University of Puerto Rico Medical Sciences Campus School of Medicine



Human Physiology

MPRI 7120

Academic Year 2016-2017

MPRI 7120

COURSE SYLLABUS

Human Physiology
September 16, 2016 to February 21, 2017
MPRI 7120
136 hours
Walter I. Silva Ortiz, Ph.D.
A-678
(787) 758-2525 ext. 1608
walter.silva@upr.edu
Amphitheater I, 3 rd floor, Guillermo Arbona Irizarry Building
8:00am until 12:00noon
None
None

COURSE DESCRIPTION:

In this course, students will learn the basic concepts of Human Physiology that will enable them to make sound clinical diagnosis based on strong scientific foundations. Clinical examples are used throughout the course to make students aware of the importance of Physiology in their future medical practice. The course runs from **September 16, 2016 to February 21, 2017** with approximately half of the time dedicated to active learning activities in the form of small group discussions, laboratories and student directed discussions.

COURSE JUSTIFICATION:

This course provides first year medical students with the basic facts and principles of Human Physiology. These principles are necessary to understand the mechanisms of disease, as well as treatments for pathological conditions, such as pharmacological interventions. In this way, the students will acquire knowledge and develop the necessary skills to integrate the function of different systems (Cardiovascular, Respiratory, Renal, Gastrointestinal and Endocrine) and how they respond to a stimulus (pathological, exercise or temperature). The concepts presented in this course are, therefore, essential to the everyday practice of clinical medicine.

COURSE OBJECTIVES:

Knowledge Objectives:

- 1. Describe the movement of molecules across the cell membrane and its regulation.
- 2. Explain the morphological and functional characteristics of skeletal, cardiac and smooth muscle.
- 3. Classify the divisions of the Autonomic System and understand its role in the regulation of physiological systems.

- 4. Evaluate the main functions of the heart and blood vessels, as well as the regulation and integrative actions of the cardiovascular system.
- 5. Describe the organization of the respiratory system as well as its function and components.
- 6. Name and analyze the structural-functional relationship of the renal system and its integrative function with other organ systems.
- 7. Compare the physiological responses caused by acid or base disturbances.
- 8. Demonstrate the organization and function of the gastrointestinal system.
- 9. Describe the organization and function of the endocrine system and explain its role in regulating homeostasis of the human body.
- 10. Recognize the interplay between genes and hormones in the expression of male and female phenotypes.
- 11. Describe and compare the male and female reproductive systems.
- 12. Explain the components of the thermoregulation system.
- 13. Discuss the physiological adaptations and responses to exercise.
- 14. Evaluate how each system responds to specific stimuli, either physical or environmental, and explain how the responses contribute to the etiology of disease.

Psychomotor Objectives:

These objectives will be accomplished by participating in the laboratory activities planned for this course.

- 1. Acquire the skills in the correct use of basic clinical equipment, such as: use of sphygmomanometer, EKG and spirometer in the monitoring of the function of the cardiovascular and respiratory systems.
- 2. Perform practice sessions with the clinical instruments and interpret their findings in various altered states of the cardiovascular and respiratory systems.

Affective Objectives:

These objectives will be accomplished by active student participation in the small group discussions scheduled for the course.

- 1. Develop individual and group communication skills by interacting with fellow students and observing the group dynamics.
- 2. Collaborate in the formulation of the problem and the problem solving by the group.
- 3. Express individual ideas and points of view while showing respect for that of others.

COURSE TOPICS:

- 1. Cell Membrane Transport
- 2. Muscle Physiology
- 3. Autonomic System
- 4. Cardiovascular Physiology

- 5. Respiratory Physiology
- 6. Renal Physiology
- 7. Acid-Base Physiology
- 8. Gastrointestinal Physiology
- 9. Exercise Physiology
- 10. Endocrine Physiology
- 11. Thermoregulatory Physiology
- 12. Reproductive Physiology

TEACHING STRATEGIES:

The table below summarizes the diverse teaching strategies of MPRI 7120.

