



BCHM 49000 SPRING 2021 SYLLABUS

Course Information

- **BCHM 49000 Undergraduate Seminar**
- **Monday 4:30-5:30 pm LILY 3102**
- **Instructional Modality** (Face-to-Face, Hybrid/Hy-Flex)
- **Course credit hour: 1**
- **Prerequisites (BCHM 498000 or 499000)**

Instructor(s) Contact Information

- Dr. Rossie
- BCHM 203
- 494-3112
- rossie@purdue.edu
- by appointment (email or make arrangements after class)

I am happy to answer questions by email or meet with students via webex or zoom. Please send me an email with **BCHM 490** in the subject line and use your purdue email address. I will answer all emails within 24 h during the week. If you do not receive an answer in a reasonable time, *feel free to send a reminder email.*

Course Description

This one-credit course is part of the capstone research experience required for completion of the Biochemistry B.S. degree. The primary focus of this course is on scientific communication. Students will learn and practice effective means to communicate scientific information in both written and oral forms, focusing on their own research experience in BCHM 49800. A secondary focus will be on proper conduct of scientific research. Students will learn various forms of presenting science research results and how to communicate to different audiences.

Learning Resources, Technology & Texts

- **Recommended texts**

Duarte N. Slide:ology: The Art and Science of Creating Great Presentations. Sebastopol (CA) O'Reilly Media Inc; 2008. *available online through Purdue libraries.*

Duarte N. Resonate: Present visual stories that transform audiences. Hoboken (NJ): John Wiley & Sons Inc; 2010. Chapter 2, Lessons from myths and movies; p. 26-52. *available online through Purdue libraries.*

- **Additional Readings etc**

Readings and web resources associated with specific assignments/lectures will be provided on Brightspace

- **Software/web resources.**
“Word Processor (i.e. MS Word) and Power point or a similar program with slide making tools. Remember that [MS Office is free for all students.](#)”
- **Brightspace learning management system (LMS)**
Access the course via Purdue’s Brightspace learning management system. Begin with the Start Here tab, which describes how the course Brightspace is organized. It is strongly suggested that you explore and become familiar not only with the site navigation but with content and resources available for this course. See the Student Services widget on the campus homepage for resources such as Technology Help, Academic Help, Campus Resources, and Protect Purdue.
- **Lecture recordings**
All lectures will be recorded, and will be available for students who miss a class or who would like to review a lecture. They can be viewed in Brightspace

Learning Outcomes

By the end of this course BCHM 49000 students will be able to:

1. Incorporate the scientific method in their communication exercises. They will demonstrate the ability to develop hypotheses, design experiments, and analyze results to create new knowledge.
2. Communicate scientific knowledge, experiments and conclusions effectively as speakers and writers.
3. Demonstrate an appreciation of ethical issues facing professionals in the life sciences.
4. Explain the contributions of our discipline to society, including improvements to medicine, agriculture, the economy and the environment.

Assignments

The grading for this course is based on two talks, a review paper, and a final poster presentation and class participation. Details on these assignments including a schedule of due dates, rubrics to guide evaluation, and guidelines on discussion participation and evaluation will be posted on the course website. *There will be occasional opportunities for extra credit. These include A) participation in the spring undergraduate research symposium and participation in the B) Biochemistry Club speed dating evening to introduce new students to research opportunities.*

Assignments	Due	Points
Participation	Throughout the semester	10
Written paper	Draft 1- 3/22, Draft 2- 4/19	30
Science talk	Throughout the semester	20
General talk	Throughout the semester	20
Poster presentation	4/26	20
		Total: 100

Grading Scale

Grades reflect the sum of your achievement throughout the semester. You will accumulate points as described in rubrics, then calculated to reflect the assignment scale described in the table above. At the end of the semester, final grades will be calculated by adding the total points earned and translating those numbers (out of 100) into the following letters.

The cutoff values for letter grades are as follows:

90%	A
80%	B
70%	C
60%	D
59% and below	F

Missing an assignment will result in a grade of 0 being recorded unless documented justification is presented. Any request to be excused from a class presentation assignment must include official documentation (doctor's note, request from academic advisor, etc) explaining why the class was or will be missed.

If you have any disagreements with the way any of your assignments have been graded, please make an appointment to see the instructor.

Requests for **re-grades** must be submitted no later than the end of the second class period after the grade is received.

The effect of academic dishonesty on a student's performance in the course may result in a lower or failing grade on the assignment, or a lower or failing grade for the course. Please see the section below for a more thorough discussion of academic dishonesty.

Attendance Policy during COVID-19

Students are expected to attend all classes unless they are ill or otherwise unable to attend class. If they feel ill, have any symptoms associated with COVID-19, or suspect they have been exposed to the virus, students should stay home and contact the Protect Purdue Health Center (496-INFO).

