

BIOSCI 0835 Our Changing World Syllabus

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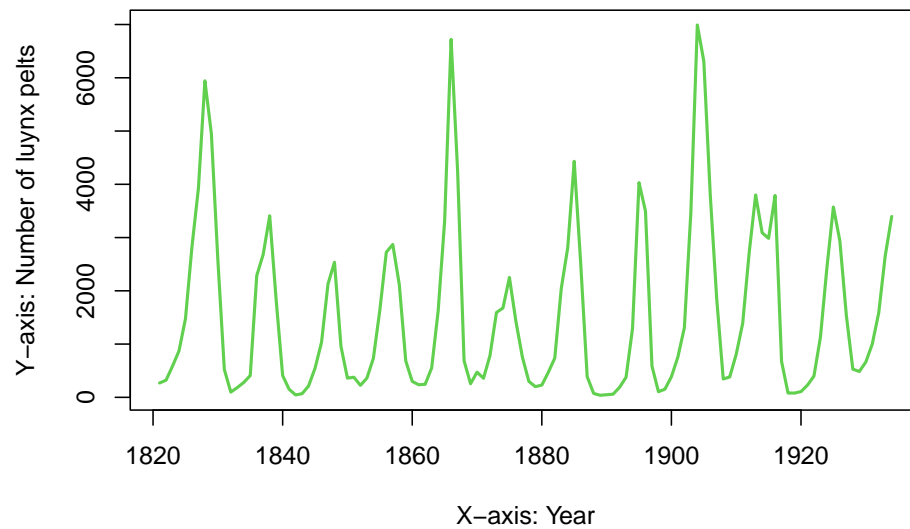
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Chapter 1

Welcome!

This is the syllabus for BioSci 0835, Our Changing World



Chapter 2

Introduction

This is the syllabus for BIOSCI 0835: Our Changing World.

The first several pages contain key information about the course. Subsequent pages are organized alphabetically by major topic.

Chapter 3

Meeting times

The course will meeting in-person on Tuesdays and Thursday.

Location: 169 Crawford Hall

Days: Tuesday & Thursday

Times: 1:00PM - 2:15PM

Dates: Aug 30, 2021-Dec 08, 2021

169 Crawford is 1 floor below street level, next to the elevators.

Enter through Langley Hall near the corner of Tennyson and Bigelow

There is no recitation for this course.

The official Pitt **Academic Calendar** can be found [here](#)

Chapter 4

Instructor

Nathan L. Brouwer, PhD Office: Langley Hall A255.

Email: nlb24 at pitt.edu

My office is on the main floor of the Biological Sciences building.

Chapter 5

Assessment overview

The primary form of assessment in the course will be i) **3** regular Unit Exams and ii) a required, semi-cumulative Final Exam that combines information from Unit 4 **and the previous units**.

Approximately **75%** of your grade will be based on these tests. See the course point breakdown on Canvas for the exact number.

Other forms of assessment include

- Short assignments and problem sets completed out of class
- In-class participation through TopHat
- In-class worksheets, submitted as photos via TopHat

As detailed elsewhere in the syllabus a portion of each of these individuals components of your grade will be dropped to accommodate illness or other personal issues. You do not need to submit information (e.g. from a doctor) when you miss an assignment or test.

Sometimes assignments or questions will be marked as based partially or entirely scored for participation or completion. These assignments ARE required - “*for participation*” does NOT mean optional.

Occasionally, fully optional assignments worth 0 points will be released - these will be clearly marked as worth 0 points and for practice only.

The syllabus will take you step-by-step through all the policies related to these elements of the course.

Chapter 6

Academic integrity

Dr. Brouwer, the Bio Sci department, and the University all take academic integrity very seriously. Cheating includes any form of plagiarism, including copying other students' work or using other resources without proper attribution.

6.1 Key academic integrity policies

1. If you are caught cheating on a graded assignment, you will receive a zero on the assignment.
2. If you are caught cheating on an exam, you will receive a zero on the exam, an F in the course, and an Academic Integrity Violation Report will be filed.

6.2 University academic integrity policy

Below is the University's Policy on Academic Integrity:

“Students in this course are expected to comply with the University of Pittsburgh School of Arts & Sciences Academic Integrity Code located at www.as.pitt.edu/faculty/policy/integrity.html. Any student suspected of failing to meet the student obligations of the code during the semester will be required to participate in the procedures for adjudication, initiated at the instructor level. This may include, but is not limited to, confiscation of the assignment of any individual suspected of violating the code. A minimum sanction of a zero score for the assignment will be imposed. Violation of the Academic Integrity Code requires the instructor to submit an Academic Integrity Violation Report to the Dean.”

