

#### Be The Difference.

## EECE 4510/5510 – Digital Signal Processing Fred J. Frigo, Ph.D. Fall 2010

## Summary:

Mathematical descriptions of discrete-time signals and systems are presented using block diagrams, signal flow graphs, and difference equations. The sampling and reconstruction of continuous-time signals is presented. Frequency analysis techniques are covered, including the z-transform, the Discrete Fourier Transform, and the Fast Fourier Transform. Simple digital filter design examples are presented.

Location & Schedule: Class meets Tuesdays & Thursdays: 5:30pm-6:45pm Haggerty Engineering Hall - Room 170

Midterm Exam: Tuesday, October 19, 2010 Final Exam: Tuesday, December 14, 2010 5:45pm-7:45pm

No class – Midterm Break – Thursday, October 21, 2010 No class – Thanksgiving Day – Thursday, November 25, 2010

# Grading:

Homework and Projects: 60% Mid-term exam: 20% Final exam: 20%

# Required Text:

Discrete-Time Signal Processing, 3rd Edition By Alan V. Oppenheim and Ronald W. Schafer ISBN-10: 0-13-198842-5 ISBN-13: 978-0-13-198842-2 Published by Prentice Hall © 2010

## Office Hours:

By appointment – Haggerty Hall – Room 283

# Contact Info:

Email: <u>Frederick.Frigo@marquette.edu</u> or <u>Fred.Frigo@med.ge.com</u>

Office: (262)-521-6104