

GY-343 Petrology Laboratory
Igneous rock thin section point counting

Introduction

In this lab you will identify the minerals and proportions of minerals in a thin section with the use of a counting stage based on a 100 point count. You will be assigned to work as a team at a specific microscope. Your team will be assigned a specific thin section to analyze. You should agree on mineralogy and average your individual counting statistics before plotting the composition on the appropriate IUGS ternary igneous classification diagram. You have two weeks to complete this lab.

Products

1. Turn in a team summary of the mineralogy and associated 100 point counts. Also diagram the geometry of your point count grid. (10x10, 5x20, etc.). Draw a sketch of your thin section that was used to orient the slide on the stage.
2. Plot the compositional point on the appropriate IUGS ternary and label the point with the thin section identification. Before plotting the point check with your instructor about the most appropriate IUGS ternary diagram.

Turn in (1) and (2) above for each team with the thin section I.D. and the team members names in the upper left corner of the (1) page.