

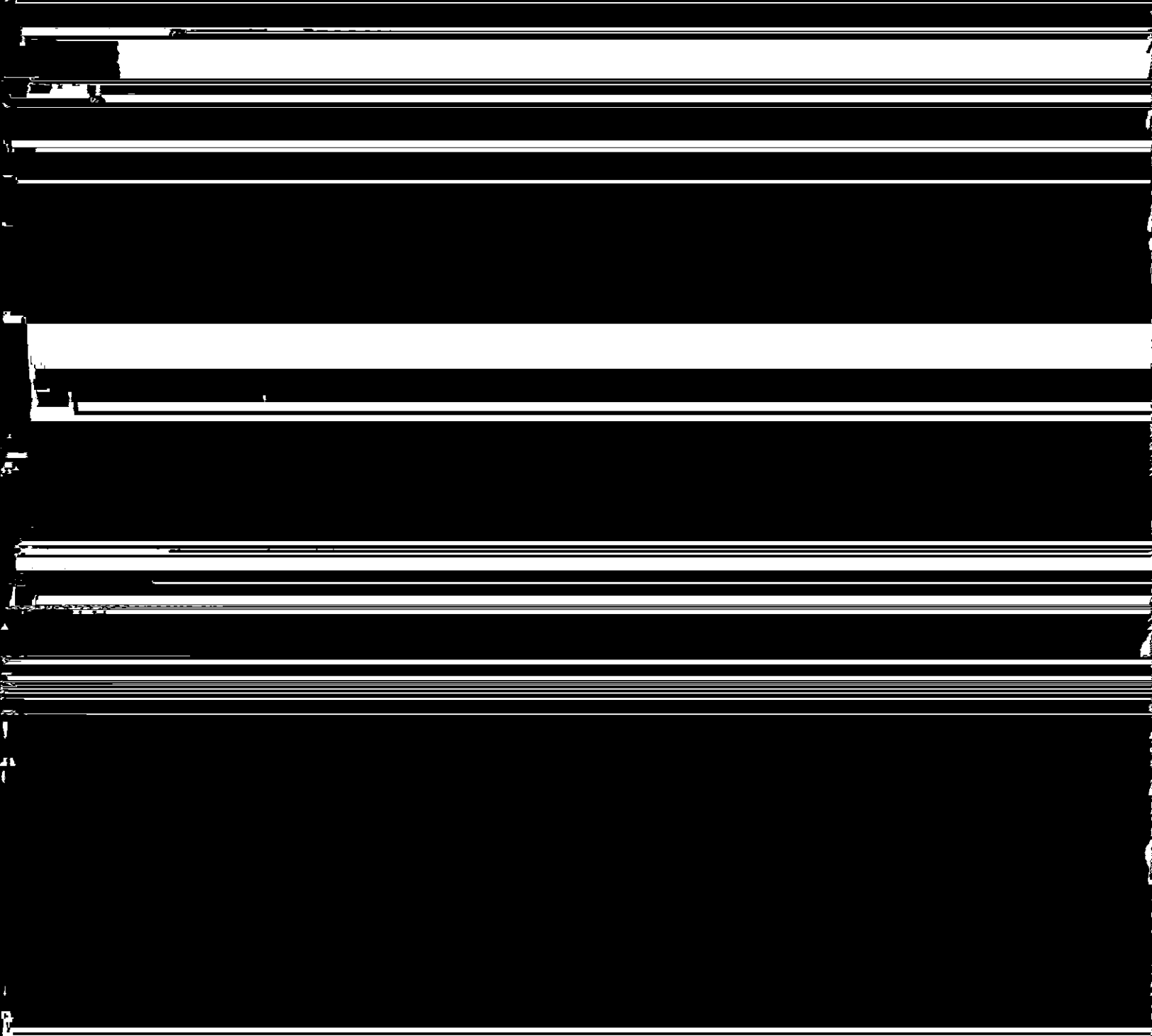
Part II. Description of Curricular Change

1. SYLLABUS OF RECORD

I. Catalog Description

GEOS 345 Igneous and Metamorphic Petrology

(3c-3l-4cr)



