



April 30, 2020

Zakiya Smith Ellis, Secretary of Higher Education Office
of the Secretary of Higher Education
1 John Fitch Plaza, 10th
Floor P.O. Box 542
Trenton, NJ 08625-0542 Dear

Madam Secretary:

On behalf of Warren Community College, I am appealing to you for an exception to the gubernatorial ban on face-to-face instruction for our Unmanned Aircraft Systems program.

During these first two months of campus closure we have provided continuous, weekly remote classes via Go-To-Meeting that have kept our classes on schedule for the lecture portion of the curriculum. However, our students are significantly behind schedule for hands-on flight time that is so essential in developing their required piloting skills. This outdoor training usually begins in early- to mid-April.

First and foremost, we can provide a safe environment with ample social distancing, protection and sanitizing to ensure the safety and wellbeing of our students while on or off campus. Second, this program requires significant live flight/lab experience to hone the manual skills necessary to achieve an acceptable competency level in aircraft piloting skills. Additionally, a quick Google search will demonstrate the emergence of unmanned aircraft as a means of combating COVID-19, and our students could be deployed in this effort if they have practical training coupled with the FAA Remote Pilot Certificate.

We do not make this request lightly and every precaution will be taken to protect our students. Their safety and wellbeing is paramount. Most of the pilot training is conducted at our new, state of the art Smith Flight Training Center that is an outdoor facility. The training center provides designated launch and return pads for each pilot that are well distanced from each other, and well in excess of 6 feet (20+ feet apart is the safety norm for remote pilots under normal conditions). Our outdoor training facility also includes individual skill building stations, which accommodate one student at a time and are a substantial distance apart. Additionally, it is standard flight safety procedure that pilots maintain a distance from each other well beyond the CDC standard set for health safety.

While some UAS classes can fulfill their live flight requirements at the on-campus flight training center, others require off-site fieldwork. This semester's class in "Photogrammetry, Remote Sensing & Analysis" is scheduled, in early May, to begin its summer agricultural research project monitoring corn crop at a test farm near our main campus in rural Warren County. This fieldwork will be conducted in an open-air setting where students will be naturally distanced from each other as they conduct separate tasks and procedures. In order to collect data in a well regulated, scientifically legitimate manner the cornfields will need to be flown and scanned approximately every ten days. If this fieldwork does not begin when the crop is in its pre-emergent stage the experiment will be nullified and the season will be lost. Agriculture is a significant industry in our region especially in light of the "Highlands Act" land use restrictions. This class is also expected to map a cement quarry which is a similar large acre open air environment.



Your letter of March 17, 2020 established conditions necessary to review an appeal of the Executive Order. Below we first affirm the need for on- and off-campus, face-to-face instruction. This is followed by the protocols to be enforced as we provide a safe and sanitary working environment.

As mentioned above, this is a very “hands-on” Associate of Applied Science program. We are rapidly exhausting the remote delivery of instructional materials. Initially, students observe demonstration of techniques, followed by their practice and honing of that skill set. Assessment is partially proficiency-based, and students are coached through the experience. However, logging flight time is essential to developing these skills and therefore access to the outdoor training center and lab is essential to skill development.

Very few, if any, students can safely replicate the pilot training experience beyond our facility. Professional-class drones can be very expensive for the average person. As an example, our fixed-wing drones have a retail values in excess of \$30,000. Additionally, students are still learning how to prepare for and conduct safe flight in a variety of mission environments. Therefore, it is imperative that pilots in training fly school-owned drones.

As noted above a Google search will demonstrate the emergence of unmanned aircraft as a means of combating COVID-19, and our students could be deployed in this effort if they have practical training coupled with the FAA Remote Pilot Certificate.

While our instructors have been remotely sharing their expertise and creatively delivering remote class instruction, you can only develop so far without live flight experience, or what aviators call “stick time”.

Remote pilots are required to track flight hours in a pilot’s logbook, which is necessary to meet minimums; required when/if they pursue advanced certifications.

