

CTSC 5770

Diagnostic Testing Strategies

Faculty: Colin P. West, M.D., Ph.D.

Credits: 1

Quarter: Spring

Prerequisites: CTSC 5600 or equivalent and CTSC 5760 is highly recommended

Overview

This discussion-based course is designed to enable students to become skilled in the formulation and revision of diagnostic testing strategies for common medical problems, within a Bayesian framework (e.g., pre-test probabilities, test operating characteristics/likelihood ratios and post-test probabilities). In the second half of the quarter, students will present a review of the testing strategy for one of the clinical problems from the course. The presentation will be based on case scenario, background information, pretest probabilities, diagnostic test operating characteristics, posttest probabilities, and the use of audiovisuals. This course will be of interest to you if you enjoy learning about statistics and medical decision making.

Objective

- To become skilled in the formulation and revision of diagnostic testing strategies for common medical problems, within a Bayesian framework (i.e. pre-test probabilities test operating characteristics/likelihood ratios, and post-test probabilities)

Evaluation

Student attendance and participation are essential in this course. The course will be graded on the student presentation, an average of peer evaluations of the presentation, and a final exam. A score of 75% or greater is required for passing this course.

Students will be expected to spend approximately two to four hours of time per week on this 1-credit course.

For specific dates and times this course is provided, please see the [quarterly detailed course schedule](#).