

BIOLOGY 10.05 & 10.06 – INTRODUCTORY BIOLOGY – SPRING 2015

4 hours lecture/3 hours lab (5 units)

- Lecture in S34 Tues AND Thurs: 9:30 am – 11:20 am
- Lab in S51 Tues OR Thurs: 11:30 am – 2:20 pm

Instructor: Jason Bram **Office:** Bldg. S5, Room S51a

Office Hours: Mon. & Wed. 1:30-2:30; Tues. & Thurs. 2:30 – 3:30 and always by appt.

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Phone #: 408-864-8654

Instructor webpage: <http://www.deanza.edu/faculty/bramjason> (not important unless you like pictures of cute dogs and a little info about me!)

Catalyst webpage: <https://catalyst.deanza.edu/> (VERY important!)

Connect webpage: <http://connect.mheducation.com/class/j-bram-biology-10-spring-2015> (VERY important!)

INTRODUCTION: Welcome to Biology 10 and the study of the wondrous array of life and adaptation on our planet! For most students this is an astounding, interesting, sometimes awe-inspiring and hopefully quite fun view of biology as we know it. This 5-unit course is an introduction to the wonderful diversity of life on earth, life's levels of complexity (from molecule to biosphere), and how plants and animals work as individuals and as parts of populations, communities and ecosystems. The course is intended for **non-biology majors**, and my goal as your instructor is to help you achieve a good understanding of the basic principles of life on earth! I also hope that you will develop a lifelong appreciation of biology – you will see for yourself that understanding biology makes the world a much more interesting place!

COURSE DESCRIPTION: An introduction to biology as a branch of the biological sciences and to its basic unifying principles, with selected application to the scientific method, evolutionary concepts, genetic modification, biotechnology, ecology, ecological crises and human impacts. This course satisfies the De Anza General Education Requirement in Natural Sciences and is transferable to both UC and CSU as a general education science course. This course does **NOT** apply towards a major in biology.

We will be using the Catalyst webspace to

1. keep up on course announcements and deadlines (as a student you are responsible for any info/announcements made in class and/or put on Catalyst)
2. track your grade in the course
3. access course files like greensheets, lectures, labs, videos, and study guides.

Please let me know as soon as possible if you have any questions/problems with accessing Catalyst.

We will be using the Connect webspace to

1. turn in your homework assignments
2. give you an added resource to aid in your success!!!

Please let me know as soon as possible if you have any questions/problems with accessing Connect.

Why Connect? A common question from past students has been "How can I do better?" Connect gives you an online tool that should help you in the course. You have the choice of utilizing very little (just to complete your homework assignments), or you can use it "hardcore" to go over the material in a lot more detail. It is up to you!!! However, having Connect access is mandatory for the course!!!

ADVISORY: English Writing 100B, and Reading 100 (or Language Arts 100) or English as a Second Language 24 and 72 (or ESL 4)

TEXT: A textbook is required, but you have some choices!!!

BEST CHOICE (highly suggested): Buy the customized version of Essentials of Biology by Sylvia S. Mader 4th edition. 2014 McGraw Hill Higher Education with Coonect (ISBN 9781308080376). It's \$139.40 at the De Anza Bookstore and can only be purchased through them as it is a custom book with Connect.

The best way to use the text is as a reference. My tests come from my lectures, **AND MY LECTURES COME FROM THIS BOOK** so if there's a concept that I go over in lecture that you need further information on, this textbook is a **GREAT** resource!

SECOND BEST CHOICE: Buy the e-book with Connect for \$85 directly through the publisher. The positive is that you save over \$50 and you get access to the full book. The negative is that it's an ebook and you will lose access to it next year. I personally like having a book that I can touch and refer to later, but this option may work for you.

THIRD BEST CHOICE: Have any decent textbook and purchase Connect access through the publisher. The access is \$71.50.

I try to keep costs as low as possible so your labs will be available on Catalyst for no charge. You can print them out or view them electronically via your tablet or laptop. I HIGHLY SUGGEST not using your smart phone to view them unless you want to squint a lot. Phone screens are too small!!!

I am well aware that finances may be very tough for some of you. I ask for a minimum of \$71.50, which I think is pretty reasonable cost for books in a science class. If this is going to be an extreme hardship for you, please don't hesitate to talk to me about it! Don't just shine it off, as it is 50 "gimme" points we are talking about!!! You need to be proactive in life, so please be proactive with this class!!!

