow students will get the most out of these activities. Then in discussion section, we will work on problems in teams. The problems will focus on drawing conclusions and constructing scientific arguments based on evidence and reasoning from primary research articles. These section activities will mimic the collaborative phase of exams that we will use in midterms (more on that below), and they will give you an opportunity to test your knowledge, practice working at the level that is expected on the exam, and practice working on a complex problem collaboratively in teams. Contributions to the group effort will be noted by the instructional assistant, and this will be part of your contribution and professionalism grades. Thus, it is very important that you arrive at discussion sections prepared.

The best way for you to learn how to solve problems and deepen your understanding of the course material is to work through the section activities and discuss them with your fellow classmates and the instructional assistant. The instructional assistant is there to facilitate students discovering and constructing an understanding for themselves but to give you the answers to the problems.

Writing assignments: There will be six writing assignments (5% each) focused on reading, understanding, and analyzing research data from primary literature articles. The first assignment will be an orientation to primary literature articles and academic integrity in general, and the other five assignments will focus on drawing conclusions and constructing scientific arguments based on

evidence and reasoning. Details of these assignments will be made available in class and on TritonEd. Please check the course website for more information.

The graded writing assignments will complement writing activities in class and in discussion section. The skills developed in these writing assignments will also be tested on midterm and final exams, where you will be challenged to analyze data and construct scientific arguments that answer specific research questions.

The Writing and Critical Expression Hub at the Teaching + Learning Commons located in Geisel Library (<http://commons.ucsd.edu/students/writing/index.html>) provides support for undergraduates working on course papers, e.g. writing assignments in this course, as well as other independent writing projects. Writing mentors can help at any stage of the writing process, from brainstorming to final polishing. The Writing and Critical Expression Hub offers: one-on-one writing tutoring by appointment; supportive and in-depth conversations about writing, the writing process, and writing skills; help with every stage in the writing process, walk-in tutoring; and workshops on writing.

Midterm and final exams: Questions in exams will challenge us to apply our understanding in new contexts by solving problems and constructing scientific arguments with evidence and reasoning. Therefore, exams will be open resources, e.g. notes and calculators but not electronic equipment that can be used to communicate with others. Exams will be cumulative but will focus on the most recent material. There will be three midterm exams in class (80 minutes and 15% each) and one final exam in exam week (179 minutes and 25%). The midterm exam with the lowest score for each individual will be removed from the final grade calculation.

To facilitate reflection and learning in the quarter, midterm exams (but not the final exam) will be conducted in two phases: The first phase will be completed individually, and the second phase will be done collaboratively in teams. The team score will be compared to the average of the team's individual scores. If the team score is higher than that average, the difference between the team score and the average will be added to each person's individual score (to a max of 100%). For example, a certain team consists of students A, B, C, and D who score 90%, 80%, 70%, and 60% individually and respectively, with an average of 75%. The team earns 80% on the team portion, so the difference between the average individual score and team score is +5%. Therefore, each individual earns an additional 5% on their scores, and the resulting exam scores will be 95%, 85%, 75%, 65% respectively for students A, B, C, and D.

We are using this two-phase testing method for midterm exams as people learn more from collaborative work compared to individual work.³ These collaborative testing opportunities allow us to deepen our understanding because we are receiving feedback on our thinking in a very timely fashion, which is critical for learning. It is also an opportunity to practice communicating effectively and collaborating to solve problems.

³ Gilley et al (2014) Journal of College Science Teaching 43: 83–91 <https://jstor.org/stable/43632038>

Professionalism: This portion of the course grade is intended to engage students in considering the impact of their actions on their own learning and the learning of others in the course.

Unprofessional interactions consume time yet have no meaningful benefits to you, your fellow students, and/or the instructional team. Analogously in the workplace, being unprofessional to your colleagues or supervisors will only discount you. When you are discounted, you may not be invited for new opportunities that you may or may not be aware of.

