

PLEASE READ THE ENTIRE SYLLABUS

Class: CodeNames Boardgame-The Biology Edition

Instructor: Lin Chao (bieb194chao@gmail.com)

Location and time: York Hall 3010; Friday 11:00a-12:20p (1st meeting Jan 12, 2024)

COVID Concerns: Because your instructor has several COVID risk factors, it is requested that you do not come to class if you have any symptoms of COVID, flu, or other infectious conditions. Adjustments have been made (see below) in case you miss classes for these reasons. Not attending class when ill is also beneficial for all students in the class.

Requirements:

Prerequisites: BIEB 102. (Will waive if have taken BILD1-2 or BICD 100).

Attendance: Part of your grade is based on your weekly in person attendance and fulfilling class time activities. You can miss attendance one week with no penalty (for whatever reason including illness or any other legitimate excuse).

LapTop and power/charger are required class during in person meetings: The laptop is required to provide to you access to online resources (spreadsheets, Canvas, etc.). Additionally, the last 10 minutes of class time requires (as part of your final grade) that you enter (through Canvas) a 200 word summary of your activities, evaluations/thoughts of the class activities that day (see below).

Text Book: Required for all individual students in class (see justification below). If you are unable to obtain copy, you can borrow class copies. (Campbell Biology **9th** Edition; by Jane B. Reece, Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Robert B. Jackson. ISBN 10: 0321558235 / ISBN 13: 9780321558237, Published by Benjamin Cummings, 2010. The book is available through the UCSD bookstore, but also can be bought online. The 9th edition is not current and is available used at reduced prices.

Own a copy of CodeNames? If you do, please bring a copy to the first (and all class meetings) so that we can use it during class time. The Instructor has copies, but extra ones will be useful.

Course Objective: To use the boardgame CodeNames to develop conceptual, integrative, holistic, and organizational thinking in biology. The objective will be achieved by dividing the class into four-member topical teams (e.g. ecology, evolution, neurobiology, physiology, genetics, development, etc.), which will then create from a

BIEB 194 Winter Quarter 2024
CodeNames Boardgame – The Biology Edition

defined knowledge base a set of word cards (in the style of CodeNames) to play the boardgame within and between teams. All words in the cards must be present in the defined knowledge base, which is the corresponding topical Unit/Chapter(s) from Campbell Biology, 9th Edition (see below). The within team games are to be used by a topical team to hone and optimize the cards for their specialty topic. Each team can modify their cards following the within team games. The between team games (two teams at a time) are played in a Class Tournament that is held towards the end of the ten week quarter. The Class Tournament will be played at two levels: A Specialized (all word cards created by one topical team) and B Generalized (word cards 50% from each team). Because this is a new and experimental class, rules and procedures will and can be changed during course of the class. Final decisions are to be approved by the instructor, but whenever possible the class will be consulted and polled.

Expectations: Class is designed for students who have strong interest and enthusiasm for looking at biology from a higher and more integrative perspective. For example, rather than just knowing what DNA, RNA and proteins do, wonder why all three are linear? And then, realize that the class uses a boardgame to organize thought rather than the usual learning approaches that characterize standard university classes. Having played (and an affection for) CodeNames will also be extremely helpful. If you have never played CodeNames and want to assess if this class fits your interests, consider reading up on CodeNames. Do you like boardgames to be played in a class? Make sure you understand the grading process and that how well you and your team perform in playing the board affects part of your grade.

Grading: Final grade is based on the following components.

Attendance, weekly in-class summary (see above), and to be announced assignments (such as preparing CodeNames cards). The weekly in-class summary is to be completed during last 10 minutes of class. The completion requires that you enter (through Canvas) a 200 word summary of your activities, evaluations/thoughts of the class activities that day. Data on the outcomes of games played by you and other students should be recorded and used for possible analyses in your final Blog (see below). These summaries are intended to help you prepare the final Blog.

You will need your laptop to access Canvas to record the information. You need to submit the summary by Canvas before end of the class, at which time the Canvas window closes. You will be given credit for whether you recorded the information, but not for its contents (unless it is totally irrelevant).

BIEB 194 Winter Quarter 2024
CodeNames Boardgame – The Biology Edition

You can miss attending one week and that week's in-class summary with no penalty for whatever reason including illness or any other legitimate excuse. There are 10 weekly meetings for this class. This component accounts for 60% of final grade. Successfully attending a weekly class earns you 60/9 % points and attending n (where $n \leq 9$) classes gives you a final score of $n \cdot 60/9$.