Attached are the safety and cleaning/sanitizing protocols that will be in place in our Unmanned Aircraft Systems laboratory and UAS Flight Training Center if we are permitted to provide live flight/lab time on campus for our students. These are highly unusual times and we recognize the significant need for disciplined precautions. As mentioned, attached are the guidelines to be exercised as we ensure all students and staff are safe. Any additional suggestions, guidelines, or measures your office would deem important would be implemented in order to reactivate our UAS Sciences program. Please feel free to reach out to me for any questions in my office, 908-689-7618.

We value your consideration on this request.

Sincerely,

A handwritten signature in blue ink that reads 'William J. Austin'.

William J. Austin
President



It is the goal of Warren Community College to provide a safe and healthy space for our students, faculty, and staff. We will be adding additional measures to our outdoor Smith UAS Flight Training Center policies and procedures in order to minimize the risk of transmission of any illness. Additional measures include:

A designated staff member will monitor and enforce this plan.

We will limit the number of individuals permitted in the training area at any given time to a maximum of five people per acre. Staff will arrange students in the outdoor workspaces to minimize close contact. Remote Piloting requires distances of at least 25 feet (i.e., the term remote). No activities will take place without these social distancing measures in place.

Students and faculty will be instructed to follow proper respiratory hygiene, including:

- Wearing masks at all times.
- Covering coughs and sneezes with a tissue or your sleeve, not hands.
- Avoid touching your eyes, nose, and mouth.
- Students will be required to wash their hands frequently. Handwashing will be required upon entry to the facility (if needed) and at the conclusion of working before exiting the facility. Directions for proper handwashing are displayed at all sinks, clearly following the general rule of washing for at least 20 seconds, especially after coughing or sneezing. They will use alcohol-based sanitizer if soap and water are not available.
- All handwashing stations will be clean and functional, with soap, paper towels, tissues, and trash cans.
- The outdoor drone port will be equipped with hand sanitizer bottles whenever live flights are being conducted.

Additional hand sanitizing stations that dispense alcohol based hand sanitizer, have been at the main entrance of the facility and throughout the college since the 2009

H1N1 global pandemic.

In remote piloting, each student will use their own personal Ipad or Android device to conduct flights; the college president or lab assistants will constantly clean and disinfect high touch surfaces including all tables, drones, LiPo batteries, and remote controls.

Disinfectant and alcohol wipes are located at all working areas. All tools and equipment will be wiped both prior to and immediately after use.

Temperature checks of persons using the LiPo battery laser temperature gauge will be taken of all students prior to flight training.

Anyone who is not feeling well will be sent home. Anyone who believes they are not fully well will be sent home. If anyone enters the facility and displays symptoms of illness, they will be requested (demanded) to leave. If they need to stay at the facility to wait for a ride they will be required to sit outside until their transportation arrives. That room will be sanitized immediately after the student departs.



If someone displays symptoms and are asked to leave, all students working in that area will be asked to leave that workspace. Campus Operations and Public Safety will be notified, and areas will be cleaned immediately by a certified 3rd party vendor.

As mentioned, all remote pilot training will take place outdoors at the Smith UAS Flight Training Center, a farm, or a rock quarry.

Additionally faculty, staff, and students will be required to adhere to the following policies. These policies will be provided to all students, faculty, and staff; and faculty will cover these policies with their students. Additionally, these policies will also be on display throughout the center. The outdoor training center or lab will be monitored at all times by the college president or lab assistants to ensure policies are being adhered to.

No open water glasses will be permitted. No food permitted.

All tools and equipment must be wiped with an alcohol or disinfectant wipe both prior to and after use.

- This includes any small unmanned aircraft
- The remote control (ground control station)
- LiPo Batteries
- Hand tools (if needed)
- Tables in all areas

Wear protective face mask at all times

If you are not feeling well please stay home and get better. Our goal is to minimize any transmission of illness. Your help is greatly appreciated.

All accessing the facility will follow guidance from the CDC, <https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html>. These guidelines, as well as the “Stop the Spread of Germs” poster, at <https://www.cdc.gov/coronavirus/2019-ncov/communication/factsheets.html>, are posted throughout the college property.