# Guided Lecture Notes, Chapter 34, The Sensory System

Learning Objective 1. List and describe the structures that make up the two main divisions of the sensory system. (Refer to **PowerPoint slides 3 to 5, 11 and 12**.)

* Describe the structure and function of the sensory system.
* Describe the two main divisions of the sensory system and list the structures present in each one using an anatomical chart or model.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 2. Describe the body’s general senses. (Refer to **PowerPoint slides 7 to 10**.)

* Describe the process that enables us to touch and feel various textures. Discuss the term *deep touch*.
* Bring a stone, a piece of velvet, a piece of metal, and a piece of wood to class. Have students describe the textures of these objects.
* Discuss the role of position receptors and their importance.
* Discuss the causes of pain and describe internal and external pain. Discuss the term *referred (radiating) pain*.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 3. Describe how we experience taste and smell. (Refer to **PowerPoint slides 14 to 18**.)

* Introduce the term *chemoreceptors*. Discuss the role of chemoreceptors in detecting taste and smell.
* Discuss the effects of taste and smell on the appetite.
* Bring a variety of foods and drink, have a student taste each item while wearing a blindfold and plugging their nose. Try to make the item difficult to identify, such as salt water or sugar water. See if the student can identify the food or liquid.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 4. Discuss how aging affects a person’s senses of taste and smell. (Refer to **PowerPoint slide 19**.)

* Discuss the effect of aging on chemoreceptors and list the dangers associated with a decreased ability to taste or smell.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 5. Describe how we experience sight. (Refer to **PowerPoint slides 21 to 28**.)

* Describe the structure of the eye. Use an anatomic model or chart to point out the structures as you mention them.
* Describe the functioning of the eye.
* Discuss the various common vision problems related to an inability to focus images properly. Explain the terms *myopia*, *hyperopia*, and *astigmatism*.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 6. Discuss the effects of aging on the eye. (Refer to **PowerPoint slide 29, 48, and 49**.)

* Discuss the effects of aging on the eye.
* Explain the term *presbyopia*.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 7. List and describe disorders that can affect the eye. (Refer to **PowerPoint slides 30 to 36**.)

* List the various disorders of the eye.
* Discuss what causes conjunctivitis, and how it is treated. Stress that conjunctivitis is extremely contagious.
* Discuss what causes cataracts, and how they are treated.
* Discuss glaucoma and its potential to lead to blindness if not detected and treated early.
* Identify factors that increase a person’s susceptibility to glaucoma. Discuss the symptoms of glaucoma and describe how it is treated.
* Discuss the cause of diabetic retinopathy and how diabetic retinopathy is treated.
* Discuss macular degeneration and the factors that can increase a person’s risk of developing macular degeneration.
* Discuss the various forms of blindness.
* Have learners refer to learning activities located at the end of the chapter.

**Learning Objective 8**. Describe how to care for eyeglasses, contact lenses, and prosthetic (artificial) eyes. (Refer to **PowerPoint slides 43 to 47**.)

* Discuss the steps followed when caring for a person’s eyeglasses.
* Describe what a contact lens is and explain that there are many different types. Explain how contact lenses should be cared for.
* Explain why a person might have a prosthetic eye. Explain how a prosthetic eye should be cared for.
* Obtain eyeglasses, contact lenses, and a prosthetic eye and show the students the correct procedure for cleaning them.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 9. Describe special considerations that are taken when caring for a person who is blind. (Refer to **PowerPoint slides 37 and 42**.)

* Discuss the rehabilitation procedure that is followed while helping a person who has recently lost his or her sight.
* Discuss the roles and responsibilities of a nursing assistant during rehabilitation.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 10. Describe how we experience sound. (Refer to **PowerPoint slides 51 to 56**.)

* Describe and discuss the structure of the ear. Use an anatomic model or chart to point out the structures as you mention them.
* State that the ear plays a role in balance and hearing.
* Describe how the ear works.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 11. Discuss the effects of aging on the ear. (Refer to **PowerPoint slide 57**.)

* Discuss the effects of aging on the ear.
* Introduce the term *presbycusis* and describe the problems faced by a person with presbycusis.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 12. List and describe disorders that can affect the ear. (Refer to **PowerPoint slides 58 to 65, 73 and 74**.)

* List the various infections of the ear. Discuss the symptoms of the infections and their treatments.
* List the symptoms of Ménière’s disease and discuss the precautions to be taken when caring for a person with this disorder.
* Discuss the various forms of deafness and their causes.
* Discuss the types of rehabilitation and adaptive devices that are used to help a person with hearing loss.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 13. Describe techniques for communicating with a person who has hearing loss. (Refer to **PowerPoint slides 66 to 72**.)

* List and discuss the things a nursing assistant can do to ensure good communication with people who have hearing disabilities.
* Describe what a hearing aid does, and discuss the different types of hearing aids that are available.
* Discuss the limitations of a hearing aid.
* Discuss the various reasons why a person using a hearing aid might be unable to hear the nursing assistant.
* Obtain different types of hearing aids to show students.
* Have learners refer to learning activities located at the end of the chapter.

Learning Objective 14. Demonstrate proper technique for inserting and removing an in-the-ear hearing aid.

* Demonstrate the proper technique for inserting and removing an in-the-ear hearing aid.
* Have students practice inserting the hearing aid.
* Have learners refer to learning activities located at the end of the chapter.