

## EE304: Electronics Design II – Syllabus – Spring 2020

### Lectures:

T, R 9:25 AM - 10:40 AM, PAC 005

### Office Hours:

T, R 3:15 PM - 5:15 PM, HRK 215

Feel free to walk-in anytime or to make an appointment

### Instructor:

Claudio Talarico

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### Course Description

Continuation of EENG 303. Frequency response and distortion; tuned circuits; operational amplifiers; power amplifiers; feedback concepts and oscillators; digital circuits; astable circuits; data conversion; practical design and application of electronic circuits.

### Required Textbooks

A. Sedra and K. Smith, Microelectronic Circuits, Oxford University Press, (7/e)

*You are welcome to use any edition/version/format of the Sedra and Smith's textbook.*

### Grading Policy

Letter	Percentage
A	100-94
A–	93-90
B+	89-86
B	85-82
B–	81-78
C+	77-74
C	73-70
C–	69-66
D+	65-62
D	61-58
F	57-0

Course Grading:

Homework:	20% (lowest score will be dropped)
Midterm:	40%
Final:	40%

No Late work will be accepted.

No make-up exams.

Classroom Etiquette:

- Arrive in class on time
- Turn off cell phones
- No distracting conversations -- relevant questions are strongly encouraged

EENG 304 Main Learning Outcomes

- Analyze and design analog and digital electronic circuits based on the principles of operation of common electronic devices
- Evaluate electronic designs based on feasibility, component availability, and performances
- Appreciate the fact that devices, circuits, and practices in electronics are always evolving
- Demonstrate proficiency in using simulation tools for the analysis of complex electronic circuits

Detailed Class Schedule (Tentative)

Date	Topic	HW Due
Jan. 14	Review: Useful Network Theorems; Bode Plots; MOS and BJT amplifiers at mid-band frequency.	
16	MOS and BJT amplifiers at Low Frequency	
21	MOS and BJT at High Frequency	
23		HW 1
28	Power Amplifiers	
30		HW 2
Feb. 04	Current Sources	
06		HW 3
11	Differential Pairs	
13		HW 4
18	Filters	
20		HW 5
25		
27	Feedback	HW 6
Mar. 03	<i>Midterm</i>	
05		HW 7
10	<i>Spring Holiday – No Class</i>	
12	<i>Spring Holiday – No Class</i>	
17		
19		HW 8
24		
26	Oscillators	HW 9
31		
Apr. 02		HW 10
07	Data Conversion	
09		HW 11
14		
16	Wave Shaping	HW 12
21		
23		HW 13
28	CMOS Logic Circuits	
30		HW 14
May 06	<i>Final Exam (1:00 pm – 3:00 pm; PAC 005)</i>	

Important Dates:

- Tuesday, Jan. 14 – Instruction Begins
- Monday, Jan. 20 – Martin Luther King, Jr. Holiday
- Monday, Feb. 17 – President's Day Holiday
- Monday, Mar. 9 – Friday, Mar. 13 – Spring Vacation
- Friday, Apr. 10 – Good Friday Holiday
- Monday, Apr. 13 – Easter Holiday
- Wednesday, May 6 – Final Exam (1:00 pm – 3:00 pm; PAC 005)

## ADDENDA TO THE SYLLABUS

### A NOTE ON HARASSMENT, NON - DISCRIMINATION AND SEXUAL MISCONDUCT:

Consistent with its mission, Gonzaga seeks to assure that all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and Gonzaga's policy prohibit gender-based harassment, discrimination and sexual misconduct. Gonzaga encourages anyone experiencing gender-based harassment, discrimination or sexual misconduct to talk to someone from the Campus and Local Resources list found in the [Gonzaga's Harassment and Non-Discrimination Policy](#).

It may be helpful to talk about what happened in order to get the support needed and for Gonzaga to respond appropriately. There are options for support and resolution, namely confidential [support resources](#), and campus reporting and support options are available. Gonzaga will respond to all reports of sexual misconduct in order to stop the harassment, discrimination, or misconduct; prevent its reoccurrence; and address its effects. Responses may vary from support service referrals to formal investigations.

As a faculty member, I want to get you connected to the resources here on campus specially trained in and experienced in assisting in such complaints, and therefore I will report all incidents of gender-based harassment, discrimination and sexual misconduct to Title IX. A representative from that office will reach out to you via phone and/or email to explore options for support, safety measures and reporting. I will provide our Title IX Director with all relevant details, including names and identifying information, of the information reported. For more information about policies and resources or reporting options, please visit the following websites: [Equity and Inclusion](#) and [Title IX](#). If you would like to make a report of harassment, discrimination or sexual misconduct directly, you may:

- Contact the Title IX Director by phone, email, or in person

Stephanie N. Thomas, Title IX Director 509-313-6910

[whaleys@gonzaga.edu](mailto:whaleys@gonzaga.edu)

Business Services Building, 018

- Or complete an online form: [Sexual Misconduct Report Form](#)

### NOTICE TO STUDENTS WITH DISABILITIES/MEDICAL CONDITIONS:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability/medical condition requiring an accommodation, please call or visit the [Disability Access Office](#) (second floor of Foley Center Library, Room 208.)

### CLASS ATTENDANCE:

I follow Gonzaga's standard policy on absences: the maximum allowable absence is two class hours (100 minutes) for each class credit. For three-credit classes, the maximum absence is, therefore, six class hours (300 minutes). The grade for excessive absences is "V," which has the same effect as "F" **(Fail) and is counted in the GPA.**

### ACADEMIC INTEGRITY

All members of the Gonzaga community are expected to adhere to principles of honesty and integrity in their academic endeavors. You are expected to be familiar with the [University's Academic Integrity Policy](#) and the potential sanctions for violating it. I will abide strictly by this policy's procedures and guidelines. Ignorance of the policy will not serve as a defense against any violations.

### RELIGIOUS ACCOMMODATIONS FOR STUDENTS

In compliance with Washington State law (RCW 28.10.039), it is the policy of Gonzaga University to reasonably accommodate students who, due to the observance of religious holidays, expect to be absent or endure a significant hardship during certain days of their academic course or program. [The Policy on Religious Accommodations for Students](#) describes procedures for students requesting a Religious Accommodation and for faculty responding to such a request.

### COURSE EVALUATION:

At Gonzaga, we take teaching seriously, and we ask our students to evaluate their courses and instructors so that we can provide the best possible learning experience. In that spirit, we ask students to give us feedback on their classroom experience near the end of the semester. I will ask you to take a few minutes then to carry out course/instructor evaluation on-line. Please know that I appreciate your participation in this process. This is a vital part of our efforts at Gonzaga to improve continually our teaching, our academic programs, and our entire educational effort.