# BRAZOSPORT COLLEGE

**SYLLABUS** for **Fall 2015**

**General Biology 1 Lecture: BIOL 1306**

**Instructor:** Isaiah G. Schauer, Ph.D. **Office**: Sadler Building 225F
**Office phone**: 230-3123 **Email**: isaiah.schauer.brazosport@gmail.com
**Alt. phone:** 230-3225 (Mrs. Debbie Duncan – Admin Office Specialist – Sadler 225K)
**Webpage:** https://online.brazosport.edu login with your BC username & password and click on the course link for "**BIOL1306-ISCHAUER-Supplemental**"

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**Course Description:** General Biology I 1306 is a survey course which allows you to investigate the fundamental principles governing living organisms. A survey course by definition must cover many topics at limited depth. Topics covered include: the physical and chemical properties of life, the scientific method, biological structure and organization, the relationship between structure & function, the evolutionary mechanism and adaptation, binomial species classification, genetics, reproduction, and gene regulation.

**Course Textbook:** *Biology*, 10th edition; Campbell *et al*., Pearson Publishing
ISBN 13: **9780321775658**

- 9th edition is acceptable; some discrepancies in lecture slide figures and page numbers
- If you're interested in a free Biology textbook (different authors, different publishing company) that covers nearly all of the topics we discuss, in PDF format, email me
- Required course materials are available at the Brazosport College bookstore, on campus or online at http://www.brazosport.edu/bookstore. A student of this institution is **not under any obligation** to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

**Course Goals:**

1. Students will become familiar with basic biological principles, theories, and terminology and become aware of the vibrant living world in which they live through lectures, discussions and coordinated laboratory exercises.
2. Students will be capable of distinguishing differences between qualitative and quantitative approaches in the Scientific Method, how these approaches differ from other means of inquiry, and will learn how Biologists communicate their findings.
3. Students will demonstrate knowledge of the chemical basis of life, basic cellular organization, and the critical nature of biological membranes, intracellular and intercellular communication, cellular energetics, chromosomal maintenance, and gene expression and regulation mechanisms through exams and assignments.

4. Students will exhibit understanding of the genetic mechanisms underlying patterns of inheritance and phenotypic adaptation within the context of Darwinian evolution and speciation through exams and assignments.
5. Students will understand the major successes and yet unsolved questions facing modern Biology, including issues that touch upon ethics and public health policy.
6. Students will develop an awareness of the interdependence of biology and biomedical technology, as well as their influence on and contribution to modern culture.
7. The course design also provides students majoring in a science with information that serves as a basis for further study in biology.

**Keys to Success:**

1. Join a **study group** or go to **S.I. sessions**.
2. Plan a specific study time each day/week & **stick to it**: **9-12 hr/week.**
3. Read the chapter material (all or partial) **before** class.
4. Ask lots of **questions in class**.
5. Review lecture slides and notes after each class.
6. **Don't wait** until the day before to study for a test. Doesn't work in College.
7. Don't let a low score discourage you. Patience & hard work pays off.

**Grading:** Your course grade will be determined by adding the points earned in lecture.

**900** points maximum:

**500** points from Exams: **Exams 1–4** and **Comprehensive Final**

Worth **100 points each**

Final is **mandatory**

**400** points from Assignments

**2** Literature Reviews worth **100 points each**

**1** Presentation in class worth **100 points**

**14** SI Sessions worth **7.14 points each (100 points total)**

*(2 points EC for up to 5 more SI sessions – 10 EC points total)*

**Grading Scale:** Points from lecture and lab will be totaled and your grade determined as follows:

| Percentage of points earned | Letter grade |
|---|---|
| 90-100% | **A** |
| 80-89% | **B** |
| 70-79% | **C** |
| 60-69% | **D** |
| Less than 60% | **F** |

**EXTRA CREDIT** ***may be offered*** during the semester. The last page of my Exams, GATOR activities and research papers are the typical routes for EC points. However, the decisions of when to offer EC, and how many points are offered, are entirely at my discretion.

**Lecture Mechanics:** Please read assigned chapters ***before*** or ***as close as possible after*** class. This will ***greatly enhance*** your understanding of lectures. Participation in lecture in partner discussion and by asking questions is ***highly encouraged***.

