

SYLLABUS
Biol 101G, Human Biology
NMSU Biology Department, Spring 2014

Lectures

MWF 9:30-10:30
 Foster Hall 231

Instructor

Dr. Kathryn Hanley
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 Phone: 646- 4583
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Teaching Assistant

Ms. Andrea Ellis
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Office Hours: Hanley

Mondays 10:30-11:30
 Tuesdays 1:00-2:00
 Or by appointment

Office Hours: Ellis

Tuesdays 10:00-11:00
 Thursdays 10:00-11:00
 Or by appointment

Text

Biology For A Changing World with Core Physiology, by Michele Shuster, Janet Vigna, Gunjan Sinha and Matthew Tontonoz.

Supplies

5 NMSU test score sheets **The BLUE scantron**, (available at the campus bookstore) and a No. 2 pencil are required for the exams. You will be asked to show a photo ID when you hand in your test score sheet at each exam. Please purchase the full-page size blue and white test score sheet with 184 question lines (92 on each side) and which is labeled "New Mexico State University Test Score Sheet" on the top.

Lecture Notes

I will use powerpoint slides extensively in my lectures. To assist you in notetaking, I will post PARTIAL copies of these powerpoint slides in the evening (usually by 5:00) before the day of the lecture. These slides are heavily redacted and will not substitute for coming to class and taking notes yourself.

Course Webpage

The course webpage is available in CANVAS. General course information, exam keys, required and supplementary readings, and lecture notes will be uploaded to this page. Official course communication to you will often come through your Canvas e-mail. Please access it regularly.

Biology 101 Lecture and Lab

If you are registered in the lecture (Biol 101G), you will earn a lecture grade for the 3-credit lecture course. If you are currently enrolled in the lab, Biol 101GL, it is an independent course for which you must complete assignments (and for which you will receive a separate and independent grade). Dr. Marion is the laboratory coordinator for Biol 101GL this semester. You can contact Dr. Marion by e-mail at amarion@nmsu.edu.

Course Objectives and Prerequisites

This 3-credit lecture course is designed for students who do not plan on continuing study in the sciences or the nursing program. The aim is to introduce the central principles of modern biology as well as the general philosophy and principles of science. By the end of this course you will be in a position to understand current events in biology of relevance to all people, including such newsworthy items as genetic sequencing, stem cells, cancer, biodiversity and human impacts on the environment.

Students are not expected to have any science background prior to taking this course. For general education credit (the "G" in Biol 101G) you must take the laboratory section (Biol 101L) as well as the lecture section. We do not check that you are enrolled in both, and the two courses are evaluated and graded separately. If you have any questions, please check with me or with an academic advisor. This course, in combination with Biol 101GL, is designed to satisfy the Basic Natural Sciences Component of NMSU's general education program. Please note that this course will NOT serve as a prerequisite for more advanced biology-related courses, either in the Biology Department itself, or in most other departments. Biology 111G and 211G serve this role.

New Mexico General Education Common Core

This course also addresses the State of New Mexico General Education Common Core Competencies in Area III: Laboratory Sciences. As mandated by the State, these are as follows:

- ☉ Describe the process of scientific inquiry
- ☉ Solve problems scientifically
- ☉ Communicate scientific information
- ☉ Apply quantitative analysis to scientific problems
- ☉ Apply scientific thinking to real world problems

Important "Administrative" Dates

- ☉ Martin Luther King Day: January 20
- ☉ Last Day to Drop with a "W": March 11
- ☉ Spring Break: March 24-28
- ☉ Last Day to Withdraw from the University: April 17
- ☉ Spring Holiday: April 18
- ☉ Exam week: May 5-9

Evaluation

In-class Exams: There will be four in-class exams, each worth 50 points (50 multiple choice questions). The dates of the in-class exams are listed in the lecture schedule below.

Final Exam: There will be a final exam on Monday May 10 from 8:00-10:00 am in Foster 231 worth 50 points. The final exam is MANDATORY, and will cover material from the entire course (i.e. the final exam is comprehensive).

Assignments: There will be five assignments, two of which will be administered in class and will NOT be announced in advance, and three of which will be take home. Descriptions of the three take-home assignments will be posted as designated in the class schedule.

Grading

There are 240 possible points for the course. They are broken down as follows:

- 150 points will be based on your three best in-class exams; the lowest exam score will be dropped
- 50 points will be based on your final exam
- 40 points will be based on your four best assignment grades. The lowest assignment grade will be dropped.

Grading Scale

Your grade will be based on the number of points that you earn, as shown below:

Grade	Points
A	215-240
B	191-215
C	167-190
D	143-167
F	<142

Please note that there will be NO ROUNDING (beyond rounding to whole numbers) of scores with respect to grades. In order to be fair to all students in the course, the grading scale set forth above will be strictly followed.

