

Elective Description

Campus: Southwest (Bismarck)
Elective/Experience Title: Introduction to Emergency Medicine
Location of Elective: Sanford Health – Bismarck, ND

Department: Emergency Medicine
Course Number: EMRG 9105-01

Preceptor(s): David Gayton, MD; Kadon Hintz, MD; Justin Reisenauer, MD; Steven Schmidt, MD & Matthew Zimny, MD
Period(s) Offered: Periods 1-10 (not 11)
Number of students per period: 1

Course Prerequisites: none
Revised Curriculum Phase(s): 2 & 3

Purpose: To provide the medical student an introduction to Emergency Medicine.

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

1. Execute the performance of an accurate history and physical examination of patients presenting for emergency medical care (*Competency 3.1*)
2. Apply the ABCDs (Airway, Breathing, Circulation, Disability) to critically ill and undifferentiated medical and trauma patients (*Competency 3.4, 3.5, 3.6*).
3. Demonstrate the ability to identify and address abnormal vital signs with appropriate urgency (*Competency 3.3, 3.5*).
4. Verbally present an emergency department patient, emphasizing the pertinent parts of the HPI and an appropriate “worst-first” differential diagnosis (*Competency 3.3, 3.4, 3.5*).
5. Recognize and initiate stabilizing treatment for the life-threatening causes of *abdominal pain, altered mental status, cardiac arrest, chest pain, GI bleeding, headache, and shortness of breath, and shock* (*Competency 3.4, 3.5, 3.6*).
6. Recognize clinical features of the following toxidromes: *sympathomimetic, opioid, cholinergic, and anticholinergic* (*Competency 3.4, 3.5, 3.6*).
7. Outline key features of stabilizing treatment for the following poisonings: *acetaminophen, aspirin, tricyclic antidepressant, and toxic alcohol poisonings* (*Competency 3.4, 3.5, 3.6*).
8. Execute management of an occluded airway by applying the head tilt/chin lift maneuver, inserting an oral or nasopharyngeal airway, and correctly administering bag-valve-mask ventilation (*Competency 3.5, 3.6*).
9. Summarize key features of 7 types of scientific publication in the Emergency Medicine literature.

Instructional Activities: During this elective, the student will be involved in/experience:

1. Minimum of 150 hours of supervised patient contact in the emergency department
2. “Study Design 101” tutorial on 7 types of scientific publication: [Study Design 101 - Himmelfarb Health Sciences Library \(gwu.edu\)](#)
3. Obtain a passing score on these 11 “Full-Code” online case-based simulations of life-threatening conditions.

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|-----------------------|--------------------------|--------------------------|--------------|
| 1 Shortness of breath | 10 Altered mental status | 29 Abdominal pain | 111 Fever |
| 5 Confused | 19 Chest pain | 45 Head injury | 113 Overdose |
| 8 Rectal bleeding | 21 Unresponsive | 78 Altered mental status | |

4. Two online interactions with Emergency Medicine Clerkship Directors via Zoom. Access department schedule here: [Emergency Medicine | University of North Dakota \(und.edu\)](#)

- a. Journal Club and Mid-Course Feedback Session. (Usually, the 2nd Thursday of the rotation at 12:00PM). Students and faculty engage in discussion of a current publication relevant to emergency medicine.
- b. Case Presentation Day. (Usually, the 4th Thursday of the rotation at 12:00PM). Students deliver a 10-minute case presentation on a patient of their choice from their Emergency Medicine rotation, with emphasis on basic science.
- c. Make-up a missed Journal Club or Case Presentation Day by passing 10 additional Full-Code cases.

Criteria for Grading: During and following this elective, the preceptor will:

1. Utilize the standardized UNDSMHS senior elective evaluation form.
2. Observe completion of 150 hours of supervised patient contact.
3. Review successful completion of the required “Full-code” cases.
4. Observe the student’s ability to obtain a complete patient history (*objective 1*).
5. Observe the student’s ability to perform a complete physical examination (*objective 1*).
6. Observe the student’s ability to present a patient case orally (*objective 4*).
7. Observe the student’s overall clinical competence (*objective 2, 3, 5-8*).
8. By discussion or observation of presentation, evaluate the student’s ability to summarize the 7 types of scientific publication in Emergency Medicine (*objective 9*).

Criteria for Honors: The student will do the following in order to obtain honors:

1. In addition to above instructional activities, obtain a passing score on 5 additional Full-Code cases.
2. Submit your Case Presentation as a written case report to Kassie Lutz. Some guidelines are available here: [Tips for writing a case report for the novice author \(nih.gov\)](#)
3. Be recommended for Honors by the preceptor completing the UNDSMHS senior elective evaluation form.