

FE 538 – Field Hydrology 2007

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What to Expect:

The course is set-up to be an intensive work week at the HJA. This reduces the amount of work required prior to and following the spring break week. Each day is a full day of lectures, field work, data crunching and fun. The class will be split into 5 groups of 3 for the week. You will work through each day long module with the same group. Prior to the class, we will distribute a required reading list of journal articles to help prepare you for the course. PDF's will be made available.

Each day will start at 9 am with a lecture either in the HJA conference room or in the field. Following the lecture we will split into our module groups for the day and head to the field. Bring your lunch. The modules are all in the field, so dress accordingly for the day. We will return from the field around 4 pm and then will begin doing data crunching and analysis. Dinner will be prepared by one group. Following dinner you will put together a short presentation (powerpoint) of the days results and present them to the entire group. We will convene for the presentations at 10pm in the HJA conference center. Following the presentations is free time. We will show Hydrology focused films, play disc-golf, etc.

Following our return OSU we will all reconvene for the final portion of the class (time and date TBD). You will prepare group reports/presentations of the final module which you completed on Friday. This presentation will summarize the entire week's data collection.

Departure/Return:

We will have vans to drive out to the HJA on Sunday March 25th, departing at 5 pm. Otherwise you will need to find your own way. We will return on Saturday March 31st (arriving Corvallis around noon), once we have completed our cleaning inspections. We will depart and return to the loading dock area of Peavy Hall. If you wish to drive on your own directions to the HJA can be found at: <http://www.fsl.orst.edu/lter/index.cfm>

Food logistics:

One module will also have kitchen duties and will prepare dinner for the entire group each night. Dinner food and menu will be planned by the instructors (feel free to make suggestions prior to the class, also **PLEASE LET US KNOW OF DIETARY NEEDS**). Food costs for dinner will be split amongst the group. Last year this was about \$25 per person for the week. Breakfast and lunch are on your own. You will need to bring everything you would like to have for the week.

Housing:

HJA has nice apartment style housing. You most likely will have a roommate. Housing cost for the week is \$100. **Please bring a check to pay the HJA.** You will need to bring

a sleeping bag or blanket and sheets if you would like them. The apartments have full kitchens, bathrooms, refrigerators, etc. There is no phone where it is easy to receive phone calls, but there are phones for outgoing calls. In case of an emergency: 541-822-6300. This number will be answered during business hours.

What to bring:

Sleeping bag	Checkbook
Sheets	Small daypack
Towel	Breakfast food
Rain Gear	Lunch food
Boots	Notebook
Warm clothes for snow module	Gloves
Notebook	Sense of humor

Required Readings:

We will provide a list of readings to supplement the field course. Listed below are “must” read articles prior to the field course. These will help set the stage for the modules and get you a jump start on understanding the processes you will measure in the field.

Gray, D.H. M., D.H. Male, (1981), Snowcover ablation and runoff, in *Handbook of snow*. Pergamon Press.

Harr, D. 1977. Water flux in soil and subsoil on a steep forested slope. *Journal of Hydrology*, 33, 37-55.

Anderson, M.G., Burt, T.P. 1978. The role of topography in controlling throughflow generation. *Earth Surface Processes*, 3, 331-344.

Wondzell, S. M. 2006, Effect of morphology and discharge on hyporheic exchange flows in two small streams in the Cascade Mountains of Oregon, USA, *Hydrol. Process.*, 20, 267-87.

M. C. Westhoff, H. H. G. Savenije, W. M. J. Luxemburg, G. S. Stelling, N. C. van de Giesen, J. S. Selker, L. Pfister, and S. Uhlenbrook. 2007. A distributed stream temperature model using high resolution temperature observations. *Hydro. Earth Syst. Sci. Discuss.*, 4, 125-149

These are posted on:

<http://watershd.forestry.oregonstate.edu/FE538%20Field%20Course/Forms/AllItems.aspx>

Soon to be on: www.cof.orst.edu/cof/fe/watershd/fe538/FE538homepage.htm

For info from last year's class see:

www.cof.orst.edu/cof/fe/watershd/fe538/FE538homepage.htm

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