

# The University of Arizona - College of Engineering

Version: June 18, 2020

## Safe ReOpening Plan (ENGR Safe ReOp): *Process and Appendices*

### Executive Summary

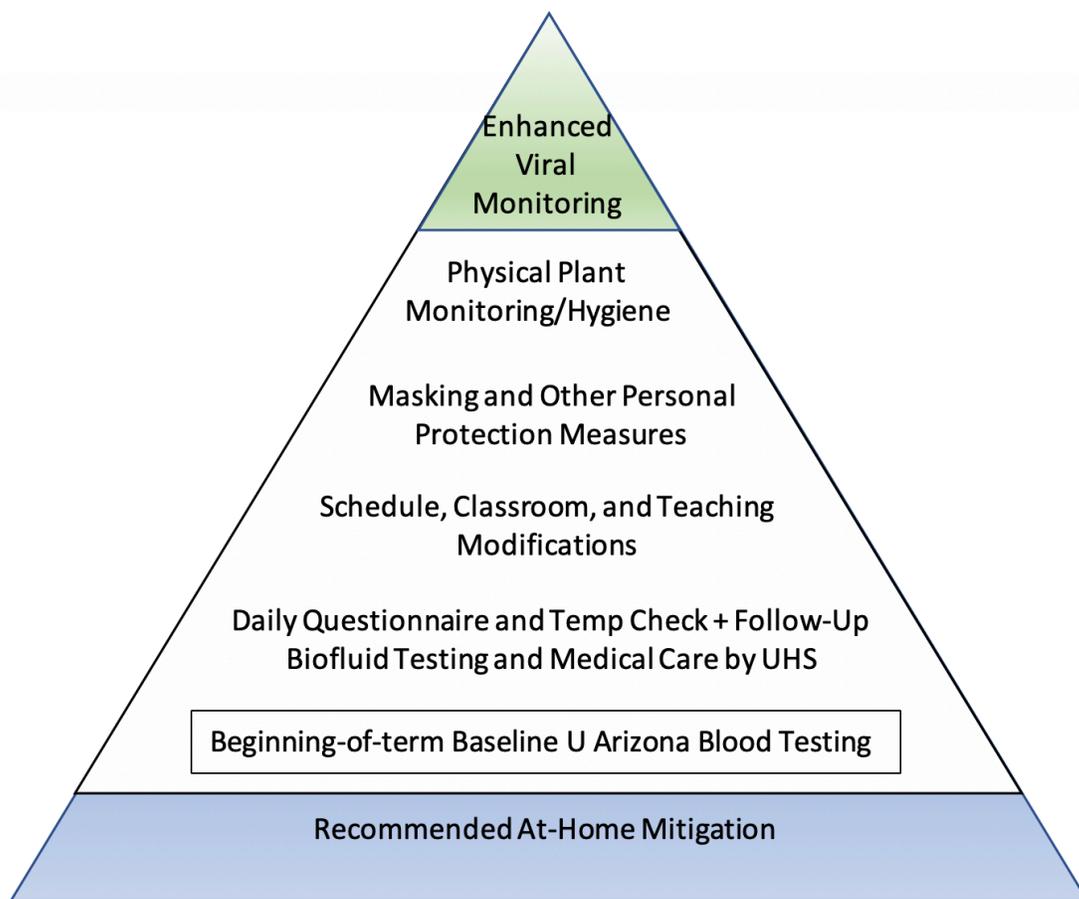
The University of Arizona College of Engineering (ENGR) has developed a comprehensive “Safe ReOpening Plan” (ENGR Safe ReOp) to reopen college activities and continue its overall mission of delivering high-quality engineering education, conducting cutting edge engineering research and development, and building a vibrant engineering community experience as safely as possible.

The Safe ReOpening Plan builds upon and is consistent with all recommendations of the [University of Arizona Campus Re-entry Plan Working Group](#), including drafts from the Implementation Team, and the Test, Trace and Treat Team. The Plan consists of a pyramid of layered mitigation measures, designed to work as an integrated whole. These mitigation measures are listed below and illustrated in the accompanying figure:

1. Recommended **at-home mitigation** (social distancing, personal hygiene, etc.)
2. **On-campus mitigation:**
  - a. Baseline blood testing for antibody provided by U Arizona (as available)
  - b. Daily screening questionnaire (covering symptoms and exposure history) and temperature checks
  - c. University-provided biofluid testing - i.e. nasal and/or blood testing - through University Health Service, for those in need of confirmatory diagnosis and medical care
  - d. Student schedule, classroom, and teaching modifications to limit on-campus population density and facilitate social distancing
  - e. Laboratory and Workshop modifications - Including hands on activities along with student schedule, lab classroom and teaching modifications to ensure engagement while limiting population density and facilitate social distancing, enhanced cleaning, and enhanced PPE measures
  - f. Adherence to face coverings and other personal protection measures in all Arizona ENGR operations
  - g. Physical plant monitoring and hygiene measures
3. **Enhanced viral monitoring:** Serial salivary testing for SARS CoV-2 and rhinoviruses of a **voluntary** cohort of the ENGR community -- a research component under IRB supervision, conducted by the College of ENGR.

This Plan is dynamic. To implement, evaluate, and update it as circumstances and university guidance evolve, ENGR will establish a COVID Task Force, whose members shall be appointed by the Dean's Office.

To ensure maximum safety and confidence, all members of the ENGR community, both on and off campus, will be asked and encouraged to participate in this comprehensive Plan. Members of the Arizona ENGR community who return to campus will be asked to strictly adhere to the safety protocols set forth in the Plan as a prerequisite for physical presence in Arizona ENGR buildings. Individuals who opt out for any reason will participate in College of ENGR activities remotely.



#### 4. Summary of Report Components and Appendices:

- a. **Teaching:** Adjustments to nearly all teaching schedules and protocols that ensure social distancing, temporal changes, face coverings, small lapel microphones and additional PPE to allow an on-campus engaged class and lab experience and measures to mitigate spread.
- b. **Teaching, Faculty Training:** ENGR faculty engagement and training to reduce training time and establish a high standard of student engagement across all teaching modes and in all departments in engineering.
- c. **Teaching, Course Syllabi:** Establish clear and concise language to students and faculty in course syllabi and other communications means to ensure the safe reopening measures and contingencies.
- d. **Teaching, Laboratory Courses:** Simulate and scale up laboratory class operations during month of July.
- e. **Research:** Work closely with RII on phased reentry for research, this includes essential research waivers or reentry checklists.
- f. **Advising:** Most student advising will continue to be conducted remotely to reduce crowding on campus.
- g. **Student Activities:** Student activities and groups to adhere to all UA wide guidance on meeting size, modalities. Provide training materials to all student groups and faculty advisors to ensure continuity across college activities.
- h. **Working from Home:** Continue to work from home for all of the college enterprise activities that can effectively continue to work this way. Provide unit level college checklists for all units that intend to be on campus. Allow unit leads to order signage and PPE from facilities management (through the building managers) to help guide students and visitors on proper routes and protocols.
- i. **Safe Routes/Traffic Flow:** Work with unit heads, building managers, and Facilities Management (FM) to create safe routes through buildings. This includes elevators, stairwells, hallways, offices, and places where students or anyone congregates. Ensure an easy-in and easy-out way to move large groups of people between classes and buildings. Message out to faculty, staff, and students in the vicinity on proper travel routes.
- j. **Contingency Planning:** Continuously work with college stakeholders regarding contingency plans. This includes reviewing the scenario plans from the UA Reentry Implementation team.
- k. **Communication/Messaging:** Throughout the months of July and August, provide clear and concise messaging to faculty, staff, and students.
- l. **Connectivity:** Participate and stay informed on University level planning and guidance.

