

2015

# Biology 121 Anatomy and Physiology Spring 2015

Valentina Mitev

*Parkland College*, [vmitev@parkland.edu](mailto:vmitev@parkland.edu)

---

## Recommended Citation

Mitev, Valentina, "Biology 121 Anatomy and Physiology Spring 2015" (2015). *Biology Courses*. Paper 5.  
[http://spark.parkland.edu/bio\\_course/5](http://spark.parkland.edu/bio_course/5)

Open access to this Course Materials is brought to you by Parkland College's institutional repository, [SPARK: Scholarship at Parkland](#). For more information, please contact [spark@parkland.edu](mailto:spark@parkland.edu).

PLEASE READ THIS DOCUMENT AND ALSO THE SYLLABUS ADDENDUM DOCUMENT THOROUGHLY AS THESE CONTAIN IMPORTANT COURSE AND COLLEGE POLICY AND SERVICES STATEMENTS. You are expected to be familiar with and adhere to the policies stated in these two documents.

Biology 121 and 122 are transfer level courses designed to give you an understanding of the structure and function of the human body. Biology 121 includes chemistry review, fluid/electrolyte/pH balance, cell biology/histology, organic chemistry, biochemistry, and metabolism, followed by study of the skeletal, muscular, and nervous systems. Biology 122 provides detailed analysis of senses organs; the endocrine, cardio-vascular, lymphatic, respiratory, urinary, reproductive, and digestive systems; nutrition, metabolism, the integument, and human development. Laboratory exercises offer concrete examples of concepts and stress basic skills and careful observation. We use human cadavers (Veterinary Technology students use cats).

**PREREQUISITE FOR BIO 121**

Successful completion of high school or CHE 100 or 106 within the past three years OR a passing grade on the Parkland College Chemistry Competency Test. High school or college biology is also very helpful.

**SPECIAL NOTE:** If you are or become pregnant, you should consult your physician as to the advisability of participating in the cadaver portions of BIO 121 or 122.

**REQUIRED BOOKS** (available in Parkland Bookstore)

- Modules and Labs for Anatomy & Physiology I: BIO 121
- Visual A&P, Martini, Ober, and Nath; Pearson © 2015(used for both BIO 121 AND 122)
- Mastering A&P (access code bundled with textbook)

**RECOMMENDED RESOURCES** (all bundled with new textbook)

- Martini’s Atlas of the Human Body, Martini; Pearson© 2009
- Practice Anatomy Lab CD, Pearson
- Interactive Physiology 10-System Suite CD, Pearson
- Get Ready for A&P (Bio 121), Garrett; Pearson, © 2013

**LECTURE INSTRUCTOR INFORMATION**

Name: \_\_\_\_\_  
 Office: \_\_\_\_\_  
 Office hours: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 E mail: \_\_\_\_\_

**ROOM NUMBERS**

Anatomy/Physiology Lab: X102  
 Cadaver Labs: L248, L253  
 Natural Sciences Testing Center: L161  
 Natural Sciences Dept.: L120  
 Administrative Assistant: 217-351-2285

**LAB INSTRUCTOR INFORMATION (If different)**

Name: \_\_\_\_\_  
 Office: \_\_\_\_\_  
 Office hours: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 E mail: \_\_\_\_\_

## COURSE POLICIES

In accordance with College policy, children and visitors may not be brought to the classroom or lab.

### DISABILITY STATEMENT

If you believe you have a disability for which you may need an academic accommodation (e.g. an alternate testing environment, use of assistive technology or other classroom assistance), please contact Cathy Robinson, Director of Disability Services, Room U264, 217-353-2082, [crobinson@parkland.edu](mailto:crobinson@parkland.edu)

Students with approved accommodations through the Office of Disability Services are expected to meet privately with instructors each semester to discuss accommodations listed on their Disability Services ID card. (e.g. extended time on exams, notes, etc.) That personal introduction officially marks the beginning of your accommodations for the semester. Instructors should be allowed to view your Disability Services ID card and note approved accommodations.

Extended-Time Testing Accommodations are not accessible in the classroom. Students should schedule tests/quizzes by calling Disability Services at 353-2338, or visit them in U264. Extended time on lab practicals must be scheduled outside of the standard practical exam schedule, and at the convenience of the course instructor.

