

PHR 253C Syllabus

Function and Anatomy of Human Systems II

Spring, 2009
Unique # 60820
TTh 10-11 am, PHR 2.110

Dr. Andrea C. Gore, Course Coordinator
PHR 5.218 (471-3669)
andrea.gore@mail.utexas.edu

- Faculty:** Dr. Andrea Gore (Pharmacology/Toxicology, and Course Coordinator, to whom questions about scheduling should be addressed)
Dr. Casey Wright (Pharmacology/Toxicology)
Dr. Carla Van Den Berg (Pharmacology/Toxicology)
- Office hours:** Dr. Wright, Dr. Van Den Berg: by appointment
Indra Mahajan (TA): Fridays 1:30-2:30 PM, PHR 6.222.
Dr. Gore: by appointment all semester. Beginning March 3, an open office hour will be held every Tuesday from 9:00-9:45 AM in PHR 5.218D.
- Course Text:** Sherwood, L., Human Physiology – From Cells to Systems, 6th Edition, 2007 (Note: Older editions will not work for this course.)
- “Clickers”:** Students are required to purchase and register their turning point clickers prior to the start of the course on January 20. Clickers may be used at the discretion of faculty for attendance and/or administration of questions. Clickers are only to be used by the owner, and no alternatives to clickers will be accepted.
- Web Resources:**
1. The official Blackboard® web site for this course can be accessed either through UTDirect or via <http://courses.utexas.edu>. Either access point is UTEID-protected, and provides you links to the courses in which you are currently enrolled. You are strongly encouraged to visit this site for additional resources associated with this course (your grades, electronic quizzes, PowerPoint presentation, electronic versions of suggested and required readings and hyperlinks, etc.). The website will also be used for official, course-related announcements and for exchange class information and questions via the discussion board. Be aware that any message posted to the discussion board is available to all enrolled students and faculty.
 2. You may also contact faculty members directly via phone or Email.

Dr. Casey Wright (232-8831) cww@mail.utexas.edu
Dr. Carla Van Den Berg (471-5199) cvandenberg@mail.utexas.edu
 3. Teaching assistant:

Indra Mahajan, indymahajan@mail.utexas.edu
471-2183

Function and Anatomy of Human Systems II (PHR 253C) Course Policies

TIPS for getting the most out of the course

- a. Daily class attendance is expected.
- b. Be on time.
- c. If you can arrive early, sit up front.
- d. Be quiet during the lecture, but feel free to ask questions.
- e. Ideally, you should read your required text for each topic, before the lectures on that topic are given. AT LEAST look over your handouts for that topic before class.

EXAMINATIONS

Students must arrive on time for examinations. All instructions and corrections will be made at the beginning of the examination period and will not be repeated. Semester exams will begin promptly at the designated hour and will be picked up at the time designated in advance by the lead instructor. The final examination will last three hours (or a time designated in advance by the course coordinator). Students arriving after any students have completed the exam and left the room may not be allowed to sit for the exam, and may receive a score of zero for the exam.

No allowances will be made for an exam being missed, other than documented illness or emergency. The student must contact the course coordinator for confirmation prior to the exam. If permission is then granted to delay the exam, it is the student's responsibility to complete the College Form titled "Student Request for Alternate Exam Time" for final consideration and final approval by the Faculty member. In this event, the nature of the make-up will be at the discretion of the course coordinator (oral, written, increased weighting on the final, etc.). An unexcused absence from an exam may result in a grade of "zero" for that exam.

The grading of objective questions will be based upon the scantron sheets turned in; i.e., not on answers written on the exam papers. After the exams have been graded and an item analysis performed (Measurement & Evaluation Center), questions may be discarded at the discretion of the Course Coordinator before arriving at final grades.

