ANATOMY AND PHYSIOLOGY SNCP115 SYLLABUS

AMERICAN COLLEGE OF THESSALONIKI, FALL 2018

INSTRUCTOR: ASSISTANT PROFESSOR DR. ANDREAS G. ANESTIS**,**
E-MAIL: aanestis@act.edu , **OFFICE:** 019, NIARCHOS TECHNOLOGY CENTER – LOWER LEVEL BISSELL LIBRARY PHONE: 2310-398343

CLASS HOURS: MONDAY, THURSDAY, FRIDAY: 13.00-14.00, TUESDAY 13.00-15.00.
CLASSROOM: 207
OFFICE HOURS: FRIDAY, 14.00-15.00

A. Course description

This course is the first part of a two-part Anatomy & Physiology Course. It is designed to provide an understanding of the anatomical structures, function and regulation of integumentary, muscular, skeletal, nervous and endocrine systems. This course aims to provide students with knowledge of normal function of the organ systems and thereby provide the information base for interpreting data relating to health and disease. For those in health fields, this information will serve as the foundation for most of your courses.

Co-requisite: Human Anatomy & Physiology 115 Lab

Course format: This course combines lectures and visual aids, weekly quizzes and discussions. You will be asked frequently to answer questions regarding the required reading and material being presented.

Text:

1) Anatomy and Physiology: The Unity of Form and Function (7th edition, Kenneth Saladin, 2012)
   An **e-book** will be used. Details will be provided by the instructor.

2) Notes provided by the instructor for the lab activities (source: Physio Ex (TM) 9,0. Laboratory simulations in Physiology (Zao, Stabler, Smith, Locuta, 2012)

Course objectives:

- Identify major structures of the systems discussed.
- Understand the unique role of each organ and how the cells and organs in each system function in maintaining health.

- Begin to understand how different organs integrate to maintain a constant internal environment and how homeostatic imbalances affect the human body.
- Gain a foundational knowledge of anatomy & physiology for all health science courses.
- Introduce some of the physiological malfunctions underlying disease.

B. Class attendance and absences policy

Your regular classroom attendance is expected. Attendance will be taken in some lecture periods by passing around a signature sheet. Your signature is the only proof of your attendance. It is your responsibility to know whether a sheet was passed out on a given day and to sign it. Large amounts of material will be presented during each lecture and it will be difficult for a student to keep up if classes are missed. Make sure you come in class or lab on time.

The **maximum allowed number of unexcused absences** for this course stands at **7 (seven) hours**, which corresponds to 7 one-hour classes.

To **excuse absences** for good cause (such as medical reasons or personal crises), the student should contact the Registrar's office and, ahead of time or at the latest within a week from the time the absences took place, provide written proof of the cause of the absences. The documents submitted are then evaluated by the Assistant Dean, who decides whether there are valid grounds for excusing the absences.

A student is considered to have **successfully attended** the course if he/she has attended 75% of the course lectures. Thus, the maximum number of absences (excused or not) stands at 13 hours (13 classes). In case of an unsuccessful attendance, the student is administratively withdrawn from the course. The student has the right to appeal the decision to be administratively withdrawn from a course due to excessive absences and seek reinstatement. In this case, the student, within three working days, must fill in a 'mitigating circumstances' form in the Registrar's office, where the reasons of the appeal should be explained.Following this, a formal hearing of the Academic Standards and Performance Committee (ASPC) takes place. The decision of the Committee is final.

C. Evaluation

9 Weekly Quizzes (lowest score will be dropped off)	15%
1 Mid-term Exam	20%
1 Final Exam (Cumulative)	30%
Homeworks	15%
Lab homeworks	20%

- Exams in general consist of multiple choice, fill-in the blank, true/false questions and short answer.
- There will be 9 weekly short quizzes that will test your knowledge of the unit of material covered each week. The lowest of the 9 grades will be dropped and will not count towards your grade.
- Homeworks: Specific topics from the scientific literature and case studies related to the material covered. The students will be asked to work in groups and answer a set of questions each time, after performing a basic research on the available resources.