Professionalism can be demonstrated through individual (2% described in this section) and community efforts (extra credit described in the section below). The individual component is to account for demonstrating maturity and professionalism. By default, every student is assumed to be professionally mature. Hence, this component is awarded to every student at the beginning of the quarter. During the quarter, based on observations by the instructional team, which includes but is not limited to one-on-one interactions, electronic communication, and follow-up conversations on different correspondence, your professionalism credit may be deducted in steps of 0.5%.

Example interactions with meaningful benefits that:

- Developing deeper insight into course material, concepts, biology, and/or society in general
- Working collaboratively to improve in skill building and future opportunities
- Learning conceptually and meaningfully why full credit was not awarded for an assignment
- Clarifying course material that facilitates deeper learning
- Reporting errors or problems in class, on assignments, or for other course material

Example interactions that have no meaningful benefits and thus should be avoided:

- Contributing inequitably to team work in class, in discussion section, or on exams
- Harassing and/or bullying the instructional team or other students, either in person or online
- Asking questions when the information is already available or will eventually be known
- Ignoring the directions or requests from the instructional team
- Being disruptive to fellow students in class, in discussion section, or on exams

Extra credit: The 0.5% extra credit is based on community professionalism, which can be earned by completing course evaluations and related surveys that are aimed to improve the course and the educational experiences of your future peers. If 90% or more of all students complete CAPEs, instructional assistant evaluations, and other course-based evaluation surveys in a mature and professional fashion (i.e. taking them seriously and providing timely and constructive feedback), 0.5% will be added to everyone in the course. Other than the community professionalism component, there are no other opportunities for extra credit beyond what is already assigned as part of the course by the instructor.

Late or missing assignments: Late contribution items will be not accepted, as completing 85% of all the contribution item will earn the full 20% of contribution grade. This 85% completion system is set up to accommodate individual students' different competing schedules and life events. Late writing assignments will be accepted, and no make-up exams will be offered, except in the case of a

documented short-term illness or serious family emergency. In this case, please contact Dr. Lo as soon as possible or as soon as it is reasonable to do so given the individual circumstances.

Regrades: If a grading error has been made, please submit a regrade request to Dr. Lo at the end of a class within two days of the exam being returned. The time and date of closing down the appeal process will be announced on TritonEd. On a cover sheet (a separate piece of paper attached to your exam), write “please re-grade question #” or “arithmetic error on p. #”. If you think your answer deserves more points (i.e. not an arithmetic error), please write a concise description of how your answer compares to the key and why you think it should have earned more points on the cover sheet. No regrades are possible for exams written in pencil or non-permanent ink. Students who submit exams for regrading understand that we may: (1) regrade the entire exam, and (2) compare the submitted paper to a scanned copy of the original exam. As a result, the overall grade of the exam may go up or down or remain the same after the regrade.

Academic integrity

<https://students.ucsd.edu/academics/academic-integrity/index.html>

Integrity of scholarship is essential for an academic learning community. In this course and at the university, we expect that both students and the teaching team will honor this principle and in so doing protect the validity of university intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. Instructors, for their part, will exercise care in planning and collaborating with students on academic work, so that academic integrity is upheld.

When people collaborate to work toward a common goal, shared values must be established so that everyone understands the acceptable ways for working together. In organizations, these are commonly called codes of conduct or ethics. In this course, we are using a statement of values⁴ in support of codes of ethics, like the Policy on Integrity of Scholarship, to state explicitly our values and describe the behaviors for maintaining and protecting those values.

The following values are fundamental to academic integrity and are adapted from the International Center for Academic Integrity. In our course, these values are open to discussions and possible alterations based on mutual agreements among all students and the instructional team. In collaborative work, each team should discuss these values and must articulate the expectations for how they are made manifest within the team’s work together.

All course materials are the property of the instructor, the course, and University of California San Diego and may not be posted online, submitted to private or public repositories, or distributed to unauthorized people outside of the course. Any suspected instances of a breach of academic integrity will be reported to the Academic Integrity Office for review.