Chapter 7

Course communication - Overview

7.1 Primary modes of communication

All important details will be sent via Canvas messages and mentioned/discussed in class.

It is your responsibility to regularly check Canvas messages to stay abreast of the course. Most communication will occur on Fridays, but important updates may be sent out at other times.

Chapter 8

Course communication - Email and Canvas messages

Announcements to the whole course via Canvas will occur typically on **Friday** afternoons. Other communication related to course administration will also occur via Canvas messages. It is your responsibility to regularly check Canvas messages to stay abreast of the course.

You can message me on Canvas or email me at nlb24 at pitt.edu.

Please include “OCW” (Our Changing World) as the 1st thing in your email subject line with an informative bit of information as the “...”. e.g. “Subject: OCW - problem accessing TopHat”.

If you use another email service as your primary email (eg GMail) please set your Pitt email to forward there.

For info on forwarding your Pitt email to your personal account follow this link: <https://bit.ly/2Riz7dx>

I try to answer all emails received on weekdays before 5 pm within 24-36 hrs. Emails received after 5 pm will be answered at the earliest the following morning. Emails received on the weekend will be answered Monday.

Please consult this syllabus before asking questions about course policies and the schedule, and refer to relevant information such as URLs, subject headings or dates. Screengrabs are super helpful. If the entire answer to your question can be found in the syllabus I will likely respond by saying something like

“This is in the syllabus, Cheers, Dr. B.”.

Questions relevant to the whole class may be re-posted (with identifying details removed) to Canvas.

Chapter 9

Communication - University email policy

Each student is issued a University e-mail address (username at pitt.edu). This e-mail address may be used by the University for official communication. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications.

The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers. Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address.

To forward e-mail sent to your University account, go to <http://accounts.pitt.edu>, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page. Be sure to log out of your account when you have finished.

For the full E-mail Communication Policy, go to bc.pitt.edu/policies/policy/09/09-10-01.html.

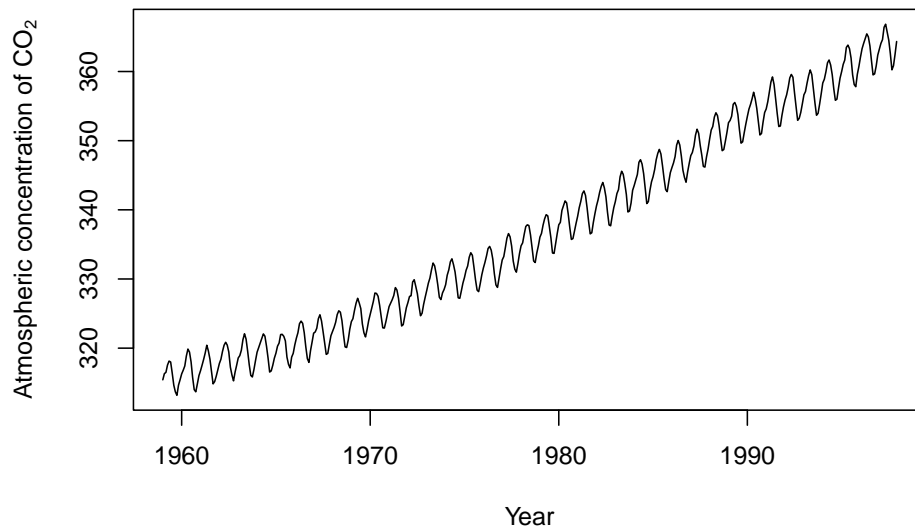
Chapter 10

Catalog description

The University catalog description of this course is:

“This course is an introduction to the evolutionary and ecological forces that change our world. We will consider how organisms change over time (evolution), how they interact with each other and with their environment (ecology), and how they assemble as communities and ecosystems. We will then apply these concepts to understand how human activity is changing the biosphere.”

Monthly CO₂ observations in ppm, Mauna Loa, HI



Chapter 11

Course materials

Thanks to an open educational resources (OER) grant from the state of Pennsylvania there is no text to purchase for this course. **All readings will be provided as webpages or PDFs.**

Most readings will be based on chapters from the book *Ecology for All!*: <https://bit.ly/Ecology4All>

Chapter 12

Course content is (kinda) cumulative

Content within the course is technically cumulative with each unit and unit exam referring back to concepts from previous material!

