

Summer I 2019

BICD 100—Genetics

Andrew Cooper

**Office:** HSS 1145B

**E-mail:** [a5cooper@ucsd.edu](mailto:a5cooper@ucsd.edu) (Include BICD100 in the subject line)

**Course Meets:** MTuWTh 11:00-12:20p HSS 1330

**Office Hours:** Monday and Wednesday 10:00-11:00 am in HSS 1145B (or by appointment)

**Course Learning Objectives:**

By the end of this course, you should be able to:

1. Apply knowledge of genetics concepts to analyze & explain data, solve problems, design experiments, and construct scientific arguments.
2. Read, understand, and critically evaluate primary literature.
3. Appreciate the molecular basis of biological diversity, variation within populations and biological systems, and evolution
4. Discuss ethical considerations that accompany modern genomic techniques, including genomic privacy and genome editing.
5. Explain both classic and modern molecular and quantitative techniques in genetics.

**Contacting Me:** Please ensure that all e-mails include BICD100 in the subject line and if the matter requires immediate attention include URGENT in the subject line as well. If I do not respond to an e-mail within 24 hours please send it again.

**Textbook (Optional):** The textbook for this course is *Essentials of Genetics* by Klug et al. Ninth edition. This book is optional, it has good additional information if you prefer to have additional sources of information

**Website:** All course related information will be posted on our Canvas site. The lecture slides will usually be posted either before lecture or immediately after. Please check the Canvas site and your UCSD e-mail regularly for any announcements. TritonEd is being phased out at UCSD so we will not be using it.

**Podcast:** Each lecture will be podcasted.

**iClickers:** iClickers are required for this course. The frequency in this classroom is AB. You must register your clicker on TritonEd by Wednesday, July 3<sup>rd</sup>. Clicker participation will be counted beginning with Lecture 2 (7/2).

**Instructional Assistants (IAs):**

Chang, Stephen                      ssc003@ucsd.edu

Ren, Jennifer                        zhr005@ucsd.edu

**Discussion Sections:** Sections begin Tuesday, July 2<sup>nd</sup>. The content will vary from meeting to meeting, however, active engagement with the material in each section is critical to developing your understanding of the lecture material. A portion of your grade will be based on attendance and active participation in section.

**Assignments:** There will be six assignments throughout the course that will provide you with an opportunity to work with the material on questions similar to those you will see on the exam. Assignments will be posted on the course website. Completed assignments will be uploaded to the course website as either a PDF or Word Doc by 10:00 am on the due date. Working together on these assignments is allowed however each student must turn in answers in their own words.

Assignment #1 – Review Material	Posted 6/28	Due 7/2
Assignment #2 – Mutations & Biotechnology	Posted 7/6	Due 7/9
Assignment #3 – Gene Regulation	Posted 7/9	Due 7/11
Assignment #4 – Non-Mendelian Genetics	Posted 7/16	Due 7/18
Assignment #5 – Chromosomes & Sex-Linked	Posted 7/20	Due 7/23
Assignment #6 – Cancer, Viruses, & Bacteria	Posted 7/27	Due 7/30

**Exams:** The exams dates are set and will not be changed so plan your summer accordingly. Exam 1 is scheduled for July 15<sup>th</sup> in class. Exam 2 is scheduled for July 24<sup>th</sup> in class. The Final Exam is scheduled for August 2<sup>nd</sup> (11:30-2:29 pm in TBD) and will be cumulative. If you do better on the Final than one (or both of the exams) then your Final score will replace the lower Exam score (more details below).

**Regrades:** If you find an error on your exam you should submit a written re-grade request, along with the exam, to the Instructor before the next exam. In this re-grade request, you should explain both the error and your justification of why it is an error. No re-grades will be allowed for exams written in pencil or non-permanent ink. Students that submit an exam for regrade understand that (1) the entire exam may be re-graded and (2) the exam will be compared to a copy to ensure no alterations have been made. Any alterations made to exams submitted for regrades will be considered academic dishonesty and will be handled accordingly.

