

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; Kara Eickman, MD; Devendra Pant, MD; Adrienne Salentiny, PhD; Richard Van Eck, PhD; 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

Course Prerequisite: Only Available in Phase 3

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: Christina Walker at the Northeast Campus (701-777-3406)

Goal: To provide an opportunity to senior medical students to develop skills in facilitating patient-centered learning (PCL) small group discussion, conducting doctoring skills practice, facilitating simulation-based learning, and analyzing 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. The senior medical student will be expected to be a role-model for the phase 1 students.

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

1. Summarize the fundamental concepts of behaviorism, cognitivism, humanism, and constructivism in professional education. (*Competency 1.2, 1.3, 1.8*)
2. Demonstrate the principles of adult learning and experiential learning to problem-based learning (PBL) sessions and team-based learning (TBL) sessions in medical education. (*Competency 1.8, 4.5*)
3. State the definitions of the commonly used terms competence, milestones, and entrustable professional activities (EPA) and summarize their role in the contexts of undergraduate and postgraduate medical education. (*Competency 1.3, 1.8*)
4. Identify key components, e.g., action verb, content, key criteria, condition of behavioral learning objectives. (*Competency 1.3, 1.8*)
5. Generate appropriate learning objectives for session planning, case write-up or course design. (*Competency 1.8, 4.5*)
6. Adopt micro-teaching skills while managing T/L sessions in small group and large groups. (*Competency 1.8, 4.3, 4.5*)
7. Generate a critique and present a journal article from a peer reviewed academic medical education journal. (*Competency 1.8, 4.5*)
8. Execute teaching assistance in doctoring skills practice sessions, e.g., medical history-taking, physical exam (core and cluster PE), and doctoring procedure skills (listed under the clinical curriculum of UNDSMHS) to phase 1 students. (*Competency 4.3, 4.5*)
9. Demonstrate conceptual understanding of the principles of assessment and evaluation in medical education. (*Competency 1.3*)

10. Generate effective constructive feedback (verbal as well as written) and debriefing (in Sim sessions) to phase 1 students. (*Competency 4.3, 4.5*)
11. Demonstrate application of the concepts of reliability, validity, difficulty index, and discriminatory index while analyzing or constructing MCQ test items. (*Competency 1.3, 4.5*)
12. Choose to be an effective role model to students in the pre-clerkship phase of the MD program. (*Competency 5.1, 8.6*)
13. Choose to function professionally and effectively in an interprofessional team of scientists, clinicians, educators, and other health professionals. (*Competency 7.2*)

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 SHAPE.
6. Helping to write or analyze MCQ items based on the National Board of Medical Examiners standards for question design.
7. Working with PCL and IPC directors in reviewing and writing case exams pertinent to the assigned units.
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 meetings and other academic/scholarly/curriculum-related activities at the Education Resources Unit.
11. Completion of 'miniproject' related to course/curriculum review, case reviews, review of inventories, evaluation tools, (or development of new cases for the PCL/TBL or SIM sessions.)
12. 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, 12, 13)
2. Presentation and meeting participation. (objective 5,7)
3. Contribution to writing or critiquing MCQs, test cases, or the cases-of-the-week. (objective 6, 7)
4. Participation in the doctoring skills teaching in the SIM Lab and SIM exam rooms. (Objective 8)
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, 12)

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 through LEO.