Composition of Magma: Important to Nature of Volcanic Eruptions and Resulting Landforms. 

Tie Between Petrology and Geomorphology. 

Eruption Types: 

- Exhalative - 
- Explosive - 
  - Viscous Magma 
  - Felsic - 
  - Bombs, Tephra, Pyroclastics 
  
Quito, Equador, 1999 

Effusive Eruption 

- Fluid Mafic 
- Lava Flow 
- Mauna Loa, March 1983
Newberry Cone Obsidian Flow

Mt. Etna, Italy

Popocatepetl, Mexico: 1994
Caldera: Collapse of Magma Chamber:

- Krakatoa, 1880s
- Mt. St. Helens 1980 (Landslide)
- Pinatubo, 1991
  - Positive Feedback System; Low Pressure = Eruption; Increase Eruption = Lower Pressure
Crater Lake: Caldera of Mt Mazama

Explosive Eruption 7,700 B.P.
Eruption Expelled About 50 Km3 of Magma.

Wizard Island, Crater Lake, USGS Photo by W.E. Scott

Aniakchak Caldera, Alaska
Areas of the United States that once were covered by volcanic ash from Yellowstone's giant eruptions

Erosion -

- Volcanic Neck Usually More Resistant To Erosion
- Erosion often Simultaneous with Eruption -
  – Complex Forms

Mt. Washington, OR:
Eroded Remnant of Composite Cone

Shiprock, New Mexico