BICD 100: Genetics

Instructor: Andrew Cooper (he/him/his)

Office: HSS 1145C

E-mail: a5cooper@ucsd.edu (Include BICD 100 in the subject line)

Lecture Time: MTuWTh 11:00a-12:20p PCYNH 106

Office Hours: MTuWTh 9:30-10:30a HSS 1145C, 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. Appreciate the molecular basis of biological diversity, variation within populations and biological systems, and evolution
3. Discuss ethical considerations that accompany modern genomic techniques, including genomic privacy and genome editing.
4. 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 24-48 hours, please send it again. I regularly check my e-mail during normal business time (Weekdays 9:00 am-6:00 pm), but more sporadically on the weekend/holidays.

Optional Text: 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

Canvas: All course related information will be posted on our Canvas site. The lecture slides will be posted before lecture. Please check the Canvas site and your UCSD e-mail regularly for any announcements as these will contain essential information.

Podcast: Lecture podcasts will be posted through the traditional podcast site and can be accessed through Canvas.

iClickers: iClickers are required for this course. The frequency in this classroom is CA.. Clicker participation will be counted beginning with the lecture on Wednesday, July 5th. Make sure you have registered your iClicker on Canvas or you will not receive credit.

Instructional Assistants (IAs):

Name	Email
Joshua Burrows	jtburrow@ucsd.edu
Allison Christian	amchristian@ucsd.edu
Yufei Deng	y9deng@ucsd.edu
Laura Qin	laqin@ucsd.edu

Discussion Sections: Sections will meet beginning Wednesday, July 5th. 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. Discussion sections will be meeting in person. You are required to attend/participate in your designated discussion time to facilitate potential contact tracing and ensure an equal student:IA ratio among the sections. If you experience extenuating circumstances that prohibit you from attending section, please let me know as soon as possible. I will evaluate these instances on a case-by-case basis. If you predict an ongoing inability to attend scheduled discussion section, please speak with me as soon as possible to work out an alternative.

Assignments: There will be six assignments posted throughout the quarter that will allow you to work with the lecture material and prepare for the exams. Each assignment will be posted on at 8:00a on and be due by 11:59p on the indicated dates. The specific post and due dates for each assignment are listed below. You are welcome to work with each other but the words submitted for your assignment should be your own. These assignments will be done directly in Gradescope and will be checked for plagiarism. If you have never used Gradescope before you will need to set-up your account. Follow the "Joining a Course" instructions looking at "Possibility 2". Our school does not allow the option of signing on with "School Credentials". At the end of the quarter your lowest assignment score will be dropped. Before attempting the first homework assignment make sure to watch the "Assignment Info" video posted on Canvas for advice on how you should approach answering homework and exam questions in this class.

Assignment #1 – Topic 2   Posted 7/3   Due 7/5
Assignment #2 – Topics 3 & 4   Posted 7/7   Due 7/9
Assignment #3 – Topics 6 & 7   Posted 7/16   Due 7/18
Assignment #4 – Topics 7 & 8   Posted 7/19   Due 7/21
Assignment #5 – Topic 9   Posted 7/23   Due 7/24
Assignment #6 – Topics 10 & 11   Posted 7/30   Due 8/1

Exams: The exam dates are set and will not be changed so plan your semester accordingly. Exam 1 is scheduled for Thursday, July 13th and will cover material from Topics 1-5. Exam 2 is scheduled for Thursday, July 27th and will cover material from Topics 6-9. The Final Exam is scheduled for Friday, August 4th from 11:30a-2:30p and will be cumulative but with an emphasis on the new material. If you do better on the

Final than one (or more of the exams) then your Final Exam score will replace the lowest Exam score (more details below). All exam questions are free response. The exams will be taken on paper, using dark writing, because we will scan the exams into Gradescope for grading and feedback. Exams will consist of free response questions. More information will be given before the first exam.