- a) Individual average grade assigned by your teammates. You will be asked to assign a grade to each member of your CodeNames team. This component accounts for 10% of your final grade. The grade you assign is to range from 0 to 10, where 10, 8, 6, 4, and 0 correspond to A, B, C, D, and F letter grades). Failure to submit grades for your teammates results in a 0% score regardless of the grade assigned to you by your teammates.
- b) A final written Blog style report (950-1000; no more, no less) on the class. The Blog should include evaluations, discussions, and recommendations for the class by alluding as much as possible to specific events and experiences that occurred during this class, rather than a general discussion of that could fit any similar class taught at another time or university. A key focus should be how and if CodeNames is able to bring (or not bring) an integrative (broad, holistic, big picture, etc.) approach to biology. You will be graded on how well you develop and support your analysis with logic and facts, and targeting an audience that is not necessarily familiar with the areas (science, biology, CodeNames, integrative thinking, etc.) but receptive to an thoughtful discussion. This component accounts for 30% of your final grade and will be graded by the instructor.
NOTE: The weekly summaries and data that you entered during the quarter will greatly help you develop and write this Blog. Blog is due March 22, 2024 midnight (as PDF sent to bieb194chao@gmail.com).
- c) If your team is a top performer, all team members can each earn 5% extra credit points above the 100% points from above.
- d) The final letter grade assignments are TENTATIVELY projected to be A (90-100%), B (80-90%), C (70-80%), D (60-70%), and F (<60%) with + and – steps.

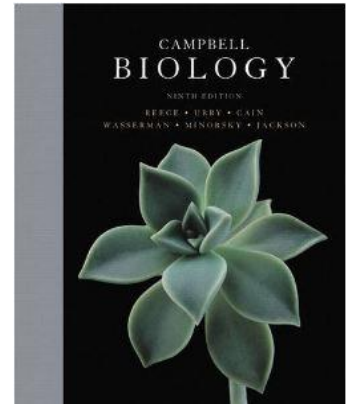
What is a Blog? A blog is an internet posting that picks a topic and presents it to an audience (often general; think about relatives at a Thanksgiving dinner). If you are not familiar with a blog, please search the internet to familiarize yourself with the concept. Definitions are vague for the internet, but a blog differs from news in that a blog often

BIEB 194 Winter Quarter 2024
CodeNames Boardgame – The Biology Edition

makes a focused effort to inform or teach you a specified topic or concept, as opposed to just advertizing a viral event. Here is an example:

https://scrapfacts.substack.com/p/age-issue-utm_source=%2Fsearch%2Fjellyfish&utm_medium=reader2

Text book: Campbell Biology 9th Edition; by Jane B. Reece, Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Robert B. Jackson. ISBN 10: 0321558235 / ISBN 13: 9780321558237, Published by Benjamin Cummings, 2010). Because of the need for the entire class to use a single defined knowledge base, we must use the 9th edition. The 9th edition is also cheaper because it is not the newest. The UCSD BookStore has placed an order for the 9th Edition, but you are free to seek alternative sources. All students need to have individual copies because of the high level of topical understanding individuals need to contribute to a team. If you have difficulties obtaining a 9th edition, please speak to instructor.



BIEB 194 Winter Quarter 2024
CodeNames Boardgame – The Biology Edition

Week	TENTATIVE Schedule
1	<ul style="list-style-type: none">a. Introduction to CodeNames Boardgame.b. Divide class into 4-5 teams by topical interests (ecology, genetics, etc.)c. Play Regular Games.d. Discuss Biology Assignment.e. Reading Campbell Biology Topical Unitsf. Record during class (last 10 minutes) notes, summaries, data, etc.
2	<ul style="list-style-type: none">a. Discuss Biology Plan.b. Reading progress.c. Prepare Cardsd. Play Regular Games (within topical groups; 2x2)e. Record during class (last 10 minutes) notes, summaries, data, etc.
3	<ul style="list-style-type: none">a. Play Regular Games (between topical groups; 4x4)b. Discuss Biology Planc. Cards due next week; to be used in class.d. Record during class (last 10 minutes) notes, summaries, data, etc.
4	<ul style="list-style-type: none">a. Play within topical group (2x2) with own Team Cardsb. Discuss revising cardsc. Record during class (last 10 minutes) notes, summaries, data, etc.
5	<ul style="list-style-type: none">a. Play within topical group (2x2) with own Team Cardsb. Discuss revising cardsc. Prepare for Between Topical Teams (study other topics)d. Record during class (last 10 minutes) notes, summaries, data, etc.
6	<ul style="list-style-type: none">a. Play Between Topical Teams (4x4)b. Study other topics of other Teamsc. Record during class (last 10 minutes) notes, summaries, data, etc.
7	<ul style="list-style-type: none">a. Free time preparation for Class Tournament.b. Study other Topicsc. Revise cards (number to be set)d. Record during class (last 10 minutes) notes, summaries, data, etc.
8	<ul style="list-style-type: none">a. Class Tournament (4x4).b. Specialized; only word cards from a topical Team.c. Record during class (last 10 minutes) notes, summaries, data, etc.
9	<ul style="list-style-type: none">a. Class Tournament (4x4).b. Generalized; 50% word cards from each topical Team.c. Record during class (last 10 minutes) notes, summaries, data, etc.
10	<ul style="list-style-type: none">a. Final discussionb. Blog due one week from week 10 class meeting.c. Record during class (last 10 minutes) notes, summaries, data, etc.