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**al-Farabi Kazakh National University**

## **MODULE 3. NON-ENERGY TECHNOLOGIES FOR WASTE UTILIZATION**

### **COURSE 3. PHYSICO- CHEMICAL TREATMENT METHODS IN WASTE MANAGEMENT**

#### **PRESENTING THE COURSE**

**MAIN TOPICS: ENERGY-TECHNOLOGIES, INCINERATION, COMBUSTION, FUEL, PYROLYSIS, GASIFICATION, SYNTHESIS GAS.**



#### **AIM OF EDUCATION**

**INTRODUCTION OF ENVIRONMENTAL MONITORING FOR ECORISKS ASSESSMENT.**

**ASSESS ENVIRONMENTAL RISKS BY MEANS OF MODELLING OF DISPERSION AND DIFFUSION OF POLLUTANTS.**

**ASSESS SOCIAL IMPACTS OF RADIOACTIVE WASTE.**

**ASSESS AND RANK RISKS ASSOCIATED WITH WASTE MANAGEMENT (SOCIAL, ECONOMIC AND ENVIRONMENTAL RISKS).**

**INTRODUCTION OF TECHNOLOGIES FOR WASTE MANAGEMENT FACILITIES AND MANAGE ENVIRONMENTAL MONITORING OF SOIL, WATER, AIR AND NATURE.**

#### **RESULTS OF THE PILOTING**

**TIME FRAME: NOVEMBER 24, 2019-DECEMBER 22, 2019**

**PLATFORM: MOOC KAZNU**

**PARTICIPANTS: STUDENTS**

**FEEDBACK RECEIVED: TO ADD MORE TRAINING HOURS. SHOW MORE EXAMPLES FROM PRACTICE.**



#### **WHAT WAS LEARNED?**

**OBTAINING NEW USEFUL TECHNOLOGIES. CREATIVE UPROACH TO THE LECTURES DEVELOPED. DISCOVERED NEW TOOLS WHEN CREATING THE ONLINE COUSE.**