

# EL6673 Resonant Power Converters 3.0

Spring 2019

**Outline:** Class D and E rectifiers. Class D inverters. Class E inverters. Phase-controlled resonant inverters. Resonant dc-dc converters. Soft switching. Quasiresonant and multiresonant converters. Control and modeling of resonant converters.

**Text:** Marian K. Kazimierczuk and Dariusz Czarkowski, *Resonant Power Converters*, 2nd ed., Wiley 2011.

**Lecture:** Monday 12:25-2:55 PM in 2MTC 9.007

**Instructor:** Dariusz Czarkowski

**Contact:** LC 200H, +1 646 997-3256, dc1677@nyu.edu

**Office hours:** Wednesday 11:15-12:15 PM or by appointment

**Web pages and other handouts:**

Course page - login to NYUClasses

Other handouts will be provided by the instructor.

**Exams:** 1 midterm (March 25th), comprehensive final (May 20th). All exams are open-book and open-notes.

**Mini-Project:** A simulation project will be assigned around the midpoint of the semester.

**Homework:** Several sets of problems will be assigned as a homework. Solutions will be distributed after a submission deadline. Homework submission is a part of the final grade.

**Grading:**

homework 10%

project 20%

midterm 20%

final 50%