Learning / Evaluation	Educational Activity	Hours	Percent Time
Passive Learning	Lectures	89.0	65.4%
Active Learning	Clinical Correlations (CC)	9.5	7.0%
	Self-directed Group Discussions (SDS)	8.0	5.9%
	Small Case-based Group Discussions (SGD)	10.0	7.4%
	Clinically-oriented Laboratory Practices	4.0	2.9%
	High Fidelity Human Simulator (Active Learning)	2.5	1.8%
	Humanistic Activity (movie-discussion- humanistic relevance): "The Danish Girl"	2.0	1.5%
Evaluation	Quizzes	3.0	2.2%
	Exams	8.0	5.9%
	Total =	136.0	100.0%

Estimates of Physiology equivalent Exam hours as per the assigned number of physiology questions and the total number of questions and time allotted for the each integrated exam (Exams 1-8). A total of approximately 5 physiology equivalent exam hours are obtained. In addition, 3 hours have been assigned for the Physiology Shelf Exam, and 3 hours for the quizzes. Total exam hours = 11.

Exam #	Physiology Qs	Total Exam Qs	Percent Physiology Qs	Allotted Exam hours	Physiology equivalent hours
1	12	230	5.2%	2.5	0.13
2	5	135	3.7%	2.75	0.10
3	23	110	20.9%	2.25	0.47
4	32	85	37.6%	1.75	0.66
5	48	65	73.8%	1.33	0.98
6	50	60	83.3%	1.25	1.04
7	45	60	75.0%	1.25	0.94
8	27	115	23.5%	2.33	0.55
Total =	242	860	28%	15	4.87

ASSESSMENT STRATEGIES

The students will be evaluated by means of the following percentages assigned per specific course components:

Course Component	Final Grade (%)
Cumulative score in Physiology questions of integrated examinations	75%
NBME Shelf Exam	10%
Quizzes	9%
Participation in SGDs	5%
Humanistic Activity Essay	1%
	100%

1. EXAMS:

In the first year curriculum, there will be a total of eight (8) integrated exams with questions from the Physiology course. The relative distribution of questions and topics covered during these exams are depicted in the Table below. It must be noted that Exam 4 will have a series of cumulative questions from topics covered prior to the Gastro section. As stated above, the cumulative score in the Physiology questions (242 total questions) in the integrated examinations (Exams 1-8) will account for <u>75%</u> of the final grade. Notice in the rightmost columns the relative weight percentage (Rel. Weight % = Subtotal [Qs/242] X 0.75) that the physiology questions in each exam will have for your final Physiology grade.

DATE	EXAM NUMBER	QUESTIONS PER PHYSIOLOGY TOPICS COVERED (Faculty) Q			Subtotal Questions	Relative Weight	Relative (%)
10/3/16	EXAM 1	Membranes (NES)	Autonomic NS (CJR)				
	-	10	2		12	0.037	3.72%
10/19/16	EXAM 2	Musculoskeletal (GES)					
		5			5	0.015	1.55%
11/14/16	EXAM 3	Cardiovascular (GES)					
		23			23	0.071	7.13%
11/28/16	EXAM 4	Respiratory (MJC)					
		32			32	0.099	9.92%
12/12/16	EXAM 5	Renal (NES)	A/B (MJC)				
		40	8		48	0.149	14.88%
1/23/17	EXAM 6	Gastro (WIS)	Cumulative (all prior)				
		28	22		50	0.155	15.50%
2/6/17	EXAM 7	Endocrine (ACS)	Endocrine (CTR)				
	•	20	25	·	45	0.139	13.95%
2/17/17	EXAM 8	Reproductive (ACS)	Exercise (WRF)	Thermoreg. (CJR)			
		20	5	2	27	0.084	8.37%
	•		Total Phy	vsiology Questions =	242	0.75	75%
2/21/17	EXAM 9	PHYSIOLOGY SHELF EXAM			0.10	10%	

In addition, Exam number 9 will be the NBME Subject Exam in Physiology (Shelf), and will account for <u>10%</u> of the final grade. The Shelf exam is a Comprehensive exam covering all physiology topics of exams 1-8. Questions and Time: Approximately 125 multiple choice questions; 2.5 hours; 1.20 min/question.

