



**Code and Name:** FİZ5060 ENVIRONMENTAL RADIOACTIVITY

**Unit:** Graduate School of Natural and Applied Sciences

**Detail:** **Period:** 2023-2024 **Status:** Optional **Class:** 1 **Credits:** 3-0-0-3 **ECTS:** 6 **Language:** Turkish

#### INSTRUCTOR

Title, Name and Surname:

Phone:

Email:

Social Account:

Student Day and Time:

#### COURSE ASSISTANT

Title, Name and Surname: .....

Phone: .....

Email: .....

Social Account: .....

Student Day and Time: .....

| Lessons Weekly Program: | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|-------------------------|--------|---------|-----------|----------|--------|----------|
|                         |        |         | -         |          |        |          |

**Rendering:** Face-to-face lessons per week 3 It will be done on an hourly basis.

**Place:** YY: - UE: -

**Purpose:** To provide master's and doctoral students with fundamental and advanced knowledge on environmental radioactivity.

**Material:** 1) Gesell, T., 2008, Environmental Radioactivity, Academic Pres, USA.

**Student Responsibility:** Students are expected to attend classes to the maximum extent and complete the assigned homework on time and with diligence.

| Weekly Lesson Plan | Week | Topic   | Method |
|--------------------|------|---|--------|
|                    | 1    | Radiation   | YY     |
|                    | 2    | Radioactivity,  | YY     |
|                    | 3    | Principles of Environmental Radioactivity,            | YY     |
|                    | 4    | Radioactivity Detection Tools                         | YY     |
|                    | 5    | Introduction to Detectors,                            | YY     |
|                    | 6    | Radioactivity in waters,                              | YY     |
|                    | 7    | Radioactivity in the soil,                            | YY     |
|                    | 8    | Atmospheric Radioactivity,                            | YY     |
|                    | 9    | Distribution of Radioactivity to the Earth's Surface, | YY     |
|                    | 10   | Physical and Chemical Factors Affecting Distribution  | YY     |
|                    | 11   | Radioactivity Calculation Techniques                  | YY     |
|                    | 12   | Introduction to Modeling                              | YY     |
|                    | 13   | Introduction to Spatial Modeling                      | YY     |
|                    | 14   | Introduction to Artificial Intelligence               | YY     |

| Assessment and Evaluation | Method       |              | Number       | Weight |
|---------------------------|--------------|--------------|--------------|--------|
|                           | Break Exam   | Exam         | Face to face | 1 % 50 |
|                           |              | Quiz         | -            | -      |
|                           |              | Homework     | -            | -      |
|                           |              | Project      | -            | -      |
|                           | General Exam | Face to face |              | 1 % 50 |

| Course Outcomes: | 1 | Student i Have Advanced Information on Environmental Radioactivity. |
|------------------|---|---|
|                  | 2 |   |
|                  | 3 |   |
|                  | 4 |   |
|                  | 5 |   |

#### Course-Specific Explanations:

UE: Distance Education; YY: Face-to-Face Education



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**Course Syllabus Form**

|                  |             |
|------------------|-------------|
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