General Description

Elective Rotation
This elective rotation in otorhinolaryngology is a two (2) or four (4) week experience structured to develop the student's decision-making, cognitive skills and to apply didactic material in a clinical setting. Most students electing this rotation will be in their fourth year of osteopathic medical school, but third year students are eligible following satisfactory completion of a General Surgery rotation. A post-rotation examination is not required.

Recommended Textbook:
Lawrence, Peter F. Essentials of Surgical Specialties, 3rd Ed. Lippincott, Williams and Wilkins, 2007 (or newer edition).

Other Suggested Textbooks:
- Chapter 18: Disorders of the Head and Neck. (Available electronically on Access Surgery through DMU Library portal.)

- Chapter 15: Otolaryngology—Head and Neck Surgery. (Available electronically on Access Surgery through DMU Library portal.)


Prerequisites
Completion of General Surgery Clerkship Core Rotation.
Basic textbook knowledge and skills lab experience with basic suturing and aseptic techniques, lesion excision and suturing techniques.
Basic textbook knowledge and skills lab experience with local anesthetics and patient resuscitation.
Basic textbook knowledge of external anatomical landmarks, motor and sensory innervations and vascular distribution to extremities, major muscular groups and skin.

Purpose
Clinical experiences are intended to assist the students’ transition from didactics to integrated clinical evaluation, decision-making, and management of patients with ear, nose, or throat problems. In addition to gaining specific skills in otorhinolaryngology during this rotation, the student should also continue to develop skill in systematic clinical problem solving and patient management abilities, establish or reinforce patterns of independent learning and self-evaluation, and improve skills in communication and medical record keeping.

At the completion of this rotation, the student should have reached certain broad goals, including:
- development of systematic medical problem solving and patient management abilities specific to otorhinolaryngology;
- expanded knowledge of disease processes related to this multi organ specialty
- improved clinical skills, including both diagnostic and therapeutic procedures
Students are expected to assist in the management of ear, nose and throat diseases, under supervision. The student should also develop fundamental psychomotor skills by performing routine basic procedures under direct supervision.

Objectives
We recognize that two to four weeks is insufficient time to cover a comprehensive list of objectives. Clearly, subjects addressed in any clinical rotation are dependent on the numbers of patients and kinds of disease entities presenting to a particular service. Nevertheless, certain minimum content must be addressed, either by clinical exposure or by didactic materials so that students are prepared for Board examinations and other testing. Therefore, each of the following sections contains relatively broad, basic objectives for which students are responsible.

Basic Psychomotor Objectives
At the completion of the ENT rotation, the student should demonstrate development and expansion of competence in the following:

1. Principles of clean and sterile techniques, including the ability to scrub, gown, and glove alone and with assistance.
2. Knowledge and usage of commonly used surgical instruments.
3. Establish a differential diagnosis of common illnesses presenting in an emergency setting.
4. Simple surgical procedures, including:
   - suturing of lacerations and surgical wounds
   - stapling of lacerations and surgical wounds
   - removal of sutures and staples
   - the use of steri strips in lacerations and surgical wounds
   - surgical dressings
5. Skill in the use of reflected light, mirrors, and handheld instruments during head and neck examinations.
6. Thyroid testing, including scans, uptakes, T3, T4 and TSH assays
7. Laryngoscopy

Basic Cognitive Objectives
For each of the following core areas, the student should be able to apply osteopathic principles and practices to:

- understand the pathogenesis, diagnosis, and management relative to the otorhinolaryngologic condition.
- apply osteopathic principles and treatments appropriately.
- understand the principles of preoperative, surgical, and post-operative management.
- understand the general requirements of rehabilitation.

The following categories and organs should be addressed:

1. Allergy
   - chronic fatigue
   - chronic headache
   - sinus disease
   - food and chemical agents
2. Auditory system
   - chronic ear disease
   - hearing loss
   - demonstrate knowledge of basic hearing tests, their value and limitations
   - demonstrate basic understanding of the roles of audiology and speech pathology
   - otitis media
   - tinnitus
3. Facial plastic surgery
4. Larynx
   - bronchoesophagology
   - laryngeal disorders
   - neck infections
   - neoplasia of the head and neck
5. Oropharynx
   - tonsillitis
   - pharyngitis
- dysphagia
- odynophagia

6. Rhinology
   - epistaxis
   - nose and paranasal sinus surgery
   - sinusitis

7. Trauma
   - maxillofacial fractures
   - facial lacerations
   - nasal fracture

8. Vestibular system
   - dizziness and vertigo
   - acoustic neuroma
   - labyrinthitis

**Implementation**

Course objectives are to be accomplished in a College affiliated hospital or clinical facility, under supervision. Basic objectives **must** be covered during the rotation to assure adequate student preparation for Board examinations and other evaluations such as post-rotation examinations. The use of diverse methods appropriate to the individual and the clinical site are encouraged, but patient-centered teaching is optimal.

Didactic methods to achieve required objectives include:
- reading assignments
- lectures
- computer-assisted programs (if available)
- student attendance at/participation in formal clinical presentations by medical faculty

Clinically oriented teaching methods may include:
- assignment of limited co-management responsibilities under supervision
- participation in clinic visits, daily patient rounds and conferences
- supervised and critiqued clinical work-ups of patients admitted to the service
- assigned, case-oriented reading case presentations

Three levels of achievement are identified:
- familiarity with a variety of medical procedures through observation and assisting
- proficiency in clinical procedures through actual supervised performance
- awareness of the availability of various medical procedures and their use

At the beginning of the rotation, the physician/mentor should review expectations/guidelines of performance with the student. On the last day of service, the supervising physician should review the student's performance with the student and have the student sign the evaluation form before submission. A student’s signature simply indicates that the student has received a grade directly from the attending; it does not indicate agreement with the grade. Evaluations of students must be completed within two weeks of completion of the rotation.

**Assignments**
The preceptor may direct specific and general reading assignments from texts and current literature. Supplemental readings from current periodical literature are recommended.