Igneous Petrology - Lab#1

Igneous Textures in Hand Sample

Objective: With this lab, you will identify the dominant textures displayed by hand samples of igneous rock. Referring to the "Common Igneous Textural Terms" table in Winter's book, identify the textural attributes for the samples on the tables. If a texture type is not observed, indicate by "NO".

The textural terms that apply to the samples include:

Grain Size - Vitric or Glassy, Aphanitic, Phaneritic (fine-, medium-, coarse-, or very coarse-grained) or porphyritic.

Relative Grain Size – Equigranular, Inequigranular or Porphyritic (identify "phyric" phase(s)) and report grain size of matrix.

Bulk Rock Texture - Ophitic, Intergranular, Intersertal, Pyroclastic

Oriented/Banding Textures - Foliated, Trachytoid, Spherulitic / Modal Layering, Flow Banding

Cavity Textures - Vesicular, Amygdaloidal

Mineralogical Composition – as possible define the minerals (quartz, plagioclase, K-feldspar, amphibole, olivine, pyroxene, biotite,).

Rock Type – Should be defined by its compositional class (ultramafic, mafic, intermediate, or felsic) and its environment of emplacement (intrusive, volcanic, or volcaniclastic (pyroclastic)).

Sample#	Grain Size	Relative Grain Size	Bulk Rock Texture	Oriented/Banding Textures	Mineralogical Composition	Rock Type