

FREQUENTLY ASKED QUESTIONS

Why did you create this curriculum?

There is no question that drones have entered the mainstream of technology. They are currently being used in many amazing ways, and there will be a tremendous need for designers and pilots to enhance their capabilities. The subject of drones is fascinating for many students, but very little information is available that provides a logical presentation of the topic. This curriculum was written to provide students with a foundational knowledge of drone design so they can broaden their awareness to meet these future needs.

Do I need an FAA Remote Pilot's License to teach these courses?

You do not need a special FAA license to teach any of the courses we offer. The operation of the unmanned aircraft is secondary to the design and construction of the aircraft such that the primary purpose of the course is not operating an unmanned aircraft.* The only concern comes to play when actual drone "flying" is involved. The FAA has issued an "Educational Memo" that is summed up by three points:

- A person may operate an unmanned aircraft for hobby or recreation in accordance with Section 336 of the FAA Modernization and Reform Act of 2012 (FMRA) at educational institutions and community-sponsored events provided that the person is (1) not compensated or (2) any compensation received is neither directly or incidentally related to that person's operation of the aircraft at such events;
- A student may conduct model aircraft operations in accordance with Section 336 of the FMRA in furtherance of his or her aviation-related education at an accredited educational institution;
- Faculty teaching aviation-related courses at accredited education institutions may assist students who are operating a model aircraft under Section 336 and in common with a course that requires such operations, provided that the student maintains operational control of the model aircraft such that the faculty member's manipulation of the model aircraft's controls is incidental and secondary to the students (e.g. the faculty member steps in to regain control in the event the student begins to lose control, to terminate flight, etc.)

** FAA regulations do not apply to drones flown indoors. The RTF drones that are recommended for the "Learn-to-Fly" curriculum are extremely light-weight and should only be flown indoors (such as in large rooms or gymnasiums).*

I have never taught aviation, and I have no knowledge of the topic. Will I be able to understand and use your course materials?

The curriculum has been written so that the lessons can be taught with no prior experience by the instructor, and any math/science references and examples are fully explained.

Do you offer support for the materials?

Yes, teachers who have questions about the course content may [email us](#) for assistance. This support is included at no additional charge.

Will we need to install the curriculum software on our computers?

Nothing needs to be installed, as our curriculum products are not software. Rather, they are logically-organized collections of PDF documents and PowerPoint™ presentations.

How does licensing work?

The courses are sold and licensed on a per school basis. A single school license can be used by multiple teachers, in different classrooms, for unlimited students and computers within the same school. School districts wishing to use a course in more than one school must purchase an additional license for each school. The license does not expire. No renewal or update fees will ever be due.

Can the license be transferred or resold?

No, the license is bound to an individual school and cannot be transferred or sold. For other licensing questions, please see our full curriculum license agreement.

What is your return policy?

Unfortunately, due to its digital format, the curriculum is **NOT REFUNDABLE**. For any defective drone kit parts or RTF drones, contact us within 30 days of purchase. Simply return the defective item, and we will send a replacement.

When will we receive the course materials?

The entire curriculum is in digital download format. Once the online payment process is completed or a signed purchase order is received, we send an email to the teacher providing instructions on how to download the materials. We usually send this email immediately, but it can take up to two business days.

Which forms of payment do you accept?

For online purchases, we accept payment via MasterCard, Visa, American Express, or Discover. We also accept Purchase Orders from educational institutions.

How much is shipping and sales tax?

Shipping only applies to drone kits, and it is **FREE!** Unless a purchaser is located in Nevada and is not tax exempt, no sales tax will be collected.

What level is the curriculum written for?

The curriculum was written for middle school and high school levels and can be used as an introductory college class or after-school program. Teachers have the option to incorporate the curriculum as needed for their situation. They can skip or provide alternate activities that appear too advanced for their students.

May we use these materials in a corporate, commercial, or online setting?

The standard license and pricing is intended for public and private K-12 schools and expressly prohibits online courses or charging fees to organizations or students. If you wish to use the materials in a commercial or online environment, please [contact us](#) for a quote.

May we use the curriculum materials for any other purposes?

No portion of the materials may be copied, extracted, re-branded, or resold for any commercial application (private K-12 schools excepted) without our express written permission. If you are in doubt about a permitted use, please contact us.

REQUIREMENTS TO QUALIFY AS A MODEL AIRCRAFT UNDER THE FAA MODERNIZATION AND REFORM ACT OF 2012 (P.L. 112-95, SECTION 336).

On February 14, 2012, the President signed into law the FAA Modernization and Reform Act of 2012 (P.L. 112-95) (the Act), which established, in Section 336, a “**Special Rule for Model Aircraft.**” In Section 336, Congress confirmed the FAA’s long-standing position that model aircraft are aircraft. Under the terms of the Act, a model aircraft is defined as “an unmanned aircraft” that is

- (1) capable of sustained flight in the atmosphere;
- (2) flown within visual line of sight of the person operating the aircraft; and
- (3) flown for hobby or recreational purposes.

Congress’ intention to define model aircraft as aircraft is further established by section 331(8) of the Act, which defines an unmanned aircraft as “*an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.*” Congress’ definition of model aircraft is consistent with the FAA’s existing definition of aircraft as “*any contrivance invented, used, or designed to navigate, or fly in, the air.*”

Although model aircraft may take many forms, at a base level model aircraft are clearly “*invented, used, or designed*” to fly in the air. Section 336 also prohibits the FAA from promulgating “*any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft*” if the following statutory requirements are met:

- the aircraft is flown strictly for hobby or recreational use;
- the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
- the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
- the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
- when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower ... with prior notice of the operation....