⁴ This class statement of values is adapted from Tricia Bertram Gallant Ph.D.

	As students, we will ...	As the teaching team, we will ...
Honesty	<ul style="list-style-type: none"> Honestly demonstrate your knowledge and abilities according to expectations listed in the syllabus or in relation to specific assignments and exams Communicate openly without using deception, including citing appropriate sources 	<ul style="list-style-type: none"> Give you honest feedback on your demonstration of knowledge and abilities on assignments and exams Communicate openly and honestly about the expectations and standards of the course through the syllabus and in relation to assignments and exams
Responsibility	<ul style="list-style-type: none"> Complete assignments on time and in full preparation for class Show up to class on time and be mentally physically present Participate fully and contribute to team learning and activities 	<ul style="list-style-type: none"> Give you timely feedback on your assignments and exams Show up to class on time and be mentally and physically present Create relevant assessments and class activities
Respect	<ul style="list-style-type: none"> Speak openly with one another while respecting diverse viewpoints and perspectives Provide sufficient space for others to voice their ideas 	<ul style="list-style-type: none"> Respect your perspectives even while we challenge you to think more deeply and critically Help facilitate respectful exchange of ideas
Fairness	<ul style="list-style-type: none"> Contribute fully and equally to collaborative work, so that we are not freeloading off of others on our teams Not seek unfair advantage over fellow students in the course 	<ul style="list-style-type: none"> Create fair assignments and exams and grade them in a fair and timely manner Treat all students and collaborative teams equally
Trustworthiness	<ul style="list-style-type: none"> Not engage in personal affairs while on class time Be open and transparent about what we are doing in class Not distribute course materials to others in an unauthorized fashion 	<ul style="list-style-type: none"> Be available to all students when we say we will be Follow through on our promises Not modify the expectations or standards without communicating with everyone in the course
Courage	<ul style="list-style-type: none"> Say or do something when we see actions that undermine any of the above values Accept a lower or failing grade or other consequences of upholding and protecting the above values 	<ul style="list-style-type: none"> Say or do something when we see actions that undermine any of the above values Accept the consequences (e.g. lower teaching evaluations) of upholding and protecting the above values

Accessibility and inclusion

<http://disabilities.ucsd.edu> | osd@ucsd.edu | 858-534-4382

Any student with a disability is welcome to contact us early in the quarter to work out reasonable accommodations to support their success in this course. Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD). Students are required to present their AFA letters to faculty and to the OSD Liaison in the Division of Biological Sciences in advance so that accommodations may be arranged.

Whenever possible, we will use universal designs that are inclusive. For example, colors used in this syllabus are distinguishable by most colorblind and non-colorblind people, and this font is designed to be dyslexic friendly. If you have feedback on how to make the class more accessible and inclusive, please get in touch!

Calendar

A general outline for the course is available on the next page. More specific details for each week, including reading and assignments, will be provided on TritonEd and in class. We may also adjust the schedule as necessary, while still focusing on the foundational concepts and laboratory skills.

Most course material will be connected to real-life phenomena or stories, and the main concepts in genetics will be revisited multiple times in these stories throughout the course, in increasing complexity and sophistication. The course is structured this way, so that we will learn the concepts through different examples and then apply our knowledge and understanding to new contexts. We will begin with an exploration for the genetic basis of sickle cell anemia, its related mechanisms for malaria resistance, and the evolutionary processes that led to selection of the sickle cell anemia disease alleles. We will examine other examples such as pigmentation in humans and animals, DNA profiling and paternity testing, evolution of body structures, antibiotic resistance, cancer, and epigenetics in relation to obesity and stress, while connecting the central concepts related to mutations, genes, phenotypes, and natural selection. These stories can span multiple classes and discussions sections, and we may revisit some of them throughout the course.

