

Fall

**Biochemical and Molecular Biology Seminar:
Ethics and Responsible Conduct of Research**

COURSE INFORMATION:

CHEM 688 (1 CREDIT)

PREREQUISITE:

GRADUATE STUDENT STANDING, OR PERMISSION OF INSTRUCTOR

LOCATION: synchronous

MEETING TIME: 11:45 - 12:45 on Wednesday

OFFICE HOURS: contact instructor via email or phone to schedule a meeting

INSTRUCTOR:

Lawrence K. Duffy

Chemistry and Biochemistry/Institute of Arctic Biology

246 WRRB/184 REIC

907-978-9695/907-474-7525

lkduffy@alaska.edu

COURSE DESCRIPTION: This seminar course introduces the concept of Responsible Conduct of Research and how to analyze ethical situations, using discussion of case studies. Research Integrity topics, including research in the Arctic, are: Research Misconduct, Collaboration, Peer Review, Conflicts of Interest, Authorship and Publication, Mentor and Trainee Relationships, Data Management, and Social Responsibility. This course is pass-fail.

COURSE READING MATERIALS:

1. RCR CASEBOOK, ORI
2. RESEARCH ETHICS, cases and materials. Robin L. Penslar, editor
3. SCIENTIFIC INTEGRITY, Francis L. Macrina
4. DOING GLOBAL SCIENCE
5. INTEGRITY IN SCIENCE RESEARCH, Institute of Medicine, NRC

STUDENT COURSE LEARNING OUTCOMES:

- * ability to assess the integrity in the research environment.
- * ability to judge relationship of action to collective norms
- * ability to assess aspects of the moral integrity of the individual, such as ethical sensitivity, ethical reasoning and to define the issue.

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INSTRUCTIONAL METHODS Small group lectures and discussions. Students will gain exposure to the concept and practice of research integrity by discussing case studies of the failure of integrity in the research environment. The instructor will guide students through moral dilemmas by identifying elements of the case, explicitly identifying the ethical norms, and where the reasoning was faulty. Also, the IRB and IACUC policies of UAF will be explained and discussed. Students will present summaries of a case study.

COURSE POLICIES:

1. **ATTENDANCE:** Student attendance is required. Active student participation is expected and will account largely for the pass fail grade.
2. **PRESENTATION:** Content and organization of topics are the primary concern, but active participation in discussion of presentation is also noted.

EVALUATION: Grades will be PASS/FAIL and based on the level and quality of the students' participation and completion of assignments.

* required reading

* participation in discussions

UAF POLICIES

HONOR CODE: Students are expected to read, understand and adhere to the UAF academic honor code as detailed in the UAF Catalog.

DISABILITIES: The instructor will work with the Office of Disabilities Services (ODS) to provide reasonable accommodation to students with disabilities.

Students with a physical or learning disability need to identify themselves to ODS in order to request special accommodations. Documentation needs to be provided by the student to ODS, which will notify the instructor of special requirements required for completing the course.

CHEATING: ANY STUDENT CAUGHT CHEATING WILL BE ASSIGNED A GRADE OF "F". The student's academic advisor will be notified of the failing grade.

COVID-19 POLICY: Students should keep up-to-date on the University's policies, practices and mandates related to COVID-19 by regularly checking this UAF website:

https://sites.google.com/alaska.edu/coronavirus_uaf/uaf-students?authuser=0

Students are expected to adhere to the university's policies, practices and mandates. Students are subject to disciplinary actions if they do not comply.

STUDENT PROTECTIONS POLICY: UAF EMBRACES A CULTURE OF RESPECT, DIVERSITY, INCLUSION AND CARING. Students at UAF are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do NOT share the same reporting obligations. As a student, UAF provides resources available to you. For more information on your rights go to the following site: <https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities>.

ATTENDANCE POLICY: You are responsible for conferring with your instructor concerning absences and the possibility of arranging to make up missed work. If you are required to participate in (a) military, (b) UAF-sponsored activity or (c) health or family emergency, notify your instructor as soon as possible of your absence.

Your instructor will make a good faith effort to make suitable arrangements to help you make up classes. You will not be penalized for excused absences. You will have the potential to withdraw from the course without academic penalty depending on the situation and timing.

Your instructor is under no obligation to allow you to make up missed work for unexcused absences. Students are encouraged to read the UAF catalog for policy details and procedures.

