Instructor
José Schutt-Ainé, email: js@emlab.illinois.edu

Textbook
ECE 350 Class Notes

Grading Policy

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>40%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
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</tbody>
</table>

Homework Policy
Homeworks are assigned every day and are due at the end of the class period on the next day. No late homework will be accepted. Homework assignments will be posted on the web site.

Exams
Two exams:
Midterm Exam: Sunday, January 7, 2018
Final Exam: TBD

Teaching Assistant
TBD

WWW Home Page
The course internet home page can be found at: http://jsa.ece.illinois.edu/hcmut/ece350
<table>
<thead>
<tr>
<th>Lec</th>
<th>Date</th>
<th>Topic</th>
<th>Homework</th>
</tr>
</thead>
</table>
| 1   | Th-4 | [Rev-1] Transmission line equations  
[Rev-2] TL with arbitrary loads  
[Rev-3] Generalized impedance  
[Rev-4] Transmission line matching | TBD |
| 2   | F-5  | [1] Overview of Maxwell’s equations  
[2] Static fields and potentials  
[3] Lorenz gauge and inhomogeneous wave equation | Homework 1 |
| 3   | Sa-6 | [4] Time-harmonic sources and retarded potentials  
[5] Vector calculus in spherical coordinates  
[6] Spherical waves  
[7] Hertzian dipole fields | Homework 2 |
|     | Su-10 | MIDTERM EXAM | |
| 4   | M 8  | [8] Radiation fields of dipole antennas  
[9] Poynting vector, radiated power radiation resistance  
[10] Antenna gain, beam pattern directivity | Homework 3 |
[12] Interference, antenna arrays  
[13] Array feed network  
[14] Interference zones, plane waves | Homework 4 |
| 6   | W-10 | [15] PW form of ME, propagation in arbitrary direction  
[16] Reflection and transmission, TE mode  
[17] Reflection and transmission, TM mode, Brewster’s angle  
[18] Reflecting plates, monopole antennas, corner reflector | Homework 5 |
| 7   | Th-11 | [19] Total internal reflection and evanescent waves  
[20] Doppler shift -  
[21] Doppler radar  
[22] Dispersion and propagation in collisionless plasmas | Homework 6 |
| 8   | F-12 | [23] Phase and group velocities and delay  
[24] Evanescent waves and tunneling  
[25] Parallel-plate waveguides: TE modes  
[26] TM modes | Homework 7  
Homework 8 |
| 9   | Sa-13 | [27] Parallel-plate waveguides example problems  
[28] TM modes in rectangular waveguides -  
[29] TE modes in rectangular waveguides  
| 10  | M-15 | [31] TE modes in dielectric slab waveguides  
[32] TM modes in dielectric slab waveguides  
[33] Rectangular cavities -  
[34] Resonant modes and field fluctuations | Homework 10  
Homework 11 |
| TBD |      |      | FINAL EXAM |