

### GEOL 3XX IGNEOUS & METAMORPHIC PETROLOGY

Description and classification of igneous and metamorphic rocks based on mineralogy, textures, and chemical compositions; study of the origins of rocks through laboratory investigations of suites of related rocks. Class includes a field trip.

Goal 1: Identify <sup>features of</sup> rocks <sup>which correlate to</sup> ~~to understand~~  
<sup>igneous + metamorphic</sup>  
Earth processes & the conditions  
under which they form

Goal 2: Interpret <sup>igneous + metamorphic</sup> rocks in the field to  
evaluate Earth history

Goal 3: <sup>Microstructural & geochemical</sup> ~~Analyze~~ Gain expertise with a  
<sup>techniques</sup> ~~microscope~~ through the analysis  
of samples. Evaluate how ~~these~~ thin  
sections correlate to hand samples

→ maybe change to: Apply ~~metamorphic~~  
microscopic techniques to analyze igneous +  
metamorphic rocks.