ANCILLARY MINERAL LAB: THIN SECTIONS

Note: *Anything marked in gray is filled in by the instructor. All other fields, checks, and write-ups to be completed by you!*

Name:	Course section ID
Date received: Due Date:	m/d/yy
⚠ The following **Due Date Penalty** applies: -10% / day	☐ 100% or _____%
Overall THIN SECTION LAB Grade:	%
	/50

Lab Access Badge #: Badge ID

Lab safety training completed on: m/d/yy

Maintenance Infraction(s):
☐ Warning Only! ☐ -5% ☐ -10%
☐ -15% and Lab Revocation

Assigned Lab Equipment BIN number:

Assigned PLM number:

Refer to LAB INSTRUCTIONS BELOW
Manual of Rapid Mineral Identification - Vol I: 11.2.2 Thin Section Preparation and Analysis p.70

ASSIGNMENTS:

Complete the THIN SECTIONS Lab as outlined below and described in the manual:

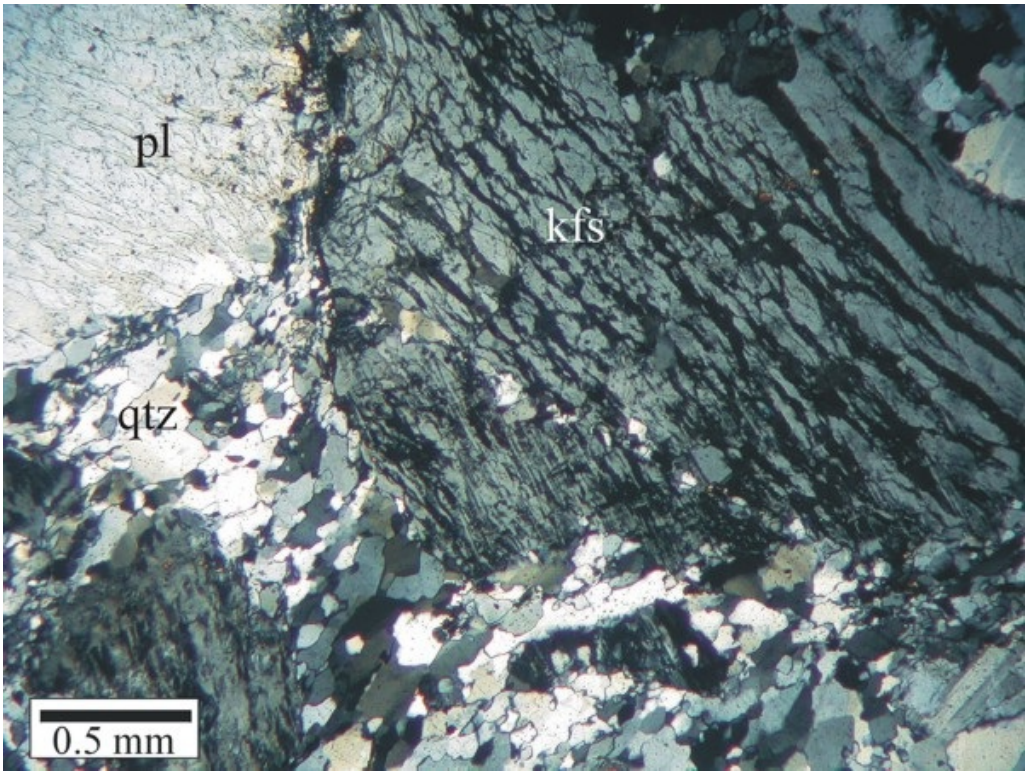
/10	**Overall Section**	Professionalism & Neatness *including but not limited to...* Good: *complete, flawless, microscope slide with label..* Bad: *broken, cracked slide, epoxy smudges, fingerprints, no label, etc....*
/10	**Section Thickness 30µm**	Correct Thickness *including but not limited to...* Good Whole thin section is close to 30 microns,... Bad Thickness deviations. The greater the deviation, the lower the quality
/10	**Uniform Thickness**	Uniform Thickness *including but not limited to...* Good: Thickness is uniform... Bad: Thickness is wedge shaped or irregular.
/10	**Rock Chip Size**	Rock Chip Size *including but not limited to...* Good Chip covers most of slide, especially width wise Bad Chip too small, too irregular, especially width wise.
/10	**Epoxy Mount Quality**	Epoxy Mount & Cover Slip Mount Quality *including but not limited to...* Good: Clear epoxy, No Bubbles or dirt. Bad: Bubbles, Dirt, smudges, excess epoxy, etc.

⚠ **NO FORMAL WRITE-UP NECESSARY FOR THIS LAB!** SUBMIT COMPLETED THIN SECTION FOR GRADING as a physical HARDCOPY by the deadline. Place your completed section in a plastic bag and attach to this sheet!

Grading with Feedback of the assignment will be recorded in CANVAS. Look in your CANVAS gradebook for feedback after your submittal!

THIN SECTION

During this lab you are to make a thins section from a rock specimen of your choice. The thickness of your section should be as close as possible to the standard of 30µm. It is therefore essential that your first section contains the mineral quartz. Use the first order birefringence color of quartz as a guide.



Example of a well crafted thin section representing a granite viewed under XPL.
pl = plagioclase, kfs = kspar, qtz = quartz. Courtesy of U.S. Department of the Interior, U.S. Geological Survey
URL: http://pubs.usgs.gov/of/2003/of03-221/htmldocs/thinsect/03mw2623ts.htm

On “How to Prepare a Thin Section”, follow Lab instructions given and the outline in the Rapid Mineral ID Manual - Vol I, page 70 to 76.