Only the instructor can excuse a student from a course requirement or responsibility. When conflicts can be anticipated, such as for many University-sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency conflicts, when advance notification to an instructor is not possible, the student should contact the instructor/instructional team as soon as possible by email, through Brightspace, or by phone. In cases of bereavement, quarantine, or isolation, the student or the student's representative should contact the Office of the Dean of Students via [email](#) or phone at 765-494-1747. Our course Brightspace includes a link to the Dean of Students under 'Campus Resources.'"

Academic Guidance in the Event a Student is Quarantined/Isolated

If you must quarantine or isolate at any point in time during the semester, please reach out to me via email so that we can communicate about how you can continue to learn remotely. Work with the Protect Purdue Health Center (PPHC) to get documentation and support, including access to an Academic Case Manager who can provide you with general guidelines/resources around communicating with your instructors, be available for academic support, and offer suggestions for how to be successful when learning remotely. Your Academic Case Manager can be reached at acmq@purdue.edu. Importantly, if you find yourself too sick to progress in the course, notify your academic case manager and notify me via email or Brightspace. We will make arrangements based on your particular situation."

Course Schedule

Course Lecture and Assignment Schedule (A separate handout including just this schedule and student groups is also provided on Brightspace)

Class meeting	Date	Who presents	Topic	Assignment due
1	1/25	S. Rossie	Course overview	

2	2/1	S. Rossie	Communicating science to an audience	
3	2/8	S. Rossie	Visualizing science in communication	
4	2/15	S. Rossie	Writing science for the public	
5	2/22	Student Group 1	Scientific talks w/peer review	Talk slides, in class reviews, participation
6	3/1	Student Group 2	Scientific talks w/peer review	Talk slides, in class reviews, participation
7	3/8	Student Group 3	Scientific talks w/peer review	Talk slides, in class reviews, participation
8	3/15	Student Group 4	Scientific talks w/peer review	Talk slides, in class reviews, participation
9	3/22	S. Rossie	Poster presentation	WRITING ASSIGNMENT 2 DRAFT 1 DUE
10	3/29	Student Group 1	General talks w/peer review	Talk slides, in class reviews, participation
11	4/5	Student Group 2	General talks w/peer review	Talk slides, in class reviews, participation
12	4/12	Student Group 3	General talks w/peer review	Talk slides, in class reviews, participation
13	4/19	Student Group 4	General talks w/peer review	Talk slides, in class reviews, participation WRITING ASSIGNMENT 2 DRAFT 2 DUE
14	4/26	All students	Poster presentations	PDF of posters, PI approval form

Here is a link to the Purdue [Academic Calendar](#) and key University dates for the Spring 2021 semester are shown below:

Jan. 4 – Academic Year Faculty/Staff First Day
 Jan. 19 – Classes Begin
 Feb. 17 – Reading Day
 March 18 – Reading Day
 April 13 – Reading Day
 May 1 – Classes End
 May 3-8 – Final Exams
 May 8 – Semester Ends
 May 11 – Grades Due

Classroom Guidance Regarding Protect Purdue

The [Protect Purdue Plan](#), which includes the [Protect Purdue Pledge](#), is campus policy and as such all members of the Purdue community must comply with the required health and safety guidelines. Required behaviors in this class include: staying home and contacting the Protect Purdue Health Center (496-INFO) if you feel ill or know you have been exposed to the virus, properly wearing a mask [in classrooms and campus building](#), at all times (e.g., mask covers nose and mouth, no eating/drinking in the classroom), disinfecting desk/workspace before and after use, maintaining appropriate social distancing with peers and instructors (including when entering/exiting classrooms), refraining from moving furniture, avoiding shared use of personal items, maintaining robust hygiene (e.g., handwashing, disposal of tissues) prior to, during and after class, and following all safety directions from the instructor.

Students who are not engaging in these behaviors (e.g., wearing a mask) will be offered the opportunity to comply. If non-compliance continues, possible results include instructors asking the student to leave class and instructors dismissing the whole class. Students who do not comply with the required health behaviors are violating the University Code of Conduct

and will be reported to the Dean of Students Office with sanctions ranging from educational requirements to dismissal from the university.

Any student who has substantial reason to believe that another person in a campus room (e.g., classroom) is threatening the safety of others by not complying (e.g., not properly wearing a mask) may leave the room without consequence. The student is encouraged to report the behavior to and discuss the next steps with their instructor. Students also have the option of reporting the behavior to the [Office of the Student Rights and Responsibilities](#). See also [Purdue University Bill of Student Rights](#).

