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| **دانشکده علوم پیراپزشکی** | | | |
| * + 1. *Binocular vision*        - 1. Fixation disparity          2. Hetrophoria strabismus          3. Amblyopia          4. Anisometropia anisokonia          5. Epidemiology of refractive error     2. psychophysics        - 1. Contrast sensitivity          2. Visual acuity          3. Stereopsis          4. Color vision          5. Saccade/ persuite fixation/vestibular optokinetic eye movements     3. *Refractive errors*         - 1. Epidemiology of refractive error          2. Peripheral refractive error          3. Refractive error surgery     4. *Contact lens*        - 1. Orthokeratology          2. ERG in keratoconus          3. Scleral and mini scleral lens          4. Social cognition and behavior          5. pharmacology     5. *paediatric*        - 1. Paediatric eye disorder; genetics          2. Paediatric contact lens          3. Vision screening          4. Paeditric communication          5. paeditric eye movment          6. Paediatric Syndroms          7. Mental retordation and paediatric          8. Preterm infants     6. *Electrophysiology*        - 1. Visual anomaly and ERG          2. visual anomaly and EOG          3. visual anomaly and VEP     7. *Low vision*        - 1. Visual performance          2. Reading performance          3. Examination and Rehabilitation of the patient with LV          4. Device in low vision rehabilitation          5. Telescope , magnifiers          6. electro-optical systems          7. Anomaly of peripheral field          8. Anomalies of control fields          9. non optical system     8. *Cornea*        - 1. Dry eye          2. Biomechanical cornea          3. Diabetic          4. Cataract          5. Glaucoma          6. Hemophilia and anomaly of vision | بینایی سنجی (5) | 1 |
| 1-vestibular   1. prevalence of vertigo and vestibular disorders 2. BPPV, meniere’s disease, vestibular neuritis, vestibular ototoxicity. 3. Vestibular assessments 4. Related questionnaires and inventories 5. Vestibular rehabilitation   2-auditory   1. Prevalence of hearing loss, tinnitus, auditory processing disorders and otologic disorders. 2. Otosclerosis, otitis media, presbycusis, sudden hearing loss and ototoxicity. 3. auditory assessments 4. Related questionnaires and inventories 5. auditory rehabilitation | شنوایی سنجی (1) | 2 |
| E-healthTechnology in health informationClinical information systemElectronic data exchangeDecision support systemsElectronic health recordTelemedicine and telehealthtelerehabilitationMobile healthVirtual realitySimulationNatural language processing (NLP)Web Based health information systemInternet of things (IOT)Ambient assisted livingGamificationNursing informaticsHealth care data and information systemHealth data concept and information governanceData usersData collection standard and principlesDesign paper form and computer viewEnsuring data quality, methodsInformation needsInformation seeking behaviorInformation literacyPatient educationHealth serious gamingPatient empoweringData access and retentionRecord IdentificationFillingRecord trackingRecord retentionRecord DestructionRecord retrievalClassification systems, clinical vocabularies and terminologiesTerminologiesNomenclaturesClassification systemsCodingMappingSemantic webTechnology and applicationsHealth information infrastructure, Technology, applicationsDesigning user interfaceComputer applicationComputer securityHealth technology assessment (HTA)Collaboration, analysis and operation in Health information systemInformation system analysisSystem life cyclesSystem development, implementation, evaluationProject managementWork flow designData management and useStatistics and data presentationSocio-temporal analysisData visualizationPrediction modelsSignal processingResearch and epidemiologyDesign and development research instrumentsData analyticsData qualityBenchmarkingRegistriesData dictionaryMinimum data set (MDS)Big dataData miningDeep learningMachine learningArtificial