

BB 111 Introduction to Biochemistry and Biophysics Research

Fall 2020, Corvallis Campus with 100% Remote Learning

1 credit Pass/No Pass

Section 001 Mondays 5:00-5:50 pm

Section 002 Wednesdays 12-12:50 pm

Section 003 Fridays 12-12:50 pm

Please attend your scheduled session unless otherwise arranged in advanced with the instructor. Zoom links for each session will be posted as announcements on the Canvas site.

Instructor: Dr. Kari van Zee (Kari pronounced car+e; officially Karen but I prefer Kari)

Email: kari.van.zee@oregonstate.edu or vanzeek@science.oregonstate.edu both come to same place.

Office: All meetings will be remote by Zoom fall 2020

Phone: 541-737-1773-leave voice mail as it will get sent as transcript via email

Office Hours: Monday 1-2 pm Fall term during my Advising Drop-in Office hours. Waiting room feature enabled. Or email to schedule a time to meet.

<https://oregonstate.zoom.us/j/98414880088?pwd=NzlwYi9aSEVVVEhud010elpVaERDQT09>

Course Description

BB 111 is designed to introduce students to the Department of Biochemistry and Biophysics, the Biochemistry and Biophysics and Biochemistry and Molecular Biology majors, as well as strategies and resources for success at OSU and in the majors. This course will introduce students to a variety of research, experiential learning, and career opportunities that complement an academic foundation in biochemistry, biophysics, and molecular biology.

Diversity Commitment- Inclusive Science

As the instructor of BB 111, I strive to create an equitable and inclusive community in which all members are welcome, heard, and treated with respect. I uphold the value that science should be accessible to all who want to learn with us and that our greatest strengths and most innovative ideas come from collaborations, discussions, and disagreements among people with diverse perspectives, lived experiences, and expertise. Please reach out to me if you have questions, concerns, or ideas about how to make our learning spaces for biochemistry more inclusive.

Student Learning Outcomes

Students completing BB 111 will be able to:

1. Demonstrate familiarity with the Department of Biochemistry and Biophysics faculty, students, and staff and describe areas of research carried out in the department.
2. Identify important professional skills and practices in life science fields and integrate standards of scientific professionalism in behavior and communication.
3. Describe the importance of community and networking for their professional and academic success.
4. Give examples of resources and processes, at OSU and elsewhere, that will support their professional and academic success, including the Academic Success Center, the Math Learning Center, the Mole Hole, the Vole Hole, the Worm Hole, CAPS, HSRC, advising, etc.
5. Identify study skills and test taking strategies to engage in academic coursework and promote mastery and retention of foundational concepts.
6. Describe the value of research, internships, shadowing, volunteering, international experiences, campus involvement and other experiential learning and leadership opportunities in their professional development and be able to identify one or more of these experiences they wish to integrate with their undergraduate career.
7. Describe student responsibilities and the role of advisors and mentors in achieving academic success and professional goals.
8. Create an academic plan and register for their planned courses using tools such as MyDegrees, Scheduler, the OSU Course Catalog, and major and option advising guides.
9. Identify one or more area of personal interest for exploration in the biochemistry, biophysics, and molecular biology disciplines and create a personal development plan.

Minimum technology and devices

This is a **synchronous, remote delivery class using the Zoom platform**. Students will need reliable internet connection and the Zoom app with both video and audio capability so that they can participate when scheduled for synchronous remote course sessions. It is acceptable for this class to join from a cell phone. Students must log in through their @oregonstate.edu domain to gain access to the Zoom sessions.

OSU COVID POLICIES

To contribute to the health and safety of all OSU community members during the ongoing COVID-19 pandemic, and to align with federal and state regulations, executive orders, and guidance, the university has adopted two policies all community members are expected to observe:

(1) **Policy on Face Coverings in Public and Common Settings**

(https://policy.oregonstate.edu/UPSM/04-041_COVID19_face_covering)

This policy requires faculty, staff, students and visitors across all OSU locations to use masks or cloth face coverings, or an appropriate alternative, when in enclosed OSU public and common areas, unless an exception is met; and



(2) **Policy on Physical Distancing During Covid-19 Pandemic**

(https://policy.oregonstate.edu/UPSM/04-040_covid19_social_distancing)

This policy requires faculty, staff, students and visitors across all OSU locations to maintain six-feet of physical distance between others when in enclosed OSU public and common areas, unless an exception is met.

