

# Biol 245 Course Syllabus

## Genetics

### Instructor:

### Course Section(s):

### Office (place):

### Office Hours:

**Course Description:** Genetics is an introduction to the basic concepts of human heredity and cytogenetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and biotechnological applications.

**Pre-requisite:** The following pre-requisites must be completed before enrolling in this course:

* A ‘C’ or better in both Science Majors General Biology I Lecture and Lab or equivalent.
* Transfer credit from other intuitions, prerequisites verification from other schools may be done by the Dean of Sciences, Department Head or the Science and Math Councilor.

Any student who has not successfully completed the prerequisites will be dropped from the class rolls. If you are dropped after the deadline for drop/adds/section changes, you will not be permitted to enroll in the prerequisite courses, and you will not receive a refund. Transcripts will be checked to see if you have successfully completed the prerequisite courses.

**Co-requisites:** None

**Course Goal**: Upon completion of this course, the student will be prepared to continue studies of genetics at any institution of higher learning, in pursuit of a degree in the area of science that requires a basic understanding of genetics.

**Texts, Readings and Other Educational Resources:**

* Required: Robert J. Brooker. 2017. Genetics: Analysis and Principles. 6th Ed. The McGraw-Hill Companies, Inc. \*\*WITH McGraw-Hill Connect\*\*
  + Connect access code is packaged with a new book or may be purchased separately.
* iClicker2: Please ask the instructor if you will need this tool for this course.

**Course Content**:

| **Chapter** | **Chapter title** |
| --- | --- |
| 1 | Overview of Genetics |
| 2 | Mendelian Inheritance |
| 3 | Chromosome Transmission During Cell Division and Sexual Reproduction |
| 4 | Extensions of Mendelian Inheritance |
| 5 | Non-Mendelian Inheritance |
| 6 | Genetic Linkage and Mapping in Eukaryotes |
| 8 | Variation in Chromosome structure and Number |
| 9 | Molecular Structure of DNA and RNA |
| 11 | DNA Replication |
| 12 | Gene Transcription and RNA Modification |
| 13 | Translation of mRNA |
| 19 | Gene Mutation and DNA Repair |
| 26 | Developmental Genetics |
| 27 | Population Genetics |

\*Presentation dates and depth of coverage are subject to the discretion of the instructor.\*

\*\*In addition to information provided by your instructor, it is the student’s responsibility to read and study any topics covered as presented in your text.\*\*

**Assessment**:

### Exams and Other Assessments:

### 65% of your final grade will be calculated from the exams, quizzes, homework and/or discussion questions.

* + Three major exams are given at regularly scheduled intervals.
  + Additional exams may be given at the discretion of the instructor.
  + A portion of the last scheduled exam grade may be calculated from part of the final exam.
  + Optional weekly homework and/or discussion questions.
  + Optional weekly quizzes

### 10% of your final grade will be calculated from McGraw Hill Connect and/or Learnsmart assignments and other assignments.

* 25% of the final grade will be calculated from the cumulative final exam.

Exam Rules:

* Makeup exams, quizzes and assignments are only permitted at the discretion of the instructor. There is no guarantee that makeups will be permitted. Review the instructor’s addendum for further requirements.
* Exams will not be dropped.
* The instructor will announce specific exam dates.
* Exams will cover material presented during the lecture, material assigned from your textbook, homework and handouts
* Exam format will be determined by your instructor. Questions can be in the form of multiple choice, multiple answer, true/false, matching, short answer, discussion, diagrams or essay.

Examination Policy:

* You are not allowed to wear hats, jackets, pull up hoods or sunglasses during exams.
* All material must be put away and electronic devices turned off and stored in a bag or given to the instructor before exams begin. Electronic devices including but not limited to phones, smart watches and recording devices cannot be on you during the exam.
* Students leaving the classroom during a quiz or exam may be barred from completing the assessment. The student should always ask permission before leaving.
* Academic dishonesty including but not limited to cheating, plagiarism or collusion may result in disciplinary action, including dismissal.
* Grades will be posted on canvas following exams.
* Instructors cannot give out grades over the phone or by e-mail.
* If you are not present on the day grades are discussed following an exam, you will need to make arrangements to stop by your instructor’s office during office hours
* Graded material is kept by the instructor. Any graded material that you may have, do not discard it until you have received your final grade for the course. If a mistake is made on your grade, if the instructor loses grades, or some other unforeseen event takes place you may need the graded material for proof of your grade. These events are very rare but it is best to keep track of your grades.
* If you feel like there has been a mistake with your grade, the first step is to discuss it with your instructor.
* Only final grades may be challenged or appealed. The challenged procedure must be completed before any appeal process is initiated. The procedure for challenging a final grade can be found in the Delgado Community College Catalog under Academic Policies.

