

## ANTICIPATED SCHEDULE OF MOLECULAR GENETICS COURSE OFFERINGS 2024/25

- Only 3 credit hours graded S/U can count towards the 30 credit hour major
- Only 3 credit hours at the 2000 level can count towards the 30 credit hour major
- Molgen 4700 (Molecular Cell and Developmental Biology) can not be used as elective credit for the major unless you have PRIOR permission from your faculty advisor.

Changes may occur due to staffing or enrollment.

### CORE COURSES

	Summer 2024	Autumn 2024	Spring 2025
<b>MolGen 4606</b> (4 cr) Molecular Genetics (Prereq: Bio 1113)	no offering	Drs. Booton and Singh	Dr. Chamberlin
<b>MolGen 5601</b> (3 or 4 cr) Eukaryotic Molecular Genetics Lab (Prereq: MolGen 4500 or 4606)	no offering	no offering	Drs. Wharton and Wu
<b>MolGen 5602</b> (3 or 4 cr) Eukaryotic Cell and Developmental Biology Lab (Prereq: MolGen 4500 or 4606)	no offering	Dr. Seeger	no offering
<b>MolGen 5607/E</b> (3 or 4 cr) Cell Biology (Prereq: MolGen 4500 or 4606)	no offering	Drs. Herman and Meier (5607 and 5607E)	Drs. Park and Huang (5607 only, no 5607E offering)
<b>MolGen 5608/E</b> (3 or 4 cr) Genes and Development (Prereq: MolGen 4500 or 4606)	no offering	no offering	Drs. Dobritsa and El-Hodiri
<b>MolGen 5645</b> (2 cr) Quantitative, Population, and Evolutionary Genetics (Prereq: MolGen 4500 or 4606)	no offering	Drs. Seeger and Ou	no offering
<b>Biochem 4511</b> (4 cr) Introduction to Biological Chemistry	Offered through Biochemistry	Offered through Biochemistry	Offered through Biochemistry

### ELECTIVE COURSES

	Summer 2024	Autumn 2024	Spring 2025
<b>MolGen 2220H</b> (1 cr) Introduction to Molecular Life Sciences: Research Opportunities and Career Options (Prereq: Bio 1113) (Contact Dr. Hopper to discuss enrollment if you are not a student in Honors or Scholars)	no offering	Dr. Hopper	Dr. Hopper
<b>MolGen 2690</b> (3 cr) Genes and Society Interdisciplinary course, cross listed in Philosophy.	no offering	no offering	Drs. Cole and D'Arms

**ELECTIVE COURSES CONTINUED****Summer 2024****Autumn 2024****Spring 2025**

<b>MolGen 3300</b> (3 cr) General Plant Biology (Prereq: Bio 1113)	no offering	no offering	Dr. Hamel
<b>MolGen 3436</b> (3 cr) Introductory Plant Physiology (Prereq: Bio 1113)	no offering	Dr. Somers	no offering
<b>MolGen 4581S</b> (1 cr, graded S/U) BioEYES: Hands-on STEM learning with zebrafish in Columbus Public Elementary Schools (Prereq: Bio 1113, and an upper division science or science ed course)	no offering	Dr. Amacher	no offering
<b>MolGen 4591S</b> (1 cr, graded S/U) DNA Fingerprinting Workshop (Prereq: MolGen 4500 or 4606)	no offering	no offering	Dr. Bird
<b>MolGen 4703</b> (3 cr) Human Genetics (Prereqs: MolGen 4500 or 4606)	no offering	Dr. Cole	no offering
<b>MolGen 5300</b> (3 cr) Cancer Genetics (Prereqs: MolGen 4500 or 4606, and 5607 recommended)	no offering	Drs. Ch. Burd and Cr. Burd	Dr. El-Hodiri
<b>MolGen 5623</b> (2 cr) Genetics and Genomics (Prereq: MolGen 4500 or 4606, 5607, and 5608)	no offering	no offering	TBA
<b>MolGen 5630</b> (3 cr) Plant Physiology (Prereq: MolGen 4500 or 4606 and 3300)	no offering	no offering	no offering
<b>MolGen 5632</b> (2 cr) Insect Molecular Genetics (Prereq: MolGen 4500 or 4606)	no offering	no offering	no offering
<b>MolGen 5650</b> (3 cr) Analysis and Interpretation of Biological Data (Prereqs: Math 1149 or 1150, and 10 credit hrs of life science courses at the 3000 level or higher)	no offering	Dr. Booton	no offering
<b>MolGen 5700</b> (3 cr) Systems of Genetic Analysis (Prereqs: 5607 and 5608; <a href="#">this is a class designed for 1<sup>st</sup> year grad students. Talk to your advisor!</a> )	no offering	Drs. El-Hodiri, Dobritsa, and Wharton	no offering
<b>MolGen 5701</b> (3 cr) DNA Transactions and Gene Regulation (Prereqs: 4500 or 4606 and Biochem4511; <a href="#">this is a class designed for 1<sup>st</sup> year grad students. Talk to your advisor!</a> )	no offering	Drs. Bisaro and Cr. Burd	no offering

### ELECTIVE COURSES CONTINUED

<b>MolGen 5705</b> (2 cr) Advances in Cell Biology (Prereqs: 5607; <a href="#">this is a class designed for 1<sup>st</sup> year grad students. Talk to your advisor!</a> )	no offering	no offering	Drs. Meier, Huang, Park, and Wu
<b>MolGen 5715</b> (2 cr) Developmental Genetics (Prereqs: 5608; <a href="#">this is a class designed for 1<sup>st</sup> year grad students. Talk to your advisor!</a> )	no offering	no offering	Drs. Dawes and Belote
<b>MolGen 5735</b> (3 cr) Plant Biochemistry (Prereq: Biochem 4511)	no offering	no offering	no offering
<b>MolGen 5800</b> (2 cr) Organelle Biology (Prereq: MolGen 4500 or 4606)	no offering	Dr. Hamel	no offering

### COURSES INTENDED ONLY FOR NON-MAJORS

	Summer 2024	Autumn 2024	Spring 2025
<b>Molgen 1101</b>	no offering	no offering	no offering
<b>MolGen 4500.01/E 4500.02</b> (3 or 4 cr) General Genetics (Prereq: Bio1113 and 3 additional cr hrs in Biological Sciences)	2 offerings planned (8 wk session 2) <ul style="list-style-type: none"> <li>• one in person (4500.01)</li> <li>• one synchronous remote (4500.02)</li> </ul>	2 in person offerings planned (4500.01)	2 in person offerings planned (4500.01)
<b>Molgen 4501</b> (1 cr) General Genetics Laboratory (Prereq: MolGen 4500 or 4500E, or permission of instructor)	Dr. Booton 8 wk session 2	2 offerings planned	2 offerings planned
<b>Molgen 4502</b> (2 cr) Expanded General Genetics Laboratory (Prereq: MolGen 4500 or 4500E, or permission of instructor)	no offering	no offering	no offering
<b>MolGen 4700</b> (3 cr) Molecular Cell and Developmental Biology NOTE: <a href="#">this class MAY BE an appropriate elective for MolGen majors IF AND ONLY IF they have advisor permission BEFORE registering</a> (Prereqs: MolGen 4500 or 4606)	no offering	Drs. Fisk and El-Hodiri	no offering