EXAMS: Semester exams will consist of scantron multiple-choice & true/false, as well as a visual matching section, fill-in-the-blank diagrams, short answer, and 2 essays at my discretion. The **Final** exam is a *mandatory, comprehensive* test covering a random selection of all scantron questions from all semester exams. **The Final exam score will replace the lowest-scoring semester exam score, thus it can count twice; i.e. worth 200 points. But this will happen only if the final score is higher, and all Exams have been taken.** Any student that is *late by 15 minutes or more* for an exam will not be able to take that exam. Makeup exams *are allowed at my discretion*, and **only** if 1) permission is requested before the exam and 2) the reason for missing the exam is a family/childcare/medical/job-related emergency that cannot be altered or re-scheduled (i.e. examples of situations that would not qualify for a makeup include a routine, scheduled doctor's visit or a shopping trip with family or friends to Houston). Exam study guides will be handed out at my discretion. All information needed for the exams can be found in your lecture notes and in the textbook. ***Do not ask your instructor what will be on the Exams or for information about how the material will appear in question form, because academic honesty dictates that I cannot and will not tell you in advance.***

LITERATURE REVIEW: Writing assignments, worth 200 points, will occur during the semester. ***Instructions and documents needed for this assignment are posted on the D2L course website.*** Your writing assignments will be based on reading, summarizing and analyzing, in a clear and concise manner current, up-to-date scientific review articles about research trends in Biology. *You'll turn in your writing center-reviewed and signed rough draft, writing tutor reflection, as well as the final, revised, edited, & polished version, via a D2L Drop Box.* **See *Literature Review instructions, posted on D2L, as well as the schedule at the end of this syllabus for the due date.*** The writing assignments must be turned in on time, without exception, for full credit. There is a *10% reduction in your total score* for every 1 hour the assignment is late. Writing assignments will not be accepted **after 2 school days** past the due date, and a grade of zero will then be assigned.

IN-CLASS PRESENTATIONS: Each student will deliver an 8 minute PowerPoint presentation during the last week(s) of the semester, based on a selected topic picked by me from selected chapters in our textbook. ***The topic assigned to you will be shown on a topic list and schedule that I'll post on the D2L course website mid-semester. I'll announce this in class too.*** I will evaluate you based on content, clarity, audience interaction, and style of information presentation on screen and verbally. ***Instructions and documents needed for these assignments are posted on the D2L course website. You'll turn in your***

***Presentation in advance, using a D2L DropBox, according to the schedule that will be posted mid-semester.***

**Electronic devices policy:** **You may NOT use** items of these types during class: Phones, pagers, personal MP3 players, portable DVD players, portable gaming devices, or any other type of portable entertainment device. Please turn off all devices or, at the very least, set them to vibrate. *If your job/work/family situation **requires** you to keep a cell phone/pager with you on at all times,* be sure to 1) talk with me during the 1st week of class, 2) send me an email stating why for record-keeping purposes, and 3) take any calls out in the hallway. You may use a laptop/tablet to take notes, however this privilege will be revoked if you are found using your device for **any** other purpose during my lecture **even once**. Feel free to utilize digital recording for lecture. I'm entirely comfortable stationing devices on my lecture podium for a higher quality recording. Re-listening to your lectures is a very effective study aid that will assist you in ***all*** of your coursework at the College level. *If a phone or e-device goes off during lecture or lab:* The device owner will **lose 30 points** from their total grade (*except during the Week 1 grace period*). *If a device goes off during an Exam or Final:* The device owner will **lose 60 points** from that Exam/Final score. **(To be blunt, you will have just failed the test despite your preparation.)**

**Participation policy:** This is College. You, your family member, or the government are paying $$$ so that you can learn this material. Thus, all students are expected to **fully participate** in this course every day we meet. If you have an immediate family or personal emergency which may result in not being present, **contact me in advance or as soon as possible** so that options may be discussed. Those who attend **90% or more of the time on course days** will receive **participation points** added to their final point total for the course, which may result in an improved final grade (Ex: *you've missed only 2 lectures during the entire course*, I calculate your final grade & you end at an 89.2, *because you've attended regularly I'll give you the points needed to make a 90*). **Plan to be in your seat five (5) minutes prior to class.** Depending on **class dynamics**, I reserve judgment on deciding the seating arrangement in lecture or lab.