2. PARTICIPATION IN THE CASE STUDIES (SMALL GROUP DISCUSSIONS) (SGDs) AND SELF DIRECTED STUDIES (SDSs)

Case studies are small group learning experiences in which basic physiological concepts are discussed in a clinical context. They are carried out in groups of 10 to 12 students under the direction of a group leader. The cases allow students to see the relevance of the knowledge that they gain in class with the practice of medicine. There will be 7 cases during the duration of the Physiology course. The group leader evaluates student's performance following these criteria:

Presence and Alertness	25%
Preparation	25%
Evoked Participation	25%
Spontaneous Participation	25%

The total grade obtained from this evaluation will count as the 5% of the total grade. *Participation in the case studies is mandatory.*

3. Quizzes:

In addition, each SGD will be evaluated in quizzes that will contain questions pertaining to the specific topic of the SGD. These questions will be evaluated separately and count as 9% of the total grade. In other words, performance in each SGD will be evaluated by the SGD group leader subjective evaluation and the quiz objective evaluation.

Quizzes

- #1 Membranes, ANS
- #2 Cardiovascular
- #3 Respiratory, Lab 1: The electrocardiogram and blood pressure, and Lab 2: Pulmonary volumes, capacities and mechanics
- #4 Renal, Acid Base
- #5 Gastrointestinal
- #6 Endocrinology and Reproduction

4. Assay Humanistic Activity:

Performance in the Humanistic component of the Physiology course will require that the student hands-in a written essay (1 page) due at midnight the day after the activity. The essay is a reflection based on the panel discussion and the video. The essay counts as 1% of the total grade.

The total grade obtained by the students in the case studies, laboratories and Humanistic activity related to the discussion of the movie will count as <u>15%</u> of the course final grade. Students who do not attend a case study, laboratory or the movie will receive a grade of 0% (zero). If the student has a valid excuse for the absence, then he/she may be given the option of removing the grade of zero by taking a written test pertaining the specific case study or arranging a discussion of the case with the professor in charge of the specific section. *IMPORTANT:* ATTENDANCE TO THE SGDs, MOVIE PRESENTATION AND LABORATORIES IS MANDATORY. ARRIVING 30 MINUTES AFTER THE START OF A CASE DISCUSSION, LABORATORY OR HUMANISTIC ACTIVITY WILL BE CONSIDERED AN ABSENCE. ABSENCE TO THREE OR MORE CASE STUDIES (OR BOTH LABORATORIES) WITHOUT A VALID AND REASONABLE EXCUSE WILL BE DEEMED A FAILURE OR <u>F</u> IN THE WHOLE MPRI 7120 COURSE WITHOUT THE BENEFIT OF REPOSITION.

The SDSs are student directed activities designed to give the students the opportunity to work on their own, and in small groups, in specially designed active learning formats. The learning activities are based on prepared problems and reading material that the student must cover in a period of 1-2 hours. A discussion with the professor is optional and depends on the professor in charge. The activity may or may not be case based depending on the specific aim that needs to be accomplished. The material covered in SDSs will not be covered in lectures but will be part of the examination and is the *sole responsibility of the student* to make sure that he (she) has studied this material. It is in the student's best interest to utilize this period of active learning activities in the morning for the SDS when it is assigned.

GRADING SYSTEM

Component	Percentage	Weight	Sample score	Sample Grading
Cumulative score in Exams 1-8	75	0.75	75%	56.25%
Final Shelf Exam Score	10	0.10	65%	6.50%
Quizzes-SGDs, labs, movie	9	0.09	100%	9.00%
SGD discussions	5	0.05	85%	4.25%
Humanistic Activity Essay	1	0.01	100%	1.00%
	100	1.0	Final grade =	77.00%

The final grade for the course will be calculated as follows (refer to sample case below):

THE PASSING GRADE FOR THE MEDICAL PHYSIOLOGY COURSE MPRI 7120 WILL BE 70%. THE GRADING SYSTEM FOR THIS COURSE WILL BE AS FOLLOWS:

Grade	Percent Score
A	90 – 100%
В	80 – 89%
С	70 – 79%
F	< 70%

Reposition Exam: If a student obtains less than seventy percent (70%) in any first year course, he/she may have the opportunity to take a reposition exam established by the course faculty coordinator and/or the department as described in the Policies and Guidelines for the Promotion of Medical Students. In order for a student to be allowed to take a reposition exam, he/she needs to have a cumulative average of at least 60%. Any student with less than 60% will not be allowed to take a reposition exam. An F will be reported as the final grade for the given course. The due process will follow the rules established in the Policies and Guidelines for the Promotion of Medical Students.

