Term Information

Effective Term	Spring 2026

General Information

Course Bulletin Listing/Subject Area	Molecular Genetics
Fiscal Unit/Academic Org	Molecular Genetics - D0340
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	2500.01
Course Title	Introductory Genetics
Transcript Abbreviation	Intro Genetics
Course Description	This course provides an introduction to basic genetic principles including inheritance, molecular genetics, regulation of genetic information, genetic technology, and population genetics with a focus on real world applications. Through the use of special topic and case studies you will ground this knowledge in real world societal concerns including human health, agriculture, and biotechnology.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites	Pereq: Biology 1101, 1102, 1110, 1112, 1113.xx, or 1113H
Exclusions	Not open to students with credit for 4500.xx, 4500E, or 4606.
Electronically Enforced	Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	26.0801
Subsidy Level	Baccalaureate Course
Intended Rank	Freshman, Sophomore, Junior

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Understand the molecular structure of the genetic material and the mechanisms of DNA replication
- Understand how genomes are passed from generation to generation in prokaryotes and eukaryotes, including the stages of Meiosis and mitosis
- Follow alleles in families using appropriate Mendelian terminology, Punnett squares and pedigree analysis
- Describe genetic linkage and how homologous recombination affects allele transmission
- Describe factors that alter the Mendelian relationship between genotype and phenotype, including incomplete penetrance, variable expressivity, sex-limited phenotypes, and organellar inheritance
- Describe the molecular processes of transcription and translation and understand the roles of non-coding RNAs in this process
- Explain how the genetic code relates transcription to translation
- Understand experimental techniques in recombinant DNA technology and describe their use in biotechnology
- Contrast the regulation of gene expression in prokaryotes and eukaryotes
- Understand DNA packaging including how histone and DNA modifications contribute to euchromatin, heterochromatin, and epigenetic inheritance
- Explain how genes and genomes control changes in an organism’s structure and function throughout its life cycle, including how gene expression gradients can establish embryonic polarity and how histone modification modulates gene activity during cell
- Explain the relationship between chromosomes and sex determination, including an understanding of the sex determination cascade
- Explain how chromosome variation and changes in gene dosage affect phenotypes in animals and plants
- Describe how mutations affect phenotypes including how trinucleotide expansions alter gene function
- Explain the difference between organismal and population genetics.
- Explain methods of genetic testing and understand the current state of gene therapies

  Identify and critique scientific issues relating to biology ethics in genetics

Content Topic List

- Mendelian genetics
- Extensions and modifications of inheritance patterns
- Pedigree analysis
- Linkage, recombination, and gene mapping
- The central dogma
- DNA structure, replication, and chromosome organization
- Gene expression: transcription/translation
- Recombinant DNA technology and applications
- Regulation of gene expression
- Special topics

Sought Concurrence

No

Attachments

- MG2500 syllabus for curriculum system.pdf: Syllabus

  (Syllabus. Owner: Cole,Susan Elizabeth)

- Cover letter for Molgen 2500.pdf: Cover letter

  (Cover Letter. Owner: Cole,Susan Elizabeth)

Comments

- No relevant units identified for concurrence. No update to MolGen curricular map, as this course will not meet any requirements for the major. *(by Cole,Susan Elizabeth on 04/25/2025 10:06 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Cole,Susan Elizabeth	04/25/2025 10:06 AM	Submitted for Approval
Approved	Cole,Susan Elizabeth	04/25/2025 10:06 AM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	04/30/2025 03:17 PM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Neff,Jennifer Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	04/30/2025 03:17 PM	ASCCAO Approval

THE OHIO STATE UNIVERSITY

Department of Molecular Genetics

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April 25th , 2025

Dear Members of the ASCC,

The Department of Molecular Genetics is requesting the creation of a new course, to be titled "MOLGEN-2500, Introductory Genetics". This course will cover principles of inheritance and molecular genetics at an introductory level and will allow us to better serve students in life sciences majors outside of Biology, for whom the new MolGen 2500 course may be an attractive Genetics class, while maintaining the Biology curriculum which requires completion of MolGen4500. Our rationales for course development are:

1) At this time, students who enroll in MolGen 4500 may have very different backgrounds (some have taken Biology1101 or the equivalent, while others have taken Biology 1113) and this differential background leads to differential student success. This may provide barriers non-ASC majors who want to take a genetics class. By creating a course accessible to students with biology background at the 1101 or 1102 level, we will offer a genetics option to students in especially health-science related majors. We believe there are audiences outside of ASC (i.e. nursing, health and rehab science) for whom a genetics course at the 2000 level will be appropriate preparation and will be more attractive than the current Molgen 4500, which is currently the only general genetics course offered at OSU.
2) In our current curriculum, MolGen 4500 is the only course that meets the OSC028 TAG. Because the Transfer articulation agreement is really intended to cover introductory coursework, the current situation where outside courses that cover the OSC028 TAG transfer in as MolGen 4500 is not optimal. MolGen covers many topics at greater depth than most courses that transfer in and contains advanced content beyond that required for the OSC028 TAG, leading to concerns that students in the Biology major and other life science majors in ASC who transfer a 2000-level Genetics course from another institution and have it count as Molgen 4500 will be inadequately prepared for upper-level biology classes that assume students have completed the Molgen 4500 content.

MolGen2500 will be accessible for students in Health Sciences majors who have taken Biology 1101, providing an attractive new genetics course for this student population. We have developed a syllabus that covers key concepts in Genetics that are essential for success in all biological sciences fields and that are contextualized via a series of content-related “Special Topics” to help students understand how it applies to our society. Each module closes with a case study to help students integrate and synthesize their new knowledge. Instructors may use these supplemental topics and case studies to tailor the class to various student audiences.

After approval of the initial in-person version of the class, we plan to develop synchronous and asynchronous online versions of the course that will be more accessible for non-traditional learners.

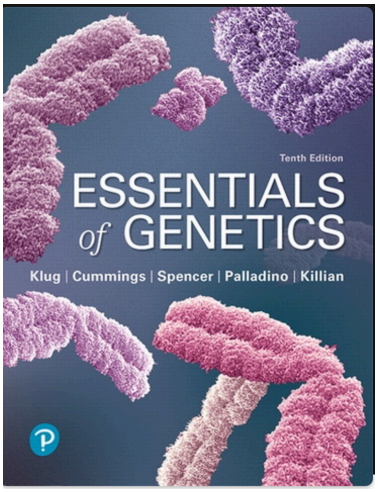
Sincerely,

Susan E Cole

Susan Cole, Ph.D.
Chair of Molecular Genetics

Molecular Genetics 2500, Introductory Genetics
Semester XXX
Lecture course, 3 credit hours

Instructor TBA
OfficeTBA
Email TBA
Phone TBA
Office Hours: TBA



Course Description

This course provides an introduction to basic genetic principles from classical Mendelian inheritance to modern molecular biotechnology, with a focus on real world applications. Major topics include inheritance, molecular genetics, regulation of genetic information, application of genetic technology, and population genetics.
Through the use of special topic and case studies you will ground this knowledge in real world societal concerns including human health, agriculture, and biotechnology.

Course learning outcomes

This Course meets the expectations for the Ohio OSC-028 Biology (Genetics) TAG. After completion of this course, students will

- Understand the molecular structure of the genetic material and the mechanisms of DNA replication
- Understand how genomes are passed from generation to generation in prokaryotes and eukaryotes, including the stages of Meiosis and mitosis
- Follow alleles in families using appropriate Mendelian terminology, Punnett squares and pedigree analysis
- Describe genetic linkage and how homologous recombination affects allele transmission
- Describe factors that alter the Mendelian relationship between genotype and phenotype, including incomplete penetrance, variable expressivity, sex-limited phenotypes, and organellar inheritance
- Describe the molecular processes of transcription and translation and understand the roles of non-coding RNAs in this process
- Explain how the genetic code relates transcription to translation

- Understand experimental techniques in recombinant DNA technology and describe their use in biotechnology
- Contrast the regulation of gene expression in prokaryotes and eukaryotes
- Understand DNA packaging including how histone and DNA modifications contribute to euchromatin, heterochromatin, and epigenetic inheritance
- Explain how genes and genomes control changes in an organism's structure and function throughout its life cycle, including how gene expression gradients can establish embryonic polarity and how histone modification modulates gene activity during cell differentiation
- Explain the relationship between chromosomes and sex determination, including an understanding of the sex determination cascade
- Explain how chromosome variation and changes in gene dosage affect phenotypes in animals and plants
- Describe how mutations affect phenotypes including how trinucleotide expansions alter gene function
- Explain the difference between organismal and population genetics.
- Explain methods of genetic testing and understand the current state of gene therapies
- Identify and critique scientific issues relating to biology ethics in genetics

Prerequisites: Biology 1101, 1113, or equivalent

Course website:

Some notes and supplemental materials will be available on Carmen/Canvas. Assigned readings from Klug, Cummings, Spencer, Palladino, Killian: Essentials of Genetics will be available at the Carmen website before class. In-class assignments will be turned in on Carmen, and module exams will be completed in the Quizzes section on the Carmen site for the course. If you have not used Carmen before, please visit the following page.

Course communication:

Announcements through Carmen are the main communication pathway for the class. I urge you to adjust carmen notification settings so you are alerted to new announcements.
The best way to communicate with me is via email either through Carmen or from your buckeyemail.osu.edu email. Please be aware that emails from addresses other than buckeyemail.osu.edu email may be missed or may be sent to our junk or spam folder by the OSU email system. Please include the class name and number in the title of your email.

Workload expectations:

This course is a 3-credit hour class. Credit hour definitions anticipate that students will spend at least 3 hours per week on work associated with a class for each credit hour earned (counting time in and out of class). This class meets three times a week for 55 minutes/meeting, and I anticipate that students will need to devote additional time to the course outside of class meetings (readings, mastering genetics assignments, studying for quizzes), leading to a commitment of at least 9 hours per week. Students can anticipate reading approximately 1 textbook chapter each week (20-30 pages). Readings will need to be done in advance so that students can complete Mastering Genetics pre-lecture assignments by the due date (before topics are discussed in class). Mastering Genetics module closing assignments will help you judge your readiness for each quiz.

Required Course Materials

1. Textbook: Available via CarmenBooks

The text for this offering will be 10th edition of Klug, Cummings, Spencer, Palladino, Killian: Essentials of Genetics, **AND** access to the corresponding Mastering Genetics. The textbook and courseware for this course is being made available via CarmenBooks. Through the CarmenBooks program students obtain publisher materials electronically through CarmenCanvas, saving up to 80% per title. The fee for this material is included as part of tuition and is listed as CarmenBooks fee on your Statement of Account. In addition to cost-savings, materials provided through CarmenBooks are available immediately on or before the first day of class. There is no need to wait for financial aid or scholarship money to purchase your textbook.
Unless you choose to opt-out of the program, you do NOT need to purchase any textbook materials for this course at the bookstore. For more information on the program or information on how to opt out, please visit the CarmenBooks website

2. TopHat Response student response system

We will use the TopHat student response system during class (see below). You can learn more about TopHat at the OSU Teaching & Learning Resource Center

Course Technology

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help, and support for urgent issues is available 24/7.

- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Baseline technical skills for course

- Basic computer and web-browsing skills
- Navigating Carmen: for questions about specific functionality, see the Canvas Student Guide.

Required equipment

- Computer: current Mac (OS X) or PC (Windows 10) with high-speed internet connection
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Software

- Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found at go.osu.edu/office365help.
- Respondus Lock-Down browser. Exams will be online and taken using the Respondus Lockdown browser
  • If you need help, please contact the OIT Service Desk: 614-688-HELP (4357) (TDD: 614-688-
  8743) or email http://8help.osu.e

Carmen access

You will need to use BuckeyePass multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

Course Grading:

	Source	Percent
1	Module 1-3 Mastering Genetics assignments	20
2	TopHat Participation Points	6
3	Case studies	9
4	Module 1 Quiz	15
5	Module 2 Quiz	15
6	Module 3 Quiz	15
7	Comprehensive Final Exam	20
	Total	**100**

Mastering Genetics Assignments (20%)

We will use the Mastering Genetics web-based tools for assignments and activities. After you buy your e-book and get the Mastering Genetics access code, you can now go directly to the Mastering Genetics site using the "Access Pearson" link on the Carmen webpage for MG2101. Instructions to activate your course are in the announcements page of the MG2101 site. Starting week 1 you will have textbook specific assignments and activities that you need to complete for course credit. The site will also provide you with additional resources to better understand the course material. Mastering Genetics assignments will be in two parts

A. Mastering Genetics Pre-lecture assignments (8%)

There will be short pre-lecture assignments for selected chapters that we will be exploring in each module (2.5 points per chapter, 55 points total). These pre-lecture quizzes are designed to get everyone on the same basic level as we begin chapters with respect to the content in those chapters. These pre-lecture quizzes must be completed by the assigned date and time found in mastering genetics.

B. Mastering Genetics Module closing Assignments (12%)

Before each module exam there will be a mastering genetics assignment covering the material from all of the chapters on that module exam. These assignments tend to be more difficult than the

actual exam, but they are very good to evaluate your preparedness for the module exams, and to develop proficiency of module concepts. If you have questions on these assignments, it is important to interact with the instructor and/or teaching assistants during virtual office hours to address/resolve difficulties with material.

TopHat Participation (6%)

This course will be incorporating the TopHat student response system to ask questions and gather students' responses during a lecture. TopHat is provided to you at no charge through OSU. TopHat responses will count towards a total of 6% of your final grade. Full points will be earned for engagement, regardless of whether your answers are correct or incorrect. To account for occasional, unanticipated absences (illness, interviews, etc) 2 days worth of TopHat responses will be dropped from the final grade

Case studies (9 %)

Case studies will be completed in class working in groups with a final document submitted via Carmen. Case studies are modified from those found at the National Science Teaching Association. They have been modified as needed for our class, and are used according to NSTA's "fair use" description. These will help you synthesize information from the entire module, and are expected to help improve your performance on the upcoming module quiz. If you must miss a case study class for a legitimate documented reason, you can make up an equivalent activity on your own.

Module Quizzes (15% each)

Module quizzes will be taken in-person in our regular classroom during scheduled class periods. However, they will be completed online using Carmen quizzes on a desktop, laptop, netbook, or an iPad. You will need to install and test the Respondus lockdown browser on your device in advance of Quiz 1.

Comprehensive final exam (20%)

The exam taken during the final exam period will cover the material from all three modules, and from the special topics sessions. Each module will contribute to 30% of the exam content and the special topics materials will contribute the final 10%.

Course Grade Scale:		
From	To	Grade
93	100	A
90	92.9	A^-
87	89.9	B^+
83	86.9	B
80	82.9	B^-
77	79.9	C^+
73	76.9	C
70	72.9	C^-
67	69.9	D^+
63	66.9	D
0	62.9	E

Academic Integrity and Misconduct: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-48.7 (B)). For additional information, see the Code of Student Conduct.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Expectations: Please note that, although exams will be online you cannot work together on the exam questions. Your written assignments should be your own original work. You should always cite the ideas and words of your research sources. While peer discussions inside and outside of class, as well as participation in study groups, are encouraged, remember that comparing or sharing answers on an assignment or exam is not permitted. If you're unsure about a particular situation, please feel free just to ask ahead of time.

Disability Services

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. 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 me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact **The Office of Institutional Equity**. **(Policy: Religious Holidays, Holy Days and Observances)**

Attendance policy

If you miss a class meeting, you should get notes from a classmate, read the relevant materials, and then you may make an appointment with the instructor or TAs to go over any material you need assistance with. You must be in attendance to earn TopHat points (two day's worth of TopHat engagement will be dropped to allow for unexpected illness, interviews, etc).

An excused absence from a midterm exam (illness, university activity, etc) will lead to an opportunity to make up the exam within one week of the original exam date. If this is not possible, the corresponding section of the cumulative final exam will be used to calculate an equivalent grade for the missed midterm. This opportunity is generally only available for one midterm. An excused absence from the cumulative final exam will result in an assignment of an "Incomplete". Should this happen, please contact me as soon as practical to work out details for a makeup exam.

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via CarmenCanvas.

Course Outline

Module 1: How genes are inherited
Mitosis and Meiosis (Chapter 2)
Mendelian Genetics (Chapter 3)
- Special topic: Sickle Cell Anemia and pleiotropic alleles

Modification of Mendelian Ratios (Chapter 4)
- Special topic: Organellar inheritance

Linkage in Eukaryotes (Chapter 7)
Population and Evolutionary Genetics (Chapter 21)
Case study: Cystic Fibrosis: Then and now

Module 2: What genes are
DNA Structure and Analysis (Chapter 9)
DNA Replication (Chapter 10)
- Special topic: telomerase and cancer

The Genetic Code and Transcription (Chapter 12)
Translation and Proteins (Chapter 13)
- Special topic: non-coding RNAs – discovery in plants and effects on human health

Recombinant DNA and biotechnology (Chapter 17)
Case study: The Mystery of the Massively Muscular Myostatin Bull

Module 3: How genes affect phenotypes
Variation in Chromosome number (Chapter 6)
Mutations and protein function (Chapter 14.1, 14.5)
- Special topic: Trinucleotide repeats and human health

Regulation of Gene Expression in prokaryotes (Chapter 15)
Regulation of Gene Expression in eukaryotes (Chapter 16)
- Special topic: Epigenetics and Human Health

Sex Determination and Sex Chromosomes (Chapter 5)
Developmental regulation by gene expression
Case study: The Dutch Hunger Winter

Special topics
The American Eugenics Movement
Genetic Testing and Gene Therapy
Genetically Modified Organisms

MG2500 Tentative Weekly Schedule, (Spring Semester 2026 dates used)

Mon Jan 12 Introduction and history of genetics
Wed Jan 14 Mitosis and Meiosis (Chapter 2)
Fri Jan 16 Mendelian Genetics (Chapter 3)
Mon Jan 19 NO CLASS. MLK DAY
Wed Jan 21 Mendelian Genetics
Fri Jan 23 Special topic: Sickle Cell Anemia and pleiotropic alleles
Mon Jan 26 Modification of Mendelian Ratios (Chapter 4)
Wed Jan 28 Modification of Mendelian Ratios
Fri Jan 30 Special topic: Organellar inheritance
Mon Feb 2 Linkage in Eukaryotes (Chapter 7)
Wed Feb 4 Linkage in Eukaryotes
Fri Feb 6 Population and Evolutionary Genetics (Chapter 21)
Mon Feb 9 Case study: Cystic Fibrosis: Then and Now
Wed Feb 11 Quiz 1
Fri Feb 13 DNA Structure and analysis (Chapter 9)
Mon Feb 16 DNA Structure and analysis
Wed Feb 18 DNA Synthesis and replication (Chapter 10)
Fri Feb 20 DNA Synthesis and replication
Mon Feb 23 Special topic: telomerase and cancer
Wed Feb 25 The Genetic Code and Transcription (Chapter 12)
Fri Feb 27 T The Genetic Code and Transcription
Mon Mar 2 Translation (Chapter 13)
Wed Mar 4 Translation
Fri Mar 6 Special topic: non-coding RNAs
Mon Mar 9 Recombinant DNA and biotechnology (Chapter 17)
Wed Mar 11 Case study: The Mystery of the Massively Muscular Myostatin Bull
Fri Mar 13 Quiz 2
Mon March 16th - Friday March 20th: NO CLASS, SPRING BREAK
Mon Mar 23 Variation in chromosome number in animals (Chapter 6)
Wed Mar 25 Variation in chromosome number in plants
Fri Mar 27 How mutations affect protein function (Chapter 14.1, 14.5)
Mon Mar 30 Special topic: trinucleotide repeat expansions and human health
Wed Apr 1 Regulation of Gene Expression in prokaryotes (Chapter 15)
Fri Apr 3 Regulation of Gene Expression in prokaryotes
Mon Apr 6 Regulation of Gene Expression in eukaryotes (Chapter 16)
Wed Apr 8 Regulation of Gene Expression in eukaryotes
Fri Apr 10 Special topic: Epigenetics in human health
Mon Apr 13 Sex Chromosomes and Sex Determination (Chapter 5)
Wed Apr 15 Developmental outcomes from gene regulation
Fri Apr 17 Case Study: The Dutch Hunger Winter
Mon Apr 20 Quiz 3
Wed Apr 22 Special Topic: American Eugenics movement
Fri Apr 24 Special Topic: Genetic Testing and Gene therapy
Mon Apr 27 Special Topic: Genetically modified organisms

The final exam will be held as scheduled through the registrar. Do not make travel or other plans that conflict with the final exam.