M1 - Cardiovascular / Respiratory, Fall 2007

Abrams, G.; Sisson, T.; Jacobson, P.
Unless otherwise noted, the content of this course material is licensed under a Creative Commons Attribution 3.0 License.

Copyright 2007, University of Michigan.

The following information is intended to inform and educate and is not a tool for self-diagnosis or a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional. You should speak to your physician or make an appointment to be seen if you have questions or concerns about this information or your medical condition. You assume all responsibility for use and potential liability associated with any use of the material.

Material contains copyrighted content, used in accordance with U.S. law. Copyright holders of content included in this material should contact open.michigan@umich.edu with any questions, corrections, or clarifications regarding the use of content. The Regents of the University of Michigan do not license the use of third party content posted to this site unless such a license is specifically granted in connection with particular content objects. Users of content are responsible for their compliance with applicable law. Mention of specific products in this recording solely represents the opinion of the speaker and does not represent an endorsement by the University of Michigan.

Viewer discretion advised: Material may contain medical images that may be disturbing to some viewers.
General Cardiovascular/Respiratory Sequence Information Fall 2007

Objectives:

For each of the subtopics of the sequence a list of comprehensive behavioral goals and cognitive objectives will explicitly define what a student should know and be able to do by the end of the sequence. These objectives provide a focus for "active" studying. It is important to note that mastery of the "basic facts" concerning structure and function, as defined in these lists of cognitive objectives, is an essential, but only the first step, in life long learning. You must also be able to use these facts in a logical manner to solve problems. Physiologic and pathophysiologic problem solving is the basis of medical practice. Accordingly, examinations will attempt to test not only for mastery of the cognitive objectives but, to the extent we are able, to test for your ability to manipulate this material, i.e., for your ability to solve problems.

The core information necessary to master these objectives will be presented primarily in lecture. Sometimes the lecturer will indicate that specific outside readings are essential for mastery of an objective. Therefore, some material will either not be given at all in lecture or will not be adequately covered in the lecture. Regardless of the level of lecture coverage you are responsible for, and can be examined on, the material designated in the listed sequence objectives.

Small Group Discussions (Cardiovascular, November 8, 1:00 PM & Respiratory, November 27, 1:00 PM)

These sessions will provide you with an opportunity to discuss, analyze, and interpret signs and symptoms as they relate to the underlying physiological principles you have learned. The purpose of these sessions is not to teach you how to diagnosis specific diseases but to provide practice in applying physiological principles to interpreting various pathophysiologic states. The problem to be discussed, and the questions you will be expected to consider during the discussion, will be provided prior to the discussion. Attendance at small group discussions is required and specific student room assignments are made by the Office of Medical Education. Failure to attend for any reason will require you to submit written answers to the small group discussion questions to the Sequence Coordinator within 72 hours of the small group session.

Required Textbooks:

CARDIOVASCULAR PHYSIOLOGY David E. Mohrman and Lois Jane Heller, McGraw-Hill, 6th Ed., 2006. ~$35 There will be copies of this textbook are on reserve at Taubman Medical Library. Older editions are similar but some figure numbers and chapter content have changed.

PULMONARY PHYSIOLOGY Michael G. Levitzky, McGraw-Hill, 7th Ed., 2007 There will be copies of this textbook on reserve at Taubman Medical Library.

Supplementary Textbook:

RESPIRATORY PHYSIOLOGY: THE ESSENTIALS John B. West, Williams and Wilkins, 7th Ed., 2004. There will be copies of this textbook on reserve at Taubman Medical Library.

Sequence Performance, Quiz, Exams and Sequence Grade:

Performance will be assessed by participation in the Small Group Exercises as well as by the quizzes and a comprehensive final exam. No "new" content from the Small Group Exercise will be added to the final. The final exam will include both written and practical components. The sequence content will be represented on the quiz and final approximately based on the time allocated in class. Questions on the quizzes, practical, and final all will be worth 1 point. In order to pass the course students must achieve a total score of at least 75% on these exercises and fulfill the responsibilities to the Small Group Exercise and Longitudinal Case.

Required Experiences:

In the Cardiovascular/Respiratory sequence there are several required experiences. In the RARE circumstance where a student cannot attend, the student must contact their class counselor in advance (or as soon as possible in an emergency) to request a deferral. (Please do NOT contact sequence directors with requests for or explanations of deferrals.) Absences will be approved or denied by class counselors based on the same guidelines used for Quiz and Exam deferrals. Should you obtain a deferral from your class counselor, make up instructions for the required experiences (found below) should be followed.

Failure to attend either small group session for any reason will require you to submit written answers to the small group discussion questions to the Sequence Coordinator within 72 hours of the small group session.

Remediation for missing the MDC will be to watch the video and write a 2 page essay detailing your reactions, including knowledge, insights, and inspirations gained from the presentation. This is due to the sequence coordinator withing 72 hours of the session.
Additional Books on Reserve at the Medical Library:  General Introductory Text:  
Vander, Sherman, and Luciano. Human Physiology, The Mechanisms of Body Function, McGraw-Hill Inc, (10th edition), 2005  There will be copies of this textbook are on reserve at Taubman Medical Library

Comprehensive medical physiology texts:
Ganong. Review of Medical Physiology, Lange, (22nd edition), 2005

Cardiovascular/Respiratory Sequence Faculty
Louis D’Alecy, Ph.D., Sequence Coordinator
Professor of Physiology, Dept. of Molecular & Integrative Physiology

Gerald Abrams, M.D.
Professor, Department of Pathology

A. Kent Christensen, Ph.D.
Professor Emeritus of Cell and Developmental Biology, Dept of Cell and Developmental Biology

Robert Bartlett, M.D.
Professor, Department of Surgery

Thomas Gest, Ph.D.
Associate Professor of Anatomical Sciences, Office of Medical Education

Peter Jacobson, J.D., M.P.H.
Professor of Public Health, Department of Health Management and Policy, School of Public Health

Sun-Kee Kim, Ph.D.
Professor of Cell and Developmental Biology, Department of Cell and Developmental Biology

Richard Neubig, M.D., Ph.D.
Professor of Pharmacology, Departments of Pharmacology and Internal Medicine

Perry Pernicano, M.D.
Clinical Assistant Professor, Department or Radiology

Steve Ramsburgh, M.D.
Assistant Professor, Department of Pathology

Marshal Shlafer, Ph.D.
Professor of Pharmacology, Department of Pharmacology

Thomas Sisson, M.D.
Assistant Professor, Department of Internal Medicine

John Traynor, Ph.D.
Associate Professor of Pharmacology, Department of Pharmacology

J. Matthew Velkey, M.S.
Lecturer, Department of Cell & Developmental Biology

Michael Welsh, Ph.D.
Professor of Cell and Developmental Biology, Dept of Cell and Developmental Biology