Thus, based on the language of the statute, we conclude that aircraft that meet the statutory definition and operational requirements, as described above, would be exempt from future FAA rulemaking action specifically regarding model aircraft. Model aircraft that do not meet these statutory requirements are nonetheless unmanned aircraft, and as such, are subject to all existing FAA regulations, as well as future rulemaking action, and the FAA intends to apply its regulations to such unmanned aircraft.

FAA Reauthorization Bill Establishes New Conditions for Recreational Use of Drones

On October 5, 2018, the President signed the **FAA Reauthorization Act of 2018** (<https://www.congress.gov/115/bills/hr302/BILLS-115hr302enr.pdf>). The Act establishes new conditions for recreational use of drones and immediately repeals *Section 336: The Special Rule for Model Aircraft*. These FAA conditions do not apply if you are flying drones indoors.

As you read through the summary below, you will find that the new conditions are similar to prior requirements. There is a new section that addresses the use of small unmanned aircraft by **institutions of higher education** but doesn't specifically cover K-12 schools. Until the FAA updates its memo defining K-12 students/programs as being considered "recreational use" (*Educational Use of Unmanned Aircraft*) https://www.faa.gov/uas/resources/uas_regulations_policy/media/interpretation-educational-use-of-uas.pdf, students should "continue to follow all current policies and guidance with respect to recreational use of drones. (from the FAA website)"

Also, the biggest addition to the new regulation is that ***all hobbyists will eventually have to pass and carry proof of passing an aeronautical knowledge and safety test. IT WILL TAKE THE FAA 6 MONTHS OR MORE BEFORE THE TEST IS IMPLEMENTED.***

FEAR NOT! Once the "hobbyist test" is created and made available by the FAA, DroneCurriculum.net **WILL PROVIDE TEST PREPARATION LINKS AND MATERIALS FREE OF CHARGE TO ALL CLIENTS.** We want all students to be able to study and fly drones as defined by the new regulations. We also offer curriculum to prepare for the ***Part 107 Remote Pilot Certification*** if schools wish to go that route. This will allow anyone with the certification to receive compensation for flying a drone and will supersede the need to take the simpler "hobbyist test."

(From the FAA website - <https://www.faa.gov/uas/>)

"The agency is evaluating the impacts of this change in the law and how implementation will proceed. The Reauthorization Act cannot be fully implemented immediately, please continue to follow all current policies and guidance with respect to recreational use of drones."

The 2018 FAA Reauthorization Act maintains a distinction between recreational and commercial activities, but the FAA is no longer constrained by law not to impose rules on the former – *Section 336*, which had previously carved out an exception for model aircraft, has been entirely repealed. In its place is a new *Section 349*, which covers what the FAA expects of recreational flyers.

The FAA is allowing the operation of certain unmanned aircraft without "certification" or "operating authority." There are eight qualifications that must be met for that:

1. "The aircraft is flown strictly for recreational purposes."
2. "The aircraft is operated in accordance with or within the programming of a community-based organization's set of safety guidelines that are developed in coordination with the Federal Aviation Administration."
3. "The aircraft is flown within the visual line-of-sight of the person operating the aircraft or a visual observer co-located and in direct communication with the operator."

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4. “The aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft.”
5. “[In airspace surrounding airports] the operator obtains prior authorization from the Administrator or designee before operating and complies with all airspace restrictions and prohibitions.”
6. “[In other airspace] the aircraft is flown from the surface to not more than 400 feet above ground level and complies with all airspace restrictions and prohibitions.”
7. ***“The operator has passed an aeronautical knowledge and safety test described in subsection (g) and maintains proof of test passage to be made available to the Administrator or law enforcement upon request.”*** (NOTE: It’ll take the FAA some time to put the test in place. As stated on their website, until implemented, “please continue to follow all current policies and guidance with respect to recreational use of drones.”
8. “The aircraft is registered and marked in accordance with chapter 441 of this title and proof of registration is made available to the Administrator or a designee of the Administrator or law enforcement upon request.”

Up to this point, hobbyists have been treated as an entirely separate group of drone pilots from those flying commercially. But it looks like that will no longer be the case, and all drones will now be viewed similarly by the FAA, at least from a regulatory perspective.

In addition to now being subject to regulations about not flying near airports or above 400 feet — restrictions commercial pilots have under the FAA’s Part 107 rules — the Act also allows the FAA to require hobbyist drone pilots to pass a knowledge test before flying. (Commercial pilots must pass the Part 107 test and receive a Part 107 certificate to fly.)

But here’s an inconsistency: Directly from the FAA’s website, they summarize the following as a list of everything that is a new condition for hobbyist drone pilots based on the 2018 Re-Authorization Act:

FAA Reauthorization Bill Establishes New Conditions for Recreational Use of Drones

<https://www.faa.gov/news/updates/?newsId=91844>

- Fly for hobby or recreation only
- Register your model aircraft
- Fly within visual line-of-sight
- Follow community-based safety guidelines and fly within the programming of a nationwide community-based organization
- Fly a drone under 55 lbs. unless certified by a community-based organization
- Never fly near other aircraft
- Never fly near emergency response efforts

Updated direction and guidance will be provided as the FAA implements this new legislation.

One interesting thing about this list is that a new knowledge test is not mentioned. It could be that the FAA is exploring alternate certification options for hobbyist pilots, such as joining or abiding by the requirements of an approved community organization, which could oversee hobbyist certification and bypass the need for the FAA to create and administer a brand-new knowledge test for hobbyists.

Another thing to notice is the condition regarding registering model aircraft. Up to this point hobbyists only had to register themselves as pilots (one registration number for all aircraft). Now, it requires each drone to be registered, as commercial pilots must do, and allows for the implementation of remote ID tracking and the possibility of creating a system for tracking who’s flying exactly what where.

Amid all this uncertainty, only one thing does seem likely — none of these changes are going to happen overnight.