



## DAKOTA COLLEGE COURSE SYLLABUS

Course Prefix/Number/Title: BIOL 220/220L Anatomy and Physiology I

Number of Credits:4

Course Description: A study of the structure and function of the human body. Topics include chemistry, cell biology, tissues, integumentary system, skeletal system, muscular system, nervous system and endocrine system.

Pre-/Co-requisites: BIOL 150 or instructor approval

Course Objectives:

- 1) To learn and retain information essential to a broad knowledge of human anatomy and physiology.
- 2) Demonstrate the application of the scientific methods of inquiry (Goal 1; Objective 1)
- 3) Practice sound, safe, and sensible laboratory techniques.
- 4) Demonstrate knowledge of the natural environment (Goal 1; Objective 2)
- 5) Demonstrate an awareness of the role of science in everyday life (Goal 1; Objective 2)

Instructor: Janelle Green

Office: NSC 113

Office Hours: MWF 11:00-12:00pm or as scheduled

Phone: 701-228-5472

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Lecture/Lab Schedule: Arntzen IVN Rm 1; 8:00-8:50 am MWF  
NSC 128; 8:00 – 9:50 am Tues  
MiSu Swain 304 10:00-11:50 am Thurs

Textbook(s): Anatomy and Physiology. 9<sup>th</sup> or 10<sup>th</sup> ed. Patton and Thibodeau. Elsevier.

Anatomy and Physiology. 10<sup>th</sup> ed. Patton and Thibodeau. Laboratory Manual.  
Elsevier.

Course Requirements:

Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. Although subject to slight modification based on the discretion of the instructor, the lecture component of this course will consist of 775 points (10 drop quizzes worth 20 points each out of 12, 4 lecture exams worth 100 points each, one final exam worth 100 points, and various lecture assignments of 75 points total. Lecture points are

added to laboratory points, 4 practical exams (400 pts), 5 lab quizzes (100pts), and 12 weekly participation and attendance points (120 pts) totals the lab points at 620 pts. This give an approximate total of 1395 points.

**ATTENDANCE & EFFORT**—Students are required to attend the 3 one-hour Lectures, & 1 two-hour Laboratory each week. Attend each Lecture - Some Lecture material will not be found in your textbook. Additional Lecture material will be presented in the Lab. Lab material will appear during your Lecture exams, & visa-versa. You can expect to spend a minimum of 6-8 hours per week studying for this course in order to receive a minimum passing grade.

**READING**—Our text utilizes a systemic approach to the study of the human body. This method is appropriate at this level for students considering careers in the Health Sciences. Whereas each chapter deals with separate organ systems, it will be very important to keep in mind the interaction among systems as the course progresses. We will be covering a great deal of material in this class & the amount of terminology has been equated with learning a foreign language. Keep up with your chapter assignments. We will not have time to cover the entirety of your reading assignments in the time allotted for Lecture—Not all material covered in Lecture will be found in the text, nor will all topics in the text be covered in Lecture. Please come to Lecture well prepared: print or download student ppts slides prior to class, look at figures & tables & read through the assigned chapters before class, without trying to fully digest the material. Then, after Lecture, go back to the text & re-read sections that were emphasized & "flesh-out" your notes. Occasionally, I may make mistakes in Lecture. If in doubt, refer to your textbook for the proper terminology & spelling.

**LECTURE EXAMS**—Exam dates are indicated in the Course schedule. Exam dates may be changed if circumstances (due to inclement weather) so dictate - the Exam will be held on the next regularly scheduled class meeting. On exam days you **must** be on time. The door will be locked after the last exam have been handed out to the on-time students. Exams are not comprehensive; however, you will be expected to integrate previous material & vocabulary into each subsequent Exam. There will be 3 lecture Exams & a non-comprehensive Final Exam.

**MAKE-UP LECTURE EXAMS**—Make-up Exams are only granted under extreme circumstances. This opportunity is **ONLY** available if you (a) have the absence excused by the Instructor 72 HOURS PRIOR to the Exam, and/or (b) you submit a detailed letter after the exam with supporting evidence (Physician's letter, Newspaper clippings, Police reports, Obituaries, Repair bills) as to why the Exam was missed. Only one Exam can be made-up in this manner. If the missed Exam is not made-up, you will receive a score of 0.0 (zero) for that Exam. On exam days you **must** be on time. The door will be locked after exams have been handed out to on time students.

**LECTURE ASSIGNMENTS/ACTIVITIES**- In lecture there may be pretest questions, drop quizzes, hands-on activities, etc. These in total will accumulate approx. 75 points in class. If you are absent when these are given you will not be able to make them up and they will result in a 0.0 (zero) unless the instructor has a notice of at least 24 hrs prior that you will absent that day.

