

CE 540 Special Topics: Unsteady flows in rivers and pipe networks (CRN: 21247, Fall 2014)

Instructor: Dr. Arturo Leon, School of Civil and Construction Engineering

Instructor e-mail: arturo.leon@oregonstate.edu

Instructor research web-page: <http://web.engr.oregonstate.edu/~leon/>

Meeting times and Location: Tue/Thurs 10:00-11:50 am, KEAR 202

Description: This course will cover the introduction and analysis of **unsteady flows** in rivers (open-channel flow) and pipe networks (pressurized flow). Strong emphasis will be given to the application of efficient numerical techniques and computational procedures to river routing and flooding, water distribution systems and stormwater conveyance. The course will focus primarily on one- and two-dimensional unsteady flows.

Prerequisite: CE 313/CE 412 or equivalent. Please contact the instructor if you have any questions.

Target students: The course is intended for graduate students of Civil Engineering, Water Resources Engineering, and various science and engineering disciplines. **Motivated undergraduate students** are also welcome. Basic knowledge of numerical methods, and computer programming is desirable but not required.

