

Portland State University *Electrical and Computer Engineering*

ECE 418/518: Linear System Analysis I

(4 Credits)

Fall 15

- Class schedule: T Th: 4:40 - 6:30 PM, FAB 40-08
- Instructor: Prof. F. Li
- Office hours: T Th: 3:30 - 4:30 PM, or by appt.
- 160-10 FAB, 5-3824 or lif@pdx.edu
- Web URL: <http://www.ece.pdx.edu/~fli>
- TA: TBA

Text:

- Signals and Systems, Second Edition, by Alexander D. Poularikas and Samuel Seely, Krieger Publishing

Notes:

- Lecture notes (with home assignments and solutions), Clean Copy.

Other References:

- Contemporary Linear Systems, Using Matlab, by Robert D. Strum and Donald E. Kirk, PWS-Kent Publishing
- Signals and Systems: Continuous and Discrete, Third Edition, by Rodger E. Ziemer, William H. Tranter, and D. Ronald Fannin, MacMillan.

Course descriptions

- Advanced concepts of continuous-time signals, systems, and transformations. Signals: periodicity, orthogonality, basis function; System: Linearity, superposition, time-invariance, causality, stability, and convolution integral; Transforms: Fourier series and Fourier transform, Hilbert and Hartley transforms, Laplace transform.

Prerequisite:

- EE 312: Fourier Transform, or equivalent.

Grading policy:

- Final grade will be based upon: two quizzes 25% each (50 minutes each) and final exam 50%.
- The homework is assigned to each chapter and the solutions to the assigned homework problems will be available at the Clean Copy. The homework will not be graded.
- Attendance is required for 418. It is the student responsibility to follow all class assignments and announcements.

Have fun!