Tokens: At the start of the quarter each student will be given four "tokens", which will be tracked and indicated in the gradebook. To use this token you will email me, with "BICD 100 Token" as the subject line, and let me know how you would like to use the token. Please send an actual email, not a Canvas message. These tokens can be used for three different purposes. (1) You can trade one token for a 24-hour extension on a homework assignment. This must be done before the end of that 24-hour period, otherwise the 20% late deduction will be applied to your homework. (2) You can trade one token to redo a homework question. To use this token you will email me, with "BICD 100 Token" as the subject line and in the body of the email state which homework question you are redoing and then type your new answer. This email needs to be sent within three days of the homework grades being posted. You can use up to two tokens on a given homework. (3) You can trade one token to redo a free response exam question. To use this token you will email me, with "BICD 100 Token" as the subject line and in the body of the email state which exam question you are redoing and then type your new answer. This email needs to be sent within three days of the exam grades being posted. You can use up to three tokens on a given exam. Tokens cannot be used on the Final Exam. For the homework and exam question redo I strongly encourage you to speak with me or your IA before submitting to make sure you have a firm understanding of what was wrong with your initial answer and what content is needed for a correct answer. Do not copy a fellow students answer and do not just copy the answer rubric or the grading comments on your answer. If you use multiple tokens on a single homework or exam, please include them in a single email, and include all content in the body of the email, not an attachment, unless it is an image. In order to redo a homework or exam question you must have may a good faith attempt to answer the question on your initial submission. You do not need to include your original answer in you email. Your overall score will not be lowered but your new answer will be graded as if it were your original answer.

Lecture Participation Points: Clicker points will be counted starting Wednesday, July 5th. For each class where you answer $\geq$75% of the questions, you will get participation points, 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 17 lectures throughout the semester where participation can be earned. You only need to earn participation credit for 13 out of the 17 lecture days to earn full credit for lecture participation, meaning you have four "no questions asked" absences in the quarter. If you experience extenuating circumstances that prevent you from attending class for more than those four "no questions asked" can discuss the possibility of making up those points.

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
Lecture Participation	15%	15%	15%
Discussion Section	10%	10%	10%
Assignments	20%	20%	20%
Exam 1	15%	0%	15%
Exam 2	15%	15%	0%
Final	25%	40%	40%
Total	100%	100%	100%

Letter grades are assigned as follows:
90-100: A
80-89: B
70-79: C
60-69: D
Below 60: F

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. No + or – grades are given.

Late Work Policy: For all assignments, those turned in within 24 hours of the due date will be accepted but with a deduction of 20% 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 (paper or electronic) issued by the Office for Students with Disabilities (link to OSD website.) Students are required to discuss accommodation arrangements with instructors and OSD liaisons in the department in advance of any exams or assignments.

Contact the OSD for further information:

858.534.4382   osd@ucsd.edu   http://disabilities.ucsd.edu

Inclusion: It is our goal to create a learning environment that supports diversity of thought, perspective, experience, and identities. We encourage all of you to participate in discussion and contribute to the field from your perspective. If you have feedback on how to make the class more inclusive, please get in touch!

Office of Equity, Diversity, and Inclusion:

858.822.3542   diversity@ucsd.edu   https://diversity.ucsd.edu

https://students.ucsd.edu/student-life/diversity/index.html

https://regents.universityofcalifornia.edu/governance/policies/4400.html

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   http://ophd.ucsd.edu

Students may receive confidential assistance at CARE at the Sexual Assault Resource Center at: 858.534.5793   sarc@ucsd.edu   http://care.ucsd.edu

Counseling and Psychological Services (CAPS) at: 858.534.3755   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 and plagiarism will not be tolerated, and I will fail any student caught engaging in academic dishonesty. Any student caught cheating on an exam will receive a failing grade for the course. Plagiarism of any kind will not be tolerated and will result in a failing grade. If you are unsure of what constitutes plagiarism it is your responsibility to seek out clarifying information. The UCSD library website has a series of modules around plagiarism that can be found here.

Writing Center: The Writing Center provides support for undergraduates working on course papers (i.e., laboratory reports and the research proposal) and independent writing projects. Writing mentors can help at any stage of the writing process, from brainstorming to final polishing.

The Writing Center offers: one-on-one appointments for undergraduates with peer writing mentors; group workshops addressing a variety of writing projects, genres, and issues; and Drop-In Zone for quick questions, targeted assistance, and a comfortable writing space.   https://writingcenter.ucsd.edu/

Basic Needs: Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in this course, is encouraged to contact:

858.246.2632   foodpantry@.ucsd.edu   basicneeds@ucsd.edu

Technical Support:

For help with accounts, network, and technical issues:
https://acms.ucsd.edu/contact/index.html

For help connecting to electronic library resources such as eReserves and e-journals:

https://library.ucsd.edu/computing-and-technology/connect-from-off-campus/