Return of Exams; Posting Class Scores & Keys. Your results will be posted within a reasonable time after taking the exam. Individual student scores can be accessed using the Blackboard® "Gradebook" (only you have access to your grades), and individual grades will not be publicly posted in any manner. Tests will be returned at the discretion of the instructors, but if tests are not handed back, you will be granted reasonable access to your exams by appointment with the relevant professor(s).

Post-Exam Remarks and Reconsideration Requests. If there is a disagreement over the answer to a specific question, the student should present his/her exam plus a written explanation (with appropriate documentation) to the instructor within 72 hours of the listserv announcement of posting of the exam results & key as described above. Documentation may include statements from textbooks, handouts, packets, or current scientific reprints;

lecture notes are not authoritative documentation. The explanation must be clear, rational, and concise. (This policy does not apply to addition or other grading errors).

Final Exam Re-Examination Policy. The re-examination policy for this course will follow the General Information Catalog (GIC) and College of Pharmacy policies for the University, which reads as follows: “Only a student who has a grade average of at least a C on all class work and lab work submitted before the final exam (in this course, >70% on each exam) may request a temporary delay of the final course grade because he or she failed the final examination (i.e., <65%), which is the examination given during the final exam period as printed in the official examination schedule. If the instructor denies the petition, the student’s final course grade will remain as originally determined. If the instructor grants the petition, the grade on the reexamination will be substituted for the grade on the original exam in determining the student’s final course grade, provided the student earns at least a C on the reexamination. If the grade on the reexamination is less than a C (in this course, <70%), a final course grade of F must be recorded.”

All students who are eligible for re-examination according to the University criteria specified above will be notified by the Course Coordinator within 24 hrs of posting the final examination scores, and must reply within the specified time as to whether they will be taking the re-examination. Those students who choose to take the re-examination will be awarded a course grade of “X” until the re-examination is evaluated and the final course grade computed.

Course Grading

First exam	33%
Second exam	33%
Comprehensive final exam	34%
Total	100%

If an exam is missed due to excused illness or emergency, the nature of the make-up exam is the prerogative of the Course Coordinator.

The following grade ranges will be used:

A = 90 - 100%
B = 80 - 89%
C = 70 - 79%
D = 65 - 69%
F = Below 65%

A curve *may* be used in assigning grades in this class at the discretion of the Course Coordinator. No exam scores are "dropped" and no "re-takes" will be offered for poor performance.

HONOR CODE

Students are expected to work independently on all examinations. Any student caught cheating will be given an "F" in the course. Any student suspected of dishonesty will be reported to the Assistant Dean of the College of Pharmacy and to the Dean of Students, as per University regulations. Students are expected to have read and understood the current

issue of the General Information Catalog, published by the Registrar's Office, for information about procedures and about what constitutes scholastic dishonesty. (See also "Honor Code Statement")

"Pharmacy practitioners enjoy a special trust and authority based upon the profession's commitment to a code of ethical behavior in its management of client affairs. The inculcation of a sense of responsible professional behavior is a critical component of professional education, and high standards of ethical conduct are expected of pharmacy students. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including failure of the course involved and dismissal from the college and/or the University. Since dishonesty harms the individual, fellow students, and the integrity of the University and the College of pharmacy, policies of scholastic dishonesty will be strictly enforced in this class. "

PROFESSIONAL CONDUCT

Examples of professional conduct

- Follows instructions
- Meets deadlines
- Shows respect for all other people in speech & actions
- Exhibits good judgment
- Cooperates with others
- Diligent (good work ethic)
- Maintains personal self-control and professional decorum
- Hold himself / herself responsible for professional conduct

Pledge of Professionalism¹

"As a student of pharmacy, I believe there is a need to build and reinforce a professional identity founded on integrity, ethical behavior, and honor. This development, a vital process in my education, will help ensure that I am true to the professional relationship I establish between myself and society as I become a member of the pharmacy community. Integrity must be an essential part of my everyday life and I must practice pharmacy with honesty and commitment to service.