Please review and familiarize yourself with these policies and supplemental guidance

(https://covid.oregonstate.edu/sites/covid.oregonstate.edu/files/face_covering_guidance_6-3-20.pdf).

Thank you for contributing to the health and safety of the community. If you have questions about these policies, please contact me or you may submit further inquiries to the Coronavirus Question form

(https://oregonstate.qualtrics.com/jfe/form/SV_cTpAHJzw4P3zyQd).

Learning Resources

No textbook is required for this course. Assignments and resources will be posted on the Canvas learning portal. Refer to the Schedule of topics at the end of this document and the Canvas calendar. If you have any issues accessing the materials on or posting assignments to CANVAS, email Dr. van Zee.

Criteria for Evaluation

To successfully complete this 1-credit course and receive a pass (P) grade, students must complete each of the following components.

- 1) Attend class regularly and participate in class discussions and activities. Students must **attend at least seven scheduled Zoom sessions (9 total) for their section to receive a "P"**. If you miss more than two classes without prior communication and permission from the instructor, you will receive an "N" in the course. Attendance will be assessed by attendance collection in the chat and/or Zoom meeting record and participation by completion of group assignments, polls, and engagement in discussions.
- 2) Complete and submit assignments in CANVAS by the appropriate deadline. Students missing 2 or more assignments will not pass the class.
- 3) Design a professional development plan and submit to CANVAS by the indicated date at the end of the term. Students who do not submit a plan by the end of the term will not pass the class.

Department of Biochemistry and Biophysics Information

Main office: Ag and Life Sciences Bldg (ALS) 2011, 541-737-4511

Website <https://biochem.oregonstate.edu/>

College of Science Student Success Center: Kidder Hall 109, 541-737-4811 and Zoom drop in hours- link will be posted on resource section of Canvas site

Academic Advising

The Department of Biochemistry and Biophysics uses a team-based, intentional-approach for academic advising. This means that students in the BB and BMB majors do not have one advisor for their entire careers at OSU, but rather students have a **team of advisors**. All members of our team are research and/or teaching faculty with expertise in the disciplines of biochemistry, biophysics, and molecular biology. A message will be sent to the **bbundergrad listserve** weeks 3, 4, 6, 7 and 8 of each term announcing the advising rotation with scheduling instructions.

Students are responsible for reading this email and scheduling appointments through the advising calendar in a timely manner with the appropriate advisor. The advising rotation will be based on a student's level in chemistry in our program rather than total credit hours: general chemistry/organic chemistry/biochemistry/biophysics-seniors.

All first year students at OSU and all students at all levels in the BB and BMB majors are required to meet with one of the advising team members **per the schedule** posted on the department's advising webpage <https://biochem.oregonstate.edu/content/advising>, though all students are invited to reach out with questions and drop by for conversations throughout the term. Drop-in hours are posted each term.

PINS for registration

The departmental policy on providing registration PINS is that PINs are only provided at scheduled remote advising sessions and are not provided by email or during drop-in advising sessions. Depending on the circumstances (ex: study abroad, health issues) phone advising appointments may be scheduled with Dr. van Zee.

University POLICIES

Regarding Students with Disabilities:

Statement Regarding Students with Disabilities: Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Academic Integrity and Expectations for Student Conduct:

Students are expected to adhere to the OSU Student Conduct Regulations described at <https://beav.es/codeofconduct>



Reach Out for Success: University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it is important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about resources that assist with wellness and academic success at oregonstate.edu/ReachOut. If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)

Statement on Reporting Please be aware that I need to report incidents you disclose to me inside or outside the classroom that involve gender or sex-based harassment, violence, or discrimination, including your name, to the Office of Equal Opportunity and Access (EOA). For more information on how EOA responds to reports, please visit their website at eoa.oregonstate.edu. However, if you wish to make a confidential disclosure and receive information on resources and services, please contact the **Survivor Advocacy and Resource Center (SARC)** by phone (541-737-2030), by e-mail (survivoradvocacy@oregonstate.edu), or visit them in the Plageman Building. EOA and SARC can assist with academic accommodations.

