COURSE SYLABUS

ENVIRONMENTAL CHEMISTRY

Credits: 02 (Lectures 1.5 – Practices 0.5 – Self-study 06)

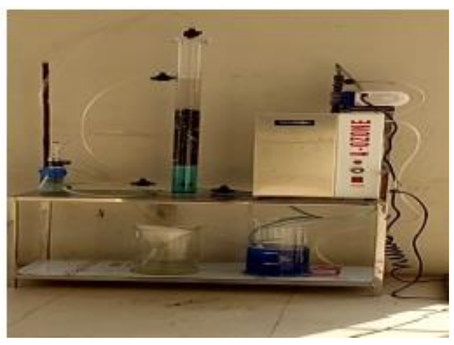
Code: MT 02003

Expected learning outcomes

Indicator	Upon the completion of the course, student able to	Expected learning outcomes of program
Knowledge		
CELO1	Analyzethechemicalprocessesinencironmenr	ELO1: Apply the knowledge of natural science, politics, social science and humanities, law, economics, and awareness of contemporary issues in the field of environmental sciences. ELO2: Analyze environmental quality including designing and conducting experiments, collecting data, and interpreting results.
CELO2	Explain the changes of chemical substances in some specific waste sources, effected by Physical and Biological factor	ELO1: Apply the knowledge of natural science, politics, social science and humanities, law, economics, and awareness of contemporary issues in the field of environmental sciences. ELO2: Analyze environmental quality including designing and conducting experiments, collecting data, and interpreting results.
CELO3	Analysis of some basic chemical indicators in laboratory	ELO2: Analyze environmental quality including designing and conducting experiments, collecting data, and interpreting results. ELO3: Evaluate the impact of natural resource exploitation and emissions on environmental quality.
CELO4	Assessment of environmental pollution accordance with the requirements of national and international standards and regulations	ELO2: Analyze environmental quality including designing and conducting experiments, collecting data, and interpreting results. ELO3: Evaluate the impact of natural resource exploitation and emissions on environmental quality.
Skills		
CELO5	Proficiency in teamwork skills	ELO6: Apply systematic, critical, and creative thinking in solving problems in the environmental and related fields. ELO7: Work in groups and lead multi-functional teams effectively.
CELO6	Proficient in analytical techniques and assessment t o find the cause of problems that uses chemical knowledge in practice	ELO6: Apply systematic, critical, and creative thinking in solving problems in the environmental and related fields.
Attitute		
CELO7	Active in learning and research	ELO11: Define a clear career orientation; possess a passion for one's career and a sense of lifelong learning.

Brief descriptions

- Chapter 1 . Atmospheric chemistry
- Chapter 2. Aquatic chemistry
- Chapter 3. Geochemistry
- Chapter 4. Circulation of some elements in nature
- Chapter 5. Toxicology
- 03 practice in lab



Learning methods

- Self study reading documents, doing exercises, studying materials
- Join in the discussion, exchange idea in class
- Prepare for the practice Calculate the chemicals, equipment needed

Assessment methods

- Grading scale: 10
- Evaluation: 50% Process, 50% final exam

Attendance 10%	Practice 10%	Mid-term 30%	Final examination 50%

Student tasks

- Attendance: Students must attend at least 75% of the class and 100% practice in lab
- Prepare the lesson according to the teacher intructions
- Attend all mid term and final exams

Key academic staffs

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