COURSE REQUIREMENTS AND EXPECTATIONS: You are expected to attend every class meeting. If you miss a class, it is your responsibility to obtain information and materials dispensed in that class period. Attendance and participation will be the first criteria considered when determining "borderline" grades. In my experience, those students who do not attend class are the students who do not fulfill their potential regardless of their level of understanding. I'm telling you, if you don't come to class, you are really only hurting you and I hate to see people in pain, so come to class!!! Disruptive behavior will not be permitted in lecture. **Basically, be nice to everyone respectful to everyone!** Here are some general rules that will help you be successful in the course and limit distractions to other students and me:

- **Arrive to class on time, and do not leave early.**
- **No use of cell phones, MP3 players, text messaging, or pagers during lecture.**
- **Do not converse with your classmates (or yourself!) while the instructor or other presenter is addressing the class. If you have a question or discussion item, please raise your hand.**

I WELCOME AND ENCOURAGE YOU TO ASK ME QUESTIONS DURING LECTURE!!! IF I DON'T KNOW THE ANSWER, I WILL FIND YOU THE ANSWER!

ASSIGNMENTS	DATE	POINTS
Three Lecture Exams:	April 30, May 28, June 24	100 pts. each
(non-cumulative, high score is counted twice) 400 points total for lecture exams!!!		
Two Lab Exams:	May 5/7, June 16/18	75 pts. each
Weekly Assignments (on Connect)	various dates	50 pts. (5 pts. each)
(All chapters covered will be available via Connect. Only 10 need to be completed for credit, so you can choose the 10 chapters you want to do in the quarter)		
Lab Attendance/Participation:		40 pts. (5 pts. each lab)
Fieldtrip:		20 pts.
Group Project Presentations:	June 9/11	30 pts.
690 TOTAL POINTS POSSIBLE!!!		

Need help? Meet with tutors and attend workshops in the Student Success

Center: <http://www.deanza.edu/studentssuccess>.

Free online tutoring available to all De Anza students! Just login to [MyPortal](#), go to the Students tab, and find the Smarthinking link. You can work with a tutor live (hours vary by subject) or post a question or piece of writing for a response. For more information, go to <http://deanza.edu/studentssuccess/onlinetutoring.html>

EXTRA CREDIT POINTS

Participation up to 20 pts.
 Paper (turn it in as a Microsoft Word Attachment via e-mail) up to 20 pts.
 Tutoring (opportunity will be presented early in the quarter) up to 20 pts.
Notes: Students who exceed 4 unexcused absences (LECTURE & LAB) are not eligible for the Participation extra credit. YOU CANNOT EXCEED 50 PTS. OF EXTRA CREDIT FOR THE QUARTER!!!

GRADING: Final letter grades shall be assigned in accordance with the following percentages:

A+	=	95% or higher	655 points or higher
A	=	91-94%	628-654
A-	=	88-90.9%	607-627
B+	=	85-87.9%	586-606
B	=	80-84.9%	552-585
B-	=	76-79.9%	524-551
C+	=	71-75.9%	490-523
C	=	63-70.9%	435-489
D	=	53-62.9%	366-434
F	=	52.9% and below	365 points or lower

I do not curve the grades for the course. IT IS IN YOUR BEST INTEREST NOT TO SETTLE ON A GRADE!!! EACH OF YOU DESERVES THE BEST GRADE THAT

YOU CAN ACHIEVE!!! DO NOT HESITATE TO TALK TO ME IF YOU ARE FINDING YOURSELF LOST, CONFUSED, OVERWHELMED, BORED OR SCARED ABOUT YOUR GRADE OR ANY OF THE INFORMATION PRESENTED AT THE EARLIEST POSSIBLE SIGN THAT YOU ARE HAVING DIFFICULTY.

EXAMS: Each of the exams will consist of a combination of multiple choice, short answer, matching, and fill-in-the-blank questions.

