Igneous Rocks

ESC 115 Physical Geology

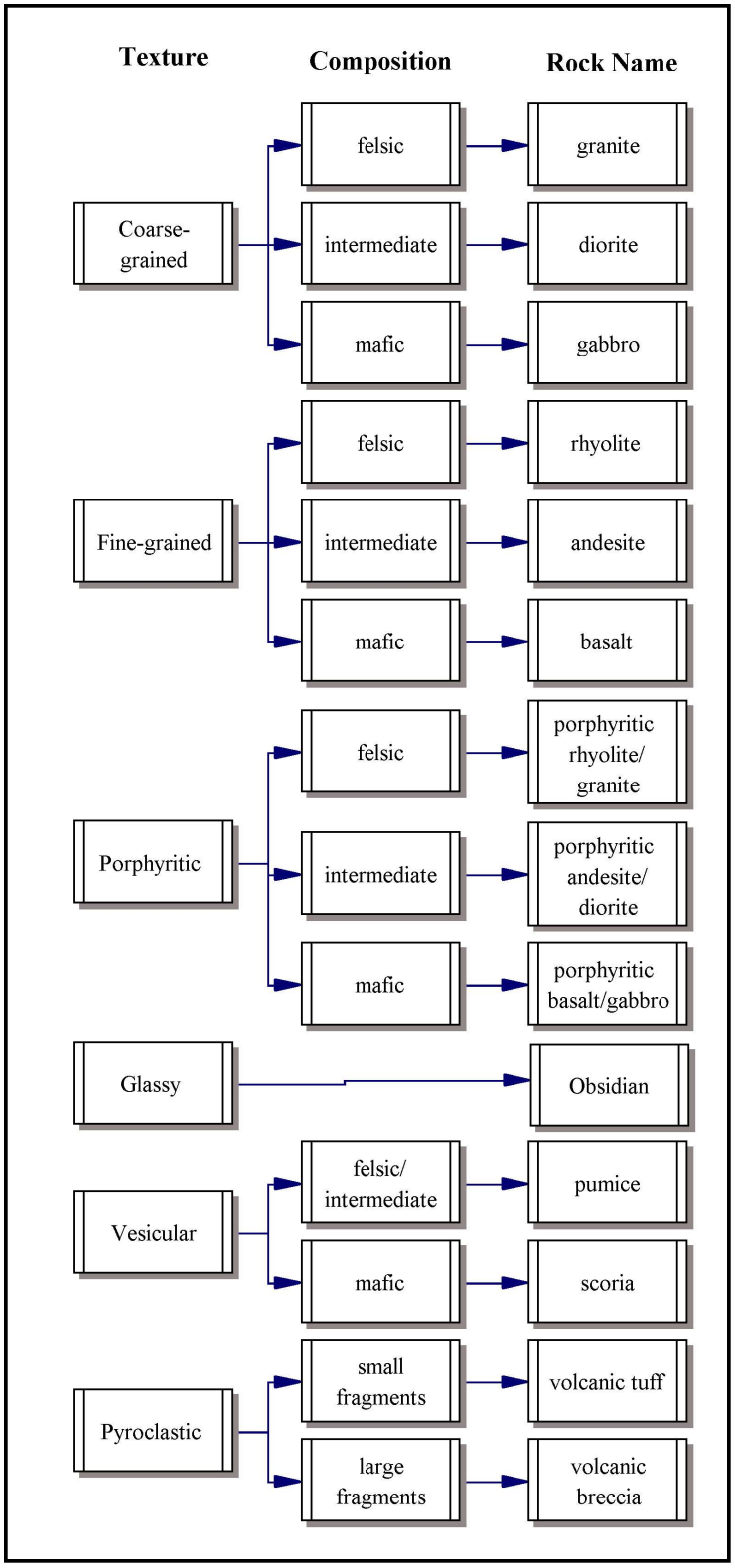
Identification

1 Igneous Rocks

To classify an igneous rock, follow these steps:

1. Determine its texture.
   (a) Pegmatitic—very coarse-grained. (We won't look at any of these in class.)
   (b) Phaneritic—coarse-grained
   (c) Porphyritic—-some coarse grains surrounded by a fine-grained matrix.
   (d) Aphanitic—fine-grained
   (e) Glassy
   (f) Vesicular—like foam or bubbles
   (g) Pyroclastic or fragmental—made from stuck-together pieces. ejected from the volcano.
2. Determine the mineralogy and color
   (a) Felsic minerals are light-colored; mafic minerals are dark-colored.
   (b) Felsic igneous rocks—0-15% mafic minerals
   (c) Intermediate igneous rocks—15-45% mafic minerals
   (d) Mafic igneous rocks—46-85% mafic minerals
3. Then use chart on the following page to determine the rock name.

Igneous Rock Identification



Igneous Rock Identification Sheet			
Item Number	Texture	Color Index	Rock Name
18			
22			
27			
28			
29			
30			
32			
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