

EART 290B/P
Seismological Glaciology and Glaciological Seismology

TuTh 2-3:45PM, E&MS D226

Susan Schwartz

**Slawek Tulaczyk (Office hours: Tuesday, noon-2PM or by appointment,
E&MS Bldg. A112, 459-5207)**

Course Topic - This graduate-level seminar will focus on application of passive seismic techniques in investigations of glaciers and permafrost. Recent publications demonstrated that analyses of seismic emissions from moving ice masses may help constrain key processes, which control glacier velocity and mass balance (e.g. ice sliding, crevassing, subglacial water drainage, iceberg calving). Exact balance of topics will be determined after taking into account student research interests.

Methodology and Evaluation – The course will be taught as a combination of lectures, student presentations, discussions, and in-class modeling in Matlab environment. Course evaluation will be based on student participation, quality of student presentations, and a final paper.

Presentations and leading of discussion (4 x 10%) =	40%
Participation in discussions =	15%
Final presentation =	15%
Final paper/project =	30%