

# DISASTER NURSING COURSE

This course information form presents comprehensive and systematic information about the "Disaster Nursing" course. The form aims to provide students with clear and detailed knowledge regarding the course objectives, content, learning outcomes, teaching methods, weekly topic distribution, and assessment criteria. Additionally, this form guides students in clearly understanding the academic responsibilities and success criteria expected from them throughout the semester.

## 1. Course Information

**Course Name:** Disaster Nursing

**Course Code:** HEM XXX

**Course Type:** Compulsory / Elective

**Course Level:** Undergraduate (3rd or 4th year recommended)

**Semester:** Fall / Spring

**Credits (ECTS):** 6 ECTS

**Contact Hours:** 2 hours lecture + 2 hours practice

**Language of Instruction:** Turkish, Czech, Finnish / English

## 2. Course Objectives

This course aims to enable students to plan nursing care in a scientific, ethical, and systematic manner before, during, and after disasters, and to acquire effective intervention, coordination, and communication skills in crisis situations.

## 3. Learning Outcomes (Bloom's Taxonomy Aligned)

**Upon completion of the course, the student will be able to:**

- a. Explain types of disasters, fundamental concepts, and their effects on health.
- b. Explain the disaster management cycle and the scope of disaster nursing.
- c. Assess disaster risks and identify preparedness requirements.
- d. Explain the roles, responsibilities, and ethical obligations of nurses in disasters.
- e. Apply triage, initial assessment, and basic emergency care interventions in disaster situations.
- f. Apply appropriate nursing approaches to trauma, shock, chemical, biological, radiological, and nuclear events, as well as infection risks.
- g. Plan care, psychosocial support, and crisis intervention for groups with special needs.
- h. Evaluate intra-team communication, coordination, and care management in disaster scenarios.

#### 4. Course Content

This course covers the fundamental concepts of disaster nursing, types of disasters, and the disaster management process. The course addresses pre-disaster preparedness, risk reduction, the roles and responsibilities of nurses in disasters, ethical principles, triage applications, and emergency care approaches, as well as trauma and shock management. Additionally, the following topics are covered: nursing care in chemical, biological, radiological, and nuclear events, infection control, public health control, care for vulnerable groups, psychosocial support, crisis intervention, field hospital organization and intra-team communication. The course is supported by skills laboratories, scenario-based simulations, and OSCE assessments, all designed to integrate theoretical knowledge with practical application.

#### 5. Weekly Course Plan

| Week | Theoretical (2 hours)                                                                            | Practical (2 hours)                                                               |
|------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1    | Introduction to disaster nursing: concepts, disaster types, management cycle                     | Course introduction, disaster scenarios, discussion of roles and responsibilities |
| 2    | Roles of nurses and ethical responsibilities in disasters                                        | Case discussion: ethical dilemmas and decision-making                             |
| 3    | National and global disaster management systems, legal regulations                               | Institutional structure analysis, disaster plans, team organization               |
| 4    | Pre-disaster preparedness: risk reduction, protection, individual and institutional preparedness | Family and institutional disaster planning                                        |
| 5    | Triage in disasters: principles and classification systems                                       | Triage cards and tabletop exercises                                               |
| 6    | Initial assessment and emergency care approaches                                                 | ABCDE approach, basic life support                                                |
| 7    | Injuries, bleeding, shock, and trauma management                                                 | Trauma care, bleeding control, immobilization                                     |
| 8    | Midterm Exam                                                                                     | Feedback and practice review                                                      |
| 9    | Nursing approach in CBRN events                                                                  | PPE use, isolation and decontamination                                            |
| 10   | Infection control and public health in disasters                                                 | Outbreak scenario and infection control practices                                 |
| 11   | Care for vulnerable groups (children, pregnant women, elderly, disabled, chronic patients)       | Care planning and case analysis                                                   |
| 12   | Psychosocial support and crisis intervention                                                     | Psychological first aid, role-play                                                |
| 13   | Field organization and service delivery                                                          | Field setup, communication, referral processes                                    |
| 14   | Comprehensive evaluation and OSCE                                                                | OSCE stations: triage, assessment, PPE, communication                             |

## 6. Teaching Methods

- Lecture
- Discussion
- Case Analysis
- Simulation
- OSCE (Objective Structured Clinical Examination)
- Problem-Based Learning

## 7. Evaluation

| Assessment Type     | Weight (%) | Description                                         |
|---------------------|------------|-----------------------------------------------------|
| Midterm Examination | 30%        | General assessment of theoretical knowledge         |
| Final Examination   | 40%        | Measurement of overall course content               |
| OSCE                | 30%        | Assessment of practical learning and applied skills |

