

EET 3706L - Electronics 2 Laboratory

Fall 2026 Syllabus, Section 01, CRN 43590,

Credit hours: 1

Instructor

Daniel Opalewski

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Public Instructor Information

Instructor Title: Dr. or Professor Daniel Opalewski

Instructor Professional Qualifications: Ph. D., General Engineering, Kennedy Western University, 2005

Post masters, Systems Engineering Post Master Oakland University, 1989-1990

Masters, Masters of Science in Electrical Engineering, Wayne State University, 1988

Bachelors, Bachelor of Science in Electrical Engineering, Lawrence Tech University, 1984

Associates, Electrical Engineering Technology, Macomb County Community College, 1976

Licensed Professional Engineer for state of Michigan, Pennsylvania and Maryland

Licensed Private Pilot, since 1978

Licensed Radio engineer, General Radio Telephone Operator License, Federal Communication Commission., 1986

Instructor Office Location: Moser 4200

Instructor Office Phone: 330-941-3286

Course Description

3706L. Electronics 2 Laboratory. Experiments involving field effect transistors (FETs), integrated circuits (ICs), operational amplifiers, frequency effects on gain, oscillator circuits and regulated power supplies. Computer circuit analysis with PSpice. Three hours per week. Concurrent with EET 3706. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Laboratory Manual for OP amps	James Fiore, 2021	

Note: copies of labs will be handed out and will include examples from the Floyd 10th ed textbook.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Proposed Labs

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	lab from Book examples for BJT	single stage voltage divider amp test in lab and multisim	
8/31	Lab From Book example for Class A, B, C	class A and B and C in multisim, one HW exp	
9/7	JFET, MOSFET AMPS	Multisim design and test of MOSFET and JFET amps	
9/14	Thyristor Lab	SCR and diac lab	



9/21	Decibels and Bode Plots (Fiore)	Db and Bode for frequency response lab
9/28	The differential Amp (Fiore)	Differential amplifier lab
10/5	Op Amp Comparator (Fiore)	OP amp comparator lab and on multisim
10/12	Non Inverting voltage AMP and OP Amp Differential (Fiore)	OP Amp inverting and noninverting lab Differential amp lab
10/19	Active Filter from the Text (Floyd 10th ed)	active filter lab
10/26	Oscillators (Floyd 10th ed)	colpitts oscillator, and armstrong oscillator
11/2	Wein Bridge Oscillator (Fiore)	Wein Bridge Oscillator
11/9	Integrator, Differentiator (Fiore)	op amp integrator and differentiator lab
11/16	Voltage Regulation (Floyd)	Voltage regulator lab
11/23	Makeup	
11/30	Makeup	
12/7	Exam Week	

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.