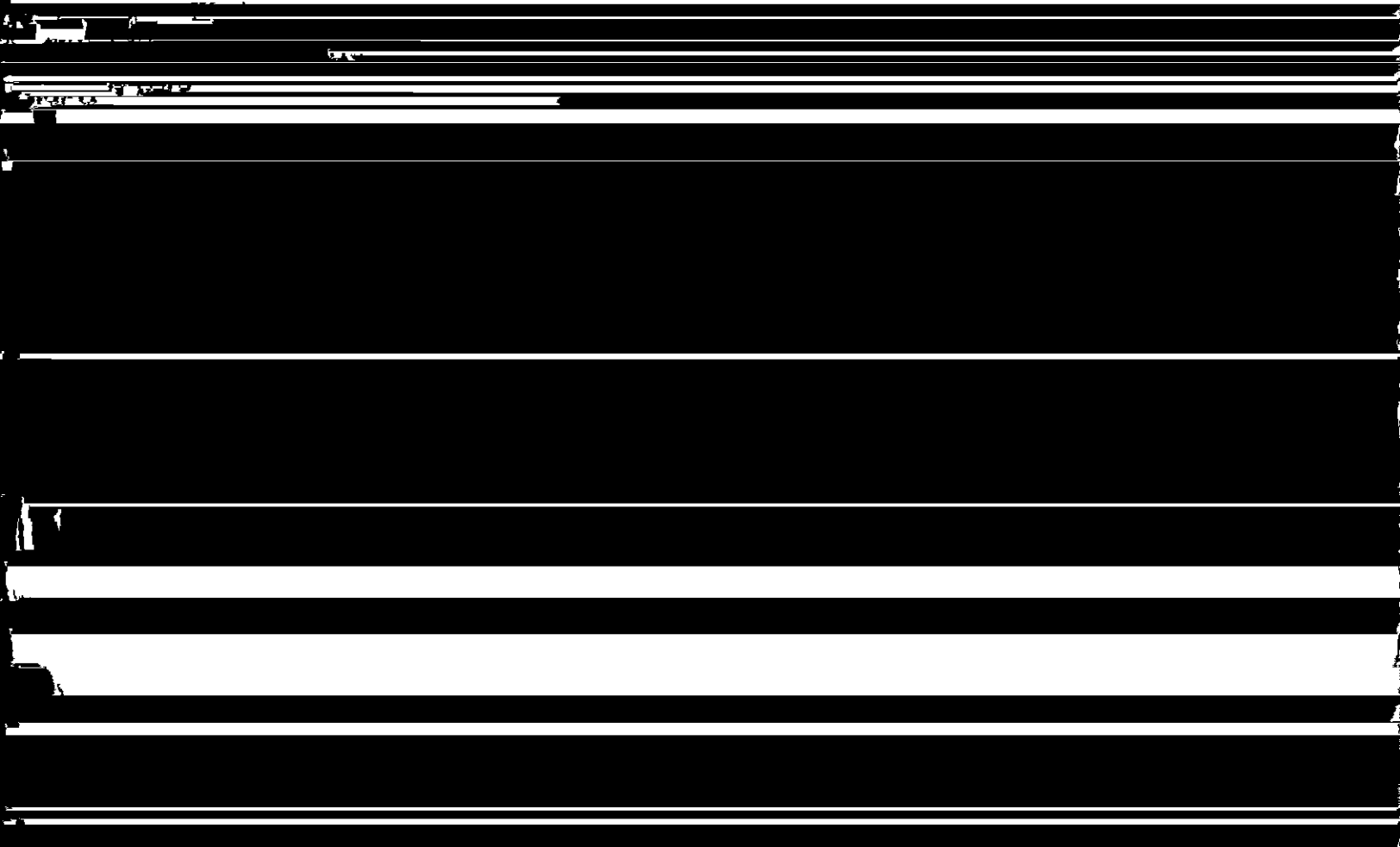
L. Final exam

(2 hours during
final exam period)