IntelligenceImage processingHealth care systemRegulatory organizationAccreditationLicensureEvaluationHealth care standardfinancing health carereimbursementmanaged careutilization managementPayersinsuranceLegal and EthicsPrivacy and health lawLegal system and obligationConfidentialityDisclosureInformed consentSecurityPatient rightresponsivenessdata ownershipencryptionOperational managementWork simplificationImprovements methodsProductivitySystems analysis and designStrategic managementHuman resource managementRevenue cycle and financial managementPatient safetyStaff safetyWorkflow designRisk managementUtilization managementQuality AssessmentMedical educationeLearningQuality assessment | مدارک پزشکی (5) | 3 |
| * + - 1. Diagnostic Radiology   Conventional & Digital Radiology  Interventional Radiology  Angiography  Mammography  Dental Radiology  Contrast Media  Image Artifacts  Patient Dosimetry  Radiation Protection  Personnel Dosimetry  Imaging & Image Processing  Quality Control   * + - 1. Computed Tomography Scan   Multislice CT  Contrast Media  Patient Dosimetry  Radiation Protection  Personnel Dosimetry  Imaging & Image Processing  Image Artifacts  Quality Control   * + - 1. Magnetic Resonance Imaging (MRI)   Pulse Sequences  MR Instruments  Magnetic Resonance Angiography (MRA)  Magnetic Resonance Spectroscopy (MRS)  MRI Artifacts  MRI Safety  Patient Screening  Contrast Media  Imaging & Image Processing  Quality Control   * + - 1. Radiobiology   Biological Effects of Ionizing Radiations  Radiation Sensitivity Factors  Dose-Response Relationships  Risk Estimates  Biological Effects of Non-Ionizing Radiations   * + - 1. Sound & Ultrasound   Imaging & Image Processing  Image Artifacts  Quality Control  Contrast Media   * + - 1. Nuclear Medicine   Hot Lab  Gamma Camera  SPECT  PET  Dual-modality imaging system  Imaging & Image Processing  Image Artifacts  Quantitative techniques  Quality Control   * + - 1. Radiotherapy   LINAC  Brachytherapy  Treatment Planning  Patient Dosimetry  Quality Control   * + - 1. Environmental Radiation   Natural Environmental Radiation Monitoring  Radon Monitoring  Environmental Radiation Protection  Radiation Effects   * + - 1. Lasers & Optics   Imaging & Image Processing  Image Artifacts   * + - 1. Nanomedicine   Molecular Imaging (theranostics nanoparticles)  Medical Education   * + - 1. Medical Education   Student Assessment & Evaluation  Clinical Skills Training  Clinical Competence Assessment  Communication Skills Training  Student Characteristics  Objective Structured Clinical Exam (OSCE)  Professionalism in Medicine  (incl. Attitudes, Cultural Competence, Ethics)  Faculty Development  Use of simulations | تکنولوژی پرتو شناسی (5) | 4 |
| * Immunology  1. Cancer Immunology 2. Immunotherapy Cancer 3. Diagnostic Test 4. Tumor Marker 5. Nanotechnology  * Bacteriology      1. Drug Resistance 2. Bcterial Diagnostic Test Based On PCR And LAMP Techniques 3. Antimicrobial Peptides  * Hematology      1. Immunohematology 2. Blood Type System 3. HDFN Disease 4. Blood Donation 5. Blood Transfusions And Blood Products 6. Complications Of Blood Transfusion 7. Hemovigilance 8. Hematology 9. Anemia Due To Decreased Production 10. Anemia Due To Increased Degradation 11. Hemorrhagic Anemia 12. Chronic Myeloid Leukemia 13. Acute Myeloid Leukemia 14. Chronic Lymphoid Leukemia 15. Acute Lymphoid Leukemia 16. Platelet And Coagulation System Abnormalities  * Chemistry  1. Lipoxygenase Inhibitors 2. Beta-Lactamase Inhibitors  * Clinical Biochemistry  1. Stem Cell 2. Tissue Engineering 3. Cancer | علوم آزمایشگاهی (6) | 5 |
