BCH 547.01: Experimental Molecular Cellular, and Chemical Biology

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

COURSE INFORMATION:
- CRN: BCH 547 (31135); BIOB 547(31106)
- Credits: 1 (C/NC)
- Term: Spring 2024
- Day/Time: Mondays 12 PM
- Location: Skaggs 169 (will try to offer Zoom viewing option): https://umontana.zoom.us/j/98717054462
- Semester Schedule/Sign-up
  o (https://docs.google.com/spreadsheets/d/1O9DnwX5pHSGW4_P1AQJQhSd0mqCYB9vvgI_QdmbPl-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 AT LEAST 70% of the meetings and offer peer feedback. When there are 2 students giving shorter talks on the same day (this is common), peer-feedback is expected for both speakers individually). Inability to participate in 70% of meetings will be excused on a case-by-case basis. Please contact the instructor.

  a. Peer-feedback
     i. The course Moodle page has specific sections for each speaker. Use the “Advanced Forum” tool to enter evaluation/feedback. NOTE: To encourage thoughtful, constructive, and respectful feedback, posts are NOT anonymous.
     ii. Please make your poses asap following the seminar so the presenter can get timely feedback.
     iii. Format for evaluations (note the modified instructions)
         1. Provide a concise, comprehensible and non-technical summary of what the seminar was “about.” Briefly, describe the major questions and/or hypotheses, the general research methods/approaches and the major findings and conclusions. Make sure to provide any background necessary as context for understanding the major questions and conclusions. But avoid technical detail and jargon. This is not to be a laborious in-depth essay, or detailed seminar
notes. Rather, this is more along the lines of casually telling a lab mate what they missed at seminar today. Recommended less than 300 words.

2. Any technical, scientific questions for the speaker that you did not ask during the Q&A.

3. Any constructive (positive and negative) criticism of the presentation you wish to share (e.g., voice volume, speaking rhythm and cadence, use of visual aids, slide design, presentation organization, etc.).

2. 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.

3. 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.

4. Each student should serve as “Host” once during the series. The Host 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. There has been a recent tradition of giving a “fun fact” about the speaker. Make sure the speaker has your blessings for this. Make sure the speaker has your blessings for this. Surprises can backfire in embarrassment.

5. Participate in post-presentation discussions by 1) asking question during the meeting, and 2) posting peer feedback (see above).

STUDENTS WITH DISABILITIES:
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/Aber Hall - Room 116, 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. If you would like to request reasonable accommodations, you are advised to provide your ODE verification letter to your instructor in the first week of class so appropriate arrangements can be made. If you decide after the semester begins to disclose your disability and request accommodations, you should provide documentation, if possible, at least 10 days before the upcoming assessment so I may prepare appropriately. It is the responsibility of students to make sure they understand the types of modifications available to them before assessments.

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.