Data Management: Document, plan, and disseminate best practices and guidance that work for the majority of ENGR courses and instructors. Use data tracking to improve measures for high quality and across major uniformity.

# Safe ReOpening Plan

## 1.0 Introduction

The components making up the plan have been detailed in the herein contained appendices. These appendices document the process, results and recommendations of the College of Engineering (ENGR) Safe ReOpening Plan (ENGR Safe ReOp) for Fall 2020. The guidance and plan that follows is the result of extensive meetings and discussions with ENGR and UA stakeholders. The plan is designed with flexibility to change as the situation and guidance from UA central units and administration evolve.

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### Context and Process

ENGR has eight departments that are housed in five buildings. Systems and Industrial (SIE), Chemical and Environmental (ChEE), Materials Science (MSE), Mining and Geological Engineering (MGE), Civil and Architectural Engineering and Mechanics (CAEM), Electrical and Computer Engineering (ECE), Aerospace and Mechanical Engineering (AME), and Biomedical Engineering (BME).

#### Five ENGR buildings:

1. Engineering (Old Engineering)
2. Harshbarger Mines
3. Civil Engineering
4. ECE
5. AME

#### Depts. Housed in the Buildings

- SIE, BME Admin, ENGR Academic Affairs  
MSE, MGE, ChEE  
ENGR Deans Office and CAEM  
ECE  
AME and BME Salter Lab

ENGR has close to 2900 undergraduate students and 500 graduate students. Most of the senior and junior level undergraduates and many of the graduate students conduct research and/or laboratory courses in the ENGR buildings. The freshman and sophomore students often take the majority of their courses (engineering pre-requisites) in other colleges (i.e., Science). They take at least one key engineering design course in the freshman and sophomore years. These design and hands-on laboratory courses have become an important component in recruitment and retention of our engineering undergraduates.

In May 2020, the College of Engineering (ENGR) assembled a committee to help craft the ENGR ReOpening Plan (ReOp). The committee involved a wide set of stakeholders including faculty, staff, students, department heads, and unit heads (such as development and advising). The 22 committee members self-selected to participate in 6 different teams to address the focused topical issues related to ReOp. Each member was assigned to 2 different teams to ensure discussion and idea sharing across the College. Fig. 1 shows the composition of the ENGR ReOp teams.

Fig. 1 Team Composition of ENGR ReOp Planning

| Member Name              | 1 Courses and Instruction | 2 Research Enterprise | 3 Advising, Recruiting, Student Activities, ExtraCurricular | 4 Testing and Surveillance | 5 Office Environment and College Enterprise | 6 Contingency Planning |
|--------------------------|---------------------------|-----------------------|---|----------------------------|---|------------------------|
| Kathie Melde: Co-Chair   |                           | Lead                  |   |                            |   |                        |
| Marvin Slepian: Co-Chair |                           |                       |   | Lead                       |   |                        |
| Kriss Pope               |                           |                       |   | x                          | x   |                        |
| Catherine Petropoulos    |                           |                       |   | x                          | x   |                        |
| Leo Enfield              |                           |                       |   |                            | Lead  | x                      |
| Margie Puerta-Edson      |                           |                       |   |                            | x   | Lead                   |
| Marisa Pope-Malings      |                           |                       | Lead  |                            | x   |                        |
| Jim Baygents             | Lead - labs               |                       | x   |                            |   |                        |
| Eniko Enikov             | Lead - labs               |                       |   |                            | x   |                        |
| Kerrie Sonnenberg        |                           |                       |   |                            | Lead  |                        |
| Beth Hutchinson          |                           | Lead                  |   |                            | x   |                        |
| Paul Blowers             | Lead - lectures           |                       | x   |                            |   |                        |
| Karen Van Winkle         |                           |                       |   |                            |   |                        |
| Hal Tharp                | x                         |                       | Lead  |                            |   |                        |
| Pierre Deymier           | x                         |                       |   |                            | x   |                        |
| Moe Momayez              | Lead - lectures           |                       |   |                            |   | x                      |
| Brad Ross                |                           |                       | x   |                            |   | Lead                   |
| Jian Liu                 | x                         | x                     |   |                            |   |                        |
| Pavlo Krokhmal           | x                         |                       |   | x                          |   |                        |
| Josh Pace                | x                         |                       | x   |                            |   |                        |
| Andrea Deranek           | x                         | x                     |   |                            |   |                        |
| Andrew Smith             | x                         | x                     |   |                            |   |                        |
| <b>Total Members</b>     | <b>11</b>                 | <b>5</b>              | <b>6</b>  | <b>4</b>                   | <b>8</b>                                    | <b>4</b>               |

In the following, ReOp component plans for the different teams are outlined. All teams agreed that overarching guidance will be given from the UA-level reentry team. All plans will implement the principles outlined in the *UA Safe Return to Work Comprehensive Guide*. The activities in ENGR are generally equally split between the education enterprise (courses and instruction) and research. Both involve significant hands-on components that include design and build, simulation and testing, and working in diverse engineering teams. These activities are hallmarks of ENGR

education and distinctive characteristics of the Wildcat Engineering experience. The main challenges in the ENGR ReOp plan have been to maintain a high quality and highly interactive student/faculty experience along with the mitigation strategies under a post-Covid19 operating plan. We anticipate that our plan (class sizes and the ability to offer the exceptional interactive and hands-on student/faculty experience) will need to be modified as UA ReEntry team guidance is crystallized.

## **2. Courses and Instruction: (ReOp Team 1)**

### **2.1 Summary Recommendations:**

**2.1.1 Teaching:** Adjustments to nearly all teaching schedules and protocols that ensure social distancing, temporal changes, face coverings, small lapel microphones and additional PPE to allow an on campus engaged class and lab experience and measures to mitigate spread.

**2.1.2 Teaching, Faculty Training:** ENGR faculty engagement and training to reduce training time and establish a high standard of student engagement across all teaching modes and in all departments in engineering.

**2.1.3. Teaching, Course Syllabi:** Establish clear and concise language to students and faculty in course syllabi and other communications means to ensure the safe reopening measures and contingencies.

**2.1.4. Teaching, Laboratory Courses:** Simulate and scale up laboratory class operations during month of July.

### **2.2 Detailed Content: Supporting Recommendations**

Our classes and instruction team has developed guidance for our faculty and departments regarding resuming classes in Fall 2020. The team involves a talented set of people including our Associate Dean of Academic Affairs, a Distinguished Professor who is serving on the UA level reentry teaching team, two ENGR dept heads, and a distinguished faculty actively involved in ENGR undergraduate laboratory courses, and students. This team, in turn, has engaged advice and ideas from a broader ENGR community on how to bring our teaching back on campus.

Our overarching vision is to incorporate the guidance given by the UA level reentry team with regards to instruction modality, class density, and overall protocols for cleaning and course syllabi. The biggest challenges in ENGR is finding classrooms for our large freshman and sophomore classes, and providing high quality and engaging design and lab courses under the Covid-19 constraints of social distancing. The strategy to roll out the plans include a simulate and scale-up

approach. This means having the ENGR ReOp teaching team closely look at simulating one of our laboratory classes. We are looking at courses in our AME program for this effort. Once details on how to safely and effectively roll out the AME laboratory classes, we will then use the lessons-learned and scale up to laboratory classes in other ENGR departments.