### ELECTRONIC DEVICES

Cell phones, pagers, and all other electronic devices must be **TURNED OFF** and **PUT AWAY** when in the classroom or lab unless your instructor tells you otherwise. These items are not permitted to be brought inside the Testing Center at all.

### ATTENDANCE AND ABSENCES

You are expected to attend all class sessions. To succeed in BIO 121, regular on-time attendance is extremely important. In case of illness or other emergency, you should call your instructor or the Department Secretary, in advance if possible, and report your absence. Your instructor will decide whether to excuse it.

### DROPS AND WITHDRAWALS

Around the tenth day of class, I am required to assess your attendance. If you have not attended regularly to that point, you will be dropped with no refund of tuition and fees. After this Ten-Day census date, you should not plan on an instructor withdrawal if you want to withdraw from the course, even if you quit coming. Although I retain the right to drop you for lack of attendance, you are ultimately responsible for your own withdrawal by the final withdrawal date (5/1/2015 for this course). **Non-attendance after the ten-day census date will result in an F if you don't withdraw yourself.**

### HOMEWORK /ASSIGNMENTS

BIO 121 consists of 11 modules of study. A set of specific learning objectives is included with each module. These are found in the module book required for this course. The module assignment, including readings and supplementary resources, is listed at the beginning of the module. You are expected to complete all reading and assignments on your own time. You should expect to spend at least 6 to 8 hours of study per week outside of class time. Class time is meant to introduce or summarize concepts— you are expected to study your course materials and assignments to master the content of each class session prior to the next class meeting, and you should arrive at each class *with full knowledge of previous course content* and prepared to move on to new material. This is referred to as “keeping up” with the course. Failure to “keep up” on a daily basis leads to you having far too much material to try to learn in a short period of time, and you will greatly reduce the likelihood of your success.

## STUDY RESOURCES

- Readiness evaluations to test your knowledge (these are not graded) are located online and at the end of each module in the Module book. Answers to readiness evaluations are posted in X102.
  - *Biology 121 Modules* book is your guide to the course. Each module includes learning objectives that you should use as your study guide to the course content, reading assignments, and additional information that is part of the course. It also includes Readiness Evaluations for self-quizzing. The back part of the book has lab instructions, procedures, and reports that you will need with you each week in lab, and also includes lists of specific structures for which you will be responsible on each lab practical.
  - *Atlas of the Human Body* is a great picture atlas to help you study cadaver anatomy for lab practical exams.
  - *Practice Anatomy Lab* (PAL) contains images to help you study the anatomy for labs and for practical exams, and includes substantial opportunities for self-quizzing. This resource includes both models and cadaver images.
  - *Interactive Physiology* provides interactive lessons and tutorials with many animations.
  - *Mastering A&P* gives you access to these and many other resources, such as games and flashcards, and assorted coaching exercises, and is designed to help you truly master the course content.
  - *Get Ready for A&P* is an engaging source for simple explanations and review activities in 6 areas: Study and Organizational Skills, Basic Math, Terminology, Body Basics, Chemistry, and Cells. Please work through chapter 1 so that you gain insight into how you now study and how you might study more effectively and more efficiently.
- You should keep all your modules and lecture notes as you progress through the BIO 121/122 sequence. They will be important review/reference materials.

## COURSE MANAGEMENT SYSTEM:

Bio 121 &122 courses use Cobra Learning, which is accessible via <http://my.parkland.edu>. The course website contains course information, readiness evaluations, a practice final, and links to many other tutorials and animations relative to course concepts. Your grades will also be recorded in Cobra Learning and you can communicate with me via email from our course site as well.

## USE OF TEXTS

Always use the objectives in your module/lab book as a guide for what to learn in this course. The module/ lab book contains information that will help you answer certain objectives, but you will also need to study your anatomy and physiology textbook, completing all assigned readings, throughout BIO 121 and BIO 122. **You are expected to complete all readings as assigned.**

## LABS

- Your course includes lecture, discussion, and lab components. Traditional courses meet for 50-minutes of lecture 3 days each week, one hour of discussion, and also for a 2-hour lab once a week. If you are enrolled in a single section that combines lab and lecture (hybrid, MW, or TTh sections), the amount of time you spend in each and what part of your class time will be held in which location is at the discretion of your instructor. Laboratory rules are posted in the lab and in your module book and must be observed at all times.
- Studying in pairs or small groups with other students is encouraged. An instructor will always be present during lab study times to assist.
- Students must be on time for each lab. Vital instructions are provided at the beginning of lab, and that time is also often used for returning previous labs.