To accomplish this goal of professional development, I as a student of pharmacy should:

DEVELOP a sense of loyalty and duty to the profession of pharmacy by being a builder of community, one able and willing to contribute to the well-being of others and one who enthusiastically accepts the responsibility and accountability for membership in the profession.

FOSTER professional competency through life-long learning. I must strive for high ideals, teamwork and unity within the profession in order to provide optimal patient care.

SUPPORT my colleagues by actively encouraging personal commitment to the Oath of Maimonides and a Code of Ethics as set forth by the profession

¹ Developed by the American Pharmaceutical Association Academy of Students of Pharmacy/American Association of Colleges of Pharmacy Council of Deans (APhA-ASP/AACP-COD) Task Force on Professionalism; June 26, 1994
American Association of Colleges of Pharmacy 1426 Prince St. Alexandria, VA 22314 Phone: (703) 739-2330 Fax: (703) 836-8982
Email AACP

INCORPORATE into my life and practice, dedication to excellence. This will require an ongoing reassessment of personal and professional values.

MAINTAIN the highest ideals and professional attributes to ensure and facilitate the covenantal relationship required of the pharmaceutical care -giver.

The profession of pharmacy is one that demands adherence to a set of rigid ethical standards. These high ideals are necessary to ensure the quality of care extended to the patients I serve. As a student of pharmacy, I believe this does not start with graduation; rather, it begins with my membership in this professional college community. Therefore, I must strive to uphold these standards as I advance toward full membership in the profession of pharmacy.”

Oath of a Pharmacist²

“At this time, I vow to devote my professional life to the service of all humankind through the profession of pharmacy.

I will consider the welfare of humanity and relief of human suffering my primary concerns. I will apply my knowledge, experience, and skills to the best of my ability to assure optimal drug therapy outcomes for the patients I serve.

I will keep abreast of developments and maintain professional competency in my profession of pharmacy.

I will maintain the highest principles of moral, ethical, and legal conduct.

I will embrace and advocate change in the profession of pharmacy that improves patient care.

I take these vows voluntarily with the full realization of the responsibility with which I am entrusted by the public.”

10. Web Resources: The **web site** for this course is located under the pharmacy homepage at

<http://www.utexas.edu/pharmacy/courses/>

You are strongly encouraged to visit this site for additional resources associated with this course (electronic quizzes, PowerPoint presentation, previous exams, contacting faculty by Email, electronic versions of suggested and **required** readings).

The **listserv** for this course is PHR253C, and the Course Coordinator has added all students. You should have received Email notification of your enrollment on the listserv by the first day of class. If you have not, send an Email message to the course coordinator, and you will be added. The listserv will be used for posting questions, exchanging class information, and making class announcements. To submit a posting to the listserv, simply submit an Email to the address:

PHR253C@lists.cc.utexas.edu

Any message posted will go to the entire membership of the listserv.

² Developed by the American Pharmaceutical Association Academy of Students of Pharmacy/American Association of Colleges of Pharmacy Council of Deans (APhA-ASP/AACP-COD) Task Force on Professionalism; June 26, 1994
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STUDENTS WITH DISABILITIES

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. All University rules concerning accommodations must be followed, including the student arranging for special accommodations prior to each examination. In the absence of such prearrangement, it will be assumed that the student is not requesting special accommodations for that exam, and will be expected to take the exam with the rest of the class at the regularly scheduled exam time. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

An Essay on Submitting Grade Reconsideration Requests

By Prof. Patrick J. Davis, Associate Dean
5/18/03

Definition: You are *requesting* that a faculty member *reconsider* your answer to a specific question(s) based upon additional documentation or explanation. Therefore, these are neither *challenges* nor contesting of the question; they are reconsideration *requests!*

The Approach: Since these are *requests for re-grade*, not *challenges*, it would be in your best interests to start your email professionally and with courtesy, for example:

- “I am submitting question #3 for reconsideration based upon...Thanks you for your consideration.” -or-
- “I am writing to ask that you reconsider my answer for question #3 based upon...” -but not-
- “I thought this was a dumb question!” -or-
- “I am contesting question #3. I felt that this question was not testing our knowledge of the material but our ability to memorize odd facts. I studied extremely hard for this exam and felt like I knew the material, but I did not memorize how many amino acids were in each hormone.” [anonymous quote, 2003]

The Justification: As indicated in the first-day handout, any submission for reconsideration needs to include appropriate, written justification to support your request. This could include your interpretation of the material and/or information from the textbook, primary references, the faculty member’s handout, etc.

1. If you believe there is a discrepancy between what two faculty members present in class (or differences between classes), this would obviously come up when the information is presented in class or when you are studying. Therefore, your

concerns or confusion should be ironed out with the faculty *before* the test, *not* used as a post exam justification.

It may be that two faculty members are presenting information differently for a reason. For example, the clinician may stress that Pen G is not useful against *Staph*. From a clinical standpoint, since the *vast* majority of *Staph* strains are resistant to Pen G, then this is a very reasonable summary statement. The medicinal chemist/pharmacologist may stress that 95% are resistant, but 5% are still sensitive during the discussion of resistance development over time, *specifically* to *emphasize* where we're at in the development of penicillin resistance with this organism. *Both* of these perspectives are clearly valid in the context of what is being taught, and are not contradictory statements.

2. Rarely will you be successful in using old exams as your justification.

- “This question was very similar to question #17 from the 1999 exam, and the answer was ‘D’ (which is what I put).” [anonymous quote, 2003]

It could be that the question on the previous exam was thrown out because of poor statistics, and so the old exam copy you have has a ‘wrong’ answer for which all students were given credit. That doesn’t make it correct. This is one reason why in Pharmacotherapy IIa-IIc, we post previous exams in an ‘unanswered’ form (for you to use for self-evaluation) and then post the keys separately.

In relying on old exams, you should also understand that the information may have changed! Consider the following question:

- “*Strains of Staphylococcus have emerged which are clinically resistant to vancomycin.*”

On the 2001 exam, this statement was *false*; on the 2002 exam it was *true*. Clearly, therapeutic guidelines change as well, which may make old exam questions equivocal or simply incorrect.

3. You may want to have a colleague read your statement for feedback before you submit it for faculty consideration. Examples:

- “*In lecture, you said that side-effects included agranulocytosis, thrombocytopenia, hypoprothrombinemia, and aplastic anemia. But on the test you said blood dyscrasias so I marked it false! You never once mentioned blood dyscrasias!* [anonymous quote, 2003]
- “*You said ‘drug of choice’ in the question, but you didn’t ask which one is primarily the best, so I thought any drug on the list used for treatment was appropriate.*” [anonymous quote, 2003]
- “*On slide 17 you said ‘most hormones circulate in the blood, coming into contact with essentially all cells,’ but on the test you said ‘most hormones come into contact with all cells.’ Since the question didn’t say anything about blood, I marked it false.*” [anonymous quote, 2003]

This is an interesting one. Can you imagine the uproar if this was reversed; i.e., if the faculty member counted this *wrong* for those students who marked it *true* simply because in lecture he mentioned *via the blood*, whereas on the exam, he didn't mention blood? *The big picture* issue here is that selectivity in hormonal response is not based on cell exposure since essentially all cells are exposed to the hormone via the blood. Rather, selectivity is based on cell-specific recognition of the hormone. Apparently, the student missed this important concept.

4. Never, never, never use as your justification "I need the points".

The decision on a reconsideration request belongs to the faculty member authoring the question, but all Course Coordinators caution their faculty to *not* consider this "justification" in *any way* in their deliberations. This is *never* an appropriate justification for awarding points, and it simply isn't fair to the other students to make it a basis for awarding points. Should a student 1-pt from a "C" be given the points for a "B" *just because they asked for them*, while another student with the same score be assigned (and accept) a "C"? What is that faculty member to do when the second student finds out the first was awarded the points just for asking?

