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| --- | --- |
| **Course Title:**  | Special senses and skin |
| **Course Code:** | **412 SPS-6** |
| **Program:** | Bachelor of Medicine and Bachelor of Surgery (MBBS) |
| **Department:**  | N/A |
| **College:** | Medicine |
| **Institution:** | Najran University |

# A. Course Identification

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| --- | --- |
| **1. Credit hours:**  | **6 (4+2)** |
| **2. Course type** |
| **a.** | University |  | College |  | Department |  | Others **(program)** | **√** |  |
| **b.** | Required | **√**  | Elective |  |  |
| **3. Level/year at which this course is offered:** | **Year 4 - Semester-2 (level 11)** |
| **4. Pre-requisites for this course** (if any)**:**Phase 1 blocks |
| **5. Co-requisites for this course** (if any)**:** |
| None |

## 6. Mode of Instruction (mark all that apply)

| **No** | **Mode of Instruction** | **Contact Hours** | **Percentage**  |
| --- | --- | --- | --- |
| **1** | **Traditional classroom** | 68 | 45% |
| **2** | **Blended**  |  |  |
| **3** | **E-learning** |  |  |
| **4** | **Distance learning**  |  |  |
| **5** | **Other**  | 85 | 55% |

**7. Contact Hours** (based on academic semester)

|  |  |  |
| --- | --- | --- |
| **No** | **Activity** | **Contact Hours** |
| **1** | **Lecture** | 46 |
| **2** | **Laboratory/Studio** | 28 |
| **3** | **TBL** | 6 |
| **4** | **PBL** | 16 |
| **5** | **Skill lab** | 33 |
| **6** | **Bedside teaching** | 15 |
| **7** | **SDL** | 9 |
|  | **Total** | 153 |

# B. Course Objectives

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| 1. Course Description  |
| This course includes the approach to the sensory and the integumentary systems. It contains general objectives and specific objectives, in which basic sciences are integrated with clinical sciences, with the required skills. The students will be introduced on various topics of special senses and skin from the point of view of anatomy, physiology, histology, pathology, parasitology, microbiology, pharmacology, ear, nose and throat health science, eye health science, and dermatology. The objectives deal with introducing the student to the developments, structures and functions of the special senses and skin organs, and the etiology, diagnosis, treatment, prognosis, and prevention of diseases. Also discussed the clinical examination, laboratory tests and other investigations.   |
| 2. Course Main Objective**By the end of this course the students are expected to:**1. Describe the structure and function of thesensory and integumentary systems
2. Describe the symptoms and signs of common diseases, injuries and disturbances of the sensory and integumentary systems
3. Develop a problem-solving approach to the sensory and integumentary systems disorders.
4. Explain the pathogenesis, presentation, investigations (laboratory, radiological, etc.), and management of various diseases affecting the sensory and integumentary systems.
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# C. Course Content

