

Instructor Information

Name	Julie González	E-mail address	jegonzalez2@dmacc.edu
Phone number	(515) 964-6379	Fax number	(515) 965-7083
Office location	Building 4; Room 11A	Office hours	M-F 12:20-1:15 MW 2:30-3:25
Online login page	https://dmacc.blackboard.com/webapps/login/		
Web page	http://www.dmacc.edu/Instructors/jegonzalez2/		

Course Information

Semester	Spring	Year	2011
Course title	Genetics		
Course number	BIO 146	Credits	3
Section number	A	CRN number	21170
Days & Time	T & R 1:25pm-2:50pm	Location	Ankeny Campus Bld. 4 Room 03
Course description	An introductory genetics course for Biology and Biotechnology majors. Topics covered include DNA and chromosome structure and function; Mendelian genetics; molecular genetics in eukaryotes, prokaryotes and viruses; recombinant DNA technology; gene expression and the genetic basis of immunology.		
Course competencies	http://www.dmacc.edu/competencies/		

Important Dates

Midterm	http://www.dmacc.edu/academiccal.asp
Final	http://www.dmacc.edu/academiccal.asp

Textbooks & Materials

Required textbooks	<u>Genetics: A Conceptual Approach</u> , 4th Ed. B.A.Pierce. Freeman and Company, 2012.
Required materials	Calculator (no cell phones)

Course Policies

Attendance	<p>Regular attendance is essential for success in this course. Absence and tardiness interfere with the learning process, <i>even if for legitimate reasons</i>.</p> <ul style="list-style-type: none"> • Daily Participation slips will help track attendance. • Repeated tardiness is not acceptable. • If you miss a class <ul style="list-style-type: none"> ○ You are responsible for any material covered and any assignments given. Call a friend, get the assignment, and be prepared for the next class. It is your responsibility to stay caught-up in this course. • Announced and unannounced quizzes and in-class assignments will be given at the instructor's discretion. <ul style="list-style-type: none"> ○ Missed quizzes and in-class assignments <u>cannot</u> be made up this includes missing a quiz due to tardiness.
Lecture	Attached is a general lecture outline for the course. You are responsible for taking notes and reading the assigned chapters in your textbook. If you miss a class, you will have to get the notes, handouts and find out about any announcements from someone in your class. Lecture exams and a comprehensive final will be administered according to the tentative dates on the outline.
Instructor Communication	All course information sent to students will be sent to your DMACC e-mail account. If you have not yet set up the account or are unable to access it contact the help desk at 515-965-7300 or 1-800-362-2127, ext. 7300.

Study expectations	Learning happens in the minds of individuals. It is not the doing that causes learning; it is the thinking about the doing, the thinking about the experience that causes learning. Therefore, each of you is responsible for your own learning . All experiences and assignments for this course have been designed to promote your acquisition of enduring understandings about the course content. You are not doing any of the assignments for me; you are doing them for yourself. And, you deserve to do high quality work for yourself .
Assignments	Homework will be assigned throughout the semester. These may include (but are not limited to) working problems, brief oral presentations, current literature searches, etc. Specific assignments will be made at appropriate times throughout the course. <ul style="list-style-type: none"> • All work handed in must be neatly and properly done. • Assignments will not be accepted if they are messy. • When writing answers, you must be certain that you have answered all parts of a question. • If you do not understand an assignment or a question, it is your responsibility to look for help. You may come to me, go to the tutoring center or ask a friend. But your not understanding something will not be accepted as an excuse for incomplete work.
Late assignments	Missed lab exercises, in class activities and quizzes cannot be made up this includes missing them due to tardiness. Most outside assignments will be accepted up to two in-session days after the due date, however the score will be reduced by 30%.
Exams	Lecture examinations will cover the textbook; material presented in lecture, activities and related readings. Each student is responsible for the contents of the textbook and supplemental material unless the instructor specifically desires to omit a certain portion of material. <ul style="list-style-type: none"> • If you know in advance you will miss an exam you may take <u>one</u> exam ahead of time with no penalty. • Only <u>one</u> exam not taken at the scheduled time may be made-up within two weeks; however the <u>overall score is lowered for by 10% for each week the exam is not completed</u>. <ul style="list-style-type: none"> ○ For example, if the exam is taken during the first week a score of 80% will automatically become a score of 70%; the second week a score of 80% will be recorded as a score of 60%. If an examination is not made-up within two weeks of the original exam date, a grade of zero will be given for the missed examination.
Alternate activities & class cancellations	You will always receive notification of alternate activities and class cancellations. Notice may be given in advance via in-class announcements or e-mail and for unanticipated events a notice will be posted on the classroom door.
Classroom conduct	"Students are expected to conduct themselves in such a manner as to show respect for faculty, staff and fellow students, exhibit and maintain integrity and honor in all matters related to the College and not interfere with or disrupt the orderly educational processes of the College." For additional information refer to the DMACC Student Handbook: http://www.dmac.edu/handbook/welcome.asp
Cell Phone Policy	Never use your phones in the classroom. <ul style="list-style-type: none"> • This includes talking, sending text messages, playing games etc. Always set your phone to manners mode when you enter classroom. <ul style="list-style-type: none"> • If you need to speak or send a text during class time <ul style="list-style-type: none"> ○ Step out into the hallway to take care of it and rejoin the class when you are done. Failure to follow this policy will result in the loss of daily participation points.

