



30	<i>Communication</i>
4	Work recorded in notebook (rather than pasted in)
8	Complete information: task descriptions, diagrams, data, reproducible one year later
4	Written in Ink
4	Student Signed every page
4	Student Dated every page
6	TA Signature for every lab session (-3 each session missed)
32	IV. WEIN-BRIDGE OSCILLATOR
	<i>C. Procedure</i>
8	1) Balanced bridge equation (derive Equation (1) relating R , L , and C values)
8	2) Frequency of oscillation (derive expression for ω_0)
6	3) Compute value of R_1 for $\omega_0 = 2\pi(25 \text{ kHz})$ (list value of R_1)
2	4) Construct Wein-bridge circuit (schematic and comments about construction)
4	5) Measure Wein-bridge circuit output with no load (Matlab [®] plot of v_0)
4	Table II filled in with measured values
18	V. TISSUE IMPEDANCE MEASUREMENT
	<i>C. Procedure</i>
8	1) Derive formulas for R_t and C_c as function of V_0 and V_1
4	2) Measure values of v_0 and v_1 (Matlab [®] plot)
2	3) Measured value of electrode surface area, A , and separation, d
2	4) Calculated values of V_0 and V_1 from measured v_0 and v_1
2	5) Calculated values of R_t and C_c
15	VI. TISSUE PARAMETERS AND PUBLISHED TISSUE DATA
	<i>A. Procedure for Calculation of Conductivity, Relative Permeability, and Power</i>
3	1) Calculated value of σ
3	Calculated value of ϵ_r
3	Calculated value of S
	<i>B. Procedure for Comparison of Measured and Published Values</i>
4	1) Table III filled in with measured values
2	2) Comment on safety of S versus published FDA limit
5	CONCLUSION
5	Comment on shortcomings/possible improvements of the lab exercise