| * + 1. Elderly  1. Techniques for the measurement of gait and posture 2. Normal and pathological gait 3. Treatment of gait and postural abnormalities 4. Biomechanical and theoretical approaches to gait and posture 5. Mathematical models of joint and muscle mechanics 6. Neurological and musculoskeletal function in gait and posture 7. The evolution of upright posture and bipedal locomotion 8. Adaptations of carrying loads 9. Walking on uneven surfaces 10. Climbing stairs 11. Running and performing other movements 12. Spinal biomechanics during usual activities 13. Psychometric properties of commonly-used outcome measurements in neurological disorders including MS, CVA, Parkinson 14. Posture and gait evaluations by single- and dual-task paradigms in neurological disorders including MS, CVA, Parkinson. 15. Association between cognitive-balance function in elderly populations.     * 1. Electro physical Agents   TENS  Neuromuscular electrical stimulation  IDC  Galvanic current  Laser  Ultrasound  Thermal agents including hot pack and infrared  Ultraviolet  Diathermy  Microwave   * + 1. Measurement   Reliability and validity of outcome measures including, kinetic and kinematic  Responsiveness of outcome measures including, kinetic and kinematic  Accuracy of diagnostic measures including, kinetic and kinematic measurement  Electromyographic Measurements to explore movement Disorders   * + 1. Mental Health   Cognitive therapy in patients with mental health disorders  Alzheimer and dementia   * + 1. Musculoskeletal   Posture and gait evaluation by single- and dual-task paradigms in musculoskeletal injured patients including low back pain, ACL-injured patients, and ankle injuries.  Psychometric properties of commonly used outcome measurements in musculoskeletal injured patients.  Physiotherapy for musculoskeletal disorders  Diagnostic and therapeutic processes  Patient centered care  Guidelines for musculoskeletal therapeutics and theoretical models that support developments in assessment  Diagnosis, clinical reasoning, and interventions   * + 1. Neurology   CNS autoimmune diseases  Traumatic brain injury  Spinal cord injury  Guillain barre syndrome  Amyotrophic lateral sclerosis (als)  Neuro-oncology  Mechanisms of neurodegenerative diseases  Alzheimer’s disease and other dementias  Parkinson’s disease  Huntington’s disease  Cerebral disorders  Motor neuron diseases  Epilepsy  Psychiatric disorders Association between cognitive-balance function in neurological disorders  Stroke Rehabilitation  Cognitive disorders   * + 1. Orthopedics   Post-operative rehabilitation  Spinal column disorders  Peripheral joint disorders  Osteoarthritis  Fractures  Sport-related injuries  Traumatic injuries  Overuse injuries  Interventional studies for clinical practice guidelines in musculoskeletal disorders including peripheral joints and vertebral column  Rehabilitation Developments in Sport Medicine   * + 1. Pediatrics   Cerebral palsy  Erb palsy  Motor delay  Down syndrome  Duchenne syndrome  Spina bifida  Cognitive disorders  Neurodevelopmental disorders  Neuromuscular conditions  Musculoskeletal conditions  Cardiorespiratory conditions  Developmental conditions  Pediatric exercise science   * + 1. Respiratory   COPD disease  Asthma  Bronchiectasis  Pneumonia  Airway clearance techniques  Active cycle of breathing techniques   * + 1. Rheumatology   Therapeutic methods (exercise, splinting, hydrotherapy, surgery)  Osteoarthritis  Rheumatoid arthritis  Ankylosing spondylitis  Lupus erythematosus  Polymyositis  Scleroderma   * + 1. Women's Health   Physical therapy for women’s health  Musculoskeletal disorders following pregnancy  Pelvic health of children and adults  Musculoskeletal, urological, gynecological systems as well biomechanical foundations and psychosocial aspects   * + 1. Tele-rehabilitation     2. Physical Conditioning     3. Professional Development     4. Service Delivery | فیزیوتراپی (6) | 6 |