**LABORATORY**— Attendance is mandatory. You will receive points (10 pts/each) for attending lab and participation. Showing up does not guarantee points. You must be punctual (less than 5 min late) and participate. Refer to the schedule for Lab exercises that will be performed. We will make extensive use of models & charts. Refer to the relevant sections of the Lecture text to prepare for each Lab so that you can work efficiently & be prepared for your Quizzes. **BRING YOUR TEXTBOOK TO LAB!**

**WEEKLY LAB QUIZZES/HANDOUTS**—Lab Quizzes/Handouts (20 pts each) will cover material from Lecture, reading assignments, Lab manual objectives, & Lab kick-off presentations. Quizzes will be of mixed format, i.e., may include multiple choice, matching, completion, identification, etc., at the discretion of your Lab Instructor. Quizzes may be given at any time, unannounced or otherwise, at the beginning, during, or end of any Lab period. In order to be prepared for Quizzes, you should review your notes & keep up with the assigned reading!

**PRACTICAL EXAMS**—Four Practical Exams will cover material from Lectures, reading assignments, Lab manual objectives, & Lab kick-off presentations (100 pts each). During these exams, you will be asked to identify labeled structures indicated on the models, & charts stationed throughout the Lab.

**MAKE-UP PRACTICALS GIVEN ONLY AT THE DISCRETION OF THE LAB COORDINATOR!**

**GRADING** —Letter grades are given as follows:

A = 89.5-100% of the total points

B = 79.5 - <89.5% of the total points

C = 69.5 - <79.5% of the total points

D = 59.5 - <69.5% of the total points

F = <59.5% of the total points

**CHALLENGING A GRADE**—Questions regarding lecture exams are to be guided to the Lecture Instructor. Questions regarding practical exams are to be guided to respective Lab Instructor. Questions regarding lab quizzes can be answered by your Lab Instructor(s). Please make all inquiries regarding the accuracy of your grades within one week of the exam. Appeals must be supported by published evidence (i.e., text, atlas, lecture outlines). **NO CHANGES TO YOUR SCORE WILL BE MADE AFTER THIS ONE WEEK PERIOD!**

Tentative Course Outline:

DATE	TOPIC	READING
Lec 1	Introduction/Overview/Chpt 1	Syllabus and course information/ Chpt 1
Lec 2	Overview and Organization of the Body	Chpt 1

Lec 3	Homeostasis	Chpt 2
Lec 4	Inorganic Chemistry	Chpt 3
Lec 5	Organic Chemistry	Chpt 4
Lec 6	Anatomy of Cells	Chpt 5
Lec 7	Anatomy of Cells	
	<b>EXAM I</b>	-
Lec 8	Transport	Chpt. 6
Lec 9	Anabolism/Catabolism	Chpt. 6
Lec 10	Growth and Reproduction	Chpt. 7
Lec 11	Growth and Reproduction	Chpt. 7
Lec 12	Tissues	Chpt. 8
Lec 13	Tissues	Chpt. 9
Lec 14	Skin	Chpt. 10
Lec 15	Skin	Chpt. 10
	<b>EXAM II</b>	-
Lec 16	Skeletal System	Chpt. 11/12
Lec 17	Skeletal System	Chpt. 12/13
Lec 18	Skeletal System	Chpt. 13/14
Lec 19	Articulations	Chpt. 14
Lec 20	Articulation	Chpt. 14
Lec 21	Muscle System	Chpt. 15
Lec 22	Muscle System	Chpt. 16
Lec 23	Muscle Physiology	Chpt. 17
Lec 24	Muscle Physiology	Chpt. 17
	<b>EXAM III</b>	-
Lec 25	Nerve Cells	Chpt. 18
Lec 26	Nerve Physiology	Chpt. 19
Lec 27	Nerve Physiology	Chpt. 19
Lec 28	Nerve Physiology	Chpt. 19
Lec 29	Central Nervous System	Chpt. 20
Lec 30	Brain	Chpt. 20
Lec 31	Brain	Chpt. 20
Lec 32	Peripheral Nervous System	Chpt. 21
Lec 33	Autonomic Nervous System	Chpt. 21
	<b>EXAM IV</b>	-
Lec 34	Receptors	Chpt. 23/24
Lec 35	Smell and Taste	Chpt. 23

Lec 36	Hearing/Sight	Chpt. 23
Lec 37	Sight	Chpt. 23
Lec 38	Endocrine System	Chpt. 25
Lec 39	Endocrine System	Chpt. 26
Lec 40	Endocrine System	Chpt. 26
Lec 41	Endocrine System	Chpt. 26
	<b>FINAL</b>	<b>(Time TBD)</b>
	<b>Holidays</b>	
Jan 20	NO CLASS – Martin Luther King Day	
Feb 17	NO CLASS- President’s Day	
Mar 16-20	NO CLASS – Spring Break	
Apr 10/13	NO CLASS- Holiday	