**Withdrawal policy:** The Brazosport College Biology Department and I believe attendance is **critical** for the **comprehension** of material. However, my policy is not to decide whether to withdraw you from my course for lack of attendance. Each student must make the decision to withdraw themselves before the withdraw deadline.

**Authority clause and Behavior policy:** You are all now considered **adults**, with all the rights, privileges, and responsibilities therein. The College and your instructor will assume that all of you know how to conduct yourself in a respectful, polite, and college-level appropriate behavioral manner. However, **the lecture classroom is not a democracy - - it is instead an autocracy.** By rank and position, your instructor **retains all control** over maintaining the classroom learning environment. Thus, **disruptive behavior *won't*** be tolerated in the slightest during lecture or lab. This includes, but is not limited to: excessive or loud conversations, inappropriate gestures, inappropriate or insulting conversational topics, bullying or demeaning other students or your instructor,

challenging the authority of your instructor on grades, behavior, decisions, classroom and lab activities, or anything else that your instructor deems disruptive and distracting to the learning environment. Habitual or repeated disruptive behavior of any type **WILL** result in the **loss of Course points** at my discretion and **may lead to withdrawal** from the course at my discretion. In addition, habitual or repeated **tardiness** to class or lab will result in the **loss of Course points** at my discretion, and **may lead to withdrawal** from the course at my discretion.

**Academic honesty policy:** The College and your instructor will assume that students eligible to perform at the college level are familiar with, and will abide by, the standard rules governing legal and appropriate conduct, especially with regard to academic honesty. Please refer to the Brazosport College Student Guide for more information. This is available online at http://www.brazosport.edu. Briefly, **the central principle of academic honesty is that all work presented for a grade by you is yours only and yours alone**. Academic dishonesty violates both the policies of this course and the Student Code of Conduct. Each student must do their **own work** (*meaning not written by someone else or copied from another individual*) on lecture exams and writing assignments. Academic dishonesty therefore includes, but is not limited to: cheating in any way, plagiarism of published or online material of any kind, and collusion (allowing or enabling a fellow student to cheat). **Let me be crystal clear: Cheating is *NOT TOLERATED*, under any context, in lecture or in lab. If you are caught cheating, plagiarizing, colluding to cheat you will be referred to the Dean of Student Services for review and assignment of punishment, which can include an F on the assignment/Exam in question, an F in the course, or (in rare cases or repetitive academic dishonesty) suspension.** If you are having trouble understanding any concepts or assignments please **come to talk to me *before* your resort to cheating or colluding**.

**Student services provided by Brazosport College:** To contact the Math/Science Division call (979) 230-3225. Information about the College Library is available on the website or by calling (979) 230-3310. The Student Services area provides the following services: Counseling and Advising at (979) 230-3040; Financial Aid at (979) 230-3294; and Student Activities at (979) 230-3355. Tutoring for Math, Reading, Writing, Environmental Science, Chemistry, and other subjects is available in the Student Success Center; please call (979) 230-3527 for more information. Located within the Student Success Center (second floor of the main building above the counseling and registration office) is the BC Writing Center. The Writing Center provides drop-in tutoring Monday – Thursday 9 am – 8 pm and Friday 9 am – noon. However, **there are only 2-3 tutors available on any given day, thus you need to plan on going there 4-5 days prior to the assignment due date**. Online writing tutor sessions are also offered; an instructional video on this process will be posted on the course website. The Writing Center can assist with brainstorming, organizing and developing paragraphs, understanding professors' directions, learning about APA or other writing styles, learning how to avoid plagiarism, improving mechanics, using Microsoft Word, becoming a stronger writer, and much more. **To schedule an Exam**, please contact the Testing Services department (formerly the LAC) at (979) 230-3253. Testing schedules are limited so please sign up early.

Learning Services is open 7:30 a.m. – 9:30 p.m. Monday-Thursday & 7:30 a.m. – Noon on Fridays, and is located on the 1st floor of the Main building next to Library.

**Students with disabilities:** Brazosport College is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, at (979) 230-3236 for further information.

