

PART B. REQUIRED COURSE FORM

Course title:	Organ Systems Course
Sponsoring department or unit:	Interdisciplinary
Name of course director:	William Guggino, Renee Z. Dintzis

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course, and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Department of Physiology	10
Department of Cell Biology	4
Division of Geriatrics, DOM	2
Department of Gynecology-Obstetrics	8
Environmental Health Sciences	1
Office of Student Affairs	1
Anesthesiology & Critical Care	1
Department of Medicine (DOM) Division Nephrology	3
Division of Pulmonary & Critical Care, DOM	5
Division of Cardiology, DOM	4
Division of Endocrinology, DOM	1
Division of Gastroenterology, DOM	2
Office of Academic Computing	1
Department of Biomedical Engineering	2
Division of Nutrition	1
Biochemistry, Reproductive Biology	1
Division of Endocrinology & Metabolism	2
Department of Biological Chemistry	3
Department of Pediatrics, Division Endocrinology	1
Department of Pathology	1
Department of Pathology, Immunopathology	1
History of Medicine	1

Course Objectives

Are there written objectives for the course? (check)

Yes	X	No	
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Briefly summarize the objectives/content areas covered in the course.

1. Physiology Lectures. To provide an initial basic understanding of the many different aspects of the internal structure and function of the body, which include: Renal , Pulmonary, Cardiovascular,

- Gastrointestinal, Endocrinology and Reproduction. Present a comprehensive survey of many of the complex interrelationships that exist between the structure and function of cells, tissues, and organs.
2. Physiology Labs. Observe the dynamics of physiologic processes, their natural variations and response to stimuli. Learn about physiological processes that occur over a period of time in a specific chronological order and distinguishes health and disease. Learn how to perform assays of physiological function that are critical to medical practice.
 3. Histology Lectures. To identify the mechanisms by which an organism maintains the processes that we regard as characteristic of life. The investigation of these mechanisms begins at a molecular level.
 4. Histology Labs. Be able to elucidate, through the use of microscopy the structure and organization of living cells and tissues, particularly in relation to specific chemical and functional attributes. Provide examination and comparison of pathological and normal material.
 5. Nutrition. Make students aware that in all medical specialties and subspecialties, the nutritional status of patients is a critical component of their overall health care.
 6. Clinical Correlations. Understand the bases of diagnostic decision-making, case presentation, appropriate history of patients, communication with patients, test interpretation, therapeutic decision making and preventive aspects of care.
 7. CD Learning/Discussions. Self-paced core curriculum lectures. Provide higher level discussions that focus on the application of the content of the lectures rather than on the content itself. Provide more time for students to engage in discussion of scientific theory.
 8. Journal Clubs. Gain knowledge of current research topics relevant to medicine.
 9. Group Discussions. Be able to emphasize different areas of particular interest of students.
 10. Demonstrate honesty and integrity in relationship with preceptors, colleagues, and patients at all times.

Preparation for Teaching

If graduate students, postdoctoral fellows in the biomedical sciences, or residents teach in the course (as lecturers, small group facilitators, laboratory instructors), describe how they are informed about the course objectives and prepared for their teaching role.

Graduate Students and Postdoctoral Fellows are involved as small group facilitators; they are informed about course objectives by the Organ Systems teaching faculty section leaders through training meeting(s) prior to the course. They also receive all course materials pertaining to the section they are instructing in.

If the entire course is taught at more than one site (e.g., at geographically separate campuses), describe how faculty members at all sites are oriented to the objectives and grading system.

Not applicable.

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Not applicable. Not done in the Organ Systems Course.

Year:			
Score:			

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

X	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions	X	Problem-solving exercises
X	Essay questions or papers		Presentations
	Oral exams	X	Other (describe) Self-evaluation

Briefly describe any formative assessment activities (practice exams, quizzes, etc.)

- Observations by teaching faculty in laboratory sessions.
- Discussion sections of lectures and of labs in data conferences.
- Review of microscopy slides with teaching faculty.
- Small group case studies discussions.
- Self-study using interactive CD-ROM
- Small group discussions

Is there a narrative evaluation submitted in addition to the course grade? (check)

Yes		No	X
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Course Outcomes/Evaluation

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

Teaching Faculty: There is an adequate number of faculty to teach the Organ Systems Course.

Teaching Space: The current space available for lectures and small groups is adequate and meets the needs for medical teaching.

Computer Labs: There are currently 2 computer labs/sites available for medical teaching, which have met the needs below an adequate measure. There is a need for a larger computer lab with “state of the art” technology and audio, visual equipment.

