**Phy255/ENVR 255/ INTRODUCTION TO METEOROLOGY (3 Cr.)**

**Pre-requisite:** Phys 102 or Phys 103

**Email:** hamidlatif@fccollege.edu.pk **Office:** S-035 **Office hours:** Mon, Wed and Fri 9am-10am

**Learning Objectives:**

Students will learn the physical processes condensation, precipitation, and radiation, magnetic field of earth and about atmospheres, ionosphere, magnetosphere weather and climate of earth. They will also be able to learn about changes climate due to pollution.

**Recommended books:**

1. **An Introduction to Meteorology (The Atmosphere) 12th addition by Lutgens/Tarbuck**
2. Essential of Meteorology (An Invitation to the Atmosphere) by C.D Ahrens

**Syllabus**:

**MID Term Exam Topics:**

The Earth’s Atmosphere, Nitrogen cycle, Water cycle, CO2 cycle, Warming the Earth and the Atmosphere , Air Temperature ,Humidity, Condensation, and Clouds ,Cloud Development and Precipitation ,

 **FINAL Term Exam Topics:**

Air Pressure and Winds, Atmospheric Circulations, Cyclones,Thunderstorms and Tornadoes,Hurricanes, Magnetic field of Earth, Radiations, Air Pollution Global Climate, Climate Change

 **Course evaluation:**

Mid-term exam (15%), Final exam (25%), Quizzes (10%),

Homework/ Assignments/ Presentations (25%), Project (25%).

**Attendance and Grading Scale policy:**

Students must attend all the lectures. If attendance of any student falls below 70%, he/she will not be allowed to sit in the final exam. FCCU grading scale policy will be followed to calculate grades and quality points.