Collapse All | View Progress | Publish All | + Module

Resources

- Complete Electronics Self-Teaching Guide with Projects by Earl Boysen, Harry Kybett.epub
- attaway4thOCR.pdf
- symbollibraryforppt.ppt
- howToDrawSchematics.pdf
- LRC.mp4
- KnightSummaryCh20.pdf
- KnightSummaryCh21.pdf
- KnightSummaryCh22.pdf
- KnightSummaryCh23.pdf

KnightCh23Problems.pdf

Matlab tip sheet
5 pts

Arduino tip sheet
5 pts

SolderingIronDirections.pdf

Writing & Multiliteracy Center Info for Spring 2024 EMEC/PHYS 310 - Rasnow

Introduction

EMEC-Phys 310 Syllabus Rasnow F2025.pdf

Objectives

1abToolbox.pdf

1acMoreIntro.pdf

1. Introduction to electronics

- **m01b_studentIntro.pdf**
- **m02_voltageAndCurrent.mlx**
- **m02_voltageAndCurrent.pdf**
- **soldering tips**
- **Series and Parallel**
  Jan 28 | 5 pts
- **Voltage and current**
  Feb 1 | 5 pts
- **Voltage and Current Quiz**
  Feb 6 | 8 pts
- **s2_DVM_Loading_Errors.mlx**
- **s2_DVM_Loading_Errors.pdf**

LED Nightlight

- 2ab DesignChallenge-CharacteristicCures.pdf
- m03_LEDnightlight.mlx
- Voltage divider equation
  Feb 4 | 5 pts
- Lab#1 LED nightlight
  Feb 18, 2024
- LEDNightLight.docx
- LED Nightlight Quiz
  Feb 11 | 10 pts

LM317 power supply

- m04_LM317.mlx
- Q & A 3
  Feb 14 | 5 pts

DC Power Supply Lab Report
Feb 17 | 100 pts

Quiz on Boysen & Kybett Ch. 1 and 2
Feb 16 | 6 pts

Arduino and Automation

Arduino Serial Driver: To get your Arduino working: https://learn.sparkfun.com/tutorials/how-to-install-ch340-drivers/all

4aAutomation.pdf

m05_AutomatedIVcurves.mlx

Q & A 4
Feb 20 | 5 pts

Here's another sample lab report.

Exploring Arduino Analog Input Resistance.pdf

Lab #3 Automated I-V curves
Mar 3, 2024 | 10 pts

AutomatedIVcurvesLabReport.pdf

ivData20feb24.mat

Transistors

transistorTheory2023.pdf

m06_TransistorGain.mlx

Q & A 5
Feb 27 | 5 pts

Lab 4 Transistor gain
Mar 14 | 100 pts

TransistorCircuits,FET,switches.pdf

m07_TransistorSwitches.mlx

Boysen Ch 3-4 NPN Transistor
Mar 11 | 6 pts

Transistors
Aug 26, 2023 | 5 pts

TxMidtermExam(Practice).pdf

txistorPSHWSoln.pdf

Arduino Meets Matlab

m08_MatlabMeetsArduino.mlx

Arduino Meets Matlab
Sep 6, 2023 | 5 pts

Arduino Quiz
Mar 24 | 7 pts

Microphones, op amps, and AC voltages

8a Capacitors & AC I. Theory22.pdf

8b Capacitors & AC II. Simulation.pdf

7 OpAmps.pdf

Oscilloscope Lab (MicOpAmpsSpectra lab)
Mar 30 | 100 pts

m09_OpAmpsSpectra.mlx

Capacitors, PWM, & AC

8c Capacitors & AC III. PWM filter.pdf

Boysen Chapters 5-6 Quiz
Apr 14 | 11 pts

m10_PWMFiltering.mlx

Arduino controlled DC power supply

m11_ArduinoControlledLM317.mlx

m12_ModelingLM317Controller.mlx

Q & A
Apr 15 | 5 pts

Arduino Controlled DC Power Supply
Apr 21 | 100 pts

Function generator

m13_FunctionGenerator.mlx

Oscillocope_Fundamentals_Poster_3GW_60028_11x17 (1).pdf

Q & A -- International Experience
Apr 28 | 5 pts

m14_FourierDeskewing.mlx

arddeskew.m

oscope3.m

m15_AutomatedFGen.mlx

Bode plot and Review

- m16_BodePlot.mlx
- ch6SelfTest.mlx
- Bode Plot
  May 12, 2024
- Resonance.mlx
- stochasticResonance.mlx
- LabReviews.pdf
- 310 Concept Matrix-4.xlsx
- 16Review.pdf

Finals

- 16Review.pdf
- Final Exam
  May 12 | 24 pts

Self Assessment
May 12 | 3 pts

Portfolio
May 16 | 100 pts