1. The lecture exams will only cover the material within that time period (i.e. the 2nd lecture exam will only cover the material presented AFTER the 1st exam).
2. I will be providing study guides for the lecture exams for you to study from, but in no way are they substitutes for coming to class!!!
3. You CANNOT make up an exam!!! This is not fair to the other students.
 - a. It is my experience that certain students always seem to have emergencies come up on exam days. I have found that when I'm "nice" to students, they abuse the privilege. Please be a responsible individual!
 - b. In saying all this, if an uncontrollable emergency or personal crisis arises, I will allow make-ups for **responsible** individuals. If something does happen, let me know the situation as soon as you can, and I will be more flexible.
 - i. IF THIS HAPPENS, IT CAN ONLY HAPPEN ONCE! IF IT HAPPENS MORE THAN ONCE, YOU HAVE MORE IMPORTANT THINGS TO WORRY ABOUT THAN THIS COURSE!!!
4. For the lab exams, seating will be assigned.

IMPORTANT NOTES REGARDING THE PROJECT PRESENTATION: This will be a group project, and you will receive a group grade. You are required to orally present (as a group) a 4-6 minute seminar/presentation based on a topic in biology. A video/other creative activity may be done in lieu of the presentation. This project will be gone over in class around the middle of the quarter. As this is a group presentation, anyone who doesn't participate in their group will get a minimum of 5 points taken off of their grade. It is the group's responsibility to let me know if this occurs.

Project Presentation rubric

	Great	Okay	Doesn't do it
Does the group structure their presentation effectively?	6	4	1
Does the group seem to understand what they are presenting?	6	4	1
Does the group effectively use visual aids? (i.e. Powerpoint)	6	4	1
Does the group have good content?	6	4	1
Does the group provide three usable questions for lab exam? (must be multiple choice with at least 3 choices)	6	4	1

IMPORTANT NOTES REGARDING THE FIELD TRIP: You need to go somewhere biologically related (i.e. aquarium, zoo, park etc.) on your own (or with me). If you go on your own, you must write me a 1-2 page report (double spaced) telling me about your experience. You also must include a picture of yourself at the place you go. This field trip report **MUST** be biologically related (i.e. your surf trip to the beach doesn't count, but your trip to the beach where you carefully examined the life at the beach (not the sunbathers!) does.) **PLEASE NOTE: IF YOUR REPORT DOESN'T FOCUS ON THE NATURAL LIFE FOUND AT YOUR FIELD TRIP SITE, 5 POINTS WILL BE DEDUCTED.** Additionally, if your paper does not meet the length requirement, additional points may be deducted.

Please let me know if you have any concerns/questions. I will be providing two field trip opportunities outside of class time in the quarter. If you go with me on my field trips, you don't need to write or turn in anything. That's called bribery!!! **Only 1 field trip is required!** Also note that we don't have lab one week in the quarter, so I give you your time back!

IMPORTANT NOTES REGARDING THE LABORATORY ASSIGNMENTS AND THE LAB ITSELF:

1. No eating, drinking, smoking, or sewing (especially no sewing!) allowed in the laboratory!
2. You are expected to attend all labs. If more than two labs are missed without a reasonable excuse, you may be dropped from the course!
3. If you miss a lab, you are responsible for finding out what you missed. If you don't, your lab test grade will most likely suffer tremendously! You **MUST** attend the lab that you are signed up for unless you clear it with me beforehand. If you miss the Tuesday lab for example, you cannot make up the lab by attending the Thursday lab **UNLESS** you have cleared it with me in advance. If you do show up for the wrong lab, you **WILL NOT** get credit for attending **UNLESS** you have cleared it with me in advance. I've had too many Tuesday lab students "magically" start coming to the Thursday lab on exam weeks.
4. Grading: You are responsible for attending lab and completing all the work required in lab. Your attendance in the lab won't be recorded until the end of class and you show me that you have completed your work.
5. The lab tests will be based solely on the labs that we do in class, so it's definitely in your best interest to be there!!!
6. Like the lecture exams, the lab exams are non-cumulative. Woo hoo!

SCHEDULE: The following schedule may be modified during the course at my discretion.