Grades will be assigned according to the following criteria:

Grade Description	% points	US Letter Grade	US point grade
Excellent	95-100	A	4.0
Very Good (high)	90-94	A-	3.67
Very Good (low)	85-89	B+	3.33
Good (high)	80-84	B	3.0
Good (low)	75-79	B-	2.67
Satisfactory (high)	70-74	C+	2.33
Satisfactory (low)	65-69	C	2.0
Fail	0-64	F	0

D. Examinations information

All exams are closed books and closed notes. Students are responsible for ALL topics covered in class.

You are REQUIRED to take all exams. IMPORTANT! The lecture course and the lab are considered to be a single integrated unit because both the lab and the lecture components are necessary for the understanding of and competence in the basic science part of the curriculum. While two separate course numbers are assigned to the lecture and lab to accommodate a number of administrative issues, a single grade for the integrated lecture and lab will be reported.

Make-up exams will not be allowed. (except from situations of family tragedy, serious illness or other grave situations as determined by the course instructor. A note from student health or physician is required if you miss the exam for reason of illness).

Missed Exams. If the circumstance/reason for missing the exam is determined to be non-excusable by the course coordinator the following action may occur:

1. A make-up exam may be denied and the student will receive a zero for that exam,
2. The student may be required to take an alternate exam.

Quizzes: If you are absent during a quiz, your quiz grade is zero (0). You are not allowed to make up a quiz.

Retake Exams: No retake exams are given to remediate an exam grade.

Athletes: It is your responsibility to check your away schedule and make arrangements to make up any assignments (i.e. exams) PRIOR to the deadline date.

E. Special accommodations

If you have specific physical, psychiatric or learning disabilities that you believe may require accommodations for this course, please let me know and we will discuss appropriate adaptations or modifications which might be helpful for you.

SURVIVAL GUIDE

1. **COME TO CLASS**: It is very important to come to class, listen and take notes. Many of the points that I expect you to learn are presented in class and I elaborate on in the lecture. If you miss a class, I expect that you will get the notes from a classmate and review them before the next class.
2. **READ**: I expect that you will use the text to complement the class presentations. This will allow for better understanding on lecture topics.
3. **STUDY**: Just memorizing the notes will not be enough. It is important to study all the related material after each lecture since this knowledge will help you to better understand the

material of the next lecture. During lectures, you will be asked to answer questions that require you to combine a) knowledge b) reasoning and c) critical thinking.

4. **SEEK EXTRA HELP**: Do not wait until the day before an exam to ask for help. If you do not understand the material, ask me after class, during office hours, or e-mail me.
5. **RESPECT**: Students should treat their fellow classmates and instructor with the same respect they would expect to receive. Please be quiet and respectful in class.

EXTRA CREDIT:

No extra credit is available for students who wish to raise their grade. Focus on doing the work assigned at the best of your abilities

F. Weekly Schedule

WK Nr	WEEK STARTS	DAY	TOPICS	READINGS	EXAMS	ASSIGNMENTS
1	Sep 24	Mo 24	Course overview. Form and function. Origins of biomedical science	chapt 1		
		Tu 25	The scientific method. Human's evolution	chapt 1		
		Tu 25	Human structure and function	chapt 1		
		Th 27	Atoms, ions, molecules. Water	chapt 2		
		Fr 28	Chemistry applications in anatomy and physiology. Revision for Quiz#1			
2	Oct 01	Mo 01	Biomolecules I	chapt 2		
		Tu 02	Biomolecules II	chapt 2	**QUIZ #1 (on week 1)**	
		Tu 02	Cell structure. Membrane transport mechanisms	chapt 3		
		Th 04	Cell interior	chapt 3		**HW #1 out: Mitochondria and disease**
		Fr 05	Biochemistry and cell biology applications			
3	Oct 09	Mo 08	Tissues. Epithelial and connective tissue	chapt 5		
		Tu 09	Excitable tissues. Tissue growth, repair, degeneration	chapt 5	**QUIZ #2 (on week 2)**	
		Tu 09	Skin and subcutaneous tissue	chapt 6		
		Th 11	Hair and nails. Cutaneous glands.	chapt 6		
		Fr 12	The human anatomy atlas+medical terminology - Skin disorders	chapt 6		

