

**Mountain Hydrology Graduate Class
Fall 2014 Syllabus**

Week	Dates	Topic	Reading	Homework
1	F 9-5 B	Mountain water balance	Goulden, PNAS 2014	
2	W 9-10 M F 9-12 B	Orographic precipitation	Roe 2005 Houze 2012 Dettinger 2004 Alpert 1986	
3	W 9-17 M F 9-19 B	Precipitation & snow trends	Mote 2003, 2006, 2008 Stoelinga 2010 Ohmura 2012	HW1
4	No class	Radiative transfer	Dozier, 1989	
5	F 10-3 M	Snow mapping	Rosenthal, 1996 Rice 2011 Painter, 2009	HW2
6	M 10-6 B F 10-10 B	Energy balance & snowmelt modeling	Rango 1995 Brubaker 1996 Marks 1992 Link 1999	
7	M 10-12 B W 10-15 M F 10-17 B	Snowmelt processes	Pomeroy 1999 Cline 1998 Molotch 2004	HW3ab
8	M 10-20 B F 10-24 M	Snowmelt processes	Guan 2013 Harrington 1998ab	
9a	M 10-27 B	Flowpaths and residence times	Huth 2004 Liu, 2008ab, 2013 Kirchner 2001	
9b	W 10-29 M F 10-31 M	Groundwater in mountains	Rademacher, 2005 Shaw 2013 Kondolf 1989 Tobin 2013	
10	W 11-5 M F 11-7 B	Meadow hydrology	Lohide 2005, 2009 Lowrey 2010, 2011	HW4
11	W 11-12 M F 10-14 B	Evapotranspiration	Ziemer, 1964 Running 1987 Stephenson 1998	
12	W 11-19 M F 11-21 B	Evapotranspiration	Goulden 2012 Goldstein 2000	HW5
13	M 11-24 B	Weathering and erosion	Kirchner 2001 Holbrook 2014 Hahm 2014	
14	W 12-3 M F 12-5 B	Student topics	Michael Carlos, Ziran	
15	W 12-10 M F 12-12 B	Student topics	Melissa, Joe Zeshi	HW6