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| **No** | **List of Topics** | **Contact Hours** |
|  | Introduction to the Block (Block coordinators) | 1(1+0) |
|  | Anatomy of the eye globe, optic nerve, and visual pathway (Ana) | 1(1+0) |
|  | Anatomy of extra ocular & intra ocular muscles, anatomy of the eyelids and lachrymal apparatus **SDL** (ANT.) | 3(3+0) |
|  | Anatomy of extra ocular & intra ocular muscles, anatomy of the eyelids and lachrymal apparatus. (Ana) **DR** | 2(0+2) |
|  | Anatomy of the eyelids and lachrymal apparatus, eye globe& ocular muscles (Anat.) **DR** | 2(0+2) |
|  | Histology of the eyeball, eyelids & lacrimal apparatus1(His) | 1(1+0) |
|  | Functional structure of the eye (Phys.) | 1(1+0) |
|  | Visual filed testing (Phys.) (Skill lab) | 3(0+3) |
|  | Ophthalmic and otic pharmacology (pharm) | 1(1+0) |
|  | The visual pathway & its lesion 1(Opht) | 1(1+0) |
|  | Development & anomalies of eyeball, eyelids & lacrimal apparatus (Anat.) | 1(1+0) |
|  | The visual pathway & its lesion SKILL-LAB (Opht) | 3(0+3) |
|  | Histology of the eyeball, eyelids & lacrimal apparatus 2(Hist.) (**LAB**) | 2(0+2) |
|  | Aqueous humour circulation and functions (Phys.) | 1(1+0) |
|  | Cranial nerves 2,3,4,5,6 & 7 Diseases (Opht) | 1(1+0) |
|  | External Eye Examination (Opht) (**Skill-Lab**) | 3(0+3) |
|  | Drug TTT of glaucoma (Pharma) | 1(1+0) |
|  | Pupil Disorder (Opht) | 1(1+0) |
|  | **TBL RED EYE (Microbiology & Ophthalmology)** | 2(2+0) |
|  | Visual receptors and mechanism of vision (Phys.) | 1(1+0) |
|  | Visual pathway and its defects (Phys.) | 1(1+0) |
|  | Fundus Examination SKILL LAB Ophthalmology | 3(0+3) |
|  | Visual acuity (Opht)(Skill-Lab) | 3(0+3) |
|  | Congenital anomalies of the eyes **SDL** (Opht) | 3(3+0) |
|  | Histology of the ear & olfactory epithelium (Hist) | 1(1+0) |
|  | Color & Binocular vision ; eye movements (Phys) | 1(1+0) |
|  | Pathology of the eye (Path) | 1(1+0) |
|  | Anatomy of the external, middle & inner ear (Anat.) | 1(1+0) |
|  | Auditory evoked potential (Phys.) (Skill lab)  | 3(0+3) |
|  | Development & Cong. Malformation of the ear (Anat.) (**SDL**) | 3(3+0) |
|  | Functional structure of the ear (Phys.) | 1(1+0) |
|  | Topical preparations of eye, ear & skin (Pharma)(Lab) | 2(0+2) |
|  | Anatomy of the external, middle & inner ear (Anat.) (DR) | 2(0+2) |
|  | Mechanism of hearing and sound discrimination1 (Phys.) | 1(1+0) |
|  | Mechanism of hearing and sound discrimination1 (Phys.) | 1(1+0) |
|  | Physiology of taste and Olfaction (Phys.) | 1(1+0) |
|  | Pathology of the ear (Path) | 1(1+0) |
|  |  **TBL DEAFNESS (Physiology, Anatomy & ENT)** | 2(2+0) |
|  | Hearing tests (Phys.) (Skill Lab)* Tuning fork tests
* Pure tone audiometriy
 | 3(0+3) |
|  | Hearing disorders (ENT) | 1(1+0) |
|  | Tests of olfaction and tasting (Phys.) (Skill lab) | 3(0+3) |
|  | Auditory, Olfactory & taste pathway (Anat) | 1(1+0) |
|  | Bed Side Teaching (ENT) | 3(0+3) |
|  | Histology of the ear and olfactory epithelium (**HIS LAB**) | 2(0+2) |
|  | ANOSMIA (ENT) | 1(1+0) |
|  | ENT SKIL-LAB (ENT) | 3(0+3) |
|  | Bed Side Teaching (ENT) | 3(0+3) |
|  | Auditory, Olfactory & taste pathway (Anat) | 1(1+0) |
|  | Changed into: Superficial infection of Skin (Chickenpox, shingles, measles , Impetigo and scarlet fever (Micro) | 1(1+0) |
|  | Dermatophytosis (Micro) | 1(1+0) |
|  | Leprosy (Micro) | 1(1+0) |
|  | Histology of the Skin, & Nails (Hist.) | 1(1+0) |
|  | Inflammatory skin conditions (Path.) | 1(1+0) |
|  | Skin lesions description and classification (Derma) bedside teaching | 3(0+3) |
|  | Functions of the skin and its related structures (Phys.) | 1(1+0) |
|  | Pathology of the eye and ear (Path) **LAB** | 2(0+2) |
|  | Corneal, light and accommodation reflexes (Phys.) (Skill lab) | 3(0+3) |
|  | Acne and acne related disorders (Derma) | 1(1+0) |
|  | Dermatophytosis LAB (Micro) | 2(0+2) |
|  | Bed side teaching (Derma) | 3(0+3) |
|  | Diagnostic methods of Bacterial Skin Infections (Micro)(Lab) | 2(0+2) |
|  | Taste disorders (ENT) | 1(1+0) |
|  | Neoplastic conditions of the Skin (Path) | 1(1+0) |
|  | Histology of the Skin, & Nails (Hist.) (**Lab**.) | 2(0+2) |
|  | **TBL PRURITIS (Microbiology, pharmacology and Derma)** | 2(2+0) |
|  | Papulosquamous disorders (Derma) | 1(1+0) |
|  | Common Bacterial skin infections **(**Derma) | 1(1+0) |
|  | Common Viral skin infections (Derma) | 1(1+0) |
|  | Filarial parasites of the skin 1(Micro-Para) | 1(1+0) |
|  | Topical preparations of eye and ear (Pharma)(**Lab**) | 2(0+2) |
|  | Topical TTT of Skin diseases (Pharma) | 1(1+0) |
|  | Common Fungal infections of the skin (Derma) | 1(1+0) |
|  | Common Parasitic infestations of the skin (Derma) | 1(1+0) |
|  | Bed side teaching (Medicine) | 3(0+3) |
|  | Diagnostic methods of Parasitic Skin Infections (Micro)(Lab) | 2(0+2) |
|  | Visual acuity and color vision (Skill lab) | 3(0+3) |
|  | Filarial parasites of the skin 2(Micro) | 1(1+0) |
|  | Eczematous disorders (Derma) | 1(1+0) |
|  | Systemic TTT of Dermatological Diseases 1(Pharma) | 1(1+0) |
|  | Systemic TTT of Dermatological Diseases 2(Pharma) | 1(1+0) |
|  | Topical and systemic preparations for dermatological Diseases (including psoriasis) (Pharma)(**Lab**) | 2(0+2) |
|  | Skin pathology (Path.) (**Lab**) | 2(0+2) |
| **Total** | 153 |

