



College of Medicine

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September 17, 2013

Re: item 7, the new course form for PGY413G

Dear Committee:

I would like to offer an explanation for my answer of Yes for the item 7 on the new course form.

PGY413G is a companion course for PGY412G (Principles of Human Physiology). PGY412G is a service course for various programs on campus: Kinesiology (bachelor's and master's programs), Biomedical Engineering (master's program), Nutrition Sciences (master's program), Nursing (master's program), Physical Therapy (doctoral program), and Physician Assistant Program (master's program). In addition, PGY412G attracts other undergraduate and graduate students, for example from Biological Sciences. Thus, it is anticipated that PGY413G will be interests to students in these programs, which are all students outside our degree program in Physiology.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ok-Kyong Park-Sarge'.

Ok-Kyong Park-Sarge, Ph.D
Associate Professor

From: Ok-Kyong Park-Sarge
To: Mudd, Gia
CC: Rozenber, Jerzy; Egg, Joanie M

Re: Response to questions regarding PGY 413G addressed on February 21, 2014

1. The additional course assignment for graduate students has been added in the section, Description of Course Activities and Assignment. I hope this is clearer now.
2. I thank the reviewers for raising the issue with the description on grading. I have reworked on it to make it clear and more reasonable.

- **Issue with the attendance grade:**

For each class, a student will receive a class attendance grade A (= 4 points) for their attendance. For an unexcused absence, the student will receive E (= 0 points).

- **Issue with the final grade:**

- There are three components of the final grade for an undergraduate student: attendance (50% of the final grade), homework (25% of the final grade), and class participation (25% of the final grade). Thus, the final grade is calculated by the following equation: final grade = [(Average Attendance grade for the semester) X .5] + [(Average written response grade for the semester) X .25] + [(Average participation grade for the semester) X .25].
- For total 15 classes of the semester, a student receives 15 attendance grades, 15 homework grades, and 15 class participation grades. These will be averaged to final grade calculation.
- I will illustrate here how the final grade is calculated using an example of a student who received all As (4 points) for all attendance, all homework, and all class participation grades.
 - ✓ For an average attendance grade, all attendance grades will be added to get a sum (e.g., 4 points for 15 classes = $4 \times 15 = 60$ points) and then divided by 15 (total number of the classes) ($60/15 = 4$ points). Since the attendance grade is 50% of the final grade, this will translate into $4 \times 0.5 = 2$ for the final grade.
 - ✓ With similar calculations, homework and participation points will be calculated. Each of these components are 25% of the final grades. Thus, each of these homework and participation grades will translate into $4 \times 0.25 = 1$ for the final grade.
 - ✓ Thus, the total final grade for this student = $2 + 1 + 1 = 4$

3. I have corrected the grading scales.
4. The rationale for this new companions course to our active course PGY 412G is the following.

PGY 413G, entitled “Critical Thinking in Principles of Human Physiology”, is a new course that is proposed as a companion course for our active course PGY 412G entitled, “Principles of Human Physiology.”

PGY 413G is designed to enhance the ability of students to understand and apply the concepts that are taught in PGY 412G, through the critical thinking approach.

PGY 412G is a required course for several degree-offering programs, including Physical Therapy, Physician’s Assistant, and Kinesiology programs. Many students are successful in PGY 412G; on average, about 30% of the enrolled students earn an A and another 25-30% earn a B. However, we also have students who struggle in PGY 412G and often require additional tutoring and retaking the course.

PGY 413G will enrich students who are interested in taking a further step in applying the core concepts that are taught in PGY 412G, to real-life scenarios. But more importantly, PGY 413G will help students who are struggling in understanding the core concepts because they will be taught how to approach understanding the core concepts using real-life scenarios. This approach provides an additional element that would enhance the ability of students to understand and apply the core concepts of Human Physiology.

1. General Information

1a. Submitted by the College of: MEDICINE

Date Submitted: 3/25/2013

1b. Department/Division: Physiology

1c. Contact Person

Name: Ok-Kyong Park-Sarge

Email: okps@uky.edu

Phone: 3-6067

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Semester following approval

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: PGY 413G

2c. Full Title: Critical Thinking in Principles of Human Physiology

2d. Transcript Title: Critical Thinking in Physiology

2e. Cross-listing:

2f. Meeting Patterns

DISCUSSION: 1

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 1

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

2j. Course Description for Bulletin: This is a 1 credit course designed for current and former students in PGY 412G, Principles of Human Physiology. This is a companion course for PGY 412G, Principles of Human Physiology. The objective of this course is to guide students to reinforce and apply physiological concepts to real-life scenarios. Through interactive group discussion formats, students will enhance their critical thinking and problem solving skills using questions, problems and/or case studies corresponding to PGY 412G material.

