

WEST VIRGINIA UNIVERSITY
COLLEGE OF ENGINEERING AND MINERAL RESOURCES
LANE DEPT. OF COMPUTER SCIENCE AND ELECTRICAL ENGINEERING

EE 327 - Signals and Systems 1 - Fall 2019

Instructor:	Daryl Reynolds
Office:	AER 353
Phone:	304-293-9134
Class Time:	MWF 9:00-9:50
Office Hours:	MF 10:00-11:00pm, W 12:30-1:30, after class, and by appointment
E-Mail:	daryl.reynolds@mail.wvu.edu (I may not receive mix email)
Web Page:	eCampus; check often
Recommended Textbook:	<i>Fundamentals of Signals and Systems Using the Web and Matlab</i> , Kamen and Heck, 3rd Ed.
Prerequisites:	MATH 261 and EE 223

Course Topics

This course is designed to introduce students to the analysis and modeling of devices and algorithms that operate on information-bearing signals. Particular emphasis is placed on linear systems. Both continuous and discrete-time signals and systems are considered. Time permitting, topics covered will include:

- Introduction to signals and systems
 - continuous vs. discrete-time
 - sampling and aliasing
 - linear systems
 - convolution
- Laplace-domain analysis
 - Laplace transforms
 - applications
 - transfer functions
 - system responses
 - block diagrams

- stability
- first and second-order systems
- frequency response and filtering
- z-domain analysis
 - z-transform and its inverse
 - applications
 - transfer functions
 - stability
 - FIR and IIR discrete-time filters
- State-space models
 - state-space models of continuous-time systems
 - state-space models of discrete-time systems

Grading

2 Mid-Term Exams	50%	(10/4 and 11/15)
Cumulative Final Exam	30%	(12/17)
Unannounced Quizzes	10%	lowest dropped
Matlab assignments	10%	

The instructor may curve the final grades at his discretion, but you are guaranteed at least the letter grade shown below if you obtain the corresponding score. No '+' or '-' grades will be reported.

A	90%
B	80%
C	70%
D	60%

Homework

Homework assignments will be posted regularly, along with their solutions. Although discussing homework problems with your classmates is appropriate, **being able to solve homework problems on your own is essential for doing well in the class.** Homework will not be collected or graded.

Missed Test/Quiz Policy

You are expected to attend the exams and quizzes at the scheduled time and date. There are no makeup exams or quizzes. If you miss one mid-term exam, the associated grade percentage will be added to the final exam. If you miss a second mid-term exam, you will receive zero credit for the second exam or quiz. There is no makeup final exam. The only exceptions to this rule are "University Sanctioned Absences", i.e., mandatory military obligations, mandatory court appearances, and university activities at the request of university authorities.

Honor Code

All work submitted should be your own unaided work. You may confer with your colleagues on interpretation and approach to homework problems (including the computer assignments), but *the solutions must be your own*. All code that you turn in for your computer assignments must be well documented and entirely your own work (except for code that was given to you by the instructor). As a rule of thumb, if you are sharing written work (through e-mail, for example), you are probably in violation of the honor code.

Regrading

If you believe the instructor has made a mistake or was unfair in grading, you may request a regrade. However, the request must be made in writing and submitted within one week of the return date of the assignment or exam. The decision to change the grade is entirely at the discretion of the instructor.

Attendance

Attendance is strongly encouraged. Attendance may be recorded at random times. You will be responsible for all material covered in class, even if it is not in the textbook. You are also responsible for material posted on the course web page. It is your responsibility to make sure that all assignments are turned in on time and that you are aware of all announcements made in class. Please arrive to class on time.

Electronics/Wearables in the Classroom

The use of cell phones, smart watches and wearable devices, laptops, or possession of other communication devices are strictly prohibited during exams, tests, or quizzes.

WVU Academic Integrity Statement

"The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the Student Conduct Code at <http://www.arc.wvu.edu/admissions/integrity.html>. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me before the assignment is due to discuss the matter."

Disclaimer

The instructor reserves the right to make changes in the syllabus. Any changes that are made will be in, what the professor deems, the best interests of the class.