**Tentative Lab Outline:**

WEEK	TOPIC	LAB#
Week 2	Introduction/Organization of the Body and Microscope	1 & 3
Week 3	Cell Anatomy, Transport and Cell Life Cycle	4, 5 & 6
Week 4	<b>LAB EXAM I</b>	-
Week 5	Tissues	7 & 8
Week 6	Skin and begin Skeleton	9 & 10
Week 7	Skeleton	11, 12, & 13
Week 8	Extremities and Joints	14, 15, & 16
Week 9	<b>LAB EXAM II</b>	-
Week 10	Muscles	17 & 18
Week 11	Muscles	19
Week 12	Nerves	21 & 22
Week 13	<b>LAB EXAM III</b>	-
Week 14	CNS and Brain	23, 24, & 25
Week 15	Touch/Taste/Smell	26, 27, & 28
Week 16	Ear/Eye/Endocrine	29, 30, 31, & 32
Week 17	<b>FINAL LAB EXAM</b>	-

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

- 1) To learn and retain information essential to a broad knowledge of human anatomy and physiology.
- 2) Demonstrate the application of the scientific methods of inquiry (Goal 1; Objective 1)
- 3) Practice sound, safe, and sensible laboratory techniques.
- 4) Demonstrate knowledge of the natural environment (Goal 1; Objective 2)
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Relationship to Campus Theme:

This course addresses the campus theme by incorporating the latest diagnostic procedures, treatments, and other technologies that are used to identify and treat human diseases and disorders.

Classroom Policies:

Absences:

Excused absences will be for only the following reasons and still need to be discussed with me via email, text, or phone call: sickness with a doctor's note must be emailed to me, passing of a close family member, if you're an athlete and need to miss class for a game. If you know you are going to be gone, notify me ASAP. Knowing of an absence requires you to make up work prior to being gone unless a special arrangement has been made with myself.

All requests for absences need to be reported to me immediately and directly from you, not a third party. If you do not let me know why you have missed a class or discuss with me in advanced your participation for that day will result in a ZERO. You need to make advanced arrangements with me—the SOONER THE BETTER. You need to speak with me if you know you will be gone so we can schedule make up assignments

Missing an Exam:

If you know you will be gone during an exam day you need to let me know 72 hours in advanced. If you miss an exam and I am not aware that you were going to miss it, then your grade for that exam will result in a ZERO. There will be no make-up exams for those who do not inform me of their absences on exam days.

Lab Absence:

Labs are hard to organize and setup. If you are going to absent it is easier to makeup the lab up ahead of time instead of after. Simply not showing up for lab, or being greater than 5 min late, will result in forfeiting all participation points and points for the handout if you did not notify the instructor at least 12hrs in advance that you were going to be absent. If you are ill and it is last minute you will need to provide a doctor's note or an e-mail from the school nurse in order to make up the lab.

### Lab Participation Points:

The points are awarded to students that participate equally within their group and arrive on time. Simply showing up to lab does not award you these points. They are awarded at the discretion of the instructor.

### Late Policy:

If you are planning on being late to class please be respectful of other students in the class and sit towards the back of the room (lecture). Be discrete when opening your belongings and getting prepared. During an exam date the door will be locked after the last student receives their test that was in class on time. If tardiness becomes an issue the door will be locked on all class dates 5 minutes after the start. This will be a regular occurrence for lab. If you are locked out, you will miss/lose that day's materials and all points associated with it.

### Electronic Device Policy:

Electronic devices will only be used in class for answering in-class questions and review participation. You will be instructed to use them at those times. If you are on your phone/unauthorized computer/smart watch/headphones or any other unauthorized device while not instructed by myself then, I will ask you to leave my class for that day. You should not be texting or on social media while in lecture/lab. You cannot be wearing any smart technology during ANY exam. You will be asked to remove it. If you choose to not remove it then you will be asked to leave and you will not be able to complete the exam which will result in a ZERO. All devices should be powered down during an exam. If your device is vibrating or causing a disturbance you may be asked to leave the classroom.

### Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

### Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

- If you decide to cheat and/or plagiarize you will be given at minimum a ZERO for that assignment, test, or quiz and with more serious cheating/plagiarism you will need to meet with Associate Dean for Academic and Student Affairs.

### Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services within the first two weeks of the semester to line up accommodations. If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact your instructor and/or Jackie Migler in the Disability Services TH 2213 (701-228-5672).

### Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX Webpage.