Luckily, this integration will occur within the lectures also so you shouldn't be surprised by the connections being made.

Chapter 13

Disability Resource & Services

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disabilities Resources and Services. DRS will verify your disability and determine reasonable accommodations.

216 William Pitt Union
(412) 648-7890
(412) 383-7355 (TTY)

Chapter 14

Extra credit policies

Extra credit will be made available at times; I will decide when to do it. Requests for extra credit opportunities are likely to be ignored. I will not come up with extra credit assignments on a person-by-person basis.

Chapter 15

Grade and exam inquiries

If you are concerned that your grade has been miscalculated, a key was wrong, or that there were multiple correct answers please fill out a **Grade Inquiry Form**. A link will be provided when the form is ready for use.

I will briefly evaluate all submitted forms to determine if there is an issue that requires immediate attention. *Otherwise, the resolution of the issue will not occur until grades are calculated.*

AFTER final grades have been calculated I will determine if the resolution of issues on a Grade Inquiry form will impact your final grade.

If your final grade will potentially be impacted I will fully evaluate your inquiry and notify you via email regarding its resolution.

If you did not receive information about your inquiry it means your final grade would not have been impacted.

Inquiries about exam are due one week after its key is released.

Unless you submitted an Exam Inquiry Form I will not discuss specific test questions during office hours.

Inquiries about the final exam will not be addressed until the next semester.

Chapter 16

Grading scale

Final.Percentage	Grade	GPA
98–100%	A+	4.00
92–97	A	4.00
90–91	A-	3.75
88–89	B+	3.25
82–87	B	3.00
80–81	B-	2.75
78–79	C+	2.25
72–77	C	2.00
70–71	C-	1.75
68–69	D+	1.25
62–67	D	1.00
60–61	D-	0.75
59 and below	F	0.00

Note: Students planning to major in Biological Sciences must pass this course with a C (not C- !) or better. Rounding is not done until final grades are computed and is done by computer to 1 decimal place.

Final letter grades are assigned after rounding and is done automatically by Canvas including the decimal value. For example, a score of 91.99% rounds to 92.0% and is an A, but a score of 91.94% rounds to 91.9% and is an A-.

Note: Students planning to major in Computational Biology must pass this course with a C (not C- !) or better.

Chapter 17

Test and class averages

I do not report the mean, max or other information about tests or the class as a whole.

Chapter 18

Masks and COVID-19

During this pandemic, it is extremely important that you abide by the public health regulations, the University of Pittsburgh's health standards and guidelines, and Pitt's Health Rules.

These rules have been developed to protect the health and safety of all of us. Please check your Pitt email for updates to the current masking policy.

Chapter 19

Mental health & wellness

School is hard - please take care of yourself as best you can given the many demands on your time. Diminished mental health, including significant stress, mood changes, excessive anxiety, or problems with sleeping can interfere with your academic performance. You have a support network here at Pitt to help you through challenging times. Acknowledging that you need help, and getting that help, is smart and courageous.

- If you are in an EMERGENCY situation, call 911 or Pitt Police at 412-624-2121.
- If your symptoms are due to FINANCIAL strain, please visit pitt.libguides.com/assistanceresources to see all available University resources.
- If your symptoms are due to strained RELATIONSHIPS, families, or personal crises, please visit the University Counseling Center at www.studentaffairs.pitt.edu/cc/ for free confidential services.
- If your symptoms are strictly related to your COURSE WORK and performance in this course, please contact me.

19.1 Resources:

University Counseling Center: 412-648-7930

Sexual Assault Response: 412-648-7856

RE:SOLVE crisis network: 888-796-8226

Pitt Police: 412-624-2121

Pitt Pantry food bank: www.studentaffairs.pitt.edu/pittserves/the-pitt-pantry/

Chapter 20

Office hours

20.1 Instructor Office Hours

Office hours will be available via Zoom and in-person.

Times are listed on Canvas.

20.2 UTA Office Hours

UTA office hours will be posted by the beginning of the 2nd week of lectures.

20.3 Individual appointments

I'm available for individual 15 minute appointments 10 am to noon on Tuesdays, Thursdays and Fridays.

Schedule these appointments via Calendly:<https://calendly.com/brouwern/15min>

If office hours or available times for appointments do not work for you, please email me to coordinate a different meeting time.

