LIS 4930 / LIS 5937

Drones for Information Professions

Spring, 2021

ATTN: *If you are a graduate student and you encounter an error message when you try to register, please email Alexis at shinawongsea@usf.edu and she can email you a permit.*

Hopefully this page will answer a lot of your questions. Please do not hesitate to contact me if you have any additional questions at klersch@usf.edu

How is this going to work? Do I need a special drone? I don't know how to fly! How can this course be online???

First, no, you don't need a special drone. Actually, you don't really need a drone at all. Don't panic if you don't know how to fly, or crashed the last time you did. And yes, this course is going to be totally online.

So, how is this going to work? This course will introduce you to the use of drones in a variety of settings, including intelligence, law enforcement, agriculture, homeland security, insurance, real estate, public health, communications, etc., etc., etc. It is amazing what you can do with a drone. Actually, the "real" name for a drone that flies is a small unmanned aerial system or sUAS. If I had called this course sUAS for Info Prof no one would know what the heck this course is about. So, for simplicity, we'll call it a drone for now.

There are 2 primary goals in this course: to earn your FAA Certification as a Part 107 sUAS pilot; and to learn a bit how imagery captured from a drone can be analyzed and put to use.

FAA Certification: For about 4-5 weeks, we will focus on what you need to know in order to pass the FAA aeronautical knowledge exam. There really is a lot to it. You will learn about national airspace, where it is legal to fly (and where it is not!), how to request a waiver, and what are the laws governing the use of drones. You will also learn about payloads, how the weather impacts flight, and how to read charts. **This certification is based solely on your knowledge of the regulations—there is no flying test to earn certification.** As you will see, flying a drone is serious business. For more information, please follow this link:

https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/

Then, all students are expected to take the exam at an approved FAA testing center. Don't worry—if there is an airport near where you live, there will be a testing center nearby. A couple of things you should know:

- While we will not have a required textbook, the exam is going to cost about $100-150, depending on where you go.

- To get your certification, you must pass a background check conducted by the TSA.
- Your certificate will be good for 2 years. After that, you will have to re-test to keep your license current.

Imagery Analysis: We will be learning the basic tools to analyze images captured from a drone and other sources, like satellites. You will be provided the images to conduct these hands-on exercises. Many cheaper consumer drones do not have the capability of capturing exact GPS coordinates, especially in 3d. If you do have a higher end drone and you want to analyze your own images, you will have that opportunity but it is not required. You will be provided access to the software and we will be working through a number of tutorials as you play around with the images.

I'm going to be a librarian. Why would I take this course? Well, the ALA has stated that "drones will become a regular part of life" and provides a couple of justifications:

> *Drones could help improve outreach efforts by delivering resources to the geographically isolated or homebound, providing deposit collections to areas affected by disasters, transporting equipment to individual borrowers or communities, or even connecting expert researchers via video-equipped drones.*
>
> *Because drones will provide new opportunities for content creation and research, users may expect drones to be part of the technology resources available from libraries. Additionally, video or survey content produced by drones may become content collected and managed by libraries* (http://www.ala.org/tools/future/trends/drones).

And, the ALA has also spotlighted the use of drones for special programs at libraries: http://www.ilovelibraries.org/librariestransform/drones You could find yourself on the cutting edge of technology by being the house expert on drones at your library!

How will I be graded? Honestly, I hate this question, but I can understand your concern. If you keep up with the class and give it the old college try, you will do well. We will have a number of different types of assignments, including discussion boards, hands-on step by step tutorials, quizzes, and practice exams for the FAA test. Quizzes will only be about 5 - 15 multiple choice questions, and you will be able to retake these quizzes until you are happy with your score. The practice exams (60 questions) will be pass / fail, and you will need to retake them until you pass. My job is to get you as prepared as possible to pass your 'real' exam. Your job is to study the material and try your best. Hey, if a 16-year-old kid can pass this exam, you can do it too!

A note to graduate students: This course is cross listed, so we will have some undergraduate and graduate students enroll. I will work with the grad students individually on an independent project based on your professional goals. We will have a variety of students in this class, from currently deployed military personnel to anthropologists. Undergraduates will not have to complete a special project.