ESS 431 PRINCIPLES OF GLACIOLOGY ESS 505 THE CRYOSPHERE

Lecture 14 – Glacial Erosion: Temperature in cold ice masses and special problems of ice sheets

Due Wednesday, November 22 2017, at start of class

Ritter, D.F., 1986: Process Geomorphology, Chapter 10.

- 1. Why do large glaciers tend to erode faster than small ones?
- 2. What are the signs of glacial abrasion?
- 3. What is glacial quarrying and what is the evidence for this process?
- 4. How does basal effective pressure affect quarrying rates?
- 5. How would you draw the flow lines along a long profile in a cirque glacier? Make sure you indicate where the ELA (equilibrium line altitude is).