Grading Errors

It is your responsibility to check your exam, assignment and any other scores. If you have a question about a specific score, you must let me know in writing within one week . After one week, there is no guarantee that any action can or will be taken.

Exam Policies

Remember to bring a test score sheet, a No. 2 pencil and photo ID to every exam.

Your ID, exam and score sheet will be checked and you will be asked to initial your attendance at the exam beside your name on a class roster when you hand in your answer sheet. Exams are individual efforts- keep your eyes on your own work, and keep your exam and answers covered as much as possible as you work (please note that the student code of conduct considers "cheating or knowingly assisting another student in committing an act of cheating" [Section III.B.1] to be one form of academic misconduct). All cell phones, beepers and other electronic devices must be turned off and placed in a closed bag or under your seat during exams. You will not be allowed to consult any books or calculators during the exams, and you are asked to leave your notes and books closed and under your chair during the exam. You will be asked to leave as much space between one another as possible during the exams, and you are reminded to review the Student Code of Conduct (<http://www.nmsu.edu/%7Evpsa/SCOC/misconduct.html>). In particular, please consult section III.B and III.C of the Student Code of Conduct. Please also see the section on Academic Honesty below. Students who are found to be cheating on an exam will receive a minimum of an automatic zero for that exam (as a first offence) and the Instructor reserves the right to consider more severe penalties, especially for repeat incidences. Such penalties include automatic failure (*i.e.* an automatic grade of F) of the course, and referral to the course Dean and Student Judicial Affairs.

Missed In-Class Exams and Assignments

You are **STRONGLY** encouraged to study for and take all four in-class exams and both in-class assignments. If you take all four in-class exams, then your lowest score will be dropped and your three highest scores will count towards the 150 points from in-class exams. If you miss an in-class exam for **ANY** reason (with the exception of official university business, see below) then you will earn a zero for the missed exam. **THERE ARE NO MAKE-UP EXAMS AND NO MAKE-UP IN CLASS ASSIGNMENTS.** The zero that you earn for the missed exam or assignment will presumably represent your lowest in-class exam score, and will be dropped (*i.e.* it will not be one of the three best in-class exam scores contributing to the 150 points of your final grade earned on in-class exams, and your

remaining three in-class exam scores will be used to calculate the points earned on in-class exams). If you miss **ANOTHER** in-class exam for **ANY** reason (with the exception of official university business, see below) then you will earn a second zero (0) for the second missed exam. The take-home message: **PLEASE TAKE EVERY IN-CLASS EXAM!**

Official University Business and Missed Exams: Students who must miss an exam or class period in which there might be an in-class assignment in order to participate in an official University function must bring the specific event documentation to me at least two weeks in advance and make the necessary arrangements to take the exam early (*i.e.* before your departure). Note that handing me a travel schedule at the start of the semester is NOT a substitute for bringing me the documentation for each absence, prior to that absence. It is your responsibility to personally communicate with me for every excused absence, at least two weeks in advance of your departure. Failure to schedule an alternative (early) exam time at least two weeks prior to your departure will result in your earning a ZERO for the missed exam.

Final Exam: You **MUST** take the final exam as scheduled (*i.e.* the final exam is not an optional exam, and the points earned on the final exam will contribute to your total course points-the final exam cannot be "dropped"). If an emergency results in your missing the final exam, you must contact me with written documentation immediately (for example physician documentation of serious illness), and I must be able to verify the information. If you are making passing progress (*i.e.* an overall grade of C (70%) or better in the course) prior to the emergency, then you will be assigned an Incomplete (I). You will have to sign an I Grade Information Form stating that you will take a make-up final with me in order to complete the course, and that failure to complete the make-up final within one year will result in the assignment of a replacement grade (*i.e.* to replace the I) based on the zero for the missed final. If you are not making passing progress (*i.e.* do not have an overall grade of C or better in the course) then you are not eligible for an Incomplete and will receive a zero for the missed final, and this score will be used to calculate your final course grade. Complete information regarding I grades can be found in the Undergraduate Catalogue (in the Regulations section). Please note that the final exam date and time was set last semester by the university (before registration for the current semester), and that travel plans, for example to return home, vacation or start seasonal employment do **NOT** constitute unanticipated or unavoidable emergencies.

