

IUSM Senior elective: TEAM BASED LEARNING CASE DEVELOPMENT & ASSESSMENT

Host campus and Institution: Medical Sciences, Indiana University School of Medicine, Bloomington

Description: This course is designed for students who are especially interested in academic medicine. Attendance and participation are required components of success in this course. Students are expected to make a tangible contribution to the case writing process by developing and assessing team-based learning modules, as well as investigating current literature on the subject.

Course director: Mark Braun, MD

Elective summary: This course provides an academic context in which medical students take responsibility for their own learning. Students will investigate the application and academic success of team-based learning (TBL) as an element in undergraduate medical education. Students will also design, develop and assess TBL modules for use in the teaching of pathology and mechanisms of disease.

At the beginning of the course, students will be provided a course orientation and a timetable for submission of assignments and completion of various components of the TBL cases. Students will meet with the course director at least twice each week to edit and review the progress of the TBL case cases they are authoring.

Evaluation of student performance will be by the course director, and, if appropriate, by a clinical faculty member chosen by the course director. Each student is expected to make a tangible contribution to the case development process. Exceptionally well written cases may be used for instruction of future students.

Course Goals:

- To provide the student with an opportunity to acquire, utilize, and refine communication skills which will be helpful in their future career.
- To facilitate the acquisition of skills and attitudes by the student related to lifelong learning.
- To provide the student with an opportunity to research the application and success of TBL methodology in the undergraduate medical curriculum.
- To develop skill in authoring and analyzing case studies for use as TBL modules.

Course Objectives:

- The student will undertake and summarize a literature search of the application of TBL teaching methodology as it applies to undergraduate medical education.

- The student will identify common and significant clinical problems that would constitute the basis of an instructional TBL cases.
- The student will formulate clear learning objectives for the TBL cases.
- The student will develop coherent TBL cases that integrate the basic and clinical sciences.
- The student will analyze and evaluate data in order to write a good TBL case.
- The student will consult with physicians and other experts whose work is relevant to the case being developed.
- The student will work collaboratively with peers and the course instructor.
- The student will communicate (oral and written) information to peers and course instructor.
- The student will make oral written reports.
- The student will research literature that is relevant to individual cases being developed.

Hospital(s) and facilities: IUB Medical Sciences and Bloomington Hospital

Availability: October, November, January, February, April

Number of units: 1

Maximum students per unit: 2

Prerequisites: Fourth year medical student status; interest in academic medicine.

Required reading:

- Team-Based Learning for Health Professionals Education; A Guide to Using Small Groups for Improving Learning. Editor: Larry Michaelson. 2008. Published by Stylus. EAN: 978-1-57922-248-2
- Selected current articles.

Course components: 20% library; 70% individual study; 10% faculty and group study

Time table of assignments:

- Week 1: Chapters 1-5 of Michaelson, Develop at least one TBL problem explaining rationale for various components.
- Week 2: Chapters 6-10 of Michaelson, develop at least one TBL problems.
- Week 3: Chapters 11-14 of Michaelson, develop at least one TBL problems.
- Week 4: Chapters 15-18 of Michaelson, develop at least one TBL problems.

Assessments: A student's grade will be assessed on successfully completion the above stated course objectives and assignments. Included in this will be:

- Completing and writing a summary of a literature search of the application of TBL teaching methodology as it applies to the student's specific interest area of undergraduate medical education. Included in the rubric for grading the paper will be:
 - Thoroughness of the literature review.
 - Rigor of analysis of the literature.
 - Ability to clearly communicate in a written form their findings and analysis.
 - Reaching logical conclusions regarding their stated goals for the paper.
- Completing at least four TBL exercises which will be assessed with respect to the following criteria:
 - Is the TBL presented in the context of real world medical problem?
 - Does the TBL attempt to activate relevant prior knowledge or experience?
 - Does the TBL demonstrate what is to be learned rather than simply tell information?
 - Do learners have the opportunity to practice and apply their newly acquired knowledge or skill?
 - Does the TBL provide techniques that encourage learners to integrate the new knowledge or skill into their everyday 'medical' life?
- Oral reports: Oral reports will consist of formal and informal discussions with the elective director, other pertinent faculty and/or students.

Assignment of grades: The final grade will be determined on the basis of successful completed the above assessments and overall participation (50% for successfully authoring the required four TBL exercises, 25% for the final written literature summary and critique, 25% for oral presentations).

Competencies covered: Written and oral communication (level 3), Lifelong learning (level 3), Problem solving

Final assessment and grading: The students' grade for this elective will be earned by successfully completing the course objectives, as determined by the course director.

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