**Volcano Seismology Course Outline**

GEOS 671 F001, Spring 2012  
Wednesday, 1:45-4:45 p.m., room 301M (record reading room)

Steve McNutt  
Research Professor, Geophysical Institute, 474-7131

<table>
<thead>
<tr>
<th>week</th>
<th>topic</th>
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<td>1</td>
<td>History and organization of the subject; case histories:</td>
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| 2    | Instruments and networks; seismic velocities of volcanic materials  
Redoubt 1989-90 case history |
| 3    | Terminology and event classification  
Spurr 1992 case history |
| 4    | Swarms, magnitudes, energy, b-values, p-values  
Usu 1977 case history |
| 5    | High frequency (VT, A-type) earthquakes  
Mount St. Helens 1980 case history |
| 6    | Low frequency (LP, B-type, VLP) earthquakes  
Kilauea 1983 case history |
| 7    | Volcanic tremor  
Izu-Oshima 1986 case history |
| 8    | Volcanic explosions (C-type)  
Galeras 1988-1993 case history |
| 9    | Attenuation and noise at volcanoes;  
| 10   | Large earthquakes near volcanoes; Cycles of volcanic activity  
Pavlof 1973-1996 case history |
| 11   | Forecasting of eruptions and assessment of eruptions in progress  
Augustine 2006 case history |
| 12   | Magma chambers, S-wave screening, and tomography  
Pinatubo 1991 case history |
| 13   | Selected topics: probability, chaos, lightning, modelling, etc.  
Montserrat 1995-continuing case history |