**In-Class Participation Points:** Clicker points will be counted starting Tuesday, July 2<sup>nd</sup>. For each class where you answer  $\geq 75\%$  of the questions, you will get one participation point, if you do not then you will get a zero for the day. You do not need to get the correct answer. For a majority of clicker questions, you will have to submit answers twice (once before and once after discussion) and both of these submissions are required. There will be 15 lectures throughout the semester where clicker participation will be monitored. If you obtain the participation point for 13 of the 15 lectures then you will receive the full participation points. There is no mechanism to make up these points, if you miss them you miss them (this includes forgetting your clicker or batteries dying).

**Grading:** Grading in this course is not curved, so in theory every person could earn an A! You are not competing with each other for grades, so work together!

	Option 1	Option 2	Option 3
In-Class Participation	50	50	50
Discussion Section Participation	50	50	50
Assignments	120	120	120
Exam 1	75	0	75
Exam 2	75	75	0
Final	130	205	205
Total	500	500	500

Your final grade will be calculated using each of these possible point distributions and the one that results in the highest grade will be used.

Letter grades are assigned as follows:

90-100: A

80-89: B

70-79: C

60-69: D

Below 60: F

+/- grades are given to those close to the next grade level.

**Late Work Policy:** For Assignments, those turned in within 24 hours of the due date will be accepted but with a deduction of 50% of the possible points. Assignments submitted more than 24 hours after the due date will not be accepted. If you experience extenuating circumstances (e.g., you are hospitalized) that prohibit you from submitting your assignments on time, please let me know. I will evaluate these instances on a case-by-case basis.

**Disability Access:** 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) which is located in University Center 202 behind Center Hall. Students are required to present their AFA letters to Faculty (please make arrangements to contact me privately) and to the OSD Liaison in the department in advance so that accommodations may be arranged.

Contact the OSD for further information:

858.534.4382 (phone)

[osd@ucsd.edu](mailto:osd@ucsd.edu)(email)

<http://disabilities.ucsd.edu>(website)

**Title IX Compliance:** The University recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a member of this community, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. If you want to speak confidentially you may contact the Counseling Center.

The Office for the Prevention of Harassment & Discrimination (OPHD) provides assistance to students, faculty, and staff regarding reports of bias, harassment, and discrimination. OPHD is the UC San Diego Title IX office. Title IX of the Education Amendments of 1972 is the federal law that prohibits sex discrimination in educational institutions that are recipients of federal funds. Students have the right to an educational environment that is free from harassment and discrimination.

Students have options for reporting incidents of sexual violence and sexual harassment. Sexual violence includes sexual assault, dating violence, domestic violence, and stalking. Information about reporting options may be obtained at OPHD at (858) 534-8298, [ophd@ucsd.edu](mailto:ophd@ucsd.edu) or <http://ophd.ucsd.edu>. Students may receive confidential assistance at CARE at the Sexual Assault Resource Center at (858) 534-5793, [sarc@ucsd.edu](mailto:sarc@ucsd.edu) or <http://care.ucsd.edu> or Counseling and Psychological Services (CAPS) at (858) 534-3755 or <http://caps.ucsd.edu>.

Students may feel more comfortable discussing their particular concern with a trusted employee. This may be a student affairs staff member, a department Chair, a faculty member or other University official. These individuals have an obligation to report incidents of sexual violence and sexual harassment to OPHD. This does not necessarily mean that a formal complaint will be filed. If you find yourself in an uncomfortable situation, ask for help.

**Academic Integrity:** Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. Cheating will not be tolerated, and I will fail any student caught engaging in academic dishonesty. All exams will be closed-book and closed-notes, so all personal materials must be stowed under your seat. Only exams written in non-erasable pen will be considered for regrades. Exams will be photocopied for comparison with submitted regrades. Any student caught cheating on an exam will receive a failing grade for the course. They may also be suspended from UCSD.