### Grading Scale:

Grading is based on a standard 10-point scale:

| **Grading Scale** | **Letter Grade** |
| --- | --- |
| 90% -100% | A |
| 80% to Below 90% | B |
| 70% to below 80% | C |
| 60% to below 70% | D |
| below 60% | F |
| Failure due to insufficient participation | FN |

### FN grade:

* FN Grade is assigned when a student has not attended or participated significantly in the course.
* At midterm, all instructors are required to assign an FN grade to each student for whom the instructor identifies as not meeting the requirement for sufficient participation, to be successful in the course. The FN does not mean an earned failure grade; the FN means the instructor is unable to determine an earned grade.
* If a student receives FNs in all enrolled classes at midterm, the student will be unofficially withdrawn from the College by the College Registrar. Students who are unofficially withdrawn from the College due to all FNs at midterm may request reinstatement through the Reinstatement Procedures as outlined in the current College Catalog.

If a student does not receive all FNs at midterm, he or she remains enrolled in the classes (not dropped). A student with an FN in a class at midterm (not dropped) may return to the class; however, the instructor is not required to provide make-up provisions for missed coursework.

Midterm grades:

* Midterm grades reflect only a fraction of the work required to pass the course; therefore, this grade may not be a genuine predictor of your final grade.
* You can access your official midterm and final course grade through the LOLA/Banner Registration System

### Accessing Grades on the Internet

* To access your official midterm and final grade through the Internet go to [http://www.dcc.edu](http://www.dcc.edu/) and log into the LOLA/Banner registration System
* Your username and password are sent to your official DCC e-mail.
* Some instructors will use *Canvas* to post scores from quizzes, exams, and assignments. This is not the official grade for the course.

**Communication:** Emails will be returned within 24 hours during the week and the next business day on weekends and holidays. Grades will be posted in a timely manner. Depending on the type of assessment, the timeliness will range from 72 hours (multiple choice exams) to one week (short answer material, laboratory exams). All grades will be posted on canvas. Discuss with your instructor if Canvas gradebook calculates your grade.

**Disability Statement:** It is the general policy of Delgado Community College to provide an equal opportunity for academic success to all students. Reasonable accommodations for a student with a disability will be made provided the student has self-identified with the Office of Disability Services and has provided the required documentation. Instructors will appropriately modify their methods of instruction, course and examination requirements and general procedures to accommodate the special needs of the student provided the academic integrity of the course or examination is not violated and the accommodation does not jeopardize the health and welfare of all students. Accommodations will not be made without the letter of accommodation from the Office of Disability Services.  City Park Campus and Sidney Collier Site students may contact the City Park Campus Office of Disability Services at (504) 671-5161 or [gpeopl@dcc.edu](mailto:gpeopl@dcc.edu). The office is located in Building 2, Room 102-W.  West Bank Campus, Charity School of Nursing, and Jefferson Site students may contact the West Bank Campus Office of Disability Services at (504) 762-3191 or [jwilli6@dcc.edu](mailto:jwilli6@dcc.edu).  The office is located in the Student Life Center, Room 102-C.

**Academic Honesty Statement:** Delgado Community College requires that students adhere to the highest standards of academic integrity. Students are entrusted to be honest in every phase of their academic life and to present as their own work only that which is genuinely theirs. Cheating, plagiarism, violation of exam conditions, complicity in dishonest behavior, or other falsification of academic work is a serious breach of College standards.

Plagiarism is defined as any attempt to represent the work of another as one's own original work. More specifically, plagiarism is the direct appropriation of the language, thoughts, or ideas of another--either literally or in paraphrase--without appropriate notation on the source and in such fashion as to imply that the work is one's own original work.

Depending upon the nature of the case, a student guilty of academic dishonesty or violating examination policies may receive penalties ranging from a grade of "F" for the work submitted to expulsion from the College. Such penalties may be of both an academic and disciplinary nature.  Please refer to the College Catalog for additional information.

**College and Classroom Policies:** Instructors are encouraged to include policies and procedures regarding attendance, discipline, make-up exams, etc., in their individual course syllabus addendums.

**Title IX Statement:** Delgado Community College is committed to creating and maintaining an environment in which sexual violence against men and women is not tolerated. Intervening in such instances helps to foster a safe environment for all, while sending a message that his kind of behavior will not be tolerated and is unacceptable in our community. As part of its commitment to providing an educational environment free from discrimination, Delgado Community College complies with Title IX of the Education Amendments, which prohibits discrimination and harassment based upon sex in an institution’s education programs and activities. Title IX prohibits sexual harassment, including sexual violence, of students at Delgado Community College sponsored activities and programs whether occurring on-campus or off-campus. (<http://www.dcc.edu/title-ix/default.aspx>)

**Classroom Concerns:** Students having concerns about their class are encouraged to meet with their instructor first. If an understanding cannot be reached, then students should make an appointment to speak with the assistant department chair (Ms. Sara Strickland: sdeloz@dcc.edu) followed by the department chair (Dr. Amanda Rosenzweig: arosen@dcc.edu). If further actions are necessary, the student will be informed of who to speak with next. Students whose instructors miss an excessive number of classes should promptly contact the assistant department chair or department chair.