2k. Prerequisites, if any: Students must have completed or be concurrently enrolled in PGY 412G.

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No

If YES, enter the off campus address:

4. Frequency of Course Offering: Spring and Fall

Will the course be offered every year?: Yes

If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: Yes

If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?: 30

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: No

Will it be of interest to a significant number of students outside the degree pgm?: Yes

If Yes, explain: [var7InterestExplain]: explanation included in a cover letter.

8. Check the category most applicable to this course: Traditional – Offered in Corresponding Departments at Universities Elsewhere,

If No, explain:

9. Course Relationship to Program(s).

a. Is this course part of a proposed new program?: No

If YES, name the proposed new program:

b. Will this course be a new requirement for ANY program?: No

If YES, list affected programs:

10. Information to be Placed on Syllabus.

a. Is the course 400G or 500?: Yes

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: Yes

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

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PGY 413G
Critical Thinking in Principles of Human Physiology
Tentative date and time (WED, 4-5 PM)

Course Director: Ok-Kyong Park-Sarge, Ph.D.
Office Address: MN502A UKMC
E-mail: okps@uky.edu
Office Phone: 859-323-6067

Teaching Faculty: PGY 412G instructors will function as facilitators

Office Hours: Tuesday 1-2 PM
Students can also contact the instructor and/or facilitators as needed. The best first step in communicating with them is via an e-mail.

Course Description:

PGY 413G, Critical Thinking in Principles of Human Physiology is a 1 credit course designed for current and former students in PGY 412G, Principles of Human Physiology. This is a companion course for PGY 412G, Principles of Human Physiology. The objective of this course is to guide students to reinforce and apply physiological concepts to real-life scenarios. Through interactive group discussion formats, students will enhance their critical thinking and problem solving skills using questions, problems and/or case studies corresponding to PGY 412G material.

Course Pre-requisite:

Students must have completed or be concurrently enrolled in PGY 412G.

Student Learning Outcomes:

After completing this course, the student will be able to:

1. Analyze and discuss problems associated with pathophysiological conditions.
2. Identify and discuss the physiological basis of the problems.
3. Develop and discuss strategies for reversing the problems.

Course Materials:

None. Students will be provided with questions, problems, and/or cases.

Description of Course Activities and Assignment:

For all students, there are three components of the course: class attendance, homework, and participation in class discussion. From the content and specific information related to handouts, texts and outside resources, students are expected to find answers to specific problem sets that will be provided *one week prior to each scheduled PGY 413G class*. Their prepared answers will be the stepping stones for in-class group discussions that will be facilitated by a skilled physiologist. Students will be expected to modify their answers for each question based on in-class discussion.

For graduate and post-baccalaureate students, there will be an additional component: writing a short paper. All graduate and post-baccalaureate students enrolled in PGY413G will be required to complete a short 3 page paper on an assigned disease topic, discussing what is known about the mechanism leading to that disease, its major symptoms and affected cell types/tissues. A printed copy of the paper must be submitted to Dr. Park-Sarge by _____ (date at least 1 week before the last class period). The papers are limited to 3 pages in length including text, figures, and tables (references list does not count in 3 page limit). The paper must be single-spaced, have font size 12 (Arial type preferred) and 1" margins all around.

Course Grading:

Letter grades for this course will be differentially derived from the class distribution of final grades according to the scale below, as required by the senate regulation for combined instruction of undergraduates and graduates in 400G and 500-level courses.

Grades in PGY 413G will be determined on the basis of:

1. *Class attendance (50% of the total grade).* Each attendance will be given A (4 points). Excused absences may be granted upon emailing or contacting the course director (*preferably prior to the class period but within 24 hours*); the class period of the excused absence will be assigned the student's average attendance grade of the semester. Each unexcused absence will result in a failing grade E (0 points).
2. *Homework-Typed responses to questions (25% of total grade).* Students must prepare brief answers to the given problems prior to class. During the discussion, these answers will aid the discussion. Additional notes may be added to the answers, but it is expected that some effort will have been made prior to class. At the end of the discussion period, the assignments will be turned in and assessed for level of effort. A reasonable effort yielding an incorrect answer will not be penalized. Assignments will be returned the following week.