Syllabus Addendum (Revised 8/10/2021)

COVID-19 statement: Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking this website:

<https://sites.google.com/alaska.edu/coronavirus/uaf?authuser=0>

Further, students are expected to adhere to the university's policies, practices, and mandates and are subject to disciplinary actions if they do not comply.

Student protections statement: UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights as a student and the resources available to you to resolve problems, please go to the following site: <https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities/>.

Disability services statement: I will work with the Office of Disability Services to provide reasonable accommodation to students with disabilities.

Student Academic Support:

- Speaking Center (907-474-5470, uaf-speakingcenter@alaska.cou, Gruening 507)
- Writing Center (907-474-5314, uaf-writing-center@alaska.cdu, Gruening 8th floor)
- UAF Math Services, uafmathstatlab@gmail.com, Chapman Building (for math fee paying students only)
- Developmental Math Lab, Gruening 406
- The Debbie Moses Learning Center at CTC (907-455-2860, 604 Barnette St, Room 120, <https://www.ctc.uaf.edu/student-services/student-success-center/>)
- For more information and resources, please see the Academic Advising Resource List (<https://www.uaf.edu/advising/lr/SKM364e19011717281.pdf>)

Student Resources:

- Disability Services (907-474-5655, uaf-disability-services@alaska.edu, Whitaker 208)
- Student Health & Counseling (6 free counseling sessions) (907-474-7043, <https://www.uaf.edu/chc/appointments.php>, Whitaker 203)
- Center for Student Rights and Responsibilities (907-474-7317, uaf-studentrights@alaska.edu, Eielson 110)
- Associated Students of the University of Alaska Fairbanks (ASUAF) or ASUAF Student Government (907-474-7355, asuafoffice@alaska.edu Wood Center 119)

Nondiscrimination statement: The University of Alaska is an affirmative action/equal opportunity employer and educational institution. The University of Alaska does not discriminate on the basis of race, religion, color, national origin, citizenship, age, sex, physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or other legally protected status. The University's commitment to nondiscrimination, including against sex discrimination, applies to students, employees, and applicants for admission and employment. Contact information, applicable laws, and complaint procedures are included on UA's statement of nondiscrimination available at www.alaska.edu/nondiscrimination.

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COURSE OUTLINE

AUG 26	INTRODUCTION
SEPT 2	SCIENTIFIC INTEGRITY
SEPT 9	RESEARCH MISCONDUCT
SEPT 16	COLLABORATION ISSUES
SEPT 23	CONFLICTS OF INTEREST
SEPT 30	MENTORSHIP AND TRAINEE RELATIONSHIPS
OCT 7	AUTHORSHIP AND PUBLICATION
OCT 14	PEER REVIEW
OCT 28	DATA MANAGEMENT
NOV 4	SOCIAL RESPONSIBILITY
NOV 11	RESEARCH IN THE ARCTIC
NOV 18	INDIGENOUS PEOPLE
NOV 25	THANKSGIVING WEEK
DEC 2	GLOBAL SCIENCE
DEC 9	EXAM WEEK

NOTES ON SYLLABUS AND UNIVERSITY POLICIES

1. UAF is an AA/EQ employer and educational institution and prohibits illegal discrimination against any Individual.

2. This course follows the UAF policy Incomplete Grade Policy.

The letter " I " is a temporary grade used to indicate that the student has satisfactorily completed (C or better) the majority of the courses work, but for personal reasons beyond the student's control has not been to complete the course during the regular semester. Negligence or indifference are not acceptable reasons for an "I" grade

3. UAF "C" grade policy.

"C-" grade is not the same as a C for this course.

4. Speaking Center is available (907-474-5470)

5. Writing Center is available (807-474-5314)

6. Developmental MATH lab is available in the Gruening BLDG.

7. UAF has information and resources on the ACADEMIC ADVISING RESOURCES LIST.

8. EMERGENCY NOTIFICATION PLAN. (see student handbook)

- a. in class by Instructor as a relay
- b. via phone and email

9. Extended Absence Policy (see Student Handbook)

- a. personal illness or injury
- b. bereavement
- c. military obligations
- d. jury service
- e. serious illness of family or friend
- f. other emergencies

8. Technical Requirements

- a. access to textbook
- b. access to internet
- c. access to a computer
- d. access to a phone

Students need a computer for online course material and the ability to upload or download material.