Objective:
At the end of the term, the participants will have a general understanding of different power quality problems present in modern power systems, methods of their analysis and mitigation. The students will be able to calculate different power quality indices, model main network elements for harmonic analysis, perform waveform processing and derating calculations. The participants will understand principles of harmonic solutions using direct and iterative techniques, methods of filtering and compensation in power systems.

Textbook (optional):

Reference books:


Outline:


Lecture:

Tuesday 17:30-20:00 in JAB777

Lecture instructor:

Vitaly Spitsa

Contact:

Dibner Building, LC 205, 718-260-3464, vspitsa@poly.edu

Office hours:

Tuesday 16:00-17:00 and Thursday 13:00-14:00, by appointment, or whenever you can find the office door open.
Course web page:

see MyPoly for course info, announcements, and assignments.

Exams:

Midterm
Date: October 30, 2012

Comprehensive final
Date: December 18, 2012

Homework:

1. Homework assignments will be posted at myPoly.
2. Homework submission is a part of the final grade.
3. There will be nine homework assignments in total.
4. Eight best homework grades will be accounted for.
5. Solutions will be distributed after the due dates.
6. No homework will be accepted after solutions are distributed.
7. No electronic submissions will be accepted.

Grading:

homework 10%
midterm 40%
final 50%