

Elective Description

Campus: All Campus (NE)

Elective/Experience Title: Medical Education

Location of Elective: Main Campus SMHS - Grand Forks, ND

Department: Interdisciplinary

Course Number: MED 9508

Preceptor(s): Jon Allen, MD; Kurt Borg, PhD; Patrick Carr, PhD; Devendra Pant, MD; LaVaun McCann, MD; Susan Zelewski, MD

Period(s) Offered: 2, 3, 5, 6, 8, 9, 10, and 11

Number of students per period: 4 students/period at Grand Forks site

Purpose: To provide an introduction to the fundamentals of professional learning, an opportunity to apply and improve teaching skills in a medical setting, and preparation as a future physician-educator.

Course Director: Devendra Pant, MD, PhD, MHPed, Education Resources, UNDSMHS

Contact Person for adding or changing rotation: Stacie Klegstad at the Northeast Campus (701-777-3406)

Goal: To provide an opportunity to senior medical students to develop skills in facilitating small group learning, conducting clinical skills practice, facilitating simulation-based learning, and developing test items to assess student learning. The student will also get an opportunity to work on a 'miniproject' to improve quality of medical education at the UND medical school. As a 'novice teacher', the 4th year student will work in a professional team and dynamic milieu of clinical teachers, basic scientists, educators, other health professionals, staff and students.

Objectives: Following successful completion of this elective, the student will be able to:

1. Explain the concepts of behaviorism, cognitivism, and constructivism in professional education.
2. Apply the principles of adult learning and experiential learning to problem-based learning (PBL) sessions and team-based learning (TBL) sessions in medical education.
3. Describe the terms competence, milestones, and entrustable professional activities (EPA) in the context of continuous growth and progress of a medical professional trainee.
4. Identify key components of behavioral learning objectives.
5. Formulate appropriate learning objectives in session, case or course design.
6. Apply micro-teaching skills in delivery of lectures and while conducting small group discussion sessions.
7. Critique research data from a peer reviewed academic medical education journal.
8. Teach history-taking skills, physical exam skills, and clinical procedure skills (listed under the clinical curriculum of UNDSMHS) to freshmen and sophomore students.
9. Demonstrate conceptual understanding of assessment and evaluation in medical education.
10. Provide effective constructive feedback (verbal as well as written) to freshman and sophomore students.
11. Apply the concepts of reliability, validity, difficulty index, and discriminatory index while designing test items.
12. Demonstrate ability to be an effective role model to students in the pre-clerkship phase of the MD program
13. Demonstrate ability to function professionally and effectively in an interprofessional team of scientists, clinicians, educators, and other health professionals.

Instructional Activities: During the elective, the student will be involved in the following experiences:

1. Co-facilitating small group learning in PCL and TBL sessions with clinicians, basic scientists and educators
2. Assisting faculty teachers and facilitators in the mid-block formative evaluation of medical students
3. Conducting clinical case discussions or helping in run-through of simulation patient cases in the SIM lab
4. Proctoring sophomore students in the Ambulatory Care Experience (ACE) in the SIM Center
5. Reviewing, or critiquing cases for the PCL/ TBL, SIM lab or for the Clinical Skills Assessment (CSA) exam
6. Helping to write MCQ items based on the Liaison Committee on Medical Education standards for question design.
7. Working with PCL and IPC directors in reviewing and writing case exams pertinent to the assigned block.
8. Presenting a lecture on an academically and clinically relevant topic to medical students. (The topic must be related to the UNDSMHS' MD program: its mission, program domains and course objectives.)
9. Conducting a discussion on a medical education journal article from a peer reviewed scientific or scholarly journal (e.g., *Academic Medicine*, *Medical Teacher*, *Medical Education* etc.)
10. Attending PCL/TBL facilitator meetings, ER journal club meeting, Dean's hour meeting
11. Attending Block Design team and Medical Education Curriculum meetings
12. Working on 'miniproject' related to course/curriculum review, review of inventories, evaluation tools, (or development of new cases for the PCL/TBL or SIM sessions.)
13. Participating as an "intern" on the academic faculty staff (which requires daily presence on campus for completion of duties).

Criteria for Grading:

The final grading of the senior medical student will be carried out by the Director of the Medical Education Elective Course. The evaluation will be based on the reports submitted by the respective faculty teachers, preceptors, or facilitators on the performance of the individual student.

The Med Ed elective student will work under the supervision of the respective faculty teachers, preceptors or facilitators. While working with the student, the respective faculty teacher, preceptor, or facilitator will monitor the progress and evaluate the performance of individual student based by direct observation, review of student feedback, review of written work and oral presentations on the following criteria:

The medical student's:

1. Leadership skills and interactions in small group settings, e.g. PCL, TBL sessions. (Objective 2, 6, 8, 12)
2. Presentation and meeting participation. (objective 6, 13)
3. Contribution to writing or critiquing MCQs, test cases, or the cases-of-the-week. (objective 5, 11)
4. Participation in the clinical skills teaching in the SIM Lab and SIM exam rooms. (Objective 8, 12)
5. Ability to provide effective feedback and mentoring to medical students. (Objective 10)
6. Understanding the basic principles of adult learning theory, objectives, assessment and evaluation, and the current trends in Medical Education. (objective 1, 2, 3, 4, 9)
7. Ability to work in a professional team environment (Objective 13)
8. Completion and submission of journal article review and mini project work on time (objective 7, 13)

For the preparation of the final grading of the student, the Director of the Medical Education Elective Course will utilize the standardized UNDSMHS Med Ed elective evaluation form.