Approaches to Mitigation and Spread and Risk Reduction. Principles taken from UA OSHA “layered plan” for Covid-19 mitigation. All preventative measures are layered upon one another.

1. Adjustments to teaching schedules to ensure temporal separation of students.
2. Physical distancing of students using diagrams regarding proximity and duration that students need work together.
3. Face coverings, for everyone in class room. (coverings protect others).
4. Taping and marking of floor areas so students know where to stand.
5. Face shields, with coverings..... for lab students include discussion of cleaning protocols and small cubbies (shoe sized cubbies) for storage when not in use.
6. Room entry and exit protocols described in syllabi and understood by all.
7. Options include lab groups where some attend live and video the experiments (facetime or zoom) for other participants. Reduce amounts of groups in proximity. (Need to do simulation of this approach)
8. Careful observation of time duration in close proximity.
9. Invoke a culture of caring and shared, personal responsibility.
10. Work with DRC to identify and provide accessible and equal experiences for all students.
11. Students and faculty wear lab coats and shoe coverings that are kept in plastic bags and washed in between uses.
12. Faculty Training, ENGR has initiated an ENGR wide FLC focused at faculty training and discussion of the various modes of online and in-person teaching instruction. This is in addition to the trainings and instruction provided by OIA for the entire campus community.
13. Determine and disseminate language to use in course syllabi, such as use of face coverings, unplanned absences, on line pivot, contingencies in case P/F options are available. P Blowers is lead on this for UA ReEntry team.
14. Instructors to hold virtual office hours. Equip our faculty with USB document web cameras, that allow faculty to engage via notes with students in a real time sense.
15. Equip instructors with lapel microphones that interface with existing classroom technology.

During June 2020, the ENGR ReOp teaching team has met weekly to actively discuss and work out concerns regarding teaching. Note that these discussions were happening at the same time the UA ReEntry team was working out guidance.

We note that this submitted plan is still in draft form and the discussions and issues presented are still being worked out. We still need to determine the modality of courses (due June 18,2020) and then work to match the instructors and instructors’ credentials to teach the courses with the modality. ENGR and the departments

need to still decide which courses really do need to be taught on campus, collect data about faculty modality choices, and then do the accounting to see if we meet the targets suggested by the UA overarching goals. Fig. 2 shows the general approach to our ReOp plan as we work with departments in ENGR.

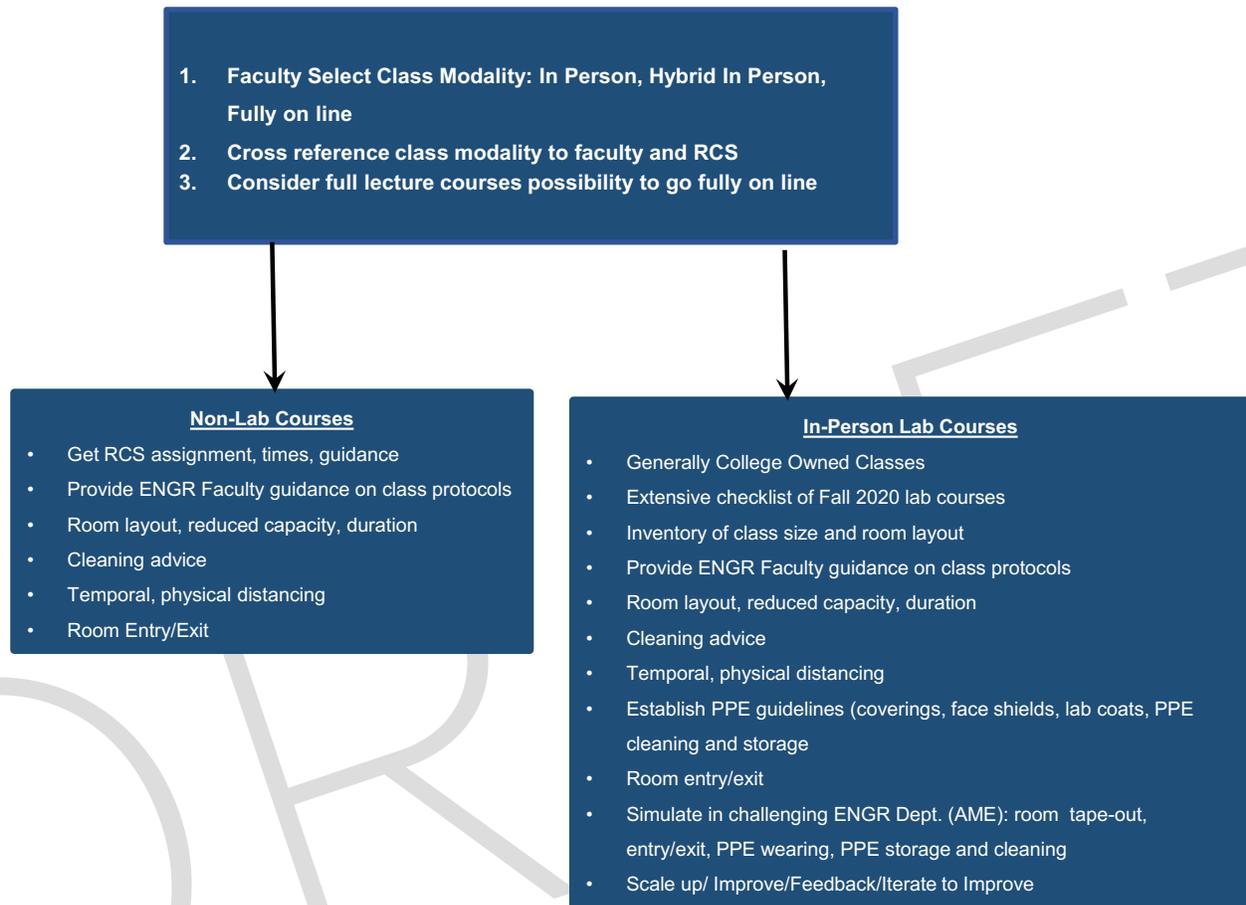


Fig. 2 Overview of ENGR Plan for ReOp

In our plan, we will communicate to faculty, TAs, and students an easy-to-follow protocol regarding:

1. Protocol for cleaning student space in labs and classrooms between classes.
2. Protocol for cleaning instructor station (keyboard, mouse, etc.) between classes.
3. Protocol for personal individual student-faculty contact which might be by appointment in a room specifically designated for face-to-face meetings. The ENGR faculty will be involved and have input on a college-wide approach to student-faculty meetings. While each faculty may make their own decisions, a standard level of quality of interaction throughout ENGR will be recommended.

### **Dept. Head/Chair Guidance**

1. Develop a list of alternative teachers/TA for each course in case someone gets sick.
2. A mechanism for information to flow from instructors, students to Dept. Head in case things do not work and corrective measures need to be taken.
3. Information should also flow between Head of different teaching units to identify potential problems and better practices.