- There will be NO make-up labs. If you miss a lab, it is your responsibility to notify your lecture instructor as soon as possible.

Lab Points and Grading: Many laboratory activities do not require that you hand anything in for grading. Some labs, however, will be graded through an oral exam, written exam, or an assignment/lab report that will be turned in to or performed for your instructor as follows:

*Lab Reports:* Labs 1, 2, & 9

*Lab Quizzes:* Lab Quiz 1 covers Lab 1, Lab Quiz 2 covers Labs 2 & 3 (the microscope parts), and Lab Quiz 3 covers anatomical terms

*Oral Exam:* Lab 3 – Microscope Focusing Quiz

*Practical Exams:* Histology (Labs 3 –6), Skeletal (Lab 7), Muscular (Lab 8), and Nervous (Lab 10) System

## CADAVER LAB

Cadaver labs are located in L248 and L253. Our cadavers are preserved in a phenol/alcohol/water solution. Please remember when using the cadaver lab to not wear your best clothes. Natural fibers can pick up the odor of phenol (washing will remove odor). Gloves are provided in lab. *If you have an allergy to latex, be sure your instructors know and we will provide non-latex gloves.* The cadavers are used by students from many courses each semester. They are valuable learning tools that few anatomy students have access to. In order to maintain them, it is important to remember to always treat the cadavers with respect and be very gentle when using them as study tools. Please read the cadaver care rules posted in the labs and adhere to them. See note concerning pregnancy on page 1 of this overview.

## ANATOMAGE DIGITAL DISSECTION TABLE

Parkland is extremely fortunate to have procured an Anatomage Digital Dissection table which is housed in room L245. This cutting-edge technology will be used to enhance your anatomy education. The table is essentially a very high-end computer system. Whenever you are in the Anatomage room, you must use extreme caution around the table. Absolutely no food or drink is permitted in room L245. Never lean on or place any objects on the table. Be very careful of the power cord that projects from one end of the table as it poses a potential tripping hazard. Follow all instructions provided by your instructor at all times when in room L245. Failure to follow posted rules may result in disciplinary action.

## DISCUSSION

You will spend one hour each week in a discussion section, usually immediately before your lab. This time will be used to complete a variety of activities—group activities, worksheets, case studies, and open discussion within your group and with your instructor—to enhance your learning by providing practice with and application of course content. This time is flexible, and each instructor will tailor the experience from week to week based on the progress and needs of your particular section. Please bring any questions about course content with you to the discussion class.

## COURSE TESTING

1. Module Quizzes. Module objectives are evaluated using quizzes consisting of multiple choice, true-false, and matching questions. All module quizzes are taken in the Natural Sciences Testing Center (L161) and on your own time. **Day students must take quizzes only during the day (before 4 PM Monday through Thursday and by 3 PM on Fridays).**

You are allowed only one attempt for each module quiz. Most quizzes will be open for four days, which are posted on the schedule. **There will be NO extensions allowed and NO late takes on quizzes.** If you are absent for ANY reason, excused or not, you will forfeit that quiz. However, to offset that, we will drop one lowest quiz score at the end of the semester.

After taking each quiz, you should review your answers with your instructor. YOU MAY NOT WRITE DOWN ANYTHING WHILE REVIEWING THE QUIZ. To review your quiz, you may go directly to your instructor if he or she is available.

2. Testing Center. When using the Testing Center, you are expected to follow the Testing Center Rules that are posted in Cobra Learning. In consideration of students taking quizzes, do not sit, stand, talk, or study in the hallway outside the Testing Center. No cell phones are permitted in the Testing Center at any time, and they will be confiscated if brought in. All belongings must be locked in the lockers outside the testing center. The lockers are free, but you must bring a quarter to open the locker. It will be returned when you return the key. Do not leave items unsecured in the hallway or in the lockers. Parkland is not responsible for any unsecured items that disappear.

Do not ask Testing Center personnel to show you your grades. Each student is responsible for keeping a record of his/her own grades, and grade questions should always be directed to your instructor.

3. Essay exam. One 50-minute (hour) examination is given in Biology 121 during lecture class as indicated on the course schedule posted in Cobra Learning.
4. Practical Exams. Anatomical structures are evaluated by practical examinations. Practical exams are not held during regular lab times. These are scheduled by signing up for a time (in X102) the week prior to the exam. Labs will still meet at the usual time on the weeks that practical exams are given. Practical exams begin promptly at the scheduled time. If you arrive late, you will not be permitted to enter the exam. Thus, *you must arrive at least five minutes before the exam begins.* If you miss your scheduled time or are late, please know that there are limited spots available and only at specific times. *You are not guaranteed a makeup time if you fail to show up when you are scheduled or arrive after the exam is in progress.*

During the practical, you rotate through timed stations to answer questions. For your answers, terms must be spelled correctly, be complete, and be as listed in your module book. Spelling counts 1/2 point per item on all practical exams; however we do not count off for singular vs. plural. Precise and accurate use of anatomical, physiological, and medical terminology both in oral and written form is an essential part of most Health Professions programs and an important skill to learn.

Availability of anatomical materials: No laboratory materials, equipment, or specimens (microscopes, models, cadavers, etc.) will be available on the day(s) of a practical.

5. Returning Tests. Essay exam, practical exams, and lab reports are reviewed in class or during lab. Students absent when papers are reviewed must contact their instructors during office hours to see the item. After review, all papers are taken to the Testing, so they are available for viewing only briefly.
6. Discussion Points. To keep the course relevant, encourage active engagement, and improve course assessment, your instructor will award up to 20 points for assorted additional assignments throughout the semester. The nature of these assignments is at the discretion of your instructor, with approval of the course coordinator, and may include such activities as pop quizzes administered at any time, writing assignments, group activities or discussions, analyzing external readings, etc. These points are part of your course grade and are not extra credit or bonus points, nor are they meant to provide easy points to improve low grades. These activities may or may not be announced in advance—you are expected to always attend class prepared and to have mastered material from previous lectures. If you ever feel these points are used improperly, discuss it with your instructor.
7. Final Exam. A comprehensive 100-question multiple-choice final exam is given according to the College schedule (see my.Parkland /Student Services /Academics /Final Exam Schedule). It is not possible to review missed questions on the final.

## MAKE-UP POLICIES

- There are no makeups for missed labs.
- There are no make-ups on missed module quizzes or practical examinations.
- If you must miss an hour exam, you must notify your instructor ***prior to the scheduled time of the exam***. At that time, your instructor will determine whether or not to excuse your absence. A makeup exam will be scheduled only if you have contacted your instructor in advance AND if your instructor agreed to excuse your absence. Documentation of the reason for your absence may be required. Makeup hour exams will be scheduled in the testing center as soon as possible after the absence so as not to delay return of exams to the rest of the class.
- Module quizzes will be open for multiple days, as posted on the course schedule. You are allowed only ONE attempt at each module quiz and it may be completed at any time while the quiz is open (during normal Testing Center hours) up to but not after the quiz deadline. Day students are only allowed to take quizzes in the Testing Center during daytime hours. Because each quiz is open for several days, **no make-ups are given for missed module quizzes for any reason, excused or unexcused.** However, to offset this, your one lowest quiz score will be dropped from your final grade.
- No make-ups will be given for missed instructor point assignments except under serious extenuating circumstances. Your instructor will decide on a case-by-case basis if you will be allowed a makeup. Make ups will not be allowed simply because you were absent the day of an assignment. For example, if you are absent without a serious reason when a pop quiz is administered, you forfeit those points.

## FINAL GRADE

Your final grade is determined by the total points you earn throughout the semester in accordance with the grading scale at the end of this document. Bonus points are possible on some exams throughout the Semester as follows: each lab practical—1 bonus point, essay exam— 5 bonus points. However ***no additional extra credit or bonus is available***. In computing your final points, your highest 10 module quiz scores will be used (one lowest score is dropped). In writing any type of test, you are expected to follow directions exactly. Failure to do so may result in loss of points. The number of points for each test and criteria for final grades are detailed below.

## ACADEMIC HONESTY AND INTEGRITY

**Plagiarism:** You are expected to prepare all answers in your own words (use of *individual* technical terms from a text is acceptable). Plagiarism (copying text information directly) will not be tolerated or accepted. Not only does it demonstrate a lack of learning, but it is illegal. Although we encourage students to work in groups, you must each prepare your own answers separately and in your own words. Student answers that are copied from or are identical to others, or copied directly from some other source will not be tolerated or accepted. Students who turn in such answers may receive a score of “0” for that assignment.

**Cheating:** Talking to another student about test questions of any type before all students have completed the test is not permitted and is regarded as a form of cheating. This includes discussing anything specific about the content of any module quiz, pop quiz, practical exam, hour exam, or final exam. Such discussion is considered cheating whenever it occurs—before, during, or after these quizzes or exams—if anyone is within hearing range of the information who is also a student in the course, and if it occurs at any time before all course students have completed that quiz or exam. Disciplinary action will result for all individuals involved.

**Please refer to the Academic Honesty Policy set forth in the “Student Policy and Procedures” Manual** (see Syllabus Addendum). Incidents of plagiarism or cheating will result in penalties, as outlined in that document, which may include “...a failing grade for that assignment or failure of the course.” In addition, as the Policy further states, “The faculty member ... will file incident reports with the respective department chair and the Office of the Vice President for Academic Services.” If you are not clear on what constitutes plagiarism or cheating, be sure to discuss it with your instructor. Also refer to the Student Policy and Procedures Manual for more details.

## GRADING INFORMATION

Grading System		
Assignment	Points	Percent
<b>Module Quizzes</b> 11 module quizzes: A-1 through A-11 @ 20 points each; one lowest score out of the 11 quiz scores will be dropped	200	36.4%
<b>Laboratories</b> Lab 1 Analysis & Conclusions – 15 points Lab Quiz #1 – 5 points Lab 2 Analysis & Conclusions – 15 points Lab Quiz #2 – 10 points Microscope Focusing Quiz – 5 points Histology Practical (Labs 3-6) - 40 points Lab Quiz #3 – 5 points ** Skeletal Practical - 40 points ** Muscle Practical - 30 points ** Lab 9 Analysis & Conclusions – 5 points Nervous System Practical - 30 points **	200	36.4%
<b>Essay Exam</b>	30	5.4%
<b>Discussion Points</b>	20	3.6%
<b>Final Exam</b>	100	18.2%
<b>Total Points</b>	550	100%

Grading Scale	
Final Grade	Points Total
A	495 – 550
B	440 – 494.5
C	385 – 439.5
D	330 – 384.5
F	Below 330

**\*\*In lieu of human anatomy, students currently enrolled in the VTT program will study cat anatomy with BIO 160.**



## Bio 121 Anatomy and Physiology I: Point Total Sheet-Grade Calculator

Assignment	Points Possible	Your Score	Total Score	Total pts Possible	≥ 90% Lowest A	≥ 80% Lowest B	≥ 70% Lowest C	≥ 60% Lowest D
A1	20			20	18	16	14	12
A1 Lab A & C	15			35	31.5	28	24.5	21
Lab Quiz 1	5			40	36	32	28	24
Lab 2 A & C	15			55	49.5	44	38.5	33
Lab Quiz 2	10			65	58.5	52	45.5	39
Focusing Quiz	5			70	63	56	49	42
A2	20			90	81	72	63	54
A3	20			110	99	88	77	66
A4	20			130	117	104	91	78
Histo Prac.	40			170	153	136	119	102
A5	20			190	171	152	133	114
A6	20			210	189	168	147	126
Essay	30			240	216	192	168	144
Lab Q 3	5			245	220.5	196	171.5	147
A7	20			265	238.5	212	185.5	159
Skel Prac.	40			305	274.5	244	213.5	183
A8	20			325	292.5	260	227.5	195
Muscle Prac.	30			355	319.5	284	248.5	213
Lab 9 A & C	5			360	324	288	252	216
A9	20			380	342	304	266	228
A10	20			400	360	320	280	240
Neuro. Prac.	30			430	387	344	301	258
Discussion	20			450	405	360	315	270
A11*	0			450	405	360	315	270
Final Exam	100			550	495	440	385	330

Total Points      550

Rev. 1/3/15

\*The (one) lowest quiz score will be dropped. You can replace it with your A-11 score (if A-11 is higher) and recalculate your total.