Grading criteria	<p>Grades will be assigned according to the following scale:</p> <table border="0"> <tr> <td>100-90</td> <td>A</td> <td>89-87</td> <td>B+</td> <td>86-84</td> <td>B</td> <td>83-80</td> <td>B-</td> </tr> <tr> <td></td> <td></td> <td>79-76</td> <td>C+</td> <td>75-71</td> <td>C</td> <td>70-66</td> <td>C-</td> </tr> <tr> <td></td> <td></td> <td>65-62</td> <td>D+</td> <td>61-58</td> <td>D</td> <td>57-55</td> <td>D-</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0- 54</td> <td>F</td> </tr> </table> <ul style="list-style-type: none"> Students can keep track of their own grades using returned assignments or they may use the following website, which will be updated as time allows. Grades may be viewed online at: http://www.eclassinfo.com This is a secure website which keeps track of grades, assignments and attendance. The information is private so that only you can view your grades online using an individual <u>Student ID</u> and <u>Password</u>. <p>If you ever forget, misplace or wish to change your ID and Password contact me.</p>	100-90	A	89-87	B+	86-84	B	83-80	B-			79-76	C+	75-71	C	70-66	C-			65-62	D+	61-58	D	57-55	D-							0- 54	F
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		65-62	D+	61-58	D	57-55	D-																										
						0- 54	F																										
Weather policy	<p>“Individual circumstances such as health, childcare, rural roads, distance from the College, etc. can vary greatly among students and staff. It is always DMACC’s goal to provide safe learning conditions, as well as provide the opportunity for students to attend classes when the vast majority is able to safely attend. The final decision to come to College can only be made by the individual student based on their specific extenuating circumstances that may make it unsafe for them to travel...”</p> <ul style="list-style-type: none"> If the campus is closed due to inclement weather, check your <u>DMACC email</u> for instructions and problems or assignments which will be due for the next class period. 																																
Academic dishonesty	<p>“Academic integrity, doing one’s own work in course assignments and in tests, is one of the most important values in higher education. Receiving credit for plagiarizing or cheating violates the value of all degrees conferred. It is unacceptable for students to submit another person’s work as their own. If students quote, summarize, paraphrase or use an author’s idea, they must acknowledge the source, otherwise they are plagiarizing. Allowing others to accept credit for work not their own in tests or in written and oral reports is also cheating. Students who plagiarize or cheat will be held accountable by their instructor and are subject to the following sanctions.”</p> <ul style="list-style-type: none"> All incidences of academic dishonesty, based on my perception, will be reported to the college. During this course the first offence will result in a 0 for the work and the second offence will result in an F for the course. Severe offences may result in an immediate F for the course. <p>For additional information refer to the DMACC Student Handbook: http://www.dmacc.edu/handbook/welcome.asp</p>																																
DMACC Information Web Sites																																	
DMACC home page	http://www.dmacc.edu/																																
Instructor home pages	http://www.dmacc.edu/Instructors/jegonzalez2/																																
Admissions & registration	http://www.dmacc.edu/potenti.asp																																
Cellular phone use statement	http://www.dmacc.edu/student_services/cellphone.asp																																
Blackboard	https://dmacc.blackboard.com/webapps/login/																																
Student handbook	http://www.dmacc.edu/handbook/welcome.asp																																
Add/drop dates	http://www.dmacc.edu/registration/add_drop.asp																																
Refund policy	http://www.dmacc.edu/refund.asp																																
Support Services																																	
Accommodations	<p>“It is the policy of DMACC to accommodate students with disabilities. Any student with a documented disability who requires reasonable accommodation should contact the special needs coordinator at 515-964-6850 voice or 515-964-6810 TTY.”</p>																																
Services for students with disabilities	<p>http://www.dmacc.edu/student_services/disabilities.asp Contact the special needs coordinator at 515-964-6850V, 515-964-6809 TTY or the counseling & advising office on any campus for an Application for Accommodation.</p>																																
Academic & educational advising	http://www.dmacc.edu/advising/welcome.asp																																
Career counseling	http://www.dmacc.edu/counseling/																																