# D. Teaching and Assessment

## 2. Assessment Tasks for Students

| **#** | **Assessment task\***  | **Week Due** | **Percentage of Total Assessment Score** |
| --- | --- | --- | --- |
| **1** | Mid-Block exam | 4th  | 20% |
| **2** | TBL assessment | Week 2-4 | 10% |
| **3** | PBL assessment | Week 1-5 | 10% |
| **4** | Final Exam:1. MCQs 40%
2. OSPE-OSCE 20%
 | 6th  | 60% |

**\*Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

# F. Learning Resources and Facilities

## 1.Learning Resources

|  |  |
| --- | --- |
| **Required Textbooks** | ANATOMY1. Snell Clinical Neuroanatomy. Richard S. Snell. 7th Ed
2. Gray’s Anatomy for Students. Richard L. Drake, Wayne Vogal and Adam W. Mitchell. 3rd Ed

EMPERYOLOGY 1. Langman’s Medical Embryology. T. W. Sadler. 13th Ed
2. The Developing Human: Clinically Oriented Embryology. Keith L. Moore, T. V. N Persaud and Mark G. Torchia. 9th Ed

HISTOLOGY:1. WHEATER’S Functional Histology: A Text and Colour Atlas. Barbara Young, Phillip Woodford and Geraldine O’Dowd. 6th Ed.
2. JUNQUEIRA’S Basic Histology: text and atlas. Antony L. Mescher. 14th Ed.

PHYSIOLOGY: 1. Ganong’s Review of Medical Physiology.Kim Barret et al. 26th Ed. 2019
2. Guyton ad Hall text book of medical physiology. John E. Hall. 14th Ed. 2021

PHARMACOOGY:1. Goodman and Gillman’s The Pharmacological Basis of THERAPEUTICS. Laurance L. Brunton, John S. Lazo and Keith L. Parker. 11th Ed
2. Basic & Clinical Pharmacology by B.G. Katzung.11th Ed.

PATHOLOGY: 1. Robbins Basic Pathology. Kumar, Abbas and Aster. 9th Ed.
2. Mur’s Text Book of Pathology, David A Levison et al.14th Ed.

MICROBIOLOGY:1. Aneja, K R. ; Textbook of Basic and Applied Microbiology. c2015.
2. Bailey & Scott's diagnostic microbiology; Tille, Patricia M.13th ED.
3. Greenwood, David, 1935; Medical microbiology : a guide to microbial infections : pathogenesis, immunity, laboratory diagnosis, and control. 18th ED
4. Markell and Voge’s Medical parasitology. 9th Ed.

MEDICINE: 1. Current Medical Diagnosis &treatment.Maxine A. Papadakis and Stephen J. McPhee. 55th Ed. 2016
2. Harrison’s principles of internal medicine.Kasper et al.19th Ed.

DERMATOLOGY:1. Dermatology Essentials by Jean L. Bolognia
2. In Bolognia, J., In Schaffer, J. V., & In Cerroni, L. (2018). Dermatology.
3. Dermatology: Illustrated Study Guide and Comprehensive Board Review‏ BY Sima Jain‏

OPHTHALMOLOGY1. Karpecki, Paul M. ,Kanski’s Clinical Ophthalmology, A Systematic Approach, 8th ed.,
2. Jay N.Chapman , American academy of ophthalmology-BCSC, 6th ed.September 2017

ENT1. ABC of ear, nose and throat / edited by Harold Ludman, Patrick J. Bradley.Malden, Mass. : Blackwell Pub. : BMJ Books, 2007.617.51 A B N
2. Diseases of the ear, nose and throat / PL Dhingra. Shruti Dhingra. Deeksha Dhingra.India : Elsevier. ; 2010.617.51 D P D
3. Essential otolaryngology : head & neck surgery / edited by K.J. Lee.New York : McGraw-Hill, Medical Pub. Division, c2008.617.51 E S O
 |
| **Essential References Materials** |  |
| **Electronic Materials** | 1. www.who.org
2. www.cdc.org
3. www.asm.org
4. www.bsac.org
5. www.clsi.org
6. www.microbelibrary.org
7. www.pubmed.gov
8. [www.pathmax.com](http://www.pathmax.com)
9. [www.webpath.com](http://www.webpath.com)
 |
| **Other Learning Materials** |  |

## 2. Facilities Required

| **Item** | **Resources** |
| --- | --- |
| **Accommodation**(Classrooms, laboratories, demonstration rooms/labs, etc.) | 1. Lecture room suitable for students.
2. Laboratory (dissection room-DR, physiology, biochemistry, microbiology, pathology, pharmacology and clinical skills) suitable for students.
3. Teaching hospital for bedside teaching
 |
| **Technology Resources** (AV, data show, Smart Board, software, etc.) | 1. Computers, multimedia in lecture room, PBL room and laboratories.
2. There is a need for 25 computers with networking and internet access for student learning. As well as a number of computers and multimedia projectors in the other rooms.
 |
| **Other Resources** (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | Library supplied with reference, textbooks, and electronic resources |

# H. Specification Approval Data

|  |  |
| --- | --- |
| **Council / Committee** |  |
| **Reference No.** |  |
| **Date** |  |