Spring 2016

**ECE 4141**

Introduction to RF/Microwave Wireless Systems

Instructor: **RAJEEV BANSAL**

ITEB-Room 452 (ECE Department)

371 Fairfield Way, UNIT 4157, UCONN, Storrs, CT 06269

Tel: 860-486-3410, email: rajeev@engr.uconn.edu

Office Hrs: Tu, Th 2- 3 (or by appointment)

Textbook: D. Pozar, **Microwave Engineering** (4th edition), Wiley, 2012.

Outline: 1) Introduction (1): Text Ch. 1

2) Transmission Lines (4): Text Ch. 2, 3

3) Waveguides (2): Text Ch. 3

5) Impedance Matching and Tuning (2): Text Ch. 5

6) Resonators and filters (2): Text Ch. 6, 8

7) Network Analysis (4): Text Ch. 4

8) Components (4): Text Ch. 7, 9

9) Oscillators, amplifiers, and mixers (2): Text Ch. 11-13

10) Systems and Applications; Bio-safety (4): Text Ch. 14

NOTES: (a) The number in parentheses denotes the estimated number of 75-minute lectures on a topic. The appropriate chapters from the text are also indicated.

(b) All students will be required to write a technical report.

(c) GRADING: Best 2 (out of 3) Mid-term Exams (50%), Multiple-choice final (25%), technical report (15%), HW (10%).

(d) ALL EXAMS WILL BE OPEN-BOOK. No Make-up exams.

(e) Plagiarism will not be tolerated and may result in an F in the course.