Library	http://www.library.dmacc.edu/ Building 6, room 3 Monday – Thursday 7:30 am to 9:00 pm Friday – 7:30 am to 4:00 pm Saturday – 8:00 am to 1:00 pm
Academic Achievement Center	http://www.dmacc.edu/student_services/academic_achievement_center.asp Provides academic assistance for students on a drop-in basis. Also serves as a make-up testing center. 515-964-6558 or 1-800-362-2127 ext. 6558 Building 6, Room 20 Monday – Thursday 8:00 am to 7:00 pm Friday – 8:00 am to 2:30 pm NOTE: Summer hours may vary
Testing Center	Building 6, Room 23 Sufficient time should be allowed for test completion during office hours. A photo ID is required for all testing. Fall & Spring Mon–Thu: 8 a.m. – 8 p.m. Friday: 8 a.m. – 4:30 p.m. Summer Mon, Thu, Fri: 7:30 a.m. – 4 p.m. Tue & Wed: 7:30 a.m. – 7 p.m. Spring & May Breaks Mon–Fri: 7:30 a.m. – 4 p.m. https://go.dmacc.edu/testingcenter/pages/acankeney.aspx
Computer labs	http://www.dmacc.edu/helpdesk/pc_labs.htm Building 6 Monday – Thursday 7:30 am to 10:00 pm Friday – 7:30 am to 4:00 pm Saturday – 7:30 am to 1:00 pm
Disclaimer	
<p>“This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change without notice. Any potential exceptions to stated policies and requirements will be addressed on an individual basis, and only for reasons that meet specific requirements. If you have any problems related to this class, please feel free to discuss them with me.”</p>	
Nondiscrimination Policy	
<p>Des Moines Area Community College shall not engage in or allow discrimination covered by law. This includes harassment based on race, color, national origin, creed, religion, gender, sexual orientation, age, and disability. Veteran status in educational programs, activities, employment practices, or admission procedures is also included to the extent covered by law. Individuals who believe they have been discriminated against may file a complaint through the College Discrimination Complaint Procedures. Complaint forms may be obtained from the DMACC Web site, the Ombudsperson, Judicial Officer, Human Resources Department, the campus Provost's Offices, and Academic Deans' Offices.</p> <p>Students who wish additional information or assistance may contact the Executive Dean, Student Services, Laurie Wolf, Building 1, 515-964-6437 or the EEO/AA Officer, Dr. Sandy Tryon, Human Resources, Bldg. 1, 515-964-6301 or they may refer to Student Services procedure 4645 located on the DMACC Intranet at http://my.dmacc.edu/procs.aspx . Go to Policies & Procedures and choose Student Services Procedures. Employees and applicants who wish additional information or assistance may contact the EEO/AA Officer, Dr. Sandy Tryon, Human Resources, Bldg. 1, 515-964-6301 or refer to HR Procedures 3000, 3005, 3010, 3015, and 3020 at http://www.dmacc.edu/hr/hrpp.asp .</p> <p>For requests for accommodations, the Accommodation/Section 504/ADA Coordinator, Sharon Bittner, can be contacted at 515-964-6857. Students with requests for accommodations should refer to the Student Services procedure 4610 located on the DMACC Intranet at http://my.dmacc.edu/default.aspx . Go to Policies & Procedures and choose Student Services Procedures.</p>	

Genetics Tuesday & Thursday 1:25-2:50 Tentative Lecture Schedule for Spring 2011				4th ed.
Week	Date	Day	Topic	Chapter
1	Jan 11	T	Syllabus & Introduction to Genetics	1
	13	R	Chromosomes and Cellular Reproduction	2
2	18	T	Basic Principles of Heredity	3
	20	R	(cont.)	
3	25	T	Sex Determination and Sex-Linked Characteristics	4
	27	R	EXAM 1	
4	Feb 1	T	Extensions & Modifications of Basic Principles	5
	3	R	(cont.)	
5	8	T	Pedigree Analysis, Applications & Genetic Testing	6
	10	R	Linkage, Recombination, and Eukaryotic Gene Mapping	7
6	15	T	(cont.) & Exam Review	
	17	R	EXAM 2	
7	22	T	Bacterial & Viral Genetic Systems (Start Bioinformatics Project)	8
	24	R	Chromosome Variation	9
8	Mar 1	T	(cont.)	
	3	R	DNA: The Chemical Nature of the Gene & Exam Review	10
9	8	T	EXAM 3	
	10	R	Chromosome Structure and Transposable Elements	11
10	22	T	DNA Replication and Recombination	12
	24	R	Gene Mutations and DNA Repair	18
11	29	T	Organelle DNA & Exam Review	21
	31	R	EXAM 4	
12	Apr 5	T	Transcription	13
	7	R	RNA Molecules & RNA Processing	14
13	12	T	The Genetic Code and Translation	15
	14	R	Control of Gene Expression (Prok. & Euk.) & Exam Review	16 & 17
14	19	T	EXAM 5	
	21	R	Molecular Genetic Analysis & Biotechnology	19
15	26	T	Genomics & Proteomics: Population and Evolutionary Genetics	20, 25 & 26
	28	R	(cont.) & Final Exam Review (Bioinformatics Projects Due)	
FINAL	May 3	T	Comprehensive Final Exam (May 3rd 11:30am - 1:30pm)	

This is the approximate schedule we will follow. The instructor reserves the right to alter this schedule as necessary during the course of the semester, including the dates and number of exams.

Study Buddy Contact Info

As stated in this syllabus “You are responsible for any material covered and any assignments given. Call a friend, get the assignment, and be prepared for the next class. It is your responsibility to stay caught-up in this course.”

To assist you with this you must find at least three students in your class who you will contact if you miss a class. Your study buddy can give you notes explain any assignments and pick up handouts for you.

Study Buddy #1

Name _____

Email _____

Phone _____

Study Buddy #2

Name _____

Email _____

Phone _____

Study Buddy #3

Name _____

Email _____

Phone _____

Study Buddy #4 (optional)

Name _____

Email _____

Phone _____

Study Buddy Assignment (4 pts)

As you find at least three Study Buddies fill out this form:

1. Turn in this page for today's in-class assignment.
 - a. Fill out and sign the back side.
2. Keep the Study Buddy Contact info page at the back of your syllabus.

You're Name: _____

Additional commitments you have this semester which you would like to make me aware of (activities, clubs, organizations, work, family, etc.).

Study Buddy #1

Name _____

One thing you have in common with this classmate _____

Study Buddy #2

Name _____

One thing you have in common with this classmate _____

Study Buddy #3

Name _____

One thing you have in common with this classmate _____

Study Buddy #4 (optional)

Name _____

One thing you have in common with this classmate _____

Student Information Form

Please complete the following by printing or writing legibly.

Name: _____ Phone number(s): _____

Hometown/Country of Origin: _____

Describe your career plans:

Why are you taking this course?

Describe your science and math preparation. (What courses have you taken in high school and college?):

Please feel free to indicate any comments or questions you have for me regarding this course:

PLEASE READ THE FOLLOWING CAREFULLY BEFORE SIGNING!

I have received the syllabus for the course indicated above. I have or will read it. I am aware of the following course policies:

- ✓ Attendance
- ✓ Lecture
- ✓ Instructor communication
- ✓ Study expectations
- ✓ Assignments
- ✓ Late assignments
- ✓ Exams and late exam policies
- ✓ Alternate activities & class cancellations
- ✓ Classroom conduct
- ✓ Cell phone policy
- ✓ Grading criteria
- ✓ Weather policy
- ✓ Academic dishonesty and consequences
- ✓ Resources for additional information, accommodations and services

By signing and dating this form in the space below I am indicating understanding and agreement with the above statements.

Signed: _____ Date: _____