**Data Collection and Documentation** (best practices, continuous measurable improvement, keep the things that work and fix the things that do not)

1. Data may be collected about the teaching measure practice.
2. Data needs to be converted into information that can be shared.
3. Develop a feedback process based on data to improve measures

### **2.3 UA-level ReEntry Documents and Guidance for Courses and Instruction**

- Excerpts from Fall Class Modality Mix, Timeline V8 (June 5,2020)
- Working documents of ENGR ReOP Team 3, Courses and Instruction.
- Excerpts from Harvard, Staged Campus Re-Entry Plans, Labs & Instruction.
- Our Proposed Timeline for Teaching Strategies.
- Budget Items for Teaching.
- Other notes.

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#### **Principles:**

- Our goal is to offer at least 50% of all Academic Degree Program courses and 70% of Gen Ed and Foundations courses\* with a minimum of one in-person component each week.
- Faculty, instructors, and instructional support staff will choose if they are able to be in person.
- Plan for 20% fewer students to be present on campus.
- A new maximum occupancy will be assigned to each classroom which will be at least 50% of its current maximum occupancy. Some rooms may have even more than a 50% reduction if the room features warrant it.
- Course-associated laboratories can enroll at lab room capacity, with additional mitigations of surgical masks, gloves (such as nitrile or latex), and eye protection (including goggles or safety glasses). Students will be required to clean their own workstation prior to beginning lab work.
- No more than 250 people can gather at any time in any enclosed space on campus.
- Relocate all classes at or close to the maximum occupancy into larger classrooms, once we identify classrooms freed up because of shift to fully remote/online modes.
- Ensure that a remote, asynchronous engagement mode is available to each student for **every class** to accommodate students who cannot attend in person because they are high-risk for infection or need to be quarantined. These opportunities can be accomplished through the following:

- Recording synchronous sessions and making them available for students through D2L.
- Providing slides, readings, video content, guided exercises, etc.
- Providing office hours weekly through Zoom, and allow for telephone-based office hours (particularly important for rural and Native American students).

**THE ROAD HOME** A GUIDE FOR IN-PERSON AND ONLINE COURSES IN FALL 2020

We're so glad to welcome you for a new school year. As you probably know, your classes this fall will look a little different than usual. The University of Arizona will offer four types of classes, ranging from fully In-person to fully online. You will be able to identify which format your courses will feature by reviewing your schedule in UAccess Student. All courses will provide options for students who are unable to come to campus due to illness or other temporary circumstances, as well as for graduate students who may need to remain remote for the duration of the semester. Undergraduate students planning to remain remote for the duration of the semester should enroll in Live Online or iCourses where possible.

**THE FOUR COURSE FORMATS**

**IN-PERSON**  
Students and instructors attend class in person with enhanced health protections, including wearing face coverings and decreasing classroom density.

**FLEX IN-PERSON**  
Students participate in a mix of in-person and online modes. For example, you may be in a rotating group that alternates between in-person and online meetings following the weekly class schedule. Or you may participate in lectures online and labs in person. The exact mix of in-person and online will be determined by your instructor.

**LIVE ONLINE**  
The instructor and students are online simultaneously, and your instructor provides content in a live online platform.

**iCOURSE**  
For the majority of coursework, students and instructors are not required to be online simultaneously, and students complete their work through D2L.

**BEAR DOWN!**

**\*Percentage Calculations:**

The calculation will be determined by reviewing the total student credit hour of capacity by class category and College.

- $SCH\ Capacity = \text{minimum credit unit multiplied by the capacity of the class.}$
- The (sum of SCH Capacity for class formats of In-Person and Flex In-Person) divided by the (total SCH Capacity for all class formats.) will give us the In-Person Engagement Percentage.

**Draft – UA COVID-19 Planning, by Activity / Constituent Group**  
**Group Number (1-7) \_\_\_\_\_ Version/Date \_\_v2.0 May 18, 2020\_\_\_\_\_**

Our group is tasked with developing a plan to guide teaching and learning in the classroom and in class-based laboratory activities. Concerns include mitigation of exposure to at-risk individuals while maintaining the highest standards of teaching and learning. The main focus of this group is therefore offering flexible participation while minimizing transmission and optimizing communications. We also propose a modeling system to help us track student movement to best inform our decisions.

### Distinctive Challenges to Teaching and Learning:

- Distancing within the classroom.
- Class transitions: time between classes, flow into/out of classroom, sanitizing between classes.
- Delivery of content for remote students/faculty.
- Safety and personal protection during live classes.
- Standardizing types of course offerings (e.g., the flexible participation plan).

**Offer flexible participation:** Offer numerous options for students, staff, and faculty to protect individuals vulnerable to COVID-19 and reduce crowding.

### Big Picture Goals:

- Give all faculty and students the option to teach and learn remotely via synchronous live streaming for all classrooms.
- Make all courses available to students and faculty regardless of physical presence with various levels of remote work (see below).
- Equip all classrooms and train instructors for use of technology that allows for synchronous 2-way participation in courses. Current options for this include 2-way Panopto, Zoom, Elmo and microphones.
- Develop a 'Flexible Participation Plan'. The goal of this plan is twofold:
  - To standardize course formats so that faculty can choose what level of synchronicity and modality works best for them,
  - And so that students know what to expect out of each of their classes.

### **Flexible Participation Plan (Non-Lab Courses)**

#### **Level 1 (In-Person) – Instructor in-person, students in-person, livestreaming**

- Enrollment size is capped to allow for sufficient social distancing
- All classes will be live for the duration of the course.
- Classes will be simulcast via Zoom or Panopto for any students not able to attend.

#### **Level 2 (Hybrid) – Instructor in-person, student subgroups in-person, livestreaming**

- If enrollment cap and room capacity do not allow for adequate social distancing, divide students into subgroups to enable social distancing.
- Instructor meets with one subgroup live and in-person each class. For example, in a MWF course, 1/3 of the course may attend live on Monday, 1/3 on Wednesday, 1/3 on Friday.
- Other students join synchronously via Zoom or Panopto. TAs/LAs/Preceptors monitor Zoom chat to facilitate remote student participation. This level would require instructional support staff to assist to ensure the course synchronous broadcast is properly delivered and remote students can participate through the chosen delivery technology.
- This level can encompass traditional in-person lecture classes and/or hybrid classes.

### **Level 3 (Teleconvening) – Synchronous online instruction**

- Instructor is remote and provides content synchronously via Zoom or another technology.
- Students are remote and attend class 'live' but remotely.
- Synchronous course times are input into UAccess as with a normal in-person course.

### **Level 4 (iCourse) – Asynchronous online instruction**

### **Flexible Participation Plan (Lab Courses)**

The University of Arizona would follow the some of the guidelines of the Harvard Faculty of Arts and Sciences and School of Engineering and Applied Sciences, Staged Campus Re-entry Plan (Version 8.0: May 12, 2020). A page of this plan as it pertains to teaching is included in this section.

**Minimize contact and reduce crowding:** Reduce instances of close physical contact among students, faculty, staff, and visitors during on campus activities.

- The flexible participation plan allows for reduced classroom capacities.
- Follow the guidelines of the UArizona Safe Workforce Early Return Team (SWERT).
- Instructors of large courses should dismiss classes 5 minutes prior to the stated end of class to all for a less congested flow of students into and out of the classroom. This time can be made up with online instruction.
- Students should be advised to maintain social distancing while waiting for class to begin. Students would wait outside the building until 5 minutes prior to class.
- We also suggest a modeling of student movement.

**Minimize transmission:** Reduce the probability of transmission of SARS-CoV-2 during in-person campus activities.

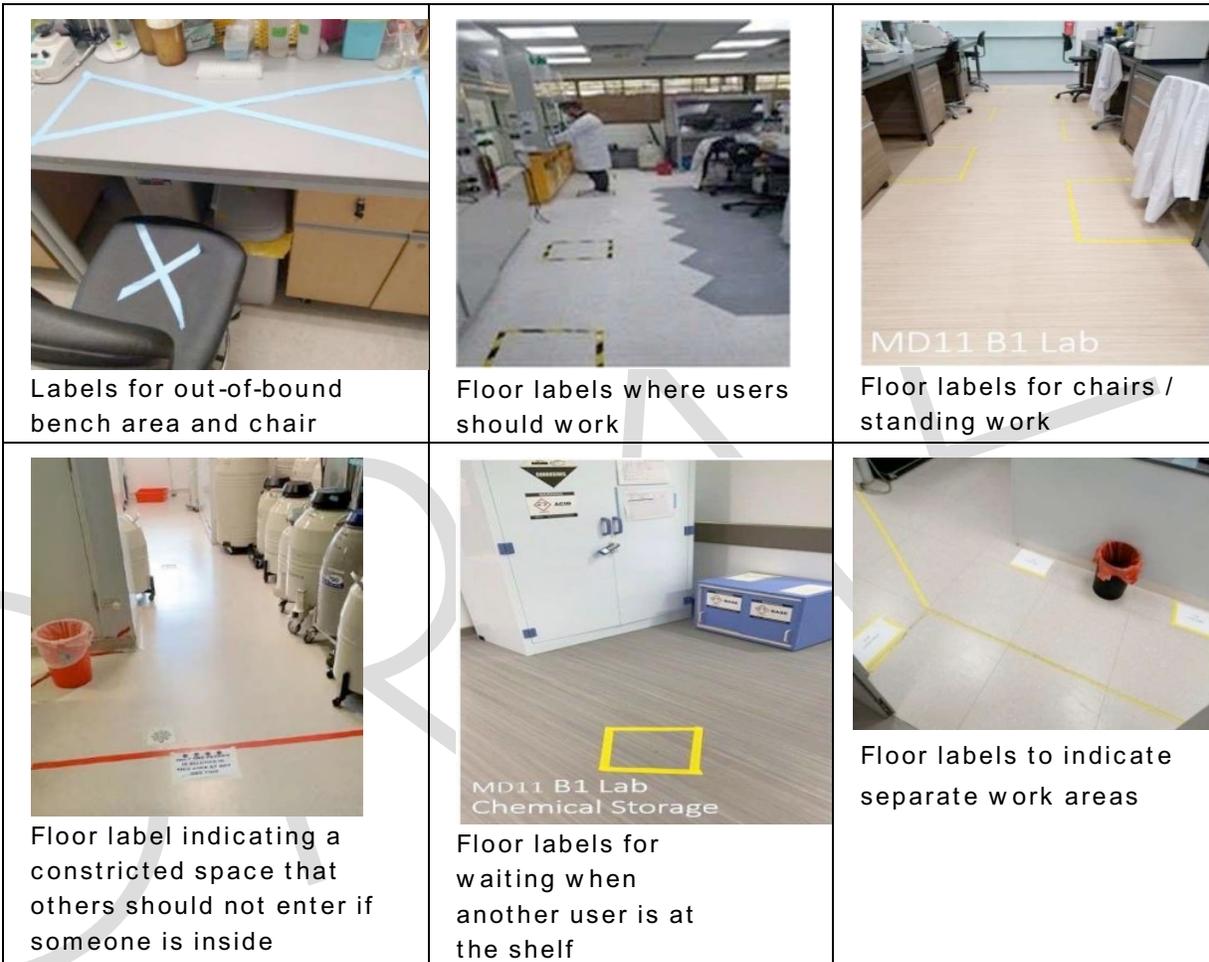
- All students will be required to wear face-masks.
- All instructors will wear ClearMasks, which will be provided by UA.
- Students will take a sanitizing wipe upon entering the classroom to wipe down their seat and desk.
- Instructors will be provided with sanitizing wipes and gloves for disinfecting their teaching station.
- Classrooms will be cleaned and sanitized daily according to SWERT protocols.

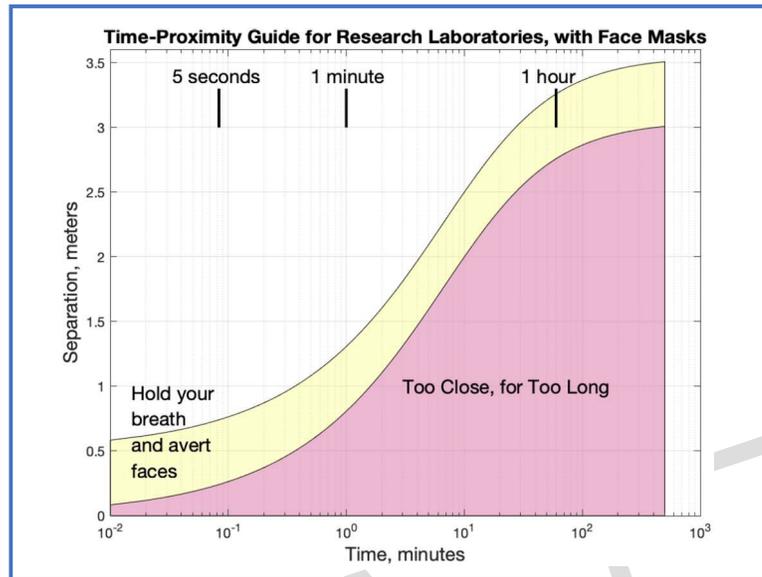
**Communicate:** Maintain an active COVID-19 Reopening Campus communication plan.

- All instructors will maintain communication via D2L with their course participants regarding any changes in policy that have to do with remote learning or mitigations. Instructors will need to provide norms for communication with students that do not rely on real-time, face-to-face instruction: Guidelines for consulting D2L announcements, threaded-discussion forums for course-related questions, syllabus and calendar, etc. The guideline that students should know to consult “three [asynchronous sources of help] before me” is helpful here. Courses that have instructional teams, with a dedicated TA/preceptor who can field course-related questions and communicate to both instructor and students, will be helpful here.
  - Communicate and provide support to instructors that emphasize approaches that can be flexible if there is a need to quickly pivot back to remote teaching will be essential: modular organization using D2L, using course tools such as calendar to help organize, assessments that do not assume need for synchronous and proctored participation.
  - Communication with instructors to make sure they are well prepared in designing their courses.
  - Consistent communications with students should start in summer so that students have a good idea of what to expect well before they return to campus for fall. Advisors are particularly important in helping to coordinate messaging to students and should be included as we plan communication-strategies. Instructors should be urged to communicate with students as well about their courses.
  - All departments should have a teaching succession plan. If instructor for ABC 200 becomes so ill they cannot work, who is prepared to step in to assume teaching responsibilities? The designated succession instructor should have access to the D2L course site from the beginning of the semester, and should be well-acquainted with the course objectives, structure, assessments, and standards for communicating with and providing feedback to students. Co-taught courses and those with structured instructional teams will have an advantage here.
-

## Strategies for minimizing person-to-person contact in laboratory

Some suggested strategies for organizing laboratory space and workflow to promote and facilitate physical distancing are shown in Figure 3. Each lab will need to determine the optimal strategy for their own group.





**Figure 4. Time-separation guidelines for individuals working with surgical masks.** The goal is to minimize integrated “exposure” which depends on both separation and duration. The graph assumes a droplet density that falls off as  $1/r^2$ , and that once separation reaches 3 meters the room air mixing and HVAC filtering dominate  $T_{12}$ . PIs are advised to arrange laboratory workflow to avoid interactions that fall in the red shaded region. The normalization of 2 m at 10 minutes is taken from CDC guidance (<https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html>, April 25, 2020).

### **ENGR Scheduling**

- All classes - determine modality June 22.
- Laboratory Classes, simulate June 22-July 5 tape out and set up lab, look at room capacity.
- Procure lab coats and face shields.
- Procure outside shade structures. Obtain unused tables and chairs from RCS or facilities. Determine logistics (storage until Fall semester, storage and planning during monsoon season).
- Scale up to different laboratory classes in other departments: ECE 220, MSE 110, ECE 320, AME, ChEE (others... to identify) July 5 – Aug. 10, 2020.

### **Budget Items for Teaching**

- Shade covering rentals for outside spaces (ENGR courtyard, AME, CE courtyard).

Outdoor spaces for studying came up in the WG today. Proposals on spaces and numbers of seats is underway. We are fortunate to have courtyards where we can build our own lab spaces. Chris Kopack seems very supportive of outside spaces so maybe we can get his input and see if there are resources that become available?

- Polycarbonate shields for ENGR collaborative classrooms.
- Tape for laboratory markings.
- Face shields, lab coats, shoe coverings for faculty and TAs in laboratory classes.
- Cubby storage for labs so students can store face shields and cleaning supplies.

### **Students to buy for lab classes:**

- Lab coat (maybe usable from previous lab courses in chemistry, etc.)
- Face shield (\$10 per student, reusable)
- Isopropyl Alcohol for cleaning face shields

### **To Buy for Faculty:**

- Face shields 150 x \$10 apiece for faculty
- USB document camera, office hours at home 100x \$80 apiece
- USB lapel microphone, speaking through masks 100x\$25 apiece

### **Lab Classes (Discussion with working group)**

- ENGR 102A, online.
- ENGR 102 B, work with breakout sessions, Team to work on hyflex model for this.
- MSE 110, live with lecture. Labs will be demo.
- ECE 220 and ECE 351C: Live (15 per class, check room capacity, taping, student movement).
- ECE 175, online (large programming course, but online created for BS Online).
- MGE 225 (lecture course room for mining): need to check classes, class capacity, timing for class turnover).
- MGE lab course, ½ students working inside, ½ working outside.
- BME 417 lab class. Enrollment usually 92. Needs work.
- CE lab courses: Needs work, identify courses, location, measures.

- Courses are AME 300 (instrumentation), AME 324L (solids), AME 400 (ME senior lab) and AME 401 – senior Aero Lab.
- Locations are AME 300- AME S426 , AME 324L – AME S402, AME 400- AME S402 (same as 342L lab), AME 401- AME N237A (north building).
  - This is a wind-tunnel experiment and diesel engine lab space. It generally stirs the air due to the operation of the wind-tunnel. Risk that everybody in that room will have a uniform exposure if viral particles are introduced.

Create Data Collection and Documentation (best practices, continuous measurable improvement, keep the things that work and fix the things that do not.)

1. Data may be collected about the teaching measure practice.
2. Data needs to be converted into information that can be shared.
3. Develop a feedback process based on data to improve measures

DRAFT

## **3.0 Research Enterprise (ReOp Team 2)**

### **3.1 Summary Recommendation**

**3.1.1 Research:** Work closely with RII on phased reentry for research, this includes essential research waivers or reentry checklists.

### **3.2 Detailed Content**

The ENGR research enterprise consists of pre-award (proposals and planning) and post-award (hands on research activities.) Guidance on research is clearly provided by RII (Research, Innovation, and Impact.) <https://research.arizona.edu/covid19/announcements>

Our ERAS team has been working remotely since mid-March and has been very active on pre-award proposals. ENGR has submitted more proposals during the Spring 2020 time than in the prior three years. Our researchers have been engaged even while working remotely. The hands on research activities moved to Phase 1 from March 2020 until May 2020. Research labs with specific “essential waivers” approved by RII were allowed to conduct operations on campus. All others operated remotely (work from home). Starting June 1, 2020, RII commenced the Phase 3 research restart plan.

<https://research.arizona.edu/covid19/research-restart>

Nearly 70 of our research labs completed the Qualtrics survey reopening Checklist. These were approved by the Associate Dean of Research (ADR) in Engineering, and by RII. Once approved by RII, the labs have restarted. Researchers and the Department Heads are reminded of the research restart and Safe Return to the University Workplace principles. The ADR is working closely with the ENGR college leadership team to stay informed of changes in the situation. Overall, ENGR opted to assign personal responsibility to each PI to prepare their own checklists, although guidance was provided as needed.

All lab directors are given the *UArizona Covid-19 Training Guide* supplied by the UA OSHA group. They are advised to keep a copy in the lab for reference and also to post the *Re-Entry Plan Summary: UArizona Return to the University Workplace at the entrance* to the lab facilities.

## **4.0 Advising, Recruiting, Student Activities, Extra Curricular (ReOp Team 3)**

### **4.1 Summary Recommendation**

**4.1.1 Advising:** Most student advising will continue to be conducted remotely to reduce crowding on campus.

**4.1.2 Student Activities:** Will rely on UA Reentry Team Guidance.

### **4.2 Detailed Content: Supporting Recommendations**

The ENGR advisors will primarily perform their advising and recruiting functions in Fall 2020 using remote work. The team has effectively met with individual students and small groups of students via scheduled Zoom meetings.

All of our student activities will closely follow the UA-level ReEntry Team 6 Guidance and Plans.

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## **Implementation Planning Subgroup 6: Undergraduate/Graduate Students: Co-Curricular Activities, Informal Collaboration & Recreation**

**Co-leads:** Kasey Urquidez, Tara Singleton, Marie Teemant, Julie Katsel

### **Executive Summary**

This guide provides guidance for undergraduate and graduate students participating in co-curricular activities, informal collaboration and recreation. Undergraduate and graduate students should be considered in all other planning guides as our student body is involved in all aspects of campus life. As such, this guide should be considered by other groups as well.

Communication, persuasion and social norming are the key components of this guide to ensure all students understand the institution's expectations, guidelines and policies for the safety and well-being of the entire community (on and off campus).

### **University Wide**

Detailed communication plan with clear and consistent messaging on signage, social media posts, push notifications and email regarding expectations. Communication plan

will include students and their families (if/when possible), as well as visitors. Communication plan to include (not limited to):

- Campus testing program and availability of tests for all students (test, treat & trace)
- Provide best practice guidelines for students reducing the probability of transmission, especially in regard to group gatherings, club and organization events, and informal gatherings through resources, including CDC guidelines for transmissible practices and the Pima County Health Department.
- Bear Down, Mask Up!
- Use of student leaders, Arizona athletes and other well-known campus leaders.
- Coordinate consistent messaging with off-campus partners, including off-campus housing locations and neighborhood associations.

### Unit/Department Specific

Oversight manual on management of large- and medium-scale gatherings-congregation on-campus for recreation, collaboration and co-curricular involvement.

### Unit/Department Specific

Updated manuals and policies for student organizations and campus gatherings

- Ensure all student organizations have accurate records of members and meeting schedules available/posted.
- Offer Increased virtual/online and hybrid opportunities for programming, services, student engagement, clubs and organizations.
- Update manuals through recognition process via ASUA and updated policies for GPSC Grants.
- Provide support to student clubs and organizations, including club advisors, to pivot traditional practices.

## **5.0 Testing and Surveillance**

### **5.1 Summary Recommendation - Overall ENGR Plan**

ENGRs approach to testing and surveillance approach will rely upon the UA Reentry Implementation team. Subgroup 1: Test, Trace, Treat. We will assign a liaison within ENGR to interface with this group. Subgroup 2: Wildcat Wellcheck. We will inform and encourage the entire ENGR community to sign up for Wildcat WellCheck, and provide continuous reminders to do so. Subgroup 4: Contact tracing. We will work with the UA Reentry team to ensure our community is aware of opt-in contact tracing apps. Subgroup 4: Health Care and Guidance. ENGR is not experienced nor should they be providing any healthcare guidance to our constituents.

ENGR will look for clear guidance from UA Administration about reporting rights and responsibilities in the case someone does get sick in our buildings.

ENGR will also conduct a small surveillance study on volunteers (80 individuals), monitoring serial, two-week intervals for salivary tests for Coronavirus and Rhinovirus as a means of evaluating mitigation/prevention efforts. This is a voluntary IRB study, also done in concert with the College of Law.

### **5.2 Enhanced Viral Monitoring (Voluntary Research Component Under IRB)**

ENGR will build upon UArizona's baseline antibody testing plan and adopt an additive serial testing plan to more closely monitor the ENGR community. This study is being conducted in concert with the College of Law. Serial salivary testing for SARS CoV-2 will be performed (detailed below). The purpose of this additional testing will be to: (a) monitor the efficacy of the composite of integrated mitigation strategies being employed by ENGR, to limit viral presence and spread in the community, and; (b) to obtain greater granularity as to asymptomatic viral presence within the Arizona ENGR community, eluding screening measures employed. This added testing will be useful to identify infected individuals, emerging trends, or other situations altering the stability of the community.

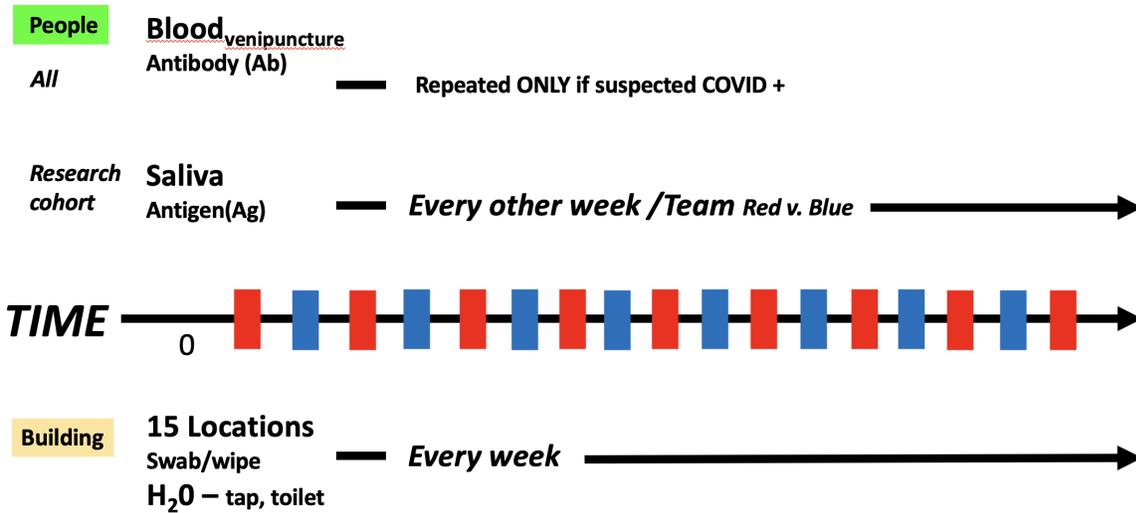
In addition, Rhinoviruses (e.g. Influenza A/B, RSV, Parainfluenza, Rhinovirus and Adenovirus) will also be tested for in this Salivary study. As these viruses will be prevalent in the fall, causing symptoms and signs confusingly similar to COVID-19, it will be valuable to determine the spread of these in the Arizona ENGR community, differentiating the common cold and flu from COVID.

### **5.3 Serial Salivary Testing Plan**

Arizona ENGR has obtained access to supplemental viral antigen testing. All tests selected are reliable, accurate, and easy to perform with regard to sample collection (expectorate in a tube). The technical specifics of each test will be available for review. Eighty individuals from the Arizona ENGR community will be enrolled as volunteers

consisting of Students - 60, Staff - 10; and faculty - 10. Coordinated with baseline venipuncture blood testing (if offered by U Arizona), Arizona ENGR will perform baseline salivary viral antigen tests for both SARS CoV-2 and Rhinoviruses, establishing a “time 0” (baseline) status for all participants. Thereafter, all group members shall be tested biweekly, as depicted on the following timeline:

## College of Engineering Testing Plan



## **6.0 Office Environment and College Enterprise (ReOp Team 5)**

### **6.1 Summary Recommendations:**

6.1.1 Continue to work from home for all of the college enterprise activities that can effectively continue to work this way. Provide unit level college checklists for all units that intend to be on campus. Allow unit leads to order signage and PPE from facilities management (through the building managers) to help guide students and visitors on proper routes and protocols.

6.1.2 Work with unit heads, building managers, and facilities management to create safe routes through buildings. This includes elevators, stairwells, hallways, offices, and places where students or anyone congregates. Ensure an easy-in and easy-out way to move large groups of people between classes and buildings. Message out to faculty, staff, and students in the vicinity on proper travel routes.

### **6.2 Detailed Content**

The team created a reentry template that each unit will fill out and utilize to develop their enterprise plans. Plans will be submitted to the College Dean for approval. These templates include a guide to planning for each of the units.

#### **Instructions for Template**

**Purpose:** The attached template is intended for departments and business units as you prepare Operating Plans for your areas of responsibility to ensure a safe and healthy campus re-entry in Fall 2020. The intention is to have one plan for each department, but if the activities covered are more diverse - please submit your operating plans at the level of granularity needed (e.g. ERAS, MarCom, Academic Affairs, etc.).

**Preparation:** Please carefully review the [Guiding Principles for Reopening University of Arizona's Operations](#) and visit the Office of the Provost Campus [Re-Entry Plan Working Group webpage](#) to learn about the Safe Workforce Early Return Team (SWERT), Implementation Planning Team and Test, Trace and Treat Team. These teams have developed comprehensive plans to guide the campus for re-entry. The plans developed by the teams are available for review and comment at: <http://forums.community.uaccess.arizona.edu/c/campus-reentry-plan>.

**Plan Development:** Although the attached template provides suggested elements for your plan, please feel free to customize as needed.

1. Review the attached Department / Unit Operating Plans Template.
2. If you have created plans that do not align well with the template, it is not necessary to reformat, but please ensure that the necessary components are included in your plans.
3. Download the template to use for developing a draft of your plan. If you need guidance or support from a project manager, please contact Jessica Thornburg ([jthor@arizona.edu](mailto:jthor@arizona.edu)).
4. Name your file as follows DRAFT\_College or Unit\_Dept\_Re-Entry Plan (e.g. DRAFT\_ENGR\_AME\_Re-Entry Plan).
5. Please submit a draft of your plan to your dean, manager or supervisor according to instructions provided in a separate communication.

**Reviews and Feedback:** Deans and Unit Leads will implement review and feedback processes.

**Submission:** Following the review and feedback process, Deans and Unit Leads will submit the plans to the Office of the Provost according to instructions provided in a separate communication. Early submissions are appreciated.

**Approval:** The Office of the Provost will conduct reviews and notify the Dean or Unit Lead of any questions, concerns or approval by late-June / early-July.

**Update as Needed:** Your Operating Plans will be a living document that should be regularly updated to reflect new knowledge of the epidemiology of COVID-19, developments in biotechnology, changes in healthcare and public health capacity, and evolving social and economic considerations associated with re-entry.

### Cover Page

**Each department will need to complete this section.** Please include a cover page with the Department / Unit Name, Date, Author(s) names. For length documents, include a Table of Contents.

### Operating Plan Overview

Provide a brief overview of the plan as it relates to the reopening of in-person campus activities for Fall 2020. This plan works in conjunction the UArizona Safe Return to Work Guidance.

<https://arizona.box.com/s/1lq83rmhi3s4ra1g81eo0yzvfqbx9t>

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Masks: Have disposable masks available for visitors and guests.

Telework: Computing options to be able to work from home.

## Goals and Tasks

### Goal 1: Protections for Faculty, and Staff

- Offer options for faculty and staff that limit their exposure risk (e.g., telework and modified job responsibilities).
- Maintain 144 sf for each person.
- Where necessary add air purifiers where ventilation is poor.
- Install plastic (or other appropriate clear material) barriers as needed in reception areas and between workstations.
- Work with FM on foot traffic flow and signage to support physical distancing. when moving within buildings, hallways, stairways, and elevators.
- Wear PPE when on campus or in any shared space.
- Promote by appointment only interactions whenever practical.
- Consistent with applicable law, put in place policies to protect the privacy of people at [higher risk for severe illness](#) regarding underlying medical conditions in compliance with applicable federal and state privacy and confidentiality laws.
- Cleaning of space will follow University guidelines (UArizona Safe Return to Work Guidance Section C.) (Per UA FM, custodial services is responsible for cleaning once daily for all offices, classrooms, meeting rooms, conference areas, and labs. In order to facilitate cleaning in between use, individuals, departments and unit, will have continuous access to cleaning supplies and will be provided with the necessary equipment to maintain clean services they use throughout the day. Individuals are encouraged to take proactive responsibility for ensuring that the surfaces they come in contact with on a daily basis are cleaned before and after each use.
- Unit leadership may identify areas with access restricted to faculty and staff working in those areas. Leadership of units sharing common space may establish restricted areas cooperatively.
- Leadership of units sharing common space may work closely with building managers to develop building foot traffic guidelines to reduce person-to-person contacts.
- Building managers and unit leadership will identify optimal building entry and exit points.

### Goal 2: Gatherings

- Pursue virtual group events, gatherings, or meetings, if possible, and promote social distancing of at least 6 feet between people if events are held. Limit group size to the extent possible.
- Utilize video or tele-conferencing (e.g. Zoom) as much as possible.
- Minimize meetings inside personal office space. Space will be designated by unit leadership for meetings outside of personal office space.
- Space must be cleaned by the users prior to use and after use to ensure a sanitized area.
- List of designated spaces will be assigned by each department or identified and assigned jointly by collaborating units.
- Scheduling of designated meeting space will be required, implemented and enforced.

- A log of scheduled meetings will be kept at the department level to help track users in the case of contamination.
- Limit any nonessential visitors, volunteers, and activities involving external groups or organizations as possible – especially with individuals who are not from the local geographic area (e.g., community, town, city, or county).
- Usage of masks (face coverings) is required for visitors and masks will be provided by each unit hosting visitors.
- Whenever visitors are invited to campus, the host unit is responsible for communicating campus COVID-19 protocols to guests and ensuring compliance.
- Host unit must work to ensure that the health and safety of the campus community is not compromised to the extent possible.

### **Goal 3: Telework and Virtual Meetings**

- When possible, use flexible work or learning sites (e.g., telework, virtual learning) and flexible work or learning hours (e.g., staggered shifts) to help establish policies and practices for social distancing (maintaining distance of approximately 6 feet) between people, especially if social distancing is recommended by state and local health authorities.
- Four 10-hour days with alternating schedules (optional).
- hours days alternating telework days (optional)
- Encourage telework for as many faculty and staff as possible, especially employees at higher risk for severe illness from COVID-19. At risk status to be defined by UArizona HR website.
- Replace in-person meetings with video- or tele-conference calls whenever possible.
- Shared service strategy to be put into place to maintain work efficiency should some personnel become ill.

### **Goal 4: Travel and Transit**

- Consider options for limiting non-essential travel in accordance with state and local regulations and guidance.
- Encourage faculty and staff who use public transportation or ride sharing to use forms of transportation that minimize close contact with others (e.g., biking, walking, driving or riding by car either alone or with household members).
- Encourage faculty and staff who use public transportation or ride sharing to follow CDC guidance on how to [protect yourself when using transportation](#). Additionally, encourage them to commute during less busy times and [clean their hands](#) as soon as possible after their trip.
- 14-day quarantine after return from travel.

### **Data Management and Assessment**

As suggested by the Guidance Document the College needs to coordinate the use of RCU Box folders to keep completed templates for each UNIT and to review and assess the plans as the University situation is updated.

### **Communication**

- All plans will be communicated to faculty staff via departmental and college listservs.
- Departments will have COOP in place for emergency changes.
- Signage will be provided via Facilities Management and will be installed with assistance from building managers.

- Regular communications between leadership of units sharing common spaces as well as building manager will take place regularly to improve processes.
- All plans and restrictions should be clearly indicated verbally and with the aid of signage to all persons, faculty, staff, students and visitors and anyone using these spaces.
- Following UArizona guidelines, information about potential or identified COVID cases should be communicated to personnel to who many have had contact and UArizona protocols for tracing will be implemented.

DRAFT

## UArizona Checklist: COVID-19 Prevention at Work

UArizona departments or work units are highly encouraged to document their workplace COVID-19 Prevention Measures using the following checklist and review them with personnel.

Make this checklist available to all employees, at all times (i.e. maintain online, email, et.).

|   |                       |
|---|-----------------------|
| Date:   | Completed By:         |
| Organization/Department Name:                               | Worksite Location(s): |
| Department/Unit COVID-19 Prevention Plan and Plan Location: |                       |

| PHYSICAL DISTANCING   | Check all that apply  | Other measures taken (describe): |
|---|---|----------------------------------|
| 1. Describe how you are implementing the physical distancing requirements (maintaining 6+ feet spacing between people, minimizing interpersonal contact). | <input type="checkbox"/> Telework options offered.<br><input type="checkbox"/> Shifts/breaks times/start times staggered.<br><input type="checkbox"/> Maximum space capacity determined based on room size.<br><input type="checkbox"/> In-person meetings limited (conference call, virtual options instead).<br><input type="checkbox"/> Non-critical in person meetings postponed.<br><input type="checkbox"/> Spread out work areas/physically separate workstations.<br><input type="checkbox"/> Attempt to minimize passing within 6 feