3503

ResThy ~~3810c~~

Instrumentation in Polysomnography

Syllabus

Course Description

ResThy 3810c, Instrumentation in Polysomnography, is a 3 credit course. This class is designed for respiratory therapy majors and other students interested in polysomnography and sleep disorders. The purpose of this class is to teach students how to become effective sleep technicians, and how to perform an overnight polysomnogram.

The following topics will be covered in class:

Signal Pathways	Output Voltages
Differential Amplifiers	Computer Basics
EEG Measurements	Patient Hookup
Monitoring Devices	Electrical Conduction
Impedances	Waveform Characteristics
Filters	Time Constants
Sensitivity and Gain	Calibration Waves
Montages	Artifacts
Role of the Night Tech	

The main focus of this course will be the patient hookup, as this is the most important aspect of performing a polysomnogram. Students will learn the principles of patient hookups and other topics related to instrumentation in class, and will put these principles into practice in the lab (ResThy 3810d).

Grading

Grades will be based mostly on exams. The class has three exams, equally weighted at 25% of your final grade each. There will be 5 unannounced quizzes worth 2% of your grade each. The other 15% of your grade will come from homework assignments. With a possible 500 points, the class is organized in the following manner:

	Points	Percent of Grade
Exam 1	125	25%
Exam 2	125	25%
Exam 3	125	25%
Quiz 1	10	2%
Quiz 2	10	2%
Quiz 3	10	2%
Quiz 4	10	2%