DATE	LECTURE TOPIC	LAB
4/7	Course Introduction (Chapt. 1)	Lab #1 - Intro: Scopes & Cells
4/9	Chemistry (Chapt. 2)	Lab #1 - Intro: Scopes & Cells
4/14	Molecules (Chapt. 3)	Lab #2 - Cells & Tissues
4/16	Cells (Chapt. 4)	Lab #2 - Cells & Tissues
4/21	Energy (Chapt. 5)	Lab #3 - Biotechnology
4/23	Photosynthesis (Chapt. 6)	Lab #3 - Biotechnology
4/28	Photosynthesis (Chapt. 6)	Lab #4 - Enzymes/Review
4/30	LECTURE EXAM #1 (includes material covered 4/9 - 4/28)	Lab #4 - Enzymes/Review
5/5	Cellular Respiration (Chapt. 7)	Lab #5 - Cell Division/Project Presentation Assignment/ Lab Exam #1 (Labs 1-4)
5/7	Cell Division (Chapt. 8)	Lab #5 - Cell Division/Project Presentation Assignment/ Lab Exam #1 (Labs 1-4)
5/12	Sexual Reproduction (Chapt. 9)	NO LAB!!!
5/14	Genetics (Chapt. 10)	NO LAB!!!
5/19	Genetics (Chapt. 10)	Lab #6 - Owl Pellets/Genetics
5/21	DNA & Protein Synthesis (Chapt. 11)	Lab #6 - Owl Pellets/Genetics
5/26	Evolution (Chapt. 14-16)	Lab #7 - Animals/Selection
5/28	LECTURE EXAM #2 (includes material covered 5/5 - 5/26)	Lab #7 - Animals/Selection
6/2	Evolution (Chapt. 14-16)	Lab #8 - Plants
6/4	Microbial Life (Chapt. 17)	Lab #8 - Plants
6/9	Plants/Fungi (Chapt. 18)	Lab #9 - Presentations
6/11	Animals (Chapt. 19)	Lab #9 - Presentations
6/16	Animals (Chapt. 19)	Lab Exam #2 (Labs 5-9)
6/18	Ecology (Chapt. 30-32)	Lab Exam #2 (Labs 5-9)
6/22	OPTIONAL REVIEW IN SC1102 5:30 - 7:20 pm!!!	

Wednesday, June 24th FINAL EXAM (9:15 am - 11:15 am) IN THE LECTURE HALL!!! (includes material covered 6/2 - 6/18)

ALL ASSIGNMENTS/EXTRA CREDIT/EVERYTHING MUST BE SUBMITTED VIA E-MAIL BY 11:59 PM ON June 24th!!!

EXTRA CREDIT: THIS IS NOT REQUIRED!!! However, I highly suggest doing all of the extra credit or you really only have yourself to blame for not receiving the grade that you want to get in this course!

You can earn up to 50 extra points by doing the following:

1. Participation (20 points maximum): These are my subjective points and are based on attitude, completed assignments, effort, and all around being a positive addition to the class. If you do this, you can safely assume that you will receive all of these points. These points are designed to bump deserving

students up to the next highest grade as well as to eliminate "begging" at the end of the quarter. These points WILL NOT be posted to Catalyst, as many students will not need "bumping" up or that "bump" won't push the student to the next highest grade. Please note that these points can be adversely affected by anything that doesn't show responsibility as a student.

2. Scientific paper summary & opinion paper (20 points maximum):
 - a. Write a 2-3 pg. double-spaced summary of a provided scientific paper (paper topics will be posted to Catalyst) (up to 10 points)
 - b. Write a 1-2 pg. double-spaced opinion of the paper or the issue that the paper brings up. (up to 10 points).
 - c. You must get your topic choice to me AT LEAST one week before the day of the final exam (topic choices are listed on Catalyst). After that, points will be deducted from your paper and/or you will not be sent a paper. I don't want this paper to get in the way of studying for your final.

IF YOU DO NOT FOLLOW THE INSTRUCTIONS ABOVE, POINTS WILL BE DEDUCTED FROM YOUR PAPER.

3. By signing up for tutoring for this class (someone will be coming by to describe this opportunity) - up to 20 points. If you do the tutoring, you do NOT need to do the opinion paper described in #2b, only the summary.
4. There may be other opportunities for extra credit provided during the quarter.
5. **YOU CANNOT EXCEED 50 PTS. OF EXTRA CREDIT FOR THE QUARTER!!!**
6. **Students who exceed 4 unexcused absences (LECTURE & LAB) are not eligible for the Participation extra credit.**

CHEATING: Absolutely no form of academic dishonesty or plagiarism will be tolerated. It is unethical, unfair, and a violation of your own intelligence as well as being lame, slimy, and vile. **Anyone caught cheating will be subjected to the most severe academic penalties. And you'll really feel guilty, so don't do it!**

ESSENTIAL STUDENT MATERIALS: Scantrons, #2 pencils, e-mail, textbook, and the labs (either printed out or on your tablet/laptop).