A DEPARTMENTAL COMPREHENSIVE REPOSITION EXAM will be administered to those students who score less than 70% at the end of the course and have a cumulative average of 60% or above. The exact date for this exam will be announced. In order to pass this reposition exam a student must score 70% or higher. THERE WILL BE NO ADJUSTMENTS APPLIED TO THE COMPREHENSIVE REPOSITION EXAM. STUDENTS TAKING AND PASSING THE COMPREHENSIVE REPOSITION EXAM WILL BE GIVEN A MAXIMUM GRADE OF "C" IN THE COURSE. If the student fails this examination test, the opportunity to take a reposition course will be evaluated. Reposition exams and remedial courses are a privilege offered to students after careful evaluation of individual circumstances.

AN ABSENCE TO ANY PARTIAL OR FINAL EXAM MUST BE ACCOMPANIED WITH AN APPROPRIATE JUSTIFICATION. UPON THE REVIEW OF THE JUSTIFICATION BY THE COURSE COORDINATOR AND ACCEPTANCE OF THE JUSTIFICATION BY THE DEPARTMENT, THE STUDENT MAY BE ALLOWED TO TAKE A MAKEUP EXAM AT A DATE ARRANGED WITH THE COORDINATOR.

NO STUDENT WILL BE ALLOWED TO TAKE A PARTIAL OR FINAL EXAM IF THE STUDENT ARRIVES 30 MINUTES AFTER THE START OF THE EXAMINATION. LATE ARRIVAL TO AN EXAM DOES NOT MEAN THAT THE STUDENT WILL BE ALLOWED TO REMAIN EXTRA TIME TO FINISH THE EXAM. THE STUDENT WILL HAVE ONLY THE REMAINING ALLOTTED TIME FOR THE EXAMINATION AND THE EXAM WILL BE COLLECTED AT THE END OF THE ESTABLISHED EXAM PERIOD.

THE STUDENT WILL HAVE 5 WORKING DAYS AFTER EACH PARTIAL EXAMINATION TO DISCUSS THE EXAM QUESTIONS WITH THE PROFESSORS. <u>ALLEGATIONS REGARDING EXAM QUESTIONS WILL NOT BE ACCEPTED AFTER THIS</u> <u>PERIOD</u>. ALLEGATIONS OF EXAM QUESTIONS ARE TO BE DISCUSSED DIRECTLY WITH THE PROFESSOR IN CHARGE OF PREPARING THE SPECIFIC QUESTIONS. THERE WILL BE NO DISCUSSIONS OF EXAMINATIONS IN CLASS.

RESOURCES:

Course Faculty:

Walter I. Silva Ph.D. (WIS) Professor & Course Coordinator (walter.silva@upr.edu)

Maria J. Crespo Ph.D. (MJC) Professor (maria.crespo3@upr.edu)

Nelson Escobales Ph.D. (NE) Professor & Chair (nelson.escobales@upr.edu)

Walter R. Frontera M.D., Ph.D. (WRF) Professor (walter.frontera@vanderbilt.edu)

Sabzali Javadov, PhD; Professor (sabzali.javadov@upr.edu)

Carlos Jiménez-Rivera Ph.D. (CJ) Professor (carlos.jimenez8@upr.edu)

Jorge D. Miranda Ph.D. (JDM) Professor (jorge.miranda3@upr.edu)

Guido E. Santacana Ph.D. (GES) Professor (guido.santacana1@upr.edu)

Annabell C. Segarra Ph.D. (ACS) Professor (annabell.segarra@upr.edu)

Carlos A. Torres-Ramos Ph.D. (CTR) Associate Professor (carlos.torres27@upr.edu)

Collaborating Faculty:

Miriam Allende, MD (MA), Professor and Chair of Endocrinology Melvin Bonilla, MD (MB) Professor and Chair of Pediatrics Enrique Carrión, MD (EC) Professor of Cardiology Alberto de la Vega, MD (ADV) Professor of Obstetrics and Gynecology Juan González, MD (JG) Professor and Chair of Emergency Medicine Josefina Romaguera, MD (JR) Professor of Obstetrics and Gynecology

Teaching Assistants (Physiology PhD candidates):

Rebecca Parodi, Cristina Roman, Enrique Pérez, Jennifer Colón, Rebeca Núñez, Magdiel Martínez, Nilmary Grafals, Ana Vacquer, Marie Román

Audiovisual:	Power Point Lectures and Turning Point ("clickers")
Physical:	Amphitheater, multi-laboratory, and small group rooms
Human Simulator:	High Fidelity Human Simulation
Learning Materials:	Course textbook, professor's handouts, and recommended books

Course Textbook:

Medical Physiology, Boron and Boulpaep, Updated Edition, Second Edition, Elsevier, 2012

Professor's Handouts

Handouts will be available through *Blackboard*.