## 8. ECTS Workload Table

| Activity              | Number | Duration (Hours) | Total                     |
|-----------------------|--------|------------------|---------------------------|
| Lectures (14 weeks)   | 14     | 4                | 56                        |
| Individual study      | 14     | 3                | 42                        |
| OSCE preparation      | 1      | 20               | 20                        |
| Midterm preparation   | 1      | 10               | 10                        |
| Final preparation     | 1      | 20               | 20                        |
| <b>Total Workload</b> |        |                  | <b>148 hours ≈ 6 ECTS</b> |

## 9. Contribution of the Course to Program Outcomes

| Program Outcome         | Contribution Level (1–5) |
|-------------------------|--------------------------|
| Clinical skills         | 5                        |
| Critical thinking       | 5                        |
| Ethical decision-making | 5                        |

| Program Outcome                      | Contribution Level (1–5) |
|--------------------------------------|--------------------------|
| Communication skills                 | 4                        |
| Leadership                           | 4                        |
| Research and evidence-based practice | 4                        |
| Community health                     | 5                        |

## 10. References

- WHO Disaster Nursing Guidelines
- ICN Disaster Nursing Competencies
- Sphere Handbook
- Turkish Disaster Management Legislation
- Current scientific articles

## 14-WEEK COURSE CONTENT SUBTOPICS

### Week 1: Introduction to Disaster Nursing

- Concepts of disaster, emergency, and crisis
- Classification of disaster types
- Scope and development of disaster nursing
- Overview of the disaster management cycle

### Week 2: Nursing Roles and Ethical Principles in Disasters

- Core functions of nursing services in disasters
- Establishing care priorities
- Ethical principles and values
- Ethical decision-making under conditions of limited resources
- Patient rights, human dignity, and privacy

### Week 3: Disaster Management System and Legal Framework

- National and international disaster management structures
- National and local disaster organizations
- Hospital disaster and emergency plans
- Professional duties, authority, and responsibilities
- Interdisciplinary collaboration processes

### Week 4: Pre-Disaster Preparedness and Risk Management

- Concepts of risk, hazard, and vulnerability

- Risk reduction and mitigation strategies
- Individual and family preparedness plans
- Institutional preparedness processes
- Training, drills, and community-based preparedness activities

#### **Week 5: Triage Applications in Disasters**

- Purpose and scope of triage
- Fundamental principles of disaster triage
- Triage categories and color-coding systems
- Primary and secondary triage applications
- Prioritization criteria

#### **Week 6: Initial Assessment and Emergency Nursing Approach**

- Scene safety and approach to the site
- Primary assessment steps
- ABCDE approach (Basic life support, advanced life support)
- Basic emergency nursing interventions

#### **Week 7: Injuries, Hemorrhage, and Trauma Management**

- Commonly encountered traumatic conditions in disaster settings
- Approach to chest and abdominal injuries
- Approach to soft tissue injuries
- Hemorrhage control methods and intervention
- Assessment and immobilization principles for fractures and dislocations

#### **Week 8: Midterm Examination**

- Assessment of the first seven weeks of content

#### **Week 9: Nursing Approach in Chemical, Biological, Radiological, and Nuclear Events**

- Characteristics of chemical, biological, radiological, and nuclear threats
- Routes of exposure and transmission
- Use of personal protective equipment
- Decontamination processes
- Isolation and worker safety measures

#### **Week 10: Infection Control, Environmental Health, and Public Health Practices in Disasters**

- Preparedness and response processes for outbreaks
- Water, sanitation, and hygiene practices

- Environmental health measures in temporary shelters
- Preventive health services and immunization practices

### **Week 11: Care for Vulnerable and Priority Groups in Disasters**

- Care needs of children
- Approach to pregnant women and postpartum individuals
- Care priorities for older adults
- Support needs of individuals with disabilities
- Continuity of care for individuals with chronic conditions

### **Week 12: Psychosocial Support, Crisis Intervention, and Post-Disaster Mental Health**

- Psychological and behavioral effects of disasters
- Crisis reactions and coping processes
- Psychological first aid applications
- Grief, loss, and post-traumatic reactions
- Burnout and secondary trauma in healthcare workers

### **Week 13: Field Organization and Service Delivery**

- Operation of field hospitals
- Organization of temporary shelter areas
- Patient admission, registration, and referral processes
- Organization of care services
- Intra-team communication, coordination, and resource management

### **Week 14: Comprehensive Assessment and OSCE**

- Structured assessment of triage skills
- Basic life support
- Choking management
- Hemorrhage control and shock management