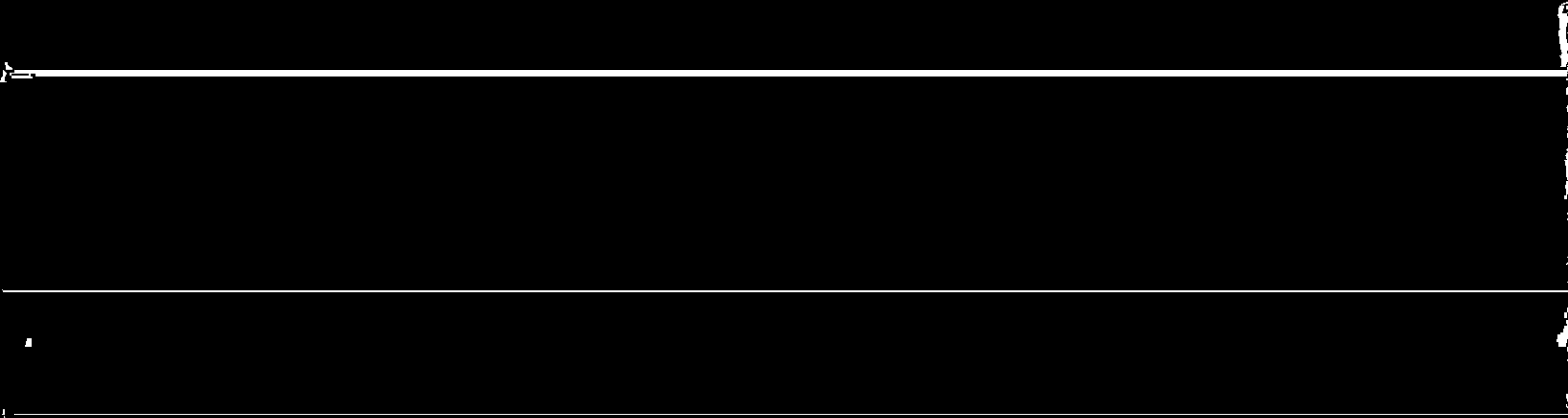
Lab Schedule



Week 1 Introduction to igneous minerals and textural terms- review of optical microscopy



Week 2 Introduction to metamorphic rocks and metamorphism



IX. Bibliography

The following resources will be used to develop the course curriculum:

Demange, Michel Andre (2012) *Mineralogy for Petrologists: Optics, Chemistry, and Occurrences of Rock-forming Minerals*. CRC Press, 218 pp.

Farndon, John (2013) *The Complete Illustrated Guide To Rocks Of The World: A practical directory of over 150 igneous, sedimentary and metamorphic rocks*: Lorenz, 128 pp.

Frost, B. Ronald, and Carol D. Frost (2013) *Essentials of Igneous and Metamorphic Petrology*. Cambridge University Press, 336 pp.

Gill, Robin (2011) *Igneous Rocks and Processes: A Practical Guide*. Wiley-Blackwell, 440 pp.

Course Analysis Questionnaire

Section A: Details of the Course

- A1 This course is designed for junior and senior geology majors. It will be a track requirement for the B.S. in Geology / Geology Track; a track option for the B.S. in Geology / Environmental Track; and it can be used as a Controlled Elective for the B.S. in Geology / Energy Resources Track.

The material covered by this course was the subject of a stand-alone course, GEOS 322 Igneous and Metamorphic Petrology, from 1968 until 2008. During our last curriculum update, the department experimented with combining Mineralogy and Petrology into a

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Appendix 2

**ASBOG FG and PG Test Blueprints
Number and Percent of Items by Domain**

CONTENT DOMAINS	FG#	FG%	PG#	PG%
A. Field Methods & Remote Sensing	32	29.1	28	35.0
B. Mineralogy, Petrology, Petrography, & Geochemistry	15	13.6	2	2.5

Section C: Implementation

C1 Faculty resources are adequate to teach this class at the current time. The course will be taught on a two-year rotation, alternating with another new controlled elective course in the workload of our mineralogist-petrologist, Dr. Nick Deardoff. Until 2008, this faculty

C5 No more than one section of this course will be offered at a time.

C6 Since this course has an integrated laboratory section, enrollment is limited to 24 students (4 students per work table / 6 work tables in the lab). This is the standard enrollment limit for