Recommended Books:

<u>Cardiovascular Physiology</u>, Berne and Levy. Ninth Edition. Mosby, 2007. <u>Respiratory Physiology: The Essentials</u>, West, 7th Edition, Williams and Wilkins, 2006. <u>Berne and Levy Physiology</u>. Koeppen and Stanton, Sixth Edition, 2010, Mosby Elsevier. <u>Physiology</u>, Costanzo, Fifth Edition, 2011, Walters Kluwer/Lippincott Williams & Wilkins <u>Medical Physiology</u>. Rhoades & Bell. Third Edition, 2009, Lippincott Williams & Wilkins. <u>Gastrointestinal Physiology</u>, Johnson, 7th Edition, 2007, Mosby.

Some websites of interest:

American Physiological Society: www.the-aps.org

Cardiovascular Physiology: www.nda.ox.ac.uk/wfsa/html/u10/u1002_01.htm and www.cvphysiology.com

Respiratory Physiology: www.nda.ox.ac.uk/wfsa/html/u12/u1211_01.htm and www.acbrown.com

Gastrointestinal Physiology: http://physioweb.med.uvm.edu/gi_physiology

Endocrine Physiology: www.hormone.org, www.endo-society.org and www.endocrinology.org

Reproductive Physiology

http://www.nlm.nih.gov/medlineplus/femalereproductivesystem.html

COORDINATING STAFF

Faculty	Coordination Component	Email address
Walter I. Silva Ortiz	Main coordinator,	walter.silva@upr.edu
	Overall course oversight	
Jorge D. Miranda	Course Exams & Quizzes	jorge.miranda3@upr.edu
Guido E. Santacana	Labs and SGDs	guido.santacana1@upr.edu

REASONABLE ACCOMMODATION

Students with a health condition or situation that, according to the law, makes them eligible for reasonable accommodation have the right to submit a written application to the professor and the dean of their faculty, according to the procedures established in the document "submittal process for reasonable accommodation of the medical sciences campus". A free copy of this document may be obtained at the office of the dean for student affairs, second floor of the pharmacy building; phone 787-758-2525 ext. 5203. A copy may also be obtained at the office

of the dean of medicine, as well as in the MSC web page. The application does not exempt students from complying with the academic requirements pertaining to the programs of the Medical Sciences Campus.

POLICY OF VIDEO AND/OR AUDIO RECORDING OF CLASS LECTURES

Recording of class lectures is discretionary. The Physiology Department allows each professor in his/her own individual character to decide if his/her lectures may be recorded. If a student has any questions regarding this policy, they should approach the professor responsible for that particular section directly.

DEPARTMENT OF PHYSIOLOGY: ON-LINE TEST ADMINISTRATION POLICY

General statement

This document is an effort to provide a fair testing environment for each medical student taking examinations by the Department of Physiology or NBME- administered Physiology subject evaluations. The Policy assures that a standardized testing environment is provided to all students being evaluated, consistent with test security and student confidentiality practices. It also promotes test validity and accuracy while minimizing the burden for students and test administrators. This Policy also responds to medical students complaints regarding the testing environment at the UPR-School of Medicine facilities.

Course Coordinators (CCs) Responsibilities:

The CCs should assure:

- A fair distribution of students among the testing facilities to be used.
- That all rooms to be used for the evaluation are available to students 30 minutes prior to the evaluation.
- the availability of CIT personnel for trouble-shooting of computer systems during test taking.*
- the availability of at least two blank sheets of paper per student, for notes or calculations. These should be returned to the CC when the student exits the room.

• a quiet environment, void of talking or other distractions that might interfere with a student's ability to concentrate or compromise the testing situation. Read-aloud accommodations for one student must not compromise the security of test items or interfere with other students' test-taking environment.

• that visual barriers or adequate spacing between students' seating are present during the examination.

• student access to and use of only those allowable resources explicitly identified in the appropriate specific subject area.

• the observation of any assessment items by only the student taking an assessment and, to a limited extent, the faculty when required.

