

Course Code & No. - Section: BIOL 332/336- Section 1
Course Title (Credits): Anatomy and Physiology II (3)/ A&P II Lab (1)
Term & Year: Spring / 2011
Course Ref. No. (CRN): 10018/10019

Instructor: Dr. Debi Walker
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Office: Tables in front of TCES Lab Rooms
Office Hours: By appointment

Class Meeting Time: Lecture MW 10:00 – 11:15am; Lab 1:00 – 3:45 pm
Location: TCES Room 204 (Biology Lab)

Prerequisites: Biology 101, 102, 335, 336
Corequisites: BIOL 336 is a corequisite for BIOL 332

Course Description

BIOL 332: Study of physiological systems and relevant anatomy for endocrine, cardiovascular, respiratory, immune, gastrointestinal, hematologic, and renal systems.

BIOL 336: Corequisite lab for Anatomy and Physiology II.

Student Outcomes

- Students mastering the material of Anatomy and Physiology II will have sufficient understanding and recall of facts and concepts of physiological systems in the human body and the anatomy related to each topic to score well on related topics on pre-professional exams, such as the MCAT and GRE, and to be successful at related post-graduate course work.
- Students will demonstrate skill at reading and comprehending science texts.
- Students will demonstrate ability to answer questions about anatomy and physiology like those on standardized exams (such as the GRE, MCAT, or senior exit exams).
- Students will communicate about and critique scientific concepts in paragraph form.
- Students will demonstrate skill at critical analysis, logic, and problem solving involving facts and concepts of physiological systems and anatomical structures related to physiology
- Students will demonstrate mastery in basic compound (brightfield) microscopy techniques and dissection of biological specimens.

Methods of Assessing Student

Mastery of Anatomy and Physiology II material, writing, and laboratory skills will be assessed through:

- Homework assignments coordinated with each text chapter
- Exams (covering 3 to 4 chapters) in multiple choice, matching, true or false, and short answer format
- A comprehensive final exam in multiple choice, matching, true or false, and short answer format
- Written laboratory assignments
- Laboratory practical exams

Instructional Strategies

In order to communicate a body of knowledge, concepts, and skills in anatomy and physiology, Anatomy and Physiology II and Lab will utilize:

- Lectures and lecture discussions
- Laboratory exercises coordinated with lecture topics
- Written homework assignments coordinated with lecture topics to encourage prompt and thorough reading of the text
- Study questions will be provided regularly
- Quizzes to provide feedback to students about their understanding of material before the exams.
- Students are encouraged to use the publisher's companion web site to accompany the text, including tutorials, quizzes, and links to related sites.
- Student study groups outside of class time are greatly encouraged!
- Course material and resources will be available on a Moodle page.

Required Texts and Materials

- 1) Marieb, Anatomy and Physiology, 4th ed, Pearson Benjamin Cummings, 2011. ISBN: 0-321-61640-5
- 2) Marieb, Human Anatomy & Physiology Lab Manual, Cat Version, Update with Access to PhysioEx 8.0, PAL 2.0, Pearson Education, Inc, 2011. ISBN: 0-321-61612-X
- 3) Internet access. A lap-top computer is recommended, as some laboratory exercises will include on-line activities. Students can complete the course using internet access available in SNC's Prim Library.

Supplemental Materials

- 1) The course syllabus, handouts, and other material will be posted on a Moodle site at www.sierranevada.moodle.com.
- 2) The publisher supports a companion Web site to the text at www.myaandp.com. This well-designed resource includes animations, tutorials, quizzes, and links to related web sites. A fast internet connection is recommended.
- 3) Students will be required to use a computer with internet access for course and lab assignments. A laptop computer that can be brought to class is recommended. Students can complete the coursework on computers available in the SNC Prim Library.
- 4) Current articles related to class topics will be assigned as supplemental reading. These will be distributed in class and posted on the course Moodle site.
- 5) Marieb, Anatomy & Physiology Coloring Workbook: A Complete Study Guide, 9/E, Pearson Benjamin Cummings, 2009. ISBN: 9780805347784. This optional text, written by our text author, provides exercises to aid students in remembering anatomy and physiology vocabulary and concepts.
- 6) Netter, Atlas of Human Anatomy – This is an excellent book of anatomy organized by body region. This will definitely be useful for any students who plan to pursue a career in healthcare.
- 7) Laboratory materials (optional): Colored pencils for sketching histological slides