WITHDRAWAL AND YOUR CONCERNS ABOUT YOUR GRADE: **Sunday, April 19th** is the last day to drop the course and receive a refund. The last day to withdraw from the course (without a "W") is **Sunday, April 19th**. The last day to withdraw from the course (with a "W") is **Friday, May 29th**. **IF YOU ARE CONCERNED ABOUT YOUR GRADE, PLEASE COME TALK TO ME AT THE**

EARLIEST POSSIBLE TIME SO THAT WE CAN DISCUSS YOUR OPTIONS. It is to your great advantage to discuss with me (I don't bite!) any problems you are having early in the quarter so that I can try and assist you as much as possible. **IT IS YOUR RESPONSIBILITY TO OFFICIALLY WITHDRAW SO THAT YOUR TRANSCRIPT RECORD WILL NOT BE ADVERSELY AFFECTED.**

Note to students with disabilities: If you have a disability-related need for reasonable academic accommodations or services in this course, provide (name of Instructor) with a **Test Accommodation Verification Form (also known as a TAV form)** from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give five days notice of the need for accommodations. Students with disabilities can obtain a TAV form from their DSS counselor (864-8753 DSS main number) or EDC advisor (864-8839 EDC main number).

PLEASE NOTE: I keep exams for 1 year and other work for 1 quarter.

A NOTE FROM THE BHES DIVISION:

You are required to comply with all rules and regulations as outlined in the Biological, Health and Environmental Sciences Division Student Handbook as well as those of De Anza College (see the De Anza College Catalog) and the FHDA Community College District. The BHES Division Student Handbook is available on-line at: <http://www.deanza.edu/bhes/StudentHandbook.pdf> as well as in the Science Center and Kirsch Center for Environmental Studies Resource Centers in hard copy. All information in the Student Handbook applies in this course and students will be held accountable for this information. In addition to outlining expectations of classroom behavior, this handbook contains many helpful resources for students as well as ideas to help students succeed in the sciences!

STUDENT LEARNING OBJECTIVES:

1. Evaluate the correlation of structure and function in plants and animals.
2. Identify and explain the characteristics of life.
3. Demonstrate an understanding of the impacts of human activities on the biosphere.
4. Apply principles of the scientific method to everyday problems and develop potential plans for solutions.

SOME EXTRA NOTES AND HINTS TO BE A SUCCESSFUL COLLEGE STUDENT (from my own experience)!

- 1. SHOW ME THAT YOU CARE ABOUT YOUR GRADE MORE THAN I CARE ABOUT YOUR GRADE!**
- 2. ATTEND CLASS!!!**
- 3. If you miss a class, get the notes from another student. If it's still unclear, then ask your professor!!!**
- 4. Don't be afraid of a professor's office hours!**
- 5. Don't be afraid of your professor! We are generally reasonable people! Talk to me! Ask me questions, no matter how stupid you may think they are!!!**
- 6. Make your professor respect you! (see #1)**
- 7. Don't procrastinate!**
- 8. Remember that in the end, it is your responsibility to understand the assignment, not for your professor to explain it better!**
- 9. Feel free to change your major!**
- 10. Don't give your professor attitude. Remember that even if they're the biggest jerk ever, they have the power. Think of them as your boss. If you have a disagreement, bring it up after class/in office hours. (See #5)**
- 11. Remember that there is some subjectivity in determining your grade.**
- 12. Don't let up!**
- 13. Being a student should be your #1 priority (if possible). BEING A STUDENT IS YOUR EMPLOYMENT. This of the college as the place that you work. Unfortunately, you don't get any wages except for the grades you receive, but in the end, those grades can lead to a much better future than a few bucks can!**
- 14. Don't be in a hurry - what's another quarter/semester?**
- 15. Study in a way that's best for you, whether that be in groups, at Starbucks, in a library, cramming, whatever!!!**
- 16. Take advantage of extra credit!**
- 17. Take advantage of opportunities presented (i.e. review sessions/study guides)!**
- 18. A W is better than a D or F!!!**
- 19. It's a competitive world. Be competitive in college! Don't settle!!!**