

**Frontiers in Medicine: Critically Appraising a Topic**  
**(FiM course 2200)**

The course **overall goals** are to enable students to:

1. Integrate evidence-based medicine process into everyday clinical patient care.
2. Demonstrate a deeper understanding of evidence-based medicine principles and evaluating different levels of evidence.
3. Form clinical questions to identify relevant high-quality evidence.

**Course Objectives:**

Upon completion of this course, each student will:

1. Identify the different types of studies in the medical literature and their hierarchy in establishing an evidence-based medical practice.
2. Use PICO method to formulate a searchable question for a clinical scenario.
3. Define appropriate search terms for clinical questions, execute a search in at least one medical literature database, and identify pertinent studies to answer the question of interest.
4. Recognize different types of observational studies and contrast their strengths and limitations.
5. Recognize randomized controlled trials as the gold standard to establish efficacy of an intervention.
6. Describe strengths and limitations of randomized controlled trials.
7. Describe strengths and limitations of metaanalysis in providing evidence-based medicine.
8. Recognize the importance and limitations of using surrogate endpoints in clinical studies.
9. Apply knowledge gained from clinical studies to clinical care of patients, while recognizing the limitations of available studies.
10. Produce a written report demonstrating Critical Appraisal of a Topic (CAT) of a randomized clinical trial for a therapeutic intervention.