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This is a response to questions raised in Professor Eric Ramirez's email of April 12, 2021. It is important to note, however, that answers to many of these questions have been available to the FIT community previously. The College has been diligent in its communication about issues related to COVID-19 and the actions that have been taken over the last year to implement best practices and address community concerns. This communication has occurred through periodic emails and through subject-matter-specific information and FAQs on the FIT Restart website.

Specific information that addresses the concerns expressed in Professor Ramirez's email are included here:

<https://www.fitnyc.edu/campus-reopening/faq-restart.php>

<https://www.fitnyc.edu/documents/facilities-buildings-safety-restart-pres2.pdf>

<https://www.fitnyc.edu/campus-reopening/cleaning.php>

<https://www.fitnyc.edu/documents/cer/fit-campus-restart-plan-spring-2021.pdf>

In addition, the following provides responses to the questions raised:

- **Ventilation and Air Quality:**
 - a. **Offices and classrooms that are in the basement with no windows at all and with horrible ventilation. Can we get a new HVAC system installed?**

FIT's HVAC system is upgraded and modified on an on-going basis in compliance with industry standards. Over the last twelve years, FIT has made many of these upgrades in partnership with New York's Department of Citywide Administrative Services to reduce its greenhouse gas emissions and carbon footprint. The following is an overview of industry standards and FIT's compliance with these standards:

- With respect to system design: HVAC and exhausts systems are a critical component of building design and installed during construction. HVAC systems are reviewed by a licensed professional engineer (PE) whenever changes are made to a building.
- Offices and classrooms were designed to meet a minimum rate at which outdoor air replaces indoor air. This is described as the air exchange rate.
- The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) sets the minimum outdoor air ventilation rates for buildings in the ANSI/ASHRAE Standard 62.1 and 62.2 guidelines. These standards specify how much outdoor air should be brought into a room every hour and is based on occupancy and room size.

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- For other spaces like offices, shops, and schools, the ASHRAE 62.1 standard doesn't give a fixed number. Instead, airflow rates based on the size of a room, its use (e.g. school, office, sports arena) and the number of people inside are provided. These can be used to calculate exact airflow requirements for a certain space.
 - In offices: 2-3 air changes per hour
 - In classrooms: 5-6 air changes per hour
 - In dining facilities: 6-8 air changes per hour
 - In residential: 0.35-1 air change per hour
- Ventilation and air change rates are calculated on a per-person basis. Reducing occupancy increases fresh air available and, conversely, if the number of occupants in a room doubles occupancy, the required ventilation rate or air change will also double. This rule can be useful for office spaces as the occupancy level changes.
- Every 10 years, in compliance with New York Local Law 87, FIT performs a periodic energy audit and retro-commissioning as part of the Greener, Greater Building Plan (GGBP). At FIT, this audit was last completed in 2017.
- Currently, MG Engineering is reviewing FIT's most recent Local Law 87 report, completing random sampling of classrooms and offices in each building to confirm design parameters are still met. This review will be completed by June 2021.
- Further, FIT is reviewing all spaces, campuswide to ensure they are ready for re-occupancy. Areas found deficient will be corrected. Corrections could include:
 - HVAC and exhaust fan adjustments
 - Coil cleaning or replacement
 - Duct cleaning
 - Reheat/VAV/CAV cleaning or replacement
 - Register cleaning

This work would be completed in advance of space re-occupancy and prior to the start of fall semester. If there are specific spaces where concerns are identified, FIT will traverse the supply and return ducts to determine air flow and exchange for that space.

b. How often is the ventilation/air replaced?

- Air changes differ from area to area. The number of air exchanges in each depends on several factors, including the intended use of the space, and is determined during design process in order to meet state and local building code requirements.

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- System designs are approved in New York by the Department of Buildings (DOB) and then maintained to those standards after installation. Recertification is done to meet local laws as described in response 1a.
- Most spaces at FIT are designed in the range of four to twelve (4-12) air exchanges per hour (ACH) range. Generally, two (2) exchanges per hour are the minimum. The number of people present also impacts supply of fresh outside air added to the space.
- Engineering staff operate the HVAC system in accordance with the ASHRAE recommendations and the Centers for Disease Control and Prevention (CDC) guidelines.
 - Changes made since March 2020 include:
 - Overriding energy efficiency set-backs.
 - These setbacks typically allow the building to recirculate safe, healthy, and conditioned air in an effort to reduce carbon footprint.
 - The override allows the operator to use maximum (i.e. 80-100%) outside air and bypass any energy wheels or returns in favor of outside air.
 - Installing air filters with a Minimum Efficiency Reporting Value (MERV) that exceeds CDC guidelines for use during the COVID-19 pandemic.
 - All central HVAC units have MERV-8 prefilters and MERV-15 bag final filters installed. These filters are monitored by magnehelic devices to alert the HVAC technician when the static pressure across the filter media is reaching its life expectancy (typically 1' of mercury) and thus they are replaced (typically semiannually or quarterly).
 - The MERV rating measures how effectively the filter stops dust and other contaminants from passing through the filter and into the air stream. Filters with higher MERV ratings trap small particles more effectively.

c. In the "A" building the air ventilation is not safe.

- The Dubinsky Center was designed and maintained as above and spaces approved for academic use.
- Worth noting is that the Facilities Department, including all offices, locker rooms, and workspaces, are in Dubinsky, basement level. These spaces have been in use in throughout the pandemic with no adverse outcomes observed through surveillance test monitoring of employees.

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d. We need HEPA filter air purifiers for our offices.

- The recommendations of the CDC and ASHRAE do not include air purifiers. The following paragraphs describe their recommendations:
 - SARS-CoV-2, the virus that causes COVID-19, is thought to spread mainly from person to person through respiratory droplets and aerosols. Infectious respiratory droplets are produced when an infected person coughs or sneezes.
 - Droplets can land in the mouths or noses of nearby people.
 - When in close contact with an infected person, droplets can be inhaled into the lungs.
- Filters consist of media with porous structures of fibers or stretched membrane material that remove particles from air streams.
- The fraction of particles removed from air passing through a filter is termed the filter efficiency and provided by the MERV under standard conditions.
- The CDC and ASHRAE have determined that MERV greater than or equal to MERV 13 are effective at capturing airborne viruses including the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19. MERV 14 or higher are preferred.
- Why FIT selected MERV 15:
 - MERV 15 gives the highest level of filtration while still permitting proper air exchange.
 - It is important to note that increased filter efficiency generally results in increased pressure drop through the filter.
 - The HVAC systems (including electrical and mechanical requirements and fan size) can be negatively impacted (and thus air flow reduced) by installing filtration in excess of design.
- For more information visit:
 - [www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-filtration disinfection-c19-guidance.pdf](http://www.ashrae.org/file%20library/technical%20resources/covid-19/ashrae-filtration%20disinfection-c19-guidance.pdf)

e. The FCC stated that Suffolk County Community College has reduced the class sizes and has given the faculty a choice of how they want to teach.

- Consistent with CDC and State of New York guidelines, FIT has implemented social distancing guidelines and has modified classrooms with fewer seats or signage during the spring semester.
- In addition, FIT has provided disinfecting wipes in all open classrooms for students and faculty to use before and after using equipment or furniture.
- For the fall, FIT will continue to follow CDC and New York State guidelines.

- f. There needs to be an analysis of the intake and outtake air vents in offices and classrooms.**
- See response to 1a and 1b above.
- g. Air Quality at FIT was poor before COVID. One person gets sick in the office, everyone gets sick eventually.**
- As noted above, FIT consistently complies with industry standards, New York City building guidelines, regulations, and laws, and, during the pandemic, with CDC and New York State DOH guidelines. In addition, FIT continues to work to improve physical plant operations, which impacts indoor air quality and occupant comfort.
 - Important ways that individuals can contribute to protecting health are by getting the COVID-19 vaccine, wearing a mask, washing hands frequently, and staying home when feeling ill.
- h. Employees want documentation of the ventilation maintenance throughout the college.**
- As noted above, the FIT Restart website and frequent college-wide communications keep the community informed about building ventilation standards.
 - FIT's Facilities Department maintains best practice maintenance records via an automated Building Engines CMMS system. These records are routinely available to all oversight and regulatory agencies.
- i. Many comments addressed the need for seeing an external HVAC engineer's report on the air exchange results in offices, classrooms and common spaces.**
- See responses to 1a and 1b above. MG Engineering is FIT's external engineering firm retained through a public procurement process. Here is a link to MG Engineering's website: <https://www.mgedpc.net/#top>
- j. Employees smell weed smoke in their offices daily from use by individuals on 27th Street coming through the vents.**
- Some of FIT's air intakes are at street level.
 - HVAC air filters do not address odors, as the particles that produce smells are generally much smaller than viral, bacterial or fungal particles.

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- Activated charcoal or ionization systems are sometimes added to systems to address smells, and can be reviewed and costed.
- **Cleaning:**
 - a. **Suffolk Community College has also changed the class schedules so that the rooms can be cleaned between classes.**
 - FIT complies with CDC, New York State, and SUNY recommendations regarding cleaning. Schedules are determined to ensure both safety and the success and efficiency of academic programming.
 - b. **What will be the schedule of cleaning offices, bathroom, common areas and classrooms during the day since our classrooms are used by multiple people during the course of the day and evening.**
 - Spring 2021 cleaning and disinfection protocols comply with CDC and NYSDOH guidelines and will remain in effect for the remainder of the semester.
 - FIT will continue to confer with SUNY and monitor the CDCs updated interim considerations for cleaning and disinfection as well as NYSDOH guidelines as we plan for fall 2021.
 - With regard to guidance from the CDC, please note that the CDC has issued new guidance on fomite (objects or materials which have the potential to carry infection, such as clothes, utensils and furniture) transmission of COVID-19, saying that there is low risk via this type of transmission. As evidence has accumulated over the course of the pandemic, scientific understanding about the virus has changed. Studies and investigations of outbreaks all point to the majority of transmissions occurring as a result of infected people spewing out large droplets and small particles called aerosols when they cough, speak or breathe. These can be directly inhaled by people close by. Surface transmission is not thought to be a significant risk.
 - Office spaces are on a daily routine cleaning schedule.
 - Restrooms are cleaned once at night and twice during the day.
 - Common use areas are cleaned and disinfected daily.
 - Classrooms are cleaned and disinfected daily.
 - Stairways, escalators, and elevators are disinfected once per day on 3rd shift.
- **Classrooms and Offices:**

a. FCC stated that Suffolk Community College has reduced the class sizes and has given the faculty a choice of how they want to teach.

- FIT's Office of Space Planning and Management is analyzing the capacities of classrooms based on 6' and 3' social distancing for fall 2021. Classroom capacities will guide Academic Affairs and the Registrar's Office in determining feasible options for in-person classes.
- In keeping with this analysis for the spring semester, FIT implemented social distance guidelines and modified classrooms with fewer seats or signage. Signage is in place to indicate 6-foot distances. For rooms with movable furniture, some furniture was relocated to allow for 6-foot distances. For rooms with fixed furniture, signage is being installed to indicate which seats and equipment can be used.
- FIT is currently in conversation with faculty and staff about plans for the fall semester.

b. Is the college investing in Plexiglas partitions for the faculty and staff within the classrooms as well as offices where there is direct contact with students?

- Following CDC, OSHA and NY State guidelines, high-traffic and transactional areas where employees have been working in person during the 2020-2021 academic year have had Plexiglas partitions installed. These areas include lobby security desks, cash registers, print and mail reception counters, Health Services reception, IT Help Desk reception, HR reception, and Residential Life reception.
- Whether additional spaces will require Plexiglas partitions for the fall 2021 is dependent on agency guidelines and college operations.

c. Will there be an analysis of each area within the college to determine the safest way of dealing with students i.e.: Financial Aid, Admissions, CIC, FITABLE and Counselling.

- Spaces will be analyzed by the Office of Space Planning and Management to determine whether the recommended social distance can be accommodated.
- FIT's Office of Enrollment Management and Student Success will discuss and determine best options for meetings with students during the fall semester considering guidelines provided by the CDC and State of New York, as well as best practices for mask wearing and other safety protocols.

d. Is working from home an option?

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- FIT is currently discussing guidelines for reopening in the fall in compliance with SUNY instructions and guidelines from New York State and the CDC.

e. How will shared offices with little distance between employees be handled?

- In shared offices that do not have the space to accommodate social distancing, the Office of Space Planning and Management will assess and provide recommendations for adjustments in accordance with CDC, OSHA and NY State guidelines.

f. Many offices have no windows in our shared offices, what if anything can be done to ensure proper ventilation?

- FIT's offices have mechanical ventilation.
- In most cases, windows should remain closed to allow conditioned air to the space. Opening windows allows non-conditioned air into a space from the outside. This air has not passed through the HVAC filtration.
- From FIT Restart website:
 - Engineering staff operate the HVAC system in accordance with ASHRAE recommendations and CDC guidelines. Increased filtration has been added and minimum outside air setting increased to maximize fresh air and exhaust.
 - FIT continues to follow best practices in the management of HVAC systems by running them in accordance with appropriate energy, humidity, and temperature standards; changing filters; and replacing malfunctioning parts, etc. (See sections above on ventilation).
- **Vaccination:**
 - a. **Will there be contact tracing of infected students and how will the faculty be informed.**
 - FIT will continue to follow CDC and New York State guidelines related to contact tracing. In addition, FIT will comply with federal guidelines related to the privacy of medical records.
 - FIT will continue to submit data related to incidents of COVID-19 on campus to the SUNY tracker, which is available on-line here: <https://www.suny.edu/covid19-tracker/>

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- **Museum:**

- a. **Will the museum be open to the public?**

- FIT will comply with New York guidelines related to the opening of museums.

- b. **Will there be limitations placed on the number of visitors to the museum?**

- Beginning April 26, New York will allow museums and zoos to increase capacity to 50%.

- c. **What about the bathroom on the main floor of E building where there are offices, museum staff currently sharing it with the public....will this change?**

- The public restrooms on the first floor of Goodman will remain accessible to all.

- d. **Will student exhibitions be allowed in the galleries (Museum, Gallery FIT and A & D Gallery or will everything continue to be virtual?**

- As student exhibitions are a critical part of the academic experience, their use in the fall semester will be discussed and determined as part of FIT's reopening plan in accordance with guidelines from New York State.

- **Sports/Events:**

- a. **The CDC recommended no indoor sports or events in schools as they have been linked to the current rise in COVID cases nationwide. Will this be considered by FIT?**

- During academic year 2020-21, FIT had no athletic events. FIT will comply with CDC and New York State guidelines related to sports and events for academic year 2021-2022.