Software: Continues to be added to the curriculum and is seen as a resource, which aids in meeting the course objectives. Software available meets the needs of the Course and is adequate.

Support Personnel: The number of personnel available is adequate to administer the Course.

Hardware: In particular, large printers are not adequate in the Academic Computer Center to meet the needs of medical students printing lecture notes, presentations from Blackboard (on-line course management system).

In short, since technology continues to be introduced into the Course, the need to support the technology with computers and printers also needs to be addressed. At present, computer labs and printers does not adequately meet the needs of the Course.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two years. If the course is new or significantly revised, provide evaluation data for the new version

of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

The new elements, resources introduced into the Organ Systems Course within the last two years include: Living Textbook, Course/Section Reviews, Blackboard (on-line course management system). Listed below are summaries from students' evaluations on these new elements.

2003 Student Reviews of Living Textbook:

- I really enjoyed the functions of the Living Textbook. The ability to take notes as the lecture proceeded and copy images into the notes was great. Also, I was able to pause the video to look something up. Most importantly, I think the Living Textbook was great because it pushed us to know the material before going into class, making the discussion sessions and the labs more valuable since problems were addressed directly rather than having us be lecture to at that time.
- I would say the Living Textbook is a more effective way of learning. Instead of listening to a 1 hour lecture (which usually loses me after 15 minutes any way.) I can learn the same amount of material by spending only 25 minutes on the Living Textbook.
- I could watch the lectures as often or as little as needed and also at times convenient to me.
- I am not a very good audio learner, and lecture usually does not help me out. The visual aids in the Living Textbook helped me as I was listening to lectures.
- Watching the lectures on Living Textbook didn't help any more than traditional lecture, but the discussions the day after helped me to learn better.
- I don't feel engaged by the Living Textbook lectures. As nice as it is to include technology in our learning, I feel that sometimes being in class and taking notes in real time is irreplaceable.

2004 Student Reviews of Living Textbook:

- Yes, the Living Textbook is an excellent way of introducing new topics since it allows the material to be explained in detail as a whole so that interactions with professors can be best utilized to explain only the tricky or poorly understood material.
- Yes and No. The Living Textbook improves the quality of lectures by making the presentation of information more efficient by reducing student questions during lecture, allowing for shorter and more well planned lectures.
- I don't think the Living Textbook enabled the quality of student-faculty contact time, although I think there is POTENTIAL for this to occur – it just takes a little more changes in the curriculum. First and foremost, we need small groups.
- I found at times, the Living Textbook helped improve the quality of contact time – particularly when the Living Textbook lectures were good and clear.

2003 and 2004 Student Evaluations of Course Reviews:

- Gives a good overall picture.
- Didn't attend, since I felt I knew the section well.
- Helped to prepare me of the upcoming exam.
- This wasn't particularly helpful to me.

2003 and 2004 Student Evaluations of Blackboard:

- Good way to communicate with faculty (email).
- I enjoyed the flexibility that the on-line quizzes provided.
- Was valuable in receiving updates, course materials.
- Could not print out Histology slides from Blackboard, because of printer being overused by a number of students trying to print at the same time.

Identify major successes in the course and problems to be overcome.

Living Textbook Lectures (CD based learning): Has been successful and allows students the flexibility to learn course materials (otherwise given as lectures) at their own pace. **PROBLEM:** Not all students prefer this mode of learning and find that they have been “trained” to learn from live lectures and note taking. **ADDRESSING THE PROBLEM:** Since the majority of the students do find CD based lectures as a valuable learning tool and some students prefer more interaction with faculty, the “Living Textbook” CD lectures will remain, but discussions following the CD’s will be in smaller groups. This was implemented for the 2004 Course. Meaning, rather than the follow-up to the CD lectures being conducted in the Basic Science Auditorium, the students were broken out into smaller groups.

Course Reviews: A Course Review was introduced in the 2003 Organ Systems Course. The Review was well received and additional Section Course Reviews were added in 2004. The Reviews gave those students needing additional course instruction the opportunity to have a faculty member review course information and be available for questions. **PROBLEM:** Not all students found the need to attend these Reviews. **ADDRESSING THE PROBLEM:** The “Reviews” are optional and scheduled at the end of the day, so those students who do not need additional course instruction, can opt to not attend and use the time to study other course information.

Blackboard (on-line course management): Has been a success in posting quizzes, evaluations, lectures and presentation notes, and all supplemental course materials. Video taping of lectures has been a tremendous resource, which allows students to review the lectures again or at a later time. **PROBLEM:** As Blackboard continues to be instrumental in Course administration, students must have the resources available to obtain and print on-line materials.