Because of the relative schedule of classes and discussion sections, the weeks for BICD 100 are somewhat staggered from Tuesday to Monday: Tuesday and Thursday for classes and then Friday and Monday for discussion sections. For example, week 1 for the course begins with class on Thursday 1/10 at 6:30 pm and ends with the last discussion section on Monday 1/16 at 8:50 pm. Please also note that discussion sections are canceled for the first week because of the Martin Luther King, Jr. holiday. Dates are listed in US format of month/day. For example, 1/10 means January 10th.

Week	Date	Topics	Assignments and exams
1	1/9	No discussion sections	
	1/10	Genes, alleles, markers, Mendel	
	1/12	Meiosis, sex determination	
	1/13-1/16	No discussion sections	
	1/13	---	
2	1/17	Non-Mendelian inheritance, statistics	
	1/19	Mutations and alleles	
	1/20-1/23	Section: Mechanisms for nondisjunction	
	1/20	---	Writing 1 due at 8:00 am
3	1/24	Hardy-Weinberg equilibrium	
	1/26	---	Midterm 1 in class
	1/27-1/30	Section: Malaria resistance	
4	1/31	Multiple genes	
	2/2	Recombination	
	2/3-2/6	Section: Chromosome structure	
	2/3	---	Writing 2 due at 8:00 am
5	2/7	Molecular markers	
	2/9	Quantitative trait loci	
	2/10-2/13	Section: Family tree of King Tut	
	2/10	---	Writing 3 due at 8:00 am
6	2/14	Regulatory mutations	
	2/16	---	Midterm 2 in class
	2/17-2/20	No discussion sections	
7	2/21	Genes to phenotypes: stickleback fish	
	2/23	Complementation	
	2/24-2/27	Section: Evolutionary pathways	
	2/24	---	Writing 4 due at 8:00 am
8	2/28	Epistasis	
	3/2	How to get into research	
	3/3-3/6	Cancer and epistasis	
	3/3	---	Writing 5 due at 8:00 am
9	3/7	GWAS: human pigmentation	
	3/9	---	Midterm 3 in class
	3/10-3/13	GWAS: expressivity of sickle cell anemia	
10	3/14	Epigenetics and obesity	
	3/16	Epigenetics and stress	
	3/17	No discussion sections	
Exam	3/21	---	Final exam at 7:00p-9:59p

Textbook information

Klug et al. Essentials of Genetics, 9th edition

- Mastering Genetics (online homework module associated with this textbook) not required
- Print or ebook option

An e-book option of the textbook is provided in TritonEd by the bookstore through a service called RedShelf. This means that everyone will receive access to an e-book version of the textbook automatically for the first two weeks of class, until after the drop/add period. After two weeks, all the students who have opted in to the program will then be charged the price of the e-book.

1. Click the RedShelf link located in the left panel of the course website on TritonEd
2. On the resulting page, click the RedShelf link again
3. Once you arrive to RedShelf, select the View Course Materials button
4. Select the Start Reading button to open the e-book

Here is a video tutorial to show the features available and how to use the e-book

<https://www.youtube.com/watch?v=0RgKnz1js3g&feature=youtu.be>

To opt out of program

If you already have this book or do not wish to use the e-book, you must follow these instructions:

1. Click the RedShelf link located in the left panel of the course website on TritonEd
2. On the resulting page, click the RedShelf link again
3. Once you arrive to RedShelf, select the View Course Materials button
4. Scroll to the bottom and select the grey Opt-out button and follow the prompt

Opt-out is only available until 1/21/2017. If you do not opt out by this date, your student account will be charged. If you opt-out but wish to opt back in, you may do so until 1/21/2017. If you opt out, it will be your responsibility to purchase the product on your own.

To opt back in to the program

You may opt back into the program up until 1/21/2017. When you opt back in, you will resume access to your book, and your student account will be charged.

1. Click the RedShelf link located in the left panel of the course website on TritonEd
2. On the resulting page, click the RedShelf link again
3. Once you arrive to RedShelf, select the opt back in button

For questions or help, please contact the bookstore or RedShelf at help@redshelf.com.