

**MG 5700 – SYSTEMS OF GENETIC ANALYSIS
FALL 2022**

Classes: 609 BioSci Bldg **Time:** 12:40-1:35 PM, MWF

Professors: Dr. Heithem El-Hodiri
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Dr. Anna Dobritsa
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Dr. Steve Osmani
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Dr. Robin Wharton
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Course Objectives:

An introduction to the use of model organisms and modern genetic tools.

Prerequisites:

MG 4500, MG 4606, MG 5607, or MG 5608; or grad standing. Students without a strong genetics background are encouraged to consult with the instructor at the start of the term.

Course materials:

There is no required text. Readings from the primary literature and other class materials will be available on the course website on Carmen.

Grades:

Each section contributes 25% of the total grade, with individual professors specifying their own modes of evaluation. There will be no final exam.

Class Schedule:

Vertebrates

El-Hodiri (11 classes)

Wed 8/24 - Mon 9/19

EXCEPT: NO CLASS Mon 9/5 Labor Day

Plants

Dobritsa (10 classes)

Wed 9/21 - Wed 10/12

Fri 10/14 Autumn Break

Fungi

Osmani (10 classes)

Mon 10/17 – Mon 11/7

Genetic Approaches

Wharton (10 classes)

Wed 11/9

Fri 11/11 Veterans Day

Mon 11/14- Wed 12/7

EXCEPT: NO CLASS Wed 11/24 and Fri 11/26 Thanksgiving

ACADEMIC INTEGRITY

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students read and understand the university's Code of Student Conduct (studentconduct.osu.edu), and that all students complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* (<http://studentlife.osu.edu/csc/>) and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct.

If the course directors suspect that a student has committed academic misconduct, we are obligated by university rules to report our suspicions to the Committee on Academic Misconduct (COAM). If COAM determines that a student has violated the university's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.

COPYRIGHT FOR INSTRUCTIONAL MATERIALS

Course materials (videos, lectures, etc.) may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

STATEMENT ON TITLE IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options on Ohio State's Title IX website (titleix.osu.edu) or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information, visit the OIE website (equity.osu.edu) or email equity@osu.edu.

COMMITMENT TO A DIVERSE AND INCLUSIVE LEARNING ENVIRONMENT

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each

member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

COMMUNICATION GUIDELINES

During this course students will have the opportunity to pose questions, share experiences and develop their own ideas. It is expected that the class is a supportive learning community where everyone feels safe to express themselves. Please:

- Critique ideas, not people.
- Use “I messages” to communicate concerns or differences in opinion. (e.g. I think...)
- Remember that sarcasm does not always come across in writing.
- Speak up if you hear or see something that might be offensive to someone in the class. Try non-accusatory language like: “I’m sure it wasn’t your intention, but I could see how your statement might be misinterpreted to mean Y”.

PLEASE TAKE CARE OF YOURSELF (Mental Health Statement)

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student’s ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

No matter where you are engaged in distance learning, The Ohio State University’s Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, on-demand mental health resources (go.osu.edu/ccsondemand) are available. You can reach an on-call counselor when CCS is closed at 614-292-5766. 24-hour emergency help is available through the National Suicide Prevention Lifeline website (suicidepreventionlifeline.org) or by calling 1-800-273-8255(TALK). The Ohio State Wellness app (go.osu.edu/wellnessapp) is also a great resource.

GRIEVANCES AND SOLVING PROBLEMS

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson (Dr. Harald Vaessin), college dean or associate dean, and to the provost, in that order. Specific procedures are outlined in Faculty Rule 3335-7-23. Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

REQUIREMENTS AND ACCOMODATIONS FOR COVID-19

The ongoing COVID-19 pandemic may affect your learning in many ways. A primary goal of the University and course directors to maintain the safety of students enrolled in this course. Therefore, all students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>). Those who are not in compliance with university guidance will be warned first. Repeat offenders will be referred to the Office of Student Life Student Conduct for disciplinary action (<https://studentconduct.osu.edu/complaint>).

If you are directly exposed to someone with COVID-19 or have symptoms of COVID-19 (loss of taste, sore throat, fever ≥ 100 °F, cough) do not report to class until cleared to do so by a physician or public health official. Should you become unable to attend class online or in-person due to illness or caretaker responsibilities please contact the course directors immediately to arrange for learning accommodations.

If the course directors become ill an alternative learning plan will be communicated to the class using the Announcements Section in CarmenCanvas. **NOTE:** Course assignments, lecture locations (on-line vs. in-person), exam formats and due dates may change in response to public health concerns. These changes will be communicated to the class via the Announcement Section in CarmenCanvas.

ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The University strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services: <https://slds.osu.edu/covid-19-info/covid-related-accommodation-requests/>

If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with the course directors as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Disability Services Contact Information

Phone: 614-292-3307

Website: slds.osu.edu

Email: slds@osu.edu

In person: Baker Hall 098, 113 W. 12th Avenue