GLY306 **Petrology**

The following are formulas for minerals that occur in common igneous rocks.

Forsterite	Mg_2SiO_4	orth
Fayalite	Fe_2SiO_4	orth
Enstatite	$Mg_2Si_2O_6$	orth
Diopside (end member)	$CaMgSi_20_6$	mono
Augite	$Ca(Mg,Fe,Al)(Si,Al)_2O_6$	mono
Hornblende	$Ca_2(Mg,Fe,Al)_5(Si,Al)_8O_{22}(OH)_2$	mono
Biotite	$K(Mg,Fe)_3[(Al,Fe)Si_3O_{10}](OH)_2$	mono
Muscovite	$KAl_2[(AlSi_3)O_{10}](OH)_2$	mono
Magnetite	Fe_3O_4	iso
Ilmenite	$FeTiO_3$	trig
Apatite	$Ca_5(PO_4)_3(F,Cl,OH)$	trig

Feldspars

Anorthite	$CaAl_2Si_2O_8$	tricl
Albite	$NaAlSi_3O_8$	tricl
K-spar	$KAlSi_3O_8$	mono, tricl

Feldspathoids

Leucite	$KAlSi_2O_6$	tetr (pseudo-iso)
Nepheline	$NaAlSiO_4$	trig
Sodalite	$[NaAlSiO_4]_3NaCl$	iso

Secondary Minerals

Serpentine & Chlorite	$(Mg,Fe)_6Si_4O_{10}(OH)_8$	mono
Hematite	Fe_2O_3	trig
Epidote	$Ca_2(Al,Fe)_3Si_3O_{12}(OH)$	mono
Calcite	$CaCO_3$	trig