| 1. **Language**    1. normal development of language in children    2. biological/ environmental risk factors for normal language development    3. assessment/ intervention in late talkers/late bloomers    4. cognition and language    5. Developmental language disorders       1. Primary DLD       2. DLD associated with or secondary to some other developmental disorders       3. Language learning disorders    6. Acquired language disorders       1. acquired language disorders in adults       2. childhood aphasia/apraxia/agnosia 2. **Speech**   2-1 normal development of speech in children  2-2 motor-speech disorders in children  2-3 assessment/ intervention in children with oro-facial anomalies  2-4 normal voice indicators in Persian children/ adults  2-5 pathology/assessment/intervention of fluency disorders (in children/ adults)  2-6 normal non-fluency  2-7 pathology/assessment/intervention of voice disorders  2-8 pathology/assessment/intervention of speech sound disorders   1. **Swallowing and feeding**   3-1. Assessment and intervention of swallowing disorders/ feeding problems in neonates  3-2. assessment and intervention of swallowing disorders/ feeding problems in children  3-3. assessment and intervention of swallowing disorders in adults   1. **Developing of assessment tools/measures or interventional guidelines** 2. **Prevalence study** 3. **Interdisciplinary study (Registration/ Life style/Neuroscience/psychological and psychiatric)** 4. **Assessment and intervention of augmentative and alternative communication (AAC) in speech and language disorders** 5. **Bilingualism** | گفتار درمانی (5) | 7 |
| OccupationOccupational performanceOccupational balanceNeurological rehabilitationMotorSensory reeducationHand and upper limb rehabilitationFlexor and extensor tendon injury of the handPeripheral nerve injuries of the handHand fracturesSpastic hand due to upper motor lesions  1. **Specific diagnosis**  Stroke,MS,Spinal cord injury,traumatic brain injury environment  1. **Children**  Neuredevelopmental therapySensory integration therapy Social policy Sensory integration  1. **Specific diagnosis of children:**  CP,Autism,motor delay | کاردرمانی (1) | 8 |
| [Social Worker in Administration, Policy and Research](https://socialworklicensure.org/types-of-social-workers/administration-policy-research)History of social service managementSocial policy implementationOrganizational researchContemporary management and leadershipGovernance issues facing human service organizations**Child, Family, and youth social Work** DivorceFamily problemsDomestic violence preventionFamily empowermentFamily centered Social work interventionsFamily issuesFamily relationships and parentingFamily povertyFamily violenceAlcohol and other drugs[School Social Work](https://socialworklicensure.org/articles/become-a-school-social-worker)Bullying and anti-social behaviorsDisabilitySocial relationships and supportsExclusion of students on the basis of perceived cultural, linguistic or other differenceStudents in juvenile justice, out-of-home careChild abuse and neglectHousing and transienceLimited community and social supportsSchooling issuesHome-school relationshipSupport for students with disabilitiesEngagement and attendanceNeed for modified curriculum, wellbeing strategies and learning environment[Community Social Work](https://socialworklicensure.org/types-of-social-workers/community-social-workers)Good governanceSocial policyCitizenshipSocial distance[Criminal Justice Social Work](https://www.mswguide.org/careers/criminal-justice-social-work/)Coping skills trainingLife skills developmentCase managementForensic social work in criminal justice[Gerontological Social Work](https://socialworklicensure.org/types-of-social-workers/gerontological-social-workers)Long-term careinsurance issuesStrengths-based and empowerment-oriented ways to work with elderlyElder abuse[Mental Health Social Work](https://socialworklicensure.org/types-of-social-workers/mental-health-substance-abuse)Care giver issuesSocial work intervention in mental health andGroup work with mental illnessForensic social work in mental illness[Palliative and Hospice Social Work](https://socialworklicensure.org/types-of-social-workers/palliative-hospice-social-workers)Hospice Social Work Methods and InterventionsHospice Social Work rolesEnd-of-life careSocial work education  1. Professionalization  Codes of ethic in social workDevelopment of professional social work requirementsDevelopment of educational models of social workSocial work and virtual educationMindfulness in social work training | مددکاری اجتماعی (2) | 9 |