EMC 351 Basic ECG Interpretation Fall 2007

<u>Course Instructor:</u> Denise Wilfong, MHS Office Hours:

 128 Moore Hall
 T,R 1:00-2:00

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 F 10:00-12:00

 dwilfong@email.wcu.edu
 By appointment

Course Description: ECG interpretation in the monitoring leads.

Objectives: At the completion of the course, the student will:

- 1. have a thorough understanding of the electrical and mechanical activity of the heart
- 2. understand the basic principles of electrocardiography
- 3. be able to interpret monitoring lead ECG's

Text: Emergency Dysrhythmias: ECG Injury Patterns, Kevin Brown, Thompson-Delmar Learning, 2003.

<u>Reading and Practice Strips:</u> Students are expected to read the assigned material for content prior to coming to class. Following most classes, there is a homework assignment that is to be completed <u>before</u> the next class meeting.

<u>Laboratory Sessions</u>: Laboratory sessions are scheduled throughout the semester. The early sessions will familiarize students with ECG equipment and their functions. The later sessions will focus on interpretation of sample ECG rhythm strips. The class and instructor as a group will proceed step-by-step through each sample rhythm strip. The goal of these sessions is to familiarize students with the actual process of ECG interpretation.

<u>Attendance Policy</u>: Because of the nature of the course, class participation is an important component. Attendance at the lectures is required. Students are expected to be punctual. Tardiness will not be tolerated. Penalties for absences and tardiness are as follows:

Each unexcused absence beyond two (2) reduces final course grade by 2 points.

Each tardy beyond one (1) reduces final course grade by 1 point.

Excused absences include death in the family, approved University sponsored trips, and other circumstances if prior approval is sought from the course instructor.

Grading Policy:

Homework	15%
Test #1	25%
Test #2	25%
Test #3	25%
Final Exam	10%

Grading Scale:

A = 93-100

B = 83-92

C = 73-82

D = 63-72

F = below 62

EMC majors are reminded that they need a C (2.0) or better in this course to remain in the program.

Homework

Practice is essential to success in interpreting ECGs. Students will be responsible for completing weekly homework. Students are reminded that homework assignments are individual activities and should neither give nor receive assistance when working on them.

All labs are posted on the Course Page of the EMC website at http://emc.wcu.edu. Students are responsible for obtaining the labs and the corresponding lab answer sheet. Only the lab answer sheet should be turned in for grading. It is the students' responsibility to confer with the syllabus and turn in homework on time.

The lowest homework grade will be dropped prior to figuring the student's final grade. All homework is due at the time and date indicated on the syllabus. **Late homework labs will not be accepted.**

Class Notes

Students are responsible for retrieving all class notes from the EMC website, http://emc.wcu.edu and bringing them to the appropriate class. Handouts will not be provided in class.

Pagers/Cell Phones

Pagers, cell phones, text messengers, PDA's, etc. are <u>not allowed</u> during class time. Students must <u>turn</u> <u>them off</u> and have them stored at all times while in class.

<u>Academic Honesty:</u> In accordance with the academic honesty policy presented in the Student Handbook, you should be aware that failure to adhere to this policy will result in a grade of F for this course. Note: academic dishonesty includes knowingly allowing someone else to cheat. The absence of a proctor during an exam or quiz does not change rules of this policy.

<u>ADA Compliance</u>: WCU makes every effort to provide reasonable accommodations for students with documented disabilities in compliance with the Americans with Disabilities Act. To receive academic accommodations, students must be registered with the Office of Student Support Services. The letter received from Student Support Services should be presented as documentation to the instructor as early in the semester as possible.

Schedule Changes: Every effort will be made to adhere to the class schedule as presented. The instructor reserves the right to change or rearrange the course schedule due to unforeseen circumstances.

EMC 351 Course Outline Fall 2007

Date	Topic	Reading Assignment	Assignment Due
08/21	Cardiovascular Anatomy & Physiology		
08/21	(slides) (outline)		
08/23	Basic Electrophysiology (slides) (outline)	pp. 1-18 (Basic Electrophysiology) (More Electrophysiology) (Depolarization Handout) (Electrophysiology Review)	
08/28	Basic Electrophysiology	pp. 1-18	
08/30	Monitoring (slides) (outline)	pp. 37-48 (Monitoring) (More Monitoring)	
09/4	Monitoring	pp. 37-48	
9/6	Lab—ECG Monitoring		
9/11	Waves and Intervals (slides) (outline)	pp. 19-27 (<u>Waves & Intervals</u>) (<u>More Waves & Intervals</u>)	
9/13	Analyzing a Rhythm Strip (slides) (outline)	pp. 29-35 pp. 49-83 (<u>Analyzing a Rhythm</u> Strip) (<u>More Analyzing a</u> Rhythm Strip)	Homework 1 Answer Sheet 1 (Email lab answer sheet to instructor no later than 21:00 9/19)
9/18	Written Examination #1	Study Guide Exam #1	
9/20	Sinus Rhythms (slides) (outline)	pp. 85-104 (<u>Sinus Rhythms</u>)	Homework 2 Answer Sheet 2 (Email lab answer sheet to instructor no later than 21:00 9/26)
9/25	Atrial Rhythms (slides) (outline)	pp.117-158 (<u>Atrial Rhythms</u>)	
9/27	Lab—ECG Interpretation		

10/02	Atrial Rhythms	pp.117-158	Homework 3 Answer Sheet 3 (Email lab answer sheet to instructor no later than 21:00 10/08)
10/04	Junctional Rhythms (slides) (outline)	pp. 159-168 (<u>Junctional Rhythms</u>)	
10/09	Junctional Rhythms	pp. 159-168	Homework 4 Answer Sheet 4 (Email lab answer sheet to instructor no later than 21:00 10/15)
10/11	Fall Break. No Class		
10/16	Lab—ECG Interpretation		
10/18	AV Blocks (slides) (outline)	pp. 183-210 (<u>AV Blocks</u>)	Homework 5 Answer Sheet 5 (Email lab answer sheet to instructor no later than 21:00 10/24)
10/23	Advising Day. No Class		
10/25	Written Examination #2	Study Guide Exam #2	
10/30	Ventricular Rhythms (slides) (outline)	pp. 225-273 (Ventricular Rhythms)	
11/01	Lab—ECG Interpretation		
11/06	Ventricular Rhythms	pp. 225-273	Homework 6 Answer Sheet 6 (Email lab answer sheet to instructor no later than 21:00 11/12)
11/08	Pacemaker Rhythms (slides) (outline)	pp. 289-316 (Pacemaker Rhythms) (More Pacemaker Rhythms)	
11/13	Pacemaker Rhythms	pp. 289-316	Homework 7 Answer Sheet 7

			(Email lab answer sheet to instructor no later than 21:00 11/19)
11/15	Lab—ECG Interpretation		
11/20	Lab—ECG Interpretation		Homework 8 Answer Sheet 8 (Email lab answer sheet
11/20	Lab—Let interpretation		to instructor no later than 21:00 11/26)
11/22	The section of December 11 May 12 and		
11/22	Thanksgiving Break. No Class		
11/27	Written Examination #3	Study Guide Exam #3	
		Study Guide Exam #3 (Miscellaneous ECG Rhythms)	Homework 9 Answer Sheet 9 (Email lab answer sheet to instructor no later than 21:00 12/5)
11/27	Written Examination #3	(Miscellaneous ECG	Answer Sheet 9 (Email lab answer sheet to instructor no later