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BIOB 547.01: Experimental Molecular, Cellular, & Chemical Biology

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Syllabus

BIOB/BCH 547: EXPERIMENTAL MOLECULAR, CELLULAR & CHEMICAL BIOLOGY

COURSE INFORMATION:

- CRN: BCH 547 (31457); BIOB 547(31425)
- Credits: 1 (C/NC)
- Term: Spring 2022
- Day/Time: Mondays 12 PM
- Location: Zoom: <https://umontana.zoom.us/j/98717054462>
 - Note that UM Login authentication is required
 - When you click the link above, you may see a popup that reads “This meeting is for authorized participants only”.
 - Click “Sign in to Join”, then “Sign in with SSO”.
 - In box titled “your company domain” type “umontana.edu” or “umconnect.umt.edu” as appropriate for your UOnline account. This should bring you to the UM NetID Login page.
 - If you are already logged in for Moodle or CyberBear or other UOnline apps, the zoom link may bring you right to the meeting.
- Semester Schedule/Sign-up
 - (https://docs.google.com/spreadsheets/d/1O9DnwX5pHSGW4_P1AQJQhSd0mqCYB9vvgI_QdmbPI-Y/edit#gid=0).

INSTRUCTOR CONTACT INFORMATION:

- **Brent Ryckman**
- Department: Biological Sciences
- Office: Interdisciplinary Science Building (ISB) 215
- Phone (Lab): 406-243-6948
- Email (preferred): brent.ryckman@mso.umt.edu
- Office hours: by appointment.

LEARNING OUTCOMES:

Students will:

- Expand their knowledge of current cellular, molecular and microbial biology research.
- Develop skills of critical analysis through writing summaries of attended seminars.
- Develop critical thinking skills through active participation and asking questions of seminar speakers.
- Extend their network of scientific contacts
- Use oral presentation format to explain their research to broad audiences.

COURSE REQUIREMENTS:

1. Attend (via Zoom) **AT LEAST 70%** of the seminar meetings. Absences will be excused on a case by case basis; please contact the instructor.
2. Documentation of seminar attendance/viewing in the form of providing peer evaluation is required as in past semesters. But note the new Moodle-based format. ***When there are 2 students giving shorter talks on the same day (this is common), please provide feedback for both students***
 - a. The newly designed Moodle page has specific folders for each speaker. Within each there is an Advanced Forum tool for students to enter evaluation/feedback. NOTE: To encourage thoughtful, constructive and respectful feedback posts are NOT anonymous.
 - b. Format for evaluation

- i. Provide a brief, non-critical summary of the presentation content. Like an abstract of a paper. The point of this is to let the speaker know how well you understood the overall message they were trying to convey. Suggested length 200-500 words. ***This need not be a technically detailed analysis. More along the lines of telling a lab mate what they missed at seminar today.***
 - ii. Scientific questions for the speaker that you did not get to ask.
 - iii. Constructive (positive and negative) criticism of the presentation (e.g., voice volume, speaking rhythm and cadence, use of visual aids, slide design, presentation organization, etc).
3. Each student is expected to deliver a presentation of research progress once during the year. This will involve giving a 20-40 minute presentation on your own experimental work (leaving 5-10 minutes for questions). Your talk should include the following:
 - a. background information needed to understand the topic,
 - b. motivation for doing the experiments (i.e. describe the "hole" in field that you are trying to fill and why it is important),
 - c. explain the experiments and results,
 - d. summarize conclusions, interpretations and future directions.
4. First-year students and/or students who do not yet have an experimental research project may choose to present a published research paper related to their current lab's research. Alternatively, they could present their undergraduate research if relevant. This would follow the same format.
5. Each student should serve as "discussant" once during the series. The Discussant will introduce the speaker, giving an idea of their educational background, which lab they work in and for how long, and the title of their talk. Discussant will begin and moderate the post-presentation question and answer session.
6. Participate in post-presentation discussions by 1) asking question during the meeting, and 2) completing speaker evaluation forms evaluation.

Accessibility

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and the Office for Disability Equity (ODE). If you anticipate or experience barriers based on disability, please contact the ODE at: (406) 243-2243, ode@umontana.edu, or visit www.umt.edu/disability for more information. Retroactive accommodation requests will not be honored, so please, do not delay. As your instructor, I will work with you and the ODE to implement an effective accommodation, and you are welcome to contact me privately if you wish.

UM CULTURAL LEAVE POLICY

Cultural or ceremonial leave allows excused absences for cultural, religious, and ceremonial purposes to meet the student's customs and traditions or to participate in related activities. To receive an authorized absence for a cultural, religious or ceremonial event the student or their advisor (proxy) must submit a formal written request to the instructor. This must include a brief description (with inclusive dates) of the cultural event or ceremony and the importance of the student's attendance or participation. Authorization for the absence is subject to approval by the instructor. Appeals may be made to the Chair, Dean or Provost. The excused absence or leave may not exceed five academic calendar days (not including weekends or holidays). Students remain responsible for completion or make-up of assignments as defined in the syllabus, at the discretion of the instructor.