Chapter 21

Office hours tips

Some guidelines for office hours:

1. **Don't be intimidated by office hours.** One of my favorite parts of my job is talking with students one-on-one.
2. If possible, **be prepared for office hours.** Come with specific questions related to slides, figures, etc. But if you just want to listen to what I'm talking about with other students, that's totally cool.
3. **Office hours are for everyone.** If multiple people show up I will alternate between them to answer their questions. If I feel I have answered your main questions I may ask that we table our discussion to cover other questions.

Note: *During finals week I do not hold office hours and am not available for appointments.*

During office hours, specific questions are better than vague ones, even if it's just "*I specifically don't understand Fig. 4 in this chapter.*"

A question like "*I don't understand natural selection*" is harder for me to work with.

I'm also happy to talk about study strategies, classes you might want to take, research opportunities, etc.

Chapter 22

Office hours not held after exam

Office hours and personal appointments will not be held the rest of the week after a test so I can catch up on other tasks. They resume the week following the test.

Chapter 23

Office hours not held finals week

I do not hold office hours the week of finals.

Chapter 24

Partial credit

Most assignments will be automatically graded by Canvas or TopHat. The system for awarding partial credit depends on whether its Canvas or Tophat, and the type of question. I try to indicate how a question will be graded, but I do not go into the grade book override how each of these programs assign partial credit.

Chapter 25

Practice tests

Questions from previous exams will be provided for on Canvas. These may not always line up perfectly with this semester's content but will help you see how questions are delivered.

Chapter 26

Rounding numeric responses

I frequently require numeric answers on assignments and tests. I always include a buffer to accommodate reasonable variation in rounding, and re-check these questions before posting grade.

For example, if the answer is 1.05, a typical buffer would allow answers from 1.044 to 1.064 to be accepted as correct.

If you believe you entered a correct numeric answer but the buffer was too narrow you can submit a test-inquiry form as detailed elsewhere in the syllabus.

26.1 How to round like a biologist

I will often include reminders or instructions about rounding, but may not always do this. Partial credit will not be assigned if you fall outside the buffer or do not follow the stated rounding rules or the general principles below.

In general, it acceptable to round to two digits after any initial zeros to the right of the decimal place.

Examples:

- 1.05 is left as 1.05
- 1.052 is left at 1.052
- 1.0545 is rounded to 1.055
- 1.05409999 is rounded to 1.054

When doing calculations round your answer only at the very end.

If you need to round intermediate numbers, rounding to the first 4 non-zero digits to the right of the decimal should be ok.

Examples:

- 1.0545 is left as 1.0545 during intermediate calculations
- 1.05409999 is left as 1.054099 during intermediate calculations

Chapter 27

Success: How to do well in this course

Below are some suggestions on how to take on the content of this course:

1. **Have confidence** – you can learn the material!
2. Read the assigned readings before the lectures.
3. Read slowly and thoroughly, but **taking notes isn't necessary**. Familiarize yourself with the vocabulary terms and look up unfamiliar words.
4. Read the **figure captions** in the book and walk through the illustrations.
5. I recommend taking notes by hand with pen and paper or on a tablet during lecture.
6. If possible, print out the slides and fill in key information during class.
7. Review your notes at least briefly after a short time after the lecture.
8. As soon as possible, fill in any gaps with information from the book, other suggested study resources, reviewing lecture recordings, or office hours, etc.
9. Study with a partner or small study group, perhaps using Zoom.
10. Attend office hours, even if it's just to listen to what other people are asking.
11. Try not to study for long, uninterrupted periods of time without a significant break. Two half-hour or 45-minute study sessions are better than one marathon 1-2 hour session.
12. Ask for help when necessary - before you fall behind. Go to office hours as often as necessary. The UTAs and I are here to help!

Chapter 28

Final exam

The final exam will ...

1. Take place during finals week on the day scheduled by the University
2. Be administered in-person using Canvas.
3. Must be taken in-person.
4. Follow the general format of the unit tests, including having buffer points.
5. Is not optional.
6. Counts towards your final grade.

Note: I do not hold office hours during finals week.

Questions on the final exam will be of similar difficulty as the regular unit tests.

Information about the final exam schedule for the University can be found here:

<https://www.registrar.pitt.edu/students/final-exams>.

What if I have more than one final exam on the same day? If you have multiple finals scheduled for the same day see here:

https://www.registrar.pitt.edu/sites/default/files/pdf/final_guideline.pdf

Chapter 29

Exam preparation and study guides

When lecturing I try to minimize diversions and content that will not be assessed on an exam. In my lectures I will flag information as “background” or “not on the test” when necessary.

In general I don’t require you to memorize numbers or dates, and any exceptions will be clearly marked.

