RSPT 83: CASE-BASED ANALYSIS & CRITICAL THINKING IN DIAGNOSTIC INTERVENTIONAL PULMONOLOGY

Foothill College Course Outline of Record

Heading	Value
Units:	2
Hours:	2 lecture per week (24 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Description

Case-based reasoning and critical thinking in the field of interventional pulmonology. Content will include critical diagnostic thinking, evidence-based medicine and quantitative studies in respiratory care.

Course Objectives

The student will be able to:
A. Understand critical diagnostic thinking
B. Describe the steps involved in critical thinking
C. Describe the scientific method
D. Define evidence-based medicine (EBM)
E. Understand and evaluate quantitative studies and clinical research
F. Understand the Levels of Evidence
G. Describe benchmarking

Course Content

A. Critical diagnostic thinking
1. Critical thinking
a. Prioritization
b. Communication
c. Decision making
d. Reflection
2. Diagnostic reasoning
a. History
b. Differentiating strategies
3. Problem-based learning approach
B. Critical thinking strategies
1. Interpretation of data
2. Analyzing the medical information
3. Evaluation of the evidence
4. Drawing conclusions
5. Making and justifying recommendations
6. Re-examining and debriefing
C. The scientific method
1. State the problem and generate a hypothesis
2. Devise a study and collect the data
3. Examine the data and come to conclusions
4. Test your hypothesis and report findings
D. Evidence-based medicine (EBM)
1. Evidence-based clinical practice guidelines
2. Electronic databases
a. PubMed
b. Cochrane Library
c. MEDLINE
d. General internet resources
E. Quantitative studies and clinical research
1. How to read a research article
2. Quantitative research
3. Clinical research
4. Statistical concepts
5. Outcomes research
F. Evidence-based medicine Levels of Evidence
1. Levels
a. Level 1a
b. Level 1b
c. Level 1c
d. Level 2a
e. Level 2b
f. Level 2c
g. Level 3a
h. Level 3b
i. Level 4
j. Level 5
2. Grades of recommendation
G. Benchmarking
1. Ratio indicators
2. Process indicators
3. Outcome indicators

Lab Content

Not applicable.

Special Facilities and/or Equipment

A. Multimedia classroom
B. Computer access for CANVAS component

Method(s) of Evaluation

Methods of evaluation may include, but are not limited to: quizzes, midterm, and a comprehensive final examination for knowledge of subject matter. Students will also be required to evaluate and summarize a research paper.

Method(s) of Instruction

Methods of instruction may include, but are not limited to: lecture, discussion, online modules, and tutorials.

Representative Text(s) and Other Materials

Ernst and Herth. Principles and Practice of Interventional Pulmonology. New York: Springer Publishing, 2013. ISBN: 9781461442912 (This is a seminal textbook in this field of study)

Friedman, R., C. Furberg, D. DeMets, C. Reboussin, and C. Granger. Fundamentals of Clinical Trials. New York, NY: Springer, 2015.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

Types of required reading and writing may include, but are not limited to: weekly reading from the textbook, cooperative learning exercises and online content.

Discipline(s)

Respiratory Technologies