## Course Outline:

1. **Week 1: Introduction**
   - Introduction. Syllabus and Policies.
   - Mode: Lecture & Discussion; Reading: Home Reading
2. **Week 2: Geodynamics and Geomorphology**
   - Introduction to Geodynamics and Geomorphology
   - Endogenic and Exogenic Forces
   - Mode: Lecture; Reading: Home Reading
3. **Week 3: Tectonic Processes**
   - Continental drift and plate tectonics
   - Mode: Lecture; Reading: Home Reading
   - Assignment 1: Delivered
4. **Week 4: Mountain Building Process**
   - Faulding and Faulting, their types
   - Mode: Lecture; Reading: Home Reading
5. **Week 5: Landform Development**
   - Factor of landform development and geomorphic processes
   - Volcanism and Earthquakes
   - Mode: Lecture; Reading: Home Reading
   - Assignment 1: Submitted
6. **Week 6: Earth's Sculpturing**
   - Weathering and its geomorphic significance.
   - Mode: Lecture; Reading: Home Reading

7. Week 7: Earth's Sculpturing
    - Mass wasting and its geomorphic significance
    - Erosion
    - Mode: Lecture; Reading: Home Reading
    - Briefing about the project
    - Mid Term
8. Week 8 : Agencies of Erosion: Running Water
    - Fluvial geomorphic cycle, valley development; classification of valleys
    - landforms by surface runoff
    - Mode: Lecture; Reading: Home Reading
    - Quiz/ Periodic Test # 1
9. Week 9: Agencies of Erosion: Glaciers
    - Glaciers and their topographic effects: types and regimes of glaciers,
    - Major features resulting from glacial erosion, depositional landforms of glaciers; Glacio-lacustrine and glacio-fluviatile features.
    - Mode: Lecture; Reading: Home Reading
10. Week 10: Agencies of Erosion: Aeolian Topography
    - Desert landforms: creation and modification of landforms by winds, arid erosion cycle.
    - Mode: Lecture; Reading: Home Reading
11. Week 11: Karst Features: Work of Underground water
    - Karst process and associated landforms.
    - Mode: Lecture; Reading: Home Reading
    - Assignment 2: Delivered
    - Field Trip
12. Week 12: Soil Development
    - Soil development: factors of soil formation, soil profile, texture and structure.
    - Mode: Lecture; Reading: Home Reading
    - Quiz/ Periodic Test # 2
13. Week 13: RS/GIS Applications
    - Geomorphological profiles, use of aerial photo and Remote sensing techniques for the interpretation of landforms and geomorphologic features.
    - Mode: Lecture; Reading: Home Reading
    - Assignment 2: Submitted
14. Week 14: Course Review
    - The Forum; Review of the Course
    - Mode: Discussion/ QA Session & Suggestions; Presentation on Project

**Recommended Readings**

| Title | Geomorphology : A Systematic Analysis of Late Cenozoic Landforms |
|---|---|
| Author | Bloom, Arthur L. |
| Publisher | New Delhi : Prentice Hall, 1998 |
| Call No | |

| Title | Tectonic Geomorphology of Mountains |
|---|---|
| Author | William B. Bull. |
| Publisher | Blackwell, 2007 |
| Call No | |

- Online and other sources as proposed by the Instructor
- http://libraryportal.fccollege.edu.pk/