Course Policies

Zoom Classroom Norms

Students who are participating in BB 111 are expected to attend the scheduled synchronous meetings in Zoom. I fully recognize that there may be reasons you may not be able to always use your camera such as not having reliable internet access, internet problems at any particular moment, or reasons pertaining to where you are sitting. Please communicate with me if you are experiencing these issues. Otherwise, I will expect your video to be turned on, as this is an opportunity for us to build a learning community and in normal years we would see each other in person in class.

When participating in Class or other virtual discussions please consider the following tips. These will help us have a smooth and enjoyable session.

- Set your name and add pronoun or pronunciation.
- Make eye contact with the camera.
- Mute mics when you are in the main Zoom session unless you are speaking and unmute in the breakout rooms.
- Find your light! Make sure there is a light source in front of you, not behind.
- If you cannot share video because of internet bandwidth issues, please add your name and a picture under setting. It will help when you ask a question or share a response to be able to use your name.
- Alternatively, you may ask questions or add comments in the chat.
- You will enter the meeting with your video feed on.
- Be respectful in your spoken words, chat, and videos.
- Do not screen-share unless you have permission.
- Do not annotate on the whiteboard unless you have permission.
- Click raise your hand in Zoom if you want to share.
- Be kind online.



Zoom Breakout Room Norms

This is an interactive, discussion-based class. Student-to-student and student-instructor interactions are highly valued and required as a component of this course. We will use the Zoom breakout room functionality to split the class into discussion groups. The instructor can move between breakout rooms to provide needed support and answers to your questions. Students are expected to be professional in their behavior and conversations in the breakout rooms just as they would in the main zoom room and in person in class.

Schedule of Topics Fall 2020- subject to change

Date	Week	Topic	Assignments: due prior to scheduled class See Canvas for assignment instructions, links, and documents.
Sep 23 (W) Sep 25 (F)	0	Testing technology and drop-in, meet and greet. Monday students are welcome to come W or F as guests.	Read the Syllabus and Rules of the Road document.
Sep. 28 (M) Sep 30 (W) Oct 2 (F)	1	Building a biochemistry learning community	Developing community learning guidelines. Science Story 1: First fMRI study to investigate how dog brains process speech. Reading and video.
Oct 5 (M) Oct 7 (W) Oct 9 (F)	2	Visit by Biochemistry Club Officers and members: discussion with peers.	Upload photo and permission to use to Canvas. Science Story 2-to be announced
Oct.12 (M) (VH) Oct 14 (W) (AK) Oct 16 (F) (AN)	3	What is biophysics? Problem solving and asking questions. Faculty from biophysics to attend each class.	Exploring Campus Resources and Engaging in Science Assignment Science Story 3-to be announced
Oct. 19 (M) Oct 21 (W) Oct 23 (F)	4	Career Exploration: Claire Wu, Career Development Office	Career Exploration prompt Advising worksheet and scheduling appointment with advisor. Planner/scheduler/deadlines/grades assignment.
Oct 26 (M) Oct 28 (W) Oct 30 (F)	5	Dam Good Self Care workshop hosted by CAPS	Science Story 4-to be announced
Nov 2 (M) Nov 4 (W)	6	Undergraduate Research	Reflective assignment on experiential learning opportunities.



Nov 6 (F)		URSA Ambassadors, URSA-Engage program, Getting involved in research	
Nov 9 (M) (MCF) Nov. 11-holiday Nov 13 (F) (MF)	7	NO synchronous CLASS on Veterans Day Wed Nov 11. Students will use on-line discussion forum Science story 2 What are biochemistry and molecular biology? research faculty presentations	Watch research talk by Dr. Nancy Klevit, University of Washington. Reflective assignment on career exploration
Nov. 16 (M) Nov 18 (W) Nov 20 (F)	8	Inclusive Science —goals, opportunities, challenges	Science Story Reading 5-to be announced Identity chart
Nov. 23 (M) Nov 25 (W) Nov 27 (F)	9	Developing your Science Story No scheduled Zoom sessions – so students can travel home for Thanksgiving and weeks 10 +finals	Telling your story. Create a 2-3 minute story about yourself as an aspiring scientist Share story in week 10 with peers.
Nov 30 (M) Dec 2 (W) Dec 4 (F)	10	Telling your science story to your peers (small group work)	Final Assignment due end of Week 10: Designing your Life—Your Personal Development Plan