Attendance

Success in Anatomy and Physiology II and Lab is largely dependent on faithful attendance at class and lab periods. Thus, laboratory reports will be accepted only from students who have attended and performed the laboratory exercise. Students MAY NOT be allowed to make up missed labs and exams. Since life happens, students may seek to excuse an absence and have an opportunity to do make up work for missed points. Absences will be excused for illness (of the student or a dependent) with a physician's excuse, military duty, a family bereavement, or at the instructor's discretion. Excused absences will NOT be granted for employment conflicting with class times, vacations, or oversleeping.

Class Requirements

Cell phones and pagers must be turned off or set to 'silent mode.'"

Sanctions for Cheating and/or Plagiarism

Plagiarism is “passing off a source’s information, ideas, or words as one’s own by omitting to acknowledge the sources.” This refers to all sources of information, including the Internet, the text, the instructor, and classmates. Examples of plagiarism include: copying the glossary definition of a term for a vocabulary assignment, cutting text from an internet source and pasting it into your answer to a homework question, copying a lab partners answer to a question for a laboratory report. As long as you answer questions, define terms, and write sentences in your own words, you are not guilty of plagiarism.

The following policy regarding cheating and plagiarism has been established at Sierra Nevada College:

- First offense: Student receives a failing grade for that assignment; the instructor notifies the advisor and the Vice President of Academic Affairs. Students identified as committing an act of plagiarism will be referred to Student Services.
- Second offense in the same class or any other class that semester or subsequent semesters: Student receives a failing grade for the class where the second offense takes place; the instructor notifies the advisor and the V. P. of Academic Affairs.
- Third offense: The student is expelled from Sierra Nevada College. The instructor notifies the advisor and the Vice President of Academic Affairs.

The Honor Code

The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills, talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity, responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand.

Consequences of Violating the Student Honor Code

SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student’s academic record.

- 1st Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

2nd Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

3rd Offense: Student is expelled.

Grading Policy

Since BIOL 332 and 336 are co-requisites, and the material of each is so integral to the other, assignments from each will contribute to an overall point total and the same letter grade will be awarded to both courses. The grading is based on a 1000-point scale, with 75% of points from BIOL 331 and 25% from BIOL 335.

For grades A through C:

If your grade is within 1 % point of a grade above, (e.g. 88.5 rounds up to 89) you will receive the higher grade with a minus (e.g. A-).

If your grade is within 2 points of a grade above (e.g. 87.5 rounds up to 88) you will receive the lower grade with a plus (e.g. B+).

For grades D & F: **No plus or minus scale is applied.**

Grade	%	POINTS
A	90-100%	895-1000
A-	88.5-89.4%	885-894
B+	87.5-88.4%	875-884
B	80-87.4%	795-874
B-	78.5-79.4%	785-794
C+	77.5-78.4%	775-784
C	70-77.4%	695-774
C-	68.5-69.4%	685-694
D	60-68.4%	595-684
F	<60%	<595

BIOL 331	Points Each	Total Points Possible
Homework Review Q's (11)	15	165
Quizzes (3)	40	120
Exams (3)	100	300
Comprehensive Final Exam	150	150
BIOL 335		
Lab Reports (11)	15	165
Lab Practicals (2)	50	100
Total		1,000

Description of Assignments and Exams:

Homework: Students are assigned homework to encourage prompt reading of the text and review of class material, and to provide feedback about students' understanding of important concepts before the exams. Assigned chapter problems and due dates are posted in the syllabus packet and on the Moodle site, and will usually be posted on the whiteboard in class before homework is due. A student's 11 best homework scores will count toward the grade. Homework may be hand-written (if legible) or typed (hard copy). Emailed homework is not accepted at this time.

