UNDERGRADUATE EXPERIMENTAL/SPECIAL COURSE PETITION

1. Proposed Course Title: Human Physiology: Cells to Systems

2. Implementation Date: 
   - Fall
   - Spring
   - Summer I
   - Summer II
   - Summer III
   - 2013
   - Year

3. Brief Course Description: This course provides an in-depth study of human physiological processes including the nervous, endocrine, integumentary, muscular, circulatory, respiratory and reproductive systems. Principles of homeostatic operation, regulation, and integration from the cellular to the organismal level are emphasized. Problem based learning is utilized to investigate how pathophysiological mechanisms disturb homeostasis. (Three hours lecture per week).

4. Prerequisites: Prereq: Biol 333 and Biol 334. Sp

5. Does this course require special grading:
   - Yes ☐ No ☒
   If yes, what kind:
   - ☐ Pass-No Pass
   - ☐ Satisfactory-Unsatisfactory

6. Attach course syllabus (topics and units of study).

7. Dean of Appropriate College(s):
   - Signature: ____________________________  College: ____________  Date: 8/30/12
   - Signature: ____________________________  College: ____________  Date: ____________
   - Signature: ____________________________  College: ____________  Date: ____________

8. Ordinarily, experimental or special courses DO NOT fulfill University Core Curriculum requirements. If you seek exception to this policy, this form must be signed by the University Core Curriculum Director.

   If seeking exception for course to fulfill Core requirement, send original and one (1) copy to the UCC Director.

   If not seeking exception, skip number (8).

9. Received by UCC Director:
   - Signature: ____________________________  Date: ____________

   Approved: ☐  Not Approved: ☐

10. Sent to Provost Office:
    (Original plus one copy with electronic petition to trpigman@usi.edu)
    - Date: 8/30/12
11. Notified Chair of the Curriculum Committee:  
   Date: 9-4-12

12. Approved: [ ] Not Approved: [ ]  
   Signature: ___________________________  
   Chair of Curriculum Committee  
   Date: 9/5/12

13. Approved: [ ] Not Approved: [ ]  
   Signature: ___________________________  
   Provost  
   Date: 9-6-12

14. Approved Implementation:  
   Date: 9-6-12

15. Published in USI Today:  
   Date: __________

16. Notified Registrar of final approval:  
   Date: 9-5-12
Biol 433 X Human Physiology: From cells to systems
Spring 2013

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Email: mkhopper@usi.edu.
Office Hours: MWR 11:00-12:00 noon and M 1:00 – 2:30 pm

Course Description:
This course provides an in-depth study of human physiological processes including the nervous, endocrine, muscular, circulatory, respiratory and reproductive systems. Principles of homeostatic operation, regulation, and integration from the cellular to the organismal level are emphasized. Problem based learning is utilized to investigate how pathophysiological mechanisms disturb homeostasis. (Three hours lecture per week). Prereq: Biol 333 and Biol 334. Sp

REQUIRED Textbooks

P. Neafsey. *Case Mysteries in Pathophysiology*
Morton Publishing Co. ISBN-10: 0895828243

SUGGESTED Textbooks
Students are encouraged to have regular access to a general pathophysiology text of their choice.


Course Outcomes
Upon completion of the course, STUDENTS WILL:
1. Demonstrate an understanding of the physiologic processes within the major systems of the body and be able to use this knowledge to anticipate the progression of prevalent disorders and diseases that affect the system.
2. Demonstrate effective problem based learning by critically and correctly analyzing case studies.
3. Produce clear, correct, and coherent written and oral communication appropriate to the purpose, occasion, and audience.

Evaluation: Final grades will be based on the following:
3 Lecture exams (3*100 pts) = 300 points
Final Paper and Presentation 100 points
Case Studies (5*20 pts) = 100 points
Guaranteed Grading scale will be as follows:
Course Grade
  90-100%  A
  80-89.9%  B
  70-79.9%  C
  60-69.9%  D
  <60%    F

Course Requirements and Assignments
Textbook readings - Students are expected to complete reading assignments prior to lecture.
(See the attached schedule)

Case Studies – Synthesis and Analysis
Students will complete five case studies provided in the text and answer the questions that
follow using proper APA format.

Semester Project/Presentation – Research and Both Written and Oral Communication Skills
Each student will write an original research paper and develop a PowerPoint presentation on a
selected disease/disorder. Grading matrices will be provided for both the paper and the
presentation. Students will consider normal physiological function, and describe how this
process is disrupted resulting in disease. Strategies for correcting/treating the disease will also
be developed.

Tests
Students will complete two tests in this course covering selected topics. Exams will include T/F,
Multiple Choice and Discussion questions.

All work submitted in this course should be of the appropriate level and original to the student.
Students should use the American Psychological Association (APA) manual guidelines for
formatting and citation of written work. Case studies are to be completed thoroughly, using the
lecture textbook, reference texts, and primary literature for information. Students should cite any
additional sources used in completion of case studies.

Course Policies
1. NO LATE WORK will be accepted, period.

2. Tentative dates of all exams and lab quizzes are announced in this document. Please make
note of them and plan accordingly. (subject to change by instructors discretion – will be
announced in class). If an exam is missed for a valid (excused) reason, you must contact the
instructor within 24 hours to schedule a make-up. Please be prepared to provide
documentation to support excused absence.

3. Regular attendance is expected and required. I will strictly adhere to the universities
attendance policies. The instructor will not automatically assign a “W” or “F” as a final grade. If
a student does not formally drop the class by the scheduled deadline, any points earned by the student will be used to compute the final grade. (Note that this often results in a grade of “F”.) Please meet with the instructor concerning these grades

4. Cheating and plagiarism will not be tolerated. Please refer to the university policy on cheating and plagiarism for a range of possible penalties. This information can be found in the student handbook or online at http://www.usi.edu/stl/forms/academicdishonestypolicy.pdf

5. **Course Cancellation** - If the University is closed for any reason (inclement weather, water issues, etc.), the class will not meet. Please visit the following website to register with the USI text notification system – RAVE – to get instant updates concerning campus closing. http://www.usi.edu/Emergency/general.asp

6. American with Disabilities Act Compliance: If you have a disability, you are encouraged to register for disability support services in the Counseling Center. If you require an accommodation, please advise the instructor by the end of the first week of class. You may be required to provide written documentation to support these accommodations. The instructor will work with you to provide reasonable accommodations to ensure that you have a fair opportunity to perform and participate in class.
## Biol 433 X Advanced Human Physiology In Health and Disease
### Tentative Course Calendar – Spring 2013

<table>
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<td>Control Systems</td>
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<td>2</td>
<td>Monday –MLK Holiday</td>
<td>Chapter 4</td>
<td>Case Study #1</td>
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<td>Endocrine: Non-Pituitary</td>
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<td>Lecture Exam #2</td>
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<td>Blood</td>
<td>Chapter 11</td>
<td>Outline of Research Due</td>
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<td>Supplemental Reading</td>
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