Subjective assessments of effort will be made by the course director with "strong effort" receiving an A (4 points); "modest effort" receiving a B (3 points); "poor effort" receiving a C (2 points); and "no effort" receiving a D (1 point). No homework submission will result in an E (0 point).

3. *Participation in class discussions (25% of total grade).* Because the main focus of this course is to encourage critical thinking and discussion related to clinical and physiological principles, students will be evaluated by the instructor on their willingness to participate in the discussions. A participation grade will be assigned in accordance with the following criteria:
 - A (4 points): The student frequently answers to questions without solicitation by the facilitator.
 - B (3 points): The student occasionally answers, but usually only responds when called upon.
 - C (2 points): The student rarely answers questions and only when called upon.
 - D (1 point): The student does not participate in the discussion and answers with "I don't know".
 - E (0 points): Unexcused absence.
4. **Paper Grade (Graduate and Post-baccalaureate Students Only):** A printed copy of the paper submitted to Dr. Park-Sarge by the deadline will be given one of three grades: high pass, pass, or fail. Papers that are not submitted by the due date or

are not compliant with format requirements will receive a failing grade.

Course Grading for Undergraduates:

Final grades are calculated by the following equation: final grade = [(Average Attendance grade for the semester) X .5] + [(Average written response grade for the semester) X .25] + [(Average participation grade for the semester) X .25]. The maximal possible final grade is 4.0.

An example of calculating an average participation grade for the semester (=15 classes) = total sum of participation grades from 15 classes / 15 classes.

Letter grades will be assigned according to the following scale of the final grades.

- A = 3.48-4.0
- B = 2.61-3.47
- C = 1.74-2.60
- D = 0.87-1.72
- E = less than 0.87

Course Grading for Graduate and Post-baccalaureate Students:

The final grades for graduate and post-baccalaureate students will be determined by the results of the class grade plus short paper grade. Their final class grades will be calculated by the equation of final grade = [(Average Attendance grade) X .5] + [(Average written response grade) X .25] + [(Average participation grade) X .25]. The short paper grades will be added to the class grades: 0.15 for high pass, 0.1 for pass, and 0 for fail.

Letter grades will be assigned according to the following scale.

- A = 3.63 and above
- B = 2.76-3.62
- C = 1.89-2.75
- E = less than 1.89

Mid-Term Grade:

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/Registrar/AcademicCalendar.htm>).

COURSE POLICIES:

Attendance Policy: Attendance is mandatory.

Excused Absence: Students may be excused for absences according to S.R. 5.2.4.2 that defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit “reasonable cause for nonattendance” by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information

regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Make-up policy: Senate Rule 5.2.4.2. allows students one week after the excused absence to contact the course director and make up missed work. The student will be given at least one week to submit the written response, from the time of the communication with the course director.

Verification of Absences: Students may be asked to verify absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence. Students will be allowed to submit the written response by the next class period.

Submission of assignments: Students will be required to submit their responses to discussion questions at the end of each discussion class. Any assignment a student turns in may be submitted to an electronic database to check for plagiarism.

Accommodations due to disability: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

Class Behavior, Decorum and Civility: Students are expected to maintain a level of dignity and respect towards faculty, staff, and fellow students. Students are expected to value differences among all members of our academic community. Conversely, all students have the right to take reasoned exception and voice opinions contrary to those offered by the instructor and/or other students according to University Senate Rules. Equally, a faculty member has the right -- and the responsibility -- to ensure that all academic discourse occurs in a context characterized by respect and civility. Acceptable decorum and civility does not include attacks of a personal nature or statements denigrating another on the basis of race, sex, religion, sexual orientation, age, or national/regional origin.

Academic Integrity: Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete

information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online <http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work that a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

Tentative Course Schedule

Meeting #	Title
1	Homeostasis, cells, and cell membrane
2	Communication between hormones and receptors
3	Energy homeostasis, diabetes, and pancreas
4	Hypothalamic-pituitary-target axis
5	Neurons, membrane potentials, and action potentials, synapses
6	Autonomic nervous system
7	Muscle physiology
8	Control of Body movement
9	Digestion and pathophysiology
10	Control of blood pressure, blood flow, and cardiac output
11	Pathophysiology of heart

12	Control of respiration
13	Homeostasis of water, salt, and ions
14	Pathophysiology of lungs and kidneys
15	Integrating organ systems in whole body physiology