Academic Honesty

All students are required to maintain the highest standards of academic honesty and conduct- these are the same high standards that will be expected of you in your future academic and professional careers. The student code of conduct outlines many of these expectations, and may be found at

(<http://www.nmsu.edu/%7Evpsa/SCOC/misconduct.html>). Cheating and academic misconduct in any form will NOT be tolerated (see the penalties described in the Exam Policies section and noted at the end of this section). The student code of conduct outlines various forms of academic misconduct in section III.B. Cheating includes, but is not limited to possession and/or use of unauthorized materials during exams; copying the work of another (e.g. another student, instructor or other reference source); using the words or ideas of another (e.g. another student, instructor or other reference source), especially without proper acknowledgement and citation (but keep in mind that citing a source DOES NOT allow you to use their words and/or organization and/or structure if these are copied directly or substantially copied); providing another student the opportunity to copy your work on exams or assignment, looking at the work of another

student during exams and quizzes and providing another student the opportunity to earn participation (clicker) points when they are not in class to earn them themselves (in which case both/all students involved will be considered to have engaged in academic dishonesty, and both/all will, at a minimum, lose all of the participation (clicker) points).

An additional note about plagiarism:

Be aware of plagiarism. Do not hand in an assignment that has any form of plagiarism (intentional or unintentional). Not only must you credit your source(s) for any ideas that are not your own, but you **MUST** paraphrase in **YOUR OWN WORDS**. Changing the occasional word in a sentence does not constitute expression of the idea in your own words (*i.e.* if you submit an assignment in which you have merely changed a few words from a source, &/or have retained the structure and organization of your source, then you have submitted a plagiarized assignment, even if you have cited that source).

Again, **two key points** are (i) to cite your sources (for ideas) and (ii) to paraphrase or summarize in your own words. This is particularly important in the sciences, as we do not typically rely on "quotations". If you are unsure of anything in this regard, please come and talk to me about any concerns. You may also find some of the following websites helpful, and I encourage you to consult them for guidelines and examples dealing with this issue:

Section III.B.2 of the NMSU Student Code of Conduct

<http://www.nmsu.edu/%7Evpsa/SCOC/misconduct.html> (note that this section addresses BOTH unintentional and intentional acts of plagiarism)

<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>

<http://www.indiana.edu/~istd/overview.html>

<http://lib.nmsu.edu/plagiarism/>

ANY act of plagiarism (unintentional or intentional) will result in a **MINIMUM** of a zero for the first offense, and additional penalties will be considered, especially for repeat offenses. Such penalties include loss of ALL POINTS for ALL class/workshop assignments (*i.e.* a loss of all the possible assignment/workshop points), and more severe penalties (including but not limited to automatic failure of the course and referral to the course Dean) are also possible.

ADA and SSD

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) covers issues relating to disability and accommodations. If a student has questions or needs an accommodation in the classroom (all medical information is treated confidentially), contact:

Trudy Luken, Director

Student Accessibility Services (SAS) Corbett Center, Rm. 244

Phone: (575) 646-6840

E-mail: sas@nmsu.edu

Website: www.nmsu.edu/~ssd/

NMSU policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct, sexual violence, sexual harassment and retaliation.

For more information on discrimination issues, Title IX or NMSU's complaint process contact: Gerard Nevarez, Executive Director or Agustin Diaz, Associate Director, Office of Institutional Equity (OIE), O'Loughlin House

Phone: (575) 646-3635

E-mail: equity@nmsu.edu

Website: <http://www.nmsu.edu/~eeo/>

Attendance, Consideration, Studying & the Disclaimer

Attendance

Formal attendance will not be taken during lectures. However, it is strongly recommended that you attend and participate in all lectures, as this is your opportunity to earn class participation points and to get the most out of the class. Note also the University expectation regarding attendance, found in the current Undergraduate Catalog: "Students are expected to attend regularly all classes for which they are registered". You are responsible for all the material (including announcements of schedule or other syllabus changes and any announcements regarding the assignments) presented in lecture. If you do miss a lecture, please be sure to obtain lecture notes from another student, review the reference materials and then, once you have completed this review process, contact me if you have any remaining questions.

Consideration

Please be considerate of your classmates and the general environment while in the lecture room. **I DO NOT PERMIT CELL PHONE USE OR TEXTING IN MY CLASSROOM.** If you are sufficiently concerned about a potential emergency, please set your cell phone to vibrate, sit near a door, and step outside of the classroom to deal with your emergency. If you do not anticipate an emergency, then assume that all will be well and leave the phone off. Dogs (with the exception of aide dogs), bikes and roller blades are not allowed in the lecture room, for safety considerations. Please keep in mind that conversations with classmates (even whispered ones) can interfere with the ability of others to hear and follow the lecture. If you have a question during the lecture, please feel free to ask me (and chances are that many of your fellow classmates will also appreciate the clarification). If you know you need to leave early, please select a seat near an exit.

