

## **ECE 4344: Antennas and Radiating Systems**

**Credit / Contact hours:** 3 / 3

**Course coordinator:** Mohammad Saed

**Textbook(s) and/or other required material:** W.L. Stutzman and G.A. Thiele, *Antenna Theory and Design*, 3rd ed., Wiley 2013.

**Catalog description:** Antenna fundamentals, uniformly spaced arrays, wire antennas of various types, aperture radiation, antennas for special applications.

**Pre-requisite(s) or co-requisites:** ECE 3341.

**Designation:** Elective

**Course learning outcomes:** Upon completion of this course, students should be able to do the following:

1. Solve problems dealing with wire antennas.
2. Solve problems dealing with antenna arrays.
3. Solve problems dealing with aperture antennas.

**ABET Student Outcomes addressed:** a, c, e, and k.

### **Topics covered:**

Antenna fundamentals - 8 hours  
Wire antennas: resonant - 7 hours  
Wire antennas: traveling wave - 4 hours  
Arrays of antennas - 8 hours  
Aperture antennas - 8 hours  
Special types of antennas - 3 hours  
Tests and reviews - 4 hours