Exams: Three exams will cover material from the previous three to four chapters. Exams include multiple choice questions, since this format is used on standardized exams, such as the GRE and MCAT. Other questions may include short answer, matching, genetics problems, or true-false formats. Make-up exams will not be given without an excused absence. Students will have hard copy exams.

Quizzes: Three hard copy quizzes covering material from two or three chapters will be given at the beginning of class periods indicated on the running schedule of classes for BIOL 332. The purpose of the quizzes is to encourage students to keep up on reading and studying, and to provide feedback about students' understanding of the material before the exams. Students will NOT be given extra time for a quiz if tardy, and no make-up quizzes will be given.

Final Exam: A comprehensive final exam with a format similar to the four exams will be given at the time scheduled by the SNC registrar. The final exam date, day, and time will be announced in class and posted on the Moodle site as soon as the SNC Spring 2011 final exam schedule is published. The entire SNC final exam schedule will be posted on the SNC web site at a link on the "Academics" menu. Make-up exams are available only with excused absence. Students must procure an exam proctor for any make-up given.

Lab Reports: Students will turn in "Review Sheet" exercises from the laboratory manual as laboratory reports. The 11 best lab report scores will count toward the student's grade. In addition, the instructor will check students' lab manuals before they leave the classroom to make sure that students also answered questions within the laboratory exercises.

Lab Practical Exams: Two lab practical exams will test students' laboratory skills, familiarity with the experiments done, data interpretation, observational skills, and the main concepts presented in lab exercises. Students will be held accountable for all lab exercises, whether or not they have turned in corresponding lab reports. The second lab practical exam will take place at the final exam time scheduled for BIOL 336. There are no make-ups for lab practicals.

Due dates and late work: Homework and laboratory assignments are designed to help students learn the material and provide feedback before periodic examinations. Accordingly, the instructor will adhere strictly to following late work policy:

- Assignments are due at the **BEGINNING** of the class period assigned as the due date. Work turned in after class on the due date will be considered one day late.
- Due dates are listed on the running schedule of classes for BIOL 331 and 335, and on any handouts describing the assignments. The running schedule and all assignment handouts are posted on the class Moodle site.
- Late work will be accepted, **HOWEVER**, 10% of the possible points will be deducted for each **CALENDAR** day that the work is late. (Work handed in at the end of the class period will be considered late by one calendar day.)
- Work that is **more than seven calendar days late** will **NOT** be accepted.

- If a student anticipates an absence on a date that work is due, it is the student's responsibility to get the work to the instructor on or before the due date.
- Students may submit late work by e-mail if it is being handed in on Tuesday, Thursday, Friday, Saturday or Sunday as I will not be on campus on those days. It is the student's responsibility to ensure that e-mailed work has been received by the instructor; students should contact the instructor if a reply to e-mailed assignments is not returned within 24 hours. (48 hours over the weekend)
- Extra Credit will NOT be accepted late.

Midterm grades: Midterm grades will be filed March 14, 2011 and will reflect all work through Wednesday March 9, 2011.

Extra credit: The content of extra credit assignments is designed to provide additional information related to course topics. Extra credit assignments may be used to make up points lost due to absences and to supplement a student's point total to earn the next higher grade. Students may earn up to 50 points in extra credit (5% of total points possible). There are several options for earning extra credit, with point values assigned commensurate with the amount of work involved. These will be posted on the class Moodle site. If more than 50 points of extra credit are accrued, the maximum of 50 points will be assigned to a student's score.

ADA Accommodations

In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu or go to the OASIS offices on the third floor of Prim Library within the first week of the semester.