Academic Integrity

Academic misconduct of any kind will not be tolerated in any course offered by the Department of Biochemistry. Information on Purdue's policies with regard to academic misconduct can be found at http://www.purdue.edu/studentregulations/student_conduct/regulations.html

Any incidence of academic misconduct will be reported to the Office of the Dean of Students. Academic misconduct may result in disciplinary sanctions including expulsion, suspension, probated suspension, disciplinary probation, and/or educational sanctions. In addition, such misconduct will result in punitive grading such as:

- receiving a lower or failing grade on the assignment, or
- assessing a lower or failing grade for the course

Punitive grading decisions will be made after consultation with the Office of the Dean of Students. Please note reported incidences of academic misconduct go on record for reference by other instructors. Further, a record of academic misconduct is likely to influence how current/future situations are handled.

To provide you with an unambiguous definition of academic misconduct, the following text has been excerpted from "Academic Integrity: A Guide for Students", written by Stephen Akers, Ph.D., Executive Associate Dean of Students (1995, Revised 1999, 2003), and published by the Office of the Dean of Students in cooperation with Purdue Student Government, Schleman Hall of Student Services, Room 207, 475 Stadium Mall Drive West Lafayette, IN 47907-2050.

"Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty." [Part 5, Section III-B-2-a, *Student Regulations*] Furthermore, the University Senate has stipulated that "the commitment of acts of cheating, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and must not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest." [University Senate Document 72-18, December 15, 1972]

More specifically, the following are a few examples of academic dishonesty which have been discovered at Purdue University that are relevant to this class.

- paying someone else to write a paper and submitting it as one's own work
- doing class assignments for someone else
- plagiarizing published material, class assignments, or lab reports
- turning in a paper that has been purchased from a commercial research firm or obtained from the internet
- padding items of a bibliography
- collaborating with other students on assignments when it is not allowed
- stealing class assignments from other students and submitting them as one's own
- fabricating data
- destroying or stealing the work of other students

Plagiarism is a special kind of academic dishonesty in which one person steals another person's ideas or words and falsely presents them as the plagiarist's own product. This is most likely to occur in the following ways:

- using the exact language of someone else without the use of quotation marks and without giving proper credit to the author
- presenting the sequence of ideas or arranging the material of someone else even though such is expressed in one's own words, without giving appropriate acknowledgment
- submitting a document written by someone else but representing it as one's own

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern.

Purdue's Honor Pledge was developed by students to advance a supportive environment that promotes academic integrity and excellence. It is intended that this pledge inspires Boilermakers of all generations to stay "on track" to themselves and their University. "As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue."

Notice of copyright protection of course materials

Among the materials that may be protected by copyright law are the lectures, notes, and other material presented in class or as part of the course. Always assume the materials presented by an instructor are protected by copyright unless the instructor has stated otherwise. Students enrolled in, and authorized visitors to, Purdue University courses are permitted to take notes, which they may use for individual/group study or for other non-commercial purposes reasonably arising from enrollment in the course or the University generally.

Notes taken in class are, however, generally considered to be "derivative works" of the instructor's presentations and materials, and they are thus subject to the instructor's copyright in such presentations and materials. No individual is permitted to sell or otherwise barter notes, either to other students or to any commercial concern, for a course without the express written permission of the course instructor. To obtain permission to sell or barter notes, the individual wishing to sell or barter the notes must be registered in the course or must be an approved visitor to the class. Course instructors may choose to grant or not grant such permission at their own discretion, and may require a review of the notes prior to their being sold or bartered. If they do grant such permission, they may revoke it at any time, if they so choose.

Nondiscrimination Statement

Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. A hyperlink to Purdue's full Nondiscrimination Policy Statement is included in our course Brightspace under University Policies.

Accessibility

Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247.

Mental Health/Wellness Statement

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try [WellTrack](#). Sign in and find information and tools at your fingertips, available to you at any time.

If you need support and information about options and resources, please contact or see the [Office of the Dean of Students](#). Call 765-494-1747. Hours of operation are M-F, 8 am- 5 pm.

If you find yourself struggling to find a healthy balance between academics, social life, stress, etc. sign up for free one-on-one virtual or in-person sessions with a [Purdue Wellness Coach at RecWell](#). Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Sign up is completely free and can be done on BoilerConnect. If you have any questions, please contact Purdue Wellness at evans240@purdue.edu.

If you're struggling and need mental health services: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact [Counseling and Psychological Services \(CAPS\)](#) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office on the second floor of the Purdue University Student Health Center (PUSH) during business hours.

Further [Resources for Working with Students](#) under the frameworks of the pandemic, wellness, and racial justice and equity are available on the [Innovative Learning](#) website.

Emergency Preparation

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructor via email or phone. You are expected to read your @purdue.edu email on a frequent basis.