## E157 Lecture 5 Day Plan

Any questions before quiz
Quiz + Team Quiz + Talk through solution
Schedule change ups: 9/18 moving lectures forward, 9/27 Prof. Brake, 9/18 reschedule to Sat.
What are all the sliders and bars on a full Smith Chart (linked on course site)? - VSWR, lambda, etc.
Practice with admittance: Yn for 100 ohms w/ 10pF shunt? 100 ohms w/ 1nH shunt?
Smith chart practice table below
Check-in, office hours

You are driving a into a load Zl from a 50 ohm line. Fill in the table below and mark points/loci for each load on the Smith Chart on the next page assuming $w$ and $k$ range from 0 to infinity.

| Case | Zl | Zn | $\Gamma$ expressed as a+b*j |
| :--- | :--- | :--- | :--- |
| 1 | 50 |  |  |
| 2 | $50+\mathrm{j}^{*} 50$ |  |  |
| 3 | $50+\mathrm{j}^{*} 100$ |  |  |
| 4 | $50+\mathrm{j}^{*} \mathrm{k}^{*} 50$ |  |  |
| 5 | $200+\mathrm{jwL}$ |  |  |
| 6 | $100+1 / \mathrm{jwC}$ |  |  |
| 7 | $100+\mathrm{j}^{*} 50$ |  |  |
| 8 | $50 * \mathrm{k}+\mathrm{j}^{*} 50$ |  |  |


| NAME | TITLE | DWG. NO. |
| :--- | :--- | :--- |
|  |  | DATE |

NORMALIZED IMPEDANCE AND ADMITTANCE COORDINATES


