

EGE 321-01 Electronics II COURSE SYLLABUS

- 1. Course number and name:** EGE 321-01 Electronics II
- 2. Credits and contact hours:** 3 credits and 3 contact hours
- 3. Instructor’s Name:** Dr. Mohammad R. Zunoubi **Office:** REH205/EIH210
- 4. Office Hours:** Monday/Thursday 12:30PM – 2:00PM Friday 10:00AM – 11:00AM
- 5. Textbook(s), title, author and year**
Sedra/Smith, “Microelectronic Circuits”, 7th ed., Oxford University Press, 2015.

- a. Other supplemental materials
Class notes created by the instructor
Site: <http://www.engr.newpaltz.edu/~zunoubm/S20/electronics2/electronics2.htm>

6. Specific course information

- a. Brief description of the content of the course (catalog description)

This course contributes to the category “engineering topics”.

Multistage amplifiers (direct coupled, capacitor coupled), differential amplifiers. Advance current sources. Applications of operational amplifiers. Frequency response of amplifiers. Tuned amplifiers. Oscillators Waveform generators. Feedback amplifiers, and stability of feedback amplifiers. Power amplifiers.

- b. Prerequisites or co-requisites

Prerequisite: EGE320 (Electronics I) / EGE322 (Electronics I Lab)

Corequisite: EGE323 (Electronics II Lab)

- c. Required, elective or selected elective

Required

7. Course Learning Outcomes:

- a. Specific outcomes of instruction

Students will demonstrate their ability to:

- I. Analyze application of operational amplifier circuits (for example wave-shaping circuits), MOSFET and BJT amplifiers, advanced current sources, differential amplifiers, multi-stage amplifiers, amplifiers with feedback and power amplifiers
- II. Design electronic circuits by working in a team, and verify their design via computer simulation and hardware experimentation (EGE323). These design activities culminate in a course design project and the corresponding project report.

b. Relationship to student outcomes

This course contributes to the Program Student Outcomes as specified in the following table:

Student Outcome	Course Desired Learning Outcome	Level of Contribution 3/3 = strong; 2/3 = moderate; 1/3 = marginal
(1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	I	3
(2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	II	3

8. Course Outline

Frequency response of transistor amplifiers: Low and high frequency models and designs, Differential and multi-stage BJT amplifier circuits: analysis and designs, Feedback amplifiers and applications: feedback topologies, Power amplifiers: analysis and design, Wave-shaping and oscillating circuits: analysis and design.

9. Grading policy

Grading weights:

Homework:	10%	90%	93%	A ⁻	A
2 Hourly Exams:	45%	80%	83%	87%	B ⁻ B B ⁺
Projects/Quizzes:	15%	70%	73%	77%	C ⁻ C C ⁺
Final Exam:	30%	Below 70%		F	

Total:	100%				

10. Return of graded papers: The hourly exams are returned the second lecture after the test is taken. Quizzes are returned the next lecture after the quiz is taken.

11. Class attendance: Attendance to classes is strongly encouraged.

Final Exam: 10:15 AM – 12:15 PM on Thursday May 14, 2020.

Campus-wide Policy Statements

- 1. Academic integrity policy statement:** *Students are expected to maintain the highest standards of honesty in their college work. Cheating, forgery, and plagiarism are serious violations of academic integrity. Students found guilty of any violation of academic integrity are subject to disciplinary action, up to and including expulsion. New Paltz's [policy on academic integrity](#) (rev. October 2017) is found in the Undergraduate Catalog. Sojourner Truth Library's website contains several excellent resources to help with avoiding plagiarism; see especially lib.newpaltz.edu/assistance/plag.html.*
- 2. Reasonable accommodation of individuals with disabilities statement:** *Students needing classroom and/or testing accommodations related to a disability should contact the [Disability Resource Center](#) (Student Union, Room 210, 845-257-3020) as close as possible to the beginning of the semester. The DRC will then provide students' instructors with an Accommodation Memo verifying the need for accommodations. Specific questions about services and accommodations may be directed to Deanna Knapp, Assistant Director (knappd@newpaltz.edu) or Jean Vizvary, Director (vizvaryj@newpaltz.edu).*
- 3. Veteran & Military Services statement:** *New Paltz's Office of Veteran & Military Services (OVMS) is committed to serving the needs of veterans, service members and their dependents during their transition from military life to student life. Student veterans, service members or their dependents who need assistance while attending SUNY New Paltz may refer to [OVMS's website](#); call 845-257-3120, -3124 or -3074; e-mail np-vms@newpaltz.edu; or stop by the Student Union, Room 100 South.*
- 4. Computer and network policies statement:** *Users of New Paltz's computer resources and network facilities are required to comply with the institutional policies outlined in the [Acceptable Uses and Privacy Policy](#) and other technology policies, available at www.newpaltz.edu/itpolicy.*
- 5. Identity verification policy statement for online courses:** *New Paltz's Online Identity Verification Policy is designed to verify that students enrolled in our online courses and/or programs are the ones who take the courses, complete the programs, and receive the academic credit. The [complete policy](#) is published in the Undergraduate Catalog.*
- 6. Title IX and related policy statement:** *Gender discrimination, sexual harassment, sexual assault, sexual violence, stalking, and power-imbalanced sexual/romantic relationships between faculty and students are strictly prohibited within the SUNY New Paltz community. We encourage students to report, confidentially discuss, or raise questions and concerns regarding potential violations. Reports can be made to the Title IX Office, the department chair and/or the dean of your school. For information on Title IX reporting and support, visit www.newpaltz.edu/titleix/. The College's Consensual Relationship Policy can be found at www.newpaltz.edu/hr/policies.html.*

Information on electronic SEIs

You are responsible for completing the Student Evaluation of Instruction (SEI) for this course. I value your feedback and use it to improve my teaching and planning. Please complete the form during the open period on line [**8:00 a.m. April 23, 2020 through Midnight May 07, 2020**].

Important dates

Last day of the semester to withdraw from a course without receiving a penalty grade is **March 30, 2020**;