• that no electronic devices that may compromise test security be present at the test table. This includes devices that allow communication among students or the photographing or copying of test content (i.e. cell phones, personal digital assistants (PDAs), iPod and electronic translation devices).

• that no student continues testing beyond the closing time for the evaluation. This applies particularly in evaluations where the test window does not close automatically.

• that the faculty does not answer questions during the exams. If a student has concerns about an item on an online test, CC or faculty will direct the student to provide the concern in writing to the CC following the examination. The CC will refer all concerns to the faculty of the Department for consideration.

• that the required accommodations for each student with identified medical conditions are in place before the examination.

Exam security:

• No copies or descriptions of the test items or passages may be made or otherwise retained or released to anyone or sent over by e-mail, fax or replicated electronically.

• All written materials or calculations using paper sheets provided the day of the evaluation by the Course Coordinator or faculty must be securely destroyed immediately following a testing session.

• No review, discussion, or analysis of test items, reading passages before, during, or after the Shelf test is allowed by students, CC or faculty.

• No hats, headphones nor earphones will be allowed. The student may use soft-ear plugs subject to inspection by CC or faculty.

• While the exam is in progress, the block and overall test session clock continues to run even if the student leaves the testing room, (e.g., for a personal emergency or restroom break). The student will not receive compensatory time for this interruption of testing.

• If the student decides to stop the test and leave for the bathroom, a faculty member will accompany him/she.

• The CC or faculty will not answer questions regarding test items.

Student responsibilities

The student:

• must be present in rooms at least 20 minutes before the testing. Students arriving 10-15 minutes after the beginning of the test, will be allowed to start the examination but will not be given additional time to finish. Students that arrive at the test 30 minutes or more after the beginning of the test will have to present a reasonable excuse to the CC who may decide to postpone the evaluation following consultation with the Departmental faculty. This includes students that have special arrangements or reasonable accommodations.

• must maintain an ethical behavior during testing, avoid passing notes or providing assistance to other students during testing.

• must remain silent during testing. If a problem should arise, they will raise his/her hand for assistance.

• should not access or use electronic equipment (e.g., cell phones, PDAs, iPods, or electronic translators) during testing.

• should not access the internet during a testing event.

• should not remove testing materials such as test items, reading passages, writing prompts, or scratch paper from the testing environment.

•should inform promptly the CC or faculty of any irregularity taking place during the test. Other responsibilities of students:

• If the student notices an error in a test item, he/she should proceed with the remaining test items and following the completion of the evaluation, submit a written complaint to the CC for due process.

• If the student experiences a computer problem during the test, he/she should notify the staff immediately. CIT personnel will be available to solve the problem. Depending on the duration of the interruption (>2min) additional time may be given for the completion of the exam.

• If for any established medical condition or any other justified cause the student is absent during the testing day, he/she should bring a valid medical excuse to the CC to coordinate a new date for the evaluation. In the absence of any valid medical excuse or a justifiable cause, the student will be given an -**F**- in said evaluation.

*The Department of Physiology is not responsible for internet services or connections problems when using the UPR or CIT infrastructure, nor has control over CIT personnel availability during testing conditions.

This Policy was adopted by the Department of Physiology of the UPR-School of Medicine at its meeting on October 22, 2013.

ETHICAL ISSUES

Written examinations are the principal means utilized by the Department of Physiology to measure student's achievement of their educational experiences. It is our intention to guarantee that all students have an equal opportunity to demonstrate their academic achievement under the same circumstances; eliminating all possibility of unfair or unethical behavior. We trust our students in their commitment to honesty and professional ethics; should unethical behavior be observed, appropriate and very rigorous disciplinary measures will be taken.

Should knowledge become available that dishonesty regarding any particular examination has occurred; the faculty of the course reserve the right to cancel the examination before or after it has been administered and to require that the exam be repeated or to completely disregard the exam from the course evaluation.

DRESS CODE

First year Medical students should follow the dress code that was approved on August 2007 and revised on November 2007 (http://www.md.rcm.upr.edu/pdf/ codigo_ profesional_vestimenta.pdf).

STUDENT COURSE EVALUATION

Evaluations are a critical step for the continued development and enhancement of academic programs. The School of Medicine uses the student, faculty, resident and course evaluations in order to monitor and improve your medical education. In order to make instruction relevant and effective, filling out these evaluations is a course requirement.