

# MCHE 474: Control Systems

## Fall 2017 Syllabus

Professor: Dr. Joshua Vaughan  
Rougeou 225  
[joshua.vaughan@louisiana.edu](mailto:joshua.vaughan@louisiana.edu)  
@Doc\_Vaughan  
<http://www.ucslouisiana.edu/~jev9637>

Lecture: CLR Room 309, Tuesday & Thursday, 12:30 – 1:45pm

Lab: Various Rooms, Various Times

Textbook: Modern Control Systems, 13th Edition  
Richard C. Dorf and Robert H. Bishop  
ISBN: 9780134407623  
<http://amzn.com/0134407628>

Course Website:  
<http://www.ucslouisiana.edu/~jev9637/MCHE474.html>

Additional Tools:  
Anaconda Python Distribution – <https://www.continuum.io/>  
Python Control Systems Library – <https://cl.ly/0Q2z091Y3s0J>

Course Description:  
Classical and modern control theory. Response of first and second-order systems, stability analysis and frequency response methods. Computer control of machines and processes.

Prerequisites:  
MATH 302, MATH 350, and ENGR 313 with a grade of C or better

Academic Honesty:  
An essential rule in every class of the University is that all work for which a student will receive a grade or credit be entirely his or her own or be properly documented to indicate sources. When a student does not follow this rule, s/he is dishonest and s/he defeats the purpose of the course and undermines the goals of the University.

Grading:	Homework	10%
	Labs & Mini-Projects	24%
	Mid-Term Exams	36%
	Final Exam	30%

Labs and projects will often be conducted in teams. Teams will be randomly assigned, and all team members will receive the same grade on the assignment.

#### Code of Conduct:

In this class, we value everyone's participation, we strive for transparency and inclusion, and we promote collaboration. Furthermore, we want every student to have a rewarding, fruitful learning experience. To achieve this, everyone is expected to show courtesy and respect towards each other. Therefore, the following Code of Conduct is agreed upon by those taking this course:

- All communication should be appropriate for a professional audience including people of many different backgrounds.
- We will not tolerate harassment, in person or online. Harassment refers to offensive verbal or written comments in reference to gender, sexual orientation, disability, physical appearance, body size, race, or religion; sexual images in public spaces; deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of class meetings, inappropriate physical contact, and unwelcome sexual attention.
- Be kind to others. Do not insult or put down other class members.
- Behave professionally. Avoid jokes that could be interpreted as sexist, racist, or exclusionary.

If you feel someone is violating the code of conduct, speak up and respectfully remind them of it. If the behavior persists, then email the course instructor explaining the situation. If you would like to keep your communication anonymous, you may use a service like [AnonymousEmail.me](https://anonymousemail.me). We may not be able to reply to anonymous complaints, but we will fully investigate them and take action as necessary. If you feel that you are in immediate danger, please contact the University of Louisiana at Lafayette police.

This code of conduct was adapted from those found at [http://www.ucs.louisiana.edu/~jev9637/Code\\_of\\_Conduct.html](http://www.ucs.louisiana.edu/~jev9637/Code_of_Conduct.html), <http://ivory.idyll.org/lab/coc.html>, and <http://github.com/leftlogic/confcodeofconduct.com>, which themselves were patterned after those of the Ada Initiative and JSConf.

Change Log: 08/14/17 – Initial version