**BINF705 RESEARCH ETHICS - FALL 2025**

**Instructor** - Jeff Solka, jsolka@gmu.edu

**Office Hours** - By Appointment

**Schedule** - Monday 7:20 pm - 8:35 pm, online synchronously

**Texts**

Macrina, Francis L. (2014) *Scientific Integrity, 4th Edition*, American Society for Microbiology.

**Course Structure**

At the start of the semester there will be several lectures on background material on ethics. Some of this will be extracted from the course textbook. This will be followed by weekly presentations by the class. Class discussions will be conducted during these presentations.

**Course Description**

This course will examine the moral dilemmas that currently face researchers. A particular emphasis will be placed on those issues associated with the use of computers in general and their application in bioinformatics in particular. Some of the topics to be discussed will include the fundamentals of ethics, scientific reporting and ethics, interpersonal relationships within a research setting, ethics and peer review, ethics and whistle blowing, relationships with funding agencies, animal research, human research, fraud, intellectual property, and improper use of computer equipment.

**Grading** - Grades will be based on class presentation, class participation, a midterm and a final.
Grading will be on the following scale. 93-100  (A), 90-92 (A-), 87-89 (B+), 80-86 (B), Below 80 C. Student averages will be rounded to the closest integer to determine final letter grades.

**Breakdown** Class Participation/Attendance (25%), Class Presentation (50%), Take-home Midterm (12.5%), Take-home Final (12.5%)

Class presentation must be submitted 48 hours prior to the scheduled course presentation unless there is a documented medical emergency. Take-home Midterm and final must be turned in on time except in the case of a documented medical emergency.

University Final Policy

**“AP.3.10.1 Absences from Final Exams**

Absences from final exams will not be excused by the instructor except for sickness on the day of the exam. Other causes must be approved by the student's academic dean or director. The effect of an unexcused absence from an undergraduate final exam shall be determined by the weighted value of the exam as stated in the course syllabus provided by the instructor. If absence from a graduate final exam is unexcused, the grade for the course is entered as F. See*AP.3.3 Additional Grade Notations* for information on being absent with permission.”