I also don’t require you to remember the names of people (e.g. famous scientists) or events in their lives. The only standing exception to this is Charles Darwin - any time I talk about Darwin’s life its important. Any other exception will be clearly noted.

In contrast, vocab is very important. Unless stated otherwise all vocab is important and could be on the test.

29.1 Your notes are your best study

Given the above, when preparing for the tests the best study guides are your notes from lecture.

29.2 Exam study guides

Exam study guides MAY be made available before each test but these study guides are in no way complete, comprehensive, or representative.

If they are available, I’ll let you know.

If available, they are most useful to look over AFTER you have thoroughly reviewed all your other class materials.

Chapter 30

Exam grading policies

30.1 Number of tests and calculation of final grade

- There will be 3 Unit Exams and 1 Final Exam administered throughout the semester.
- The final exam will be semi-cumulative.
- Your best 2 scores on of the 3 Unit Exams will be automatically dropped when grades are calculated at the end of the semester.
- Makeup exams cannot be given.
- If you are unable to take a unit test for ANY reason it will be counted zero.
- If you miss just 1 test, that score will not contribute to your final grade - no worries.
- You can take **one** of the 3 regular unit exams remotely via Zoom if you contact me beforehand.
- You must take the final exam in-person

30.2 Test length & format

NOTE: the following policies are provisional and may be adjusted as needed to optimize test length and how to implement the “buffer question” policy in Canvas.

- Exams will be scored out of 45 points. However, there will be at least 47 points worth of questions on the test. Each exam therefore will effectively contain 2 or “**buffer points**” that you can miss without harming your grade.
- The final exam will also contain buffer points.

30.3 Test question formats

- Test questions will frequently be multiple choice. Keyword: “*frequently*” - there will other types of questions too!
- Most exams will have at least one question requiring a numeric calculation.
- Other common forms of questions are fill in the blank, dropdowns, or matching.
- There will likely NO True/False questions on tests.
- For fill-in-the-blank questions, spelling errors will result in 0 points. No partial credit will be given.

Chapter 31

Exams

31.1 General exam policies and information:

1. Tests will be administered in-class but taken on Canvas.
2. There will be 3 unit exams semester. Your **2** highest scores will be used to calculate your final grade.
3. I will not answer questions during exams. This is my normal policy during my other classes, and also is in line with COVID social distancing policies.

31.2 Testing technology policies

1. If you accidentally exit and re-enter the exam you must restart it.
2. It is your responsibility to assure that you have adequate power to your device and internet access.
3. Devices can be borrowed from the library if necessary.
4. If a power or WiFi issue beyond our control impacts the class the test may be re-scheduled.

Chapter 32

TopHat

We will use TopHat in-class and for homework. Please bring a charged TopHat compatible device to all lectures and recitations.

TopHat

Join Code: **240667**

www.tophat.com

When logging into TopHat it will ask you for your university. Typing in “University of Pittsburgh” brings up multiple: **select the first one** that just says “University of Pittsburgh”.

If this is your first time using TopHat see Joining TopHat for more information.

Chapter 33

Updates to schedule & syllabus

I reserve the right to update the syllabus, schedule, point allocation and all other components of the course as necessary.

If changes occur after the first day of class, they will be clearly communicated in class and via email, and a revised syllabus and schedule distributed with major changes flagged.

All policies in this syllabus are subject to change in response to **mandated** direction from the **Biological Sciences Department**.

After reading the syllabus feel free to contact me with any questions about course policies.

Chapter 34

Videos of lectures

This is an in-person course. Lectures will not be live-streamed. Recordings of at least the audio of each lecture will be posted for reference. I can briefly review key parts of lectures during office hours but will not fill in all the gaps in your notes if you missed class. It is your responsibility to watch the class recordings and obtain notes you missed from classmates. UTAs can also help you fill in any gaps in your notes.

Chapter 35

Zoom

I will use Zoom for recording my lectures and posting them to Panopto but will not release the link for watching the lecture off-site.

Each student can take 1 regular unit exam remotely during the scheduled exam period. You must contact me ahead of time to do this.

The final exam must be taken in-person.

Chapter 36

FAQ - Frequently Asked Questions

36.1 “What textbook will we use?”

There is no textbook to purchase - I will provide all readings via Canvas.

36.2 “What content is asynchronous?”

No content will be asynchronous. Any in-class assignments can be submitted for up to 24 after class for full credit.

36.3 “I joined the class late, what can I do?”

All assignments questions associated with the Unit 1 lectures will remain open for an extended period of time to accommodate people who join the class later.