4	Oct 15	Mo 15	Tissues and organs of the skeletal system. Histology of osseous tissue	chapt 7		
		Tu 16	Bone development. Osseous tissue physiology	chapt 7	**QUIZ #3 (on week 3)**	
		Tu 16	Skeletal system disorders	chapt 7		
		Th 18	Skeletal system overview. The skull	chapt 8		**HW #2 out: Osteoporosis HW #1 due**
		Fr 19	Vertebral column, thoracic cage. Appendicular skeleton	chapt 8		
5	Oct 22	Mo 22	Joints classification. Synovial joints	chapt 9		
		Tu 23	Anatomy of selected diarthroses	chapt 9	**QUIZ #4 (on week 4)**	
		Tu 23	Muscular system organization. Muscles of head and neck	chapt. 10		
		Th 25	***Fall Break***			
		Fr 26	***Fall Break***			
6	Oct 29	Mo 29	Mid-Terms Review			
	Nov	Tu 30	**MIDTERMS (weeks 1-5)**			
		Tu 30	Anatomy of selected muscles	chapt. 10		
	Nov	Th 01	Disorders of the muscular system			**HW #2 due, HW #3 out: muscular dystrophy**
		Fr 02	Disorders of the muscular system - Case studies			
7	Nov 05	Mo 05	Types and characteristics of muscular tissue. Microscopic anatomy	chapt 11		
		Tu 06	The nerve-muscle relationship	chapt 11	**QUIZ #5 (on week 6)**	
		Tu 06	Behavior of muscle fibers and muscles	chapt 11		

		Th 08	Muscle metabolism	chapt 11		
		Fr 09	Cardiac and smooth muscles	chapt 11		
8	Nov 12	Mo 12	Nervous system overview. Properties of neurons	chapt 12		
		Tu 13	Supportive cells	chapt 12	**QUIZ #6 (on week 7)**	
		Tu 13	Neurons electrophysiology	chapt 12		
		Th 15	Synapses	chapt 12		**HW #3 due. HW #4 out: Huntdington disease**
		Fr 16	Revision of chapter 12			
9	Nov 19	Mo 19	Neural integration	chapt 12		
		Tu 20	Spinal cord and nerves. Reflexes	chapt 13	**QUIZ #7 (on week 8)**	
		Tu 20	Integrative functions of the brain	chapt 14		
		Th 22	Brain overview. Meninges. Blood supply	chapt 14		
		Fr 23	Case study - Brain and Spinal cord			
10	Nov 26	Mo 26	Autonomous nervous system	chapt 15		
		Tu 27	Properties and types of sense organs. General senses	chapt 16		
		Tu 27	Taste and smell	chapt 16	**QUIZ #8 (on week 9)**	
		Th 29	Hearing. Vision I	chapt 16		**HW #5 out: Endocrine system. HW#4 due**
		Fr 30	Vision II	chapt 16		
11	Dec 03	Mo 03	Endocrine system overview. Hypothalamus and pituitary gland	chapt. 17		

		Tu 04	Other endocrine glands. Hormones and their action	chapt. 17	**QUIZ #9 (on week 10)**	
		Tu 04	Endocrine disorders	chapt. 17		
		Th 06	Course Review for Finals			**HW #5 due. ALL HWs HARD DEADLINE**
		Fr 07	Course Review for Finals			
12	Dec 10		**FINALS**	**FINALS**	**FINALS**	**FINALS**

ANATOMY AND PHYSIOLOGY SNCP115 LAB

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INSTRUCTOR: ASSIST. PROF. DR. ANDREAS G. ANESTIS

LABORATORY HOURS: THURSDAY, 14.00-15.00

One-hour sessions including:

- Introduction to the scientific method – scientific/reading writing
- Simulation exercises in physiology (cell membrane physiology, muscular system, nervous system and endocrine system physiology)
- Basic anatomy and physiology demonstration and practicing (visits to the local Aristotle University labs and the Interbalkan Medical Center)
- Dissections lab sessions

Weekly lab schedule

WK Nr	WEEK STARTS	DAY	TOPICS	CLASSROOM	EXAMS / ASSIGNMENTS
1	Sep 24		***no labs***		
2	Oct 01	Oct 04	Diffusion and osmosis	Biology Lab / Compton Hall	**lab report #1**
3	Oct 08	Oct 11	Tissues - microscopy	Biology Lab / Compton Hall	**lab report #2**
4	Oct 15	**TBA**	Nursing in practice	**Inter-Balkan Hospital**	
5	Oct 22	Oct 25	***fall break - no labs***		
6	Oct 29	Nov 01	Skeletal system anatomy	Biology Lab / Compton Hall	**lab report #3**
7	Nov 05	Nov 08	Muscular system physiology - simulation	multimedia computer lab	**lab report #4**
8	Nov 12	**TBA**	Skeletal, muscular and integumentary systems anatomy	**Aristotle University, Medical School, Laboratory of Descriptive Anatomy**	
9	Nov 19	Nov 22	Nervous system physiology	multimedia computer lab	**lab report #5**
10	Nov 26	Nov 29	Visual perception	Biology Lab / Compton Hall	**lab report #6**
11	Dec 03	Dec 06	Sheep brain / cow eye dissection	Biology Lab / Compton Hall	
12	Dec 11		**FINAL EXAMS**	**FINAL EXAMS**	**FINAL EXAMS**

A College-wide Policy on Academic Integrity

Statement on Academic Integrity

"The College has the responsibility of maintaining the highest possible standards of academic integrity for the purpose of ensuring the quality of education it provides, underscoring its dedication to fostering a love of learning for its own sake, and of protecting those who rightly practice integrity in their academic affairs. It is the responsibility of the student to be informed about the college's policy on Academic Integrity, to refrain from infractions of that policy and from conduct, which may lead to suspicion of infractions, and to refrain from aiding or encouraging others in such infractions. It is the responsibility of the faculty to establish and maintain an environment which is conducive to Academic Integrity."

Academic Honesty

"Academic Dishonesty is the violation of Academic Integrity, committed by engaging in any form of unethical behavior which violates acceptable standards of scholarly conduct. Such practices as cheating on examinations, submitting borrowed or purchased papers and/or prepared bibliographies as one's own, plagiarizing, falsifying or copying lab reports, or aiding another person in any of the above infractions of Academic Integrity, constitute acts of Academic Dishonesty."

College-wide Policy on Academic Integrity

All academic divisions at ACT, both undergraduate and graduate, will apply the following policy on academic integrity:

"A student committing an act of Academic Dishonesty in a given course will receive an F (0 percentage points) in the assignment where the academic infraction took place. If a student commits an act of Academic Dishonesty for a second time in the same course, this student will receive a failing grade in that course.

The individual faculty is responsible for enforcing the policy in a conscientious manner, for reporting all cases to the Academic Standards & Performance Committee (AS&PC) for record-keeping and for informing the affected students of their right to appeal the faculty's decision to the AS&PC. Faculty must also insert the college's policy on Academic Integrity in their course syllabi."

Academic Standards & Performance Committee

A student may appeal an initial decision made by an individual faculty to a formal body called the Academic Standards & Performance Committee (an existing standing Committee), chaired by the Director of Academic & Student Affairs.

The AS&PC will meet as needed to evaluate appeals on alleged cases of academic dishonesty referred to the Committee by an involved party. Each case referred to the Committee will have a separate hearing (several hearings could conceivably take place during a single session of the Committee). Cases sent before the Committee deemed invalid will be dismissed. The AS&PC will keep records of all academic infraction cases, whether appealed or not and it will reserve the right to invite a student who has breached repetitively the school's policy to a hearing that may lead to sanctions ranging from failure of an assignment, to failure of a course, semester-long dismissal from the college, expulsion from the college.