The SNC Email System

The SNC email system is the official communication vehicle among students, faculty members and administrative staff and is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

Class Schedule

Anatomy and Physiology I							
Week	Date	Day	Reading	Topic	Work Due	Lab Topic	Lab Report Due
1	1-17-11	M		Martin Luther King Jr. Day			
	1-19-11	W		CH 15 The Endocrine System			
2	1-24-11	M		CH 15 The Endocrine System	CH 15	Ex 27 Endocrine Glands Dissect 3	
	1-26-11	W		CH 17 The Heart			
3	1-31-11	M		CH 17 The Heart	CH 17	Ex 30 Anatomy of Heart Ex 31 Conduction System	Ex 15
	2-2-11	W		QUIZ 1 CH 18 Blood Vessels			
4	2-7-11	M		CH 18 Blood Vessels	CH 18	Ex 32 Anatomy of BVs Dissect 4 – BVs Ex 33A BP and Pulse	Ex 30, 31
	2-9-11	W		CH 18 Blood Vessels			
5	2-14-11	M		CH 21 The Respiratory Sx		Ex 36 Anatomy of Respiratory Sx Dissect 6	Ex 32,33A Dissect 4
	2-16-11	W		EXAM 1: Chapter 15, 17, 18			

Week	Date	Day	Reading	Topic	Work Due	Lab Topic	Lab Report Due
6	2-21-11	M		PRESIDENTS' DAY		NO LAB	
	2-23-11	W		CH 21 The Respiratory Sx	CH 21		
7	2-28-11	M		CH 16 Blood		Ex 37A Respiratory System Physiology	Ex 36 Dissect 6
	3-2-11	W		CH 16 Blood	CH 16		
8	3-7-11	M		CH 19 Lymphatic System		Lab Practical I	Ex 37A
	3-9-11	W		CH 20 Immune System	CH 19		
Spring Break!							
9	3-21-11	M		QUIZ 2: Take Home CH 20 Immune System	CH 20	Ex 29 A Blood	No LAB Due
	3-23-11	W		CH 22 Digestive System	QUIZ 2		
10	3-28-11	M		CH 22 Digestive System		Ex 35 A Lymphatic System and Immune Response Dissect 5	Ex 29A
	3-30-11	W		Exam 2: Ch 21, 16, 19, 20, 22 (part I)			

Week	Date	Day	Reading	Topic	Work Due	Lab Topic	Lab Report Due
11	4-4-11	M		CH 22 Digestive System	CH 22	Ex 38 Anatomy of Digestive Sx Dissect 7	Ex 35A Dissect 5
	4-6-11	W		CH 23 Nutrition, Metabolism & Body Temp Reg	CH 23		
12	4-11-11	M		CH 23 Nutrition, Metabolism & Body Temp Reg		Ex 40 Anatomy of Urinary Sx Ex 41A Urinalysis	Ex 38 Dissect 7
	4-13-11	W		CH 24 Urinary System	CH 24		
13	4-18-11	M		Quiz 3 CH 24 Urinary System		Dissect 8 Urinary Sx Dissect 9 Reproductive Sx	Ex 40, 41A
	4-20-11	W		CH 25 Fluid, Electrolyte and Acid-Base Balance	CH 25		
14	4-25-11	M		CH 25 Fluid, Electrolyte and Acid-Base Balance		Ex 41B Renal Physiology Ex 47 Acid-Base Balance	Dissect 8 Dissect 9
	4-27-11	W		Exam 3: Ch 22 (part 2), 23, 24, 25			
15	5-2-11	M		CH 26 Reproductive System	CH 26	Ex 42 Anatomy of Reproductive Sx Ex 43 Gametogenesis	Ex 41B Ex 47
	5-4-11	W		CH 26 Reproductive System			

FINALS	5-9-11 – 5-13-11			Comprehensive Final Exam	Date & Time TBA		
				Lab Practical II	Date & Time TBA DUE: Lab Ex 42 & 43		

Your completed Syllabus must then be **emailed** (as an attachment) to your Department Chair with a copy to Web site editor Schuyler Harrison (sharrison@sierranevada.edu).