**Availability of your Instructor on Fridays, Weekends, or Holidays:** Unless indicated otherwise by your instructor during class, your instructor is not available by phone or email on Fridays – Weekends – or Holidays. Expect a **return phone call** or **email reply** from your instructor *ONLY* during standard business hours, Office hours, or hours listed on his Semester schedule posted for each class he teaches on the next business day. (http://www.brazosport.edu/sites/CurrentStudents/Faculty/IsaiahSchauer/Pages/default.aspx) With regard to phone calls, your instructor ***only returns calls made by students who leave voicemail messages***.

## Semester-At-A-Glance Schedule for Dr. Schauer's General Biology I Lecture FALL 2015

| Class Day | Lecture Topic(s) | Campbell 10th Ed Chap |
|---|---|---|
| August 25 | Course Introduction & Syllabus | |
| August 27 | Chemical Context of Life | Chap 2 |
| September 1 | Water & Life | Chap 3 |
| September 3 | Organic Chemistry | Chap 4 |
| **BC Closed September 7th in observance of Labor Day** | | |
| September 8 | Organic Chemistry | Chap 4 |
| September 10 | Structure & Function of Biomolecules | Chap 5 |
| September 15 | Structure & Function of Biomolecules | Chap 5 |
| **Exam 1 (Chap 2, 3, 4 & 5a) in class on September 17th** | | |
| September 22 | Structure & Function of Biomolecules | Chap 5 |
| September 24 | Structure & Function of Biological Membranes | Chap 7 |
| September 29 | Structure & Function of Biological Membranes | Chap 7 |
| October 1 | Cellular Respiration | Chap 9 |
| October 6 | Cellular Respiration | Chap 9 |
| **Exam 2 (Chap 5b, 7 & 9) in class on October 8th** | | |
| October 13 | Photosynthesis | Chap 10 |
| **Literature Review 1 Due in D2L Dropbox by 11:30pm on October 15th** | | |
| October 15 | Photosynthesis | Chap 10 |
| October 20 | Cell Communication | Chap 11 |
| October 22 | The Cell Cycle & Mitosis | Chap 12 |
| October 27 | The Cell Cycle & Mitosis | Chap 12 |
| **Exam 3 (Chap 10, 11 & 12) in class on October 29th** | | |
| **Last day to withdraw from courses is October 30th** | | |
| November 3 | Meiosis & Sexual Life Cycles | Chap 13 |
| November 5 | Chromosomal Basis of Inheritance | Chap 15 |
| November 10 | Chromosomal Basis of Inheritance | Chap 15 |
| November 12 | Molecular Basis of Inheritance | Chap 16 |
| **Literature Review 2 Due in D2L Dropbox by 11:30pm on November 12th** | | |
| **PowerPoint Due in D2L Dropbox by 11:30pm on November 15th** | | |
| **Exam 4 (Chap 13, 15 & 16) in class on November 17th** | | |
| November 19 | In-Class Presentations & Reviewing Old Exams for Final | |
| **BC Closed November 24-27th in observance of Thanksgiving** | | |
| December 1 | In-Class Presentations & Reviewing Old Exams for Final | |
| December 3 | In-Class Presentations & Reviewing Old Exams for Final | |
| **Final Exam in class on December 10th from 10:30am – 12:30pm** | | |

**Tracking My Grades throughout the Semester**

**LECTURE EXAMS (out of 500 points):**

Exam # 1 (100 points) _____
Exam # 2 (100 points) _____
Exam # 3 (100 points) _____
Exam # 4 (100 points) _____
Final (100 points) _____
**A. TOTAL** _____

**LECTURE ASSIGNMENTS (out of 400 points):**

Lit Reviews 1 & 2 (200 points) _____
Presentation (100 points) _____
SI Sessions (100 points) _____
**B. TOTAL** _____

**FIGURING MY GRADE AT ANY TIME IN THE SEMESTER:**

1. Add the *points you've received* thus far.
2. Divide by the *total points available* thus far.
3. Multiple by 100 to get your current percentage

**FIGURING MY COURSE GRADE:**

1. Add Total lines **A & B** _____
2. Divide by 9 _____
3. Compare to grading scale to determine your grade

| Percentage of points earned | Letter grade |
|---|---|
| 90-100% | **A** |
| 80-89% | **B** |
| 70-79% | **C** |
| 60-69% | **D** |
| Less than 60% | **F** |