ECE 4344: Antennas and Radiating Systems

Credit / Contact hours: 3 / 3

Course coordinator: Hermann Krompholz

Textbook(s) and/or other required material: W.L. Stutzman and G.A. Thiele, Antenna Theory and Design, 2nd ed., Wiley 1998.

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

Student outcomes addressed: a, c, e, and k.

Topics covered

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

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