5. Just because you can find an article supporting your position doesn't *automatically* mean that it is correct or that you should be given credit.

Part of the faculty member's responsibility is to stay current with their field, which involves reading, reviewing, and distilling the often-time copious & conflicting material relevant to their field to create their learning environment and define the content they present to you in class. The faculty member will make their decision on the article/text you cite in the context of their full knowledge of the field and what they present to you in class.

6. If you feel that your reconsideration request has not been fairly considered, you have the right to appeal the decision to the Course Coordinator (consistent with the College Grievance Policy in your Student Handbook). However, you need to *fully justify* your appeal, not just forward a message to the Course Coordinator that "*You have all the emails I sent, and as you can see, the Professor did not give me the points.*"

Conclusion: Not all courses allow for the submission of reconsideration requests; the decision as to whether to do so rests with the faculty. Clearly, if this is allowed, the faculty member is committed to fully and fairly assessing your submission prior to making a decision based on the information you provide. Therefore, your submission should be well thought-out and presented in a professional manner, *and you have every right to expect* the faculty member to respond in a like manner.

Lecture Schedule 2009

Dr. Van den berg

January 20 Course introduction (Gore)

Respiration respiratory mechanics (Van den berg) – Chapter 13

- January 22 Respiration – gas exchange, control of respiration – Chapter 13
 January 27 Acid-base balance – chemical buffer systems – Chapter 15
 January 29 Acid-base balance: role of respiration & kidney; acid-base imbalance – Chap 15

Dr. Wright

- February 3 Kidney function introduction – Chapter 14
 February 5 Tubular reabsorption and renin-angiotensin-aldosterone system – Chap 14
 February 10 Secretion – Chap 14
 February 12 Plasma clearance – Chap 14
 February 17 Counter-current mechanism – Chap 14
 February 19 Hematopoiesis – Chap 11

Dr. Van den berg & Dr. Wright

- February 24** Review during class (Drs. Van Den Berg, Wright)

Exam I (All of Dr. Wright & Dr. Van den berg's materials)

7-9 PM, PHR 2.110 (Last names A-Maldonado) and PHR 3.106 (last names Martin-Z)

Dr. Gore

- February 26 General Endocrinology (652-662), Biological rhythms (676-678), Hypothalamus – Chapter 18
 March 3 Neuroendocrinology: Hypothalamus & pituitary (662-668) – Chap 18
 March 5 Hypothalamic control of energy balance & thermoregulation (633-649) – Chap 17
 March 10 Hypothalamic control of energy balance & thermoregulation II – Chap 17
 March 12 Endocrine control of metabolism, pancreatic hormones I (701-716) – Chap 19
March 16-20 **Spring break**
 March 24 Endocrine control of metabolism, pancreatic hormones II – Chap 19
 March 26 Growth axis & bone (668-676) – Chap 18
 March 31 Parathyroid hormones, calcium & bone (716-726) – Chap 19
 April 2 Thyroid axis I (682-689) – Chap 19
April 7 Review during class (Dr. Gore)
Exam II (Dr. Gore's material from Feb 26-Mar 31) 7-9 PM, UTC 2.102A
 April 9 Thyroid axis II – Chap 19
 April 14 Adrenal axis I (689-701) – Chap 19
 April 16 Adrenal axis II – Chap 19
 April 21 Reproduction: Reproductive tract, sexual differentiation (730-739) – Chap 20
 April 23 Male reproductive physiology (739-751) – Chap 20

April 28	Female reproductive physiology (752-764) – Chap 20
April 30	Fertilization, pregnancy & lactation (764-782) – Chap 20
May 5	Completion of reproduction units
May 7	Review and Q&A

CUMULATIVE FINAL EXAM: TBA