Study Strategy

This course covers a great deal of material. You are responsible for the lecture material as well the reading and in-class assignments. It is not always possible for your instructor to cover every topic in great depth, thus you will need to use the reference materials to develop your OWN thorough understanding of the course material. Use the lectures as a guide for your reading, and use the text to help you understand the material that we cover together in lecture. Often the figures in the text are helpful in this regard, as they summarize a great deal of information. The workshops are intended to enhance your critical thinking skills and your understanding of the course material, so take the time to do your best work on these assignments.

It is highly recommended that you review your lecture notes as soon after each lecture as possible. Use this time to supplement your lecture notes with additional helpful information from the reference material. To be sure that you understand the material, complete the additional review questions at the end of each book chapter. You will best test your understanding by trying to do these questions as if they were actual exam questions (i.e. by doing them with your notes and books closed). Form study groups (help each other learn). Draw your own diagrams or flow charts, make your own tables etc. Come to office hours to ask any questions and clarify any information. I am happy to help!

Disclaimer

The instructor reserves the right to modify the course schedule or other aspects of the syllabus during the semester as considered necessary to achieve course objectives. Any necessary changes to the syllabus (or to the course schedule) will be announced in class and you are responsible for being aware of them.

Dropping the Course

Your instructor will not automatically drop students for poor performance or attendance. It is your responsibility to do so (by completing the necessary paperwork) prior to the deadline to drop with a "W".

Biol 101G, Human Biology
Course Schedule*, Spring 2014

Date	Day	Topic/s	Readings & Other Notes
1/17	F	L1: Introduction to the Course	
1/20	M	<i>MLK Day-No Class</i>	
1/22	W	L2: The Scientific Method, pt 1	Ch 1: pgs 1-11
1/24	F	L3: The Scientific Method, pt 2	Ch 1: pgs 11-18
1/27	M	L4: The Scientific Method, pt 3 DNA: The Blueprint of Life, pt 1	Ch 7: pgs 122-129 & pgs 139-142
1/29	W	L5: DNA; The Blueprint of Life, pt 2	Ch 8
1/31	F	L6: Mendelian Inheritance	Ch 11 and Mendel's Garden
2/3	M	L7: Complex Inheritance	Ch 12: pgs 229-234 & 240-246
2/5	W	L8: DNA Forensics	Ch 7: pgs 129-139
2/7	F	Review Day	
2/10	M	Exam 1	
2/12	W	L9: What is Life?	Ch 2: pgs 20-31
2/14	F	L10: Personal Genome Sequencing: Potential and Pitfalls	"How to Sequence a Genome" †
2/17	M	L11: Cell structure	Ch 3
2/19	W	L12: Nutrition	Ch 4
2/21	F	L13: Diet, Energy, Obesity	Ch 6
2/24	M	L14: Digestion Assignment 1 posted	Ch 26
2/26	W	L15: Cell Division and Mitosis	Ch 9
2/28	F	L16: Sex and Reproduction	Ch 28
3/3	M	Review Day Assignment 1 due (hard copy, in class)	
3/5	W	Exam 2	
3/7	F	L17: Cancer	Ch 10
3/10	M	L18: Recombinant DNA, Stem Cells and Cloning	Ch 13
3/12	W	L19: Artificial Selection of Modern Dog Breeds Assignment 2 posted	
3/14	F	L20: Natural Selection & Adaptation pt 1	Ch 14
3/17	M	L21: Natural Selection & Adaptation pt 2	
3/19	W	L22: Speciation	Ch 15
3/21	F	L23: Evidence for Evolution Assignment 2 due (hard copy, in class)	Ch 16
3/24	M	<i>Spring Break</i>	
3/26	W	<i>Spring Break</i>	
3/28	F	<i>Spring Break</i>	
3/31	M	Review Day	
4/2	W	Exam III	
4/4	F	L24: Immune System	Ch 29
4/7	M	L25: Pathogens & Vaccines	
4/9	W	L26: Allergy	
4/11	F	L24: Life on Earth	Ch 17

4/14	M	L25: Major Transitions in Animal Evolution	
4/16	W	L26: Human Evolution and Diversity	Ch 20
4/18	F	Spring Holiday	
4/22	M	The Central Nervous System	Ch 27
4/23	W	Review Day	
4/25	F	Exam IV	
4/28	M	L27: Population Ecology Assignment 3 posted	Ch 21
4/30	W	L28: Population Ecology pt 2	
5/2	F	L29: Ecosystems & Sustainability Assignment 3 due (in class, hard copy)	Ch 23
5/5	M	Final Exam: 8:00-10:00 am in Foster 231	

* Will be updated as necessary in class- you are responsible for being aware of these updates

† Posted on Canvas