# RCET 2253 Systems Analog and Digital Lab
# Lab 1 Check-Off Sheet

Student Information

Name Start Date

Check-Offs

| Action item | Date (DD/MM/YY) | Status | Instructor Initials |
|---|---|---|---|
| 4a. Set the oscilloscope to trigger on the Probe Compensation Signal. Demonstrate the difference between free-running and triggered by adjusting the trigger level | | ☐ Satisfactory ☐ Unsatisfactory | |
| 4b. Identify trigger level, rise/fall slope setting, and trigger point | | ☐ Satisfactory ☐ Unsatisfactory | |
| 5. Demonstrate proper probe compensation | | ☐ Satisfactory ☐ Unsatisfactory | |
| 8a. Measure the period, frequency, and amplitude of the signal without using the measure function of the scope | | ☐ Satisfactory ☐ Unsatisfactory | |
| 8b. Measure the period, frequency, and amplitude of the signal with the measure function of the scope | | ☐ Satisfactory ☐ Unsatisfactory | |
| 8c. Measure the period, frequency, and amplitude of the signal with the cursor function of the scope | | ☐ Satisfactory ☐ Unsatisfactory | |
| 8d. Show how all three methods compare in a table. Explain any discrepancies | | ☐ Satisfactory ☐ Unsatisfactory | |
| 10. Measure tilt & rise time | | ☐ Satisfactory ☐ Unsatisfactory | |
| 11a. Calculate all voltages, phase angles, and frequency response of the circuit. | | ☐ Satisfactory ☐ Unsatisfactory | |
| 11b. Draw the predicted voltage phasor diagram | | ☐ Satisfactory ☐ Unsatisfactory | |
| 11c. Measure the circuit and compare to the predicted values. Explain discrepancies | | ☐ Satisfactory ☐ Unsatisfactory | |
| 12a. reference the Tektronix Lissajous document and draw predicted Lissajous patterns in your lab book at 0° 360°, 45° 225°, 90° 270°, 135° 315°, 180° | | ☐ Satisfactory ☐ Unsatisfactory | |
| 12b. verify Lissajous patter accuracy using two channels out of the generator and varying the phase of one. | | ☐ Satisfactory ☐ Unsatisfactory | |
| 13. Predict and Measure the phase difference between the generator and the output using Lissajous pattern | | ☐ Satisfactory ☐ Unsatisfactory | |
| 16. FFT | | ☐ Satisfactory ☐ Unsatisfactory | |

Check-Off Redo

| (write in Action Item!) | Date (DD/MM/YY) | Status | Instructor Initials |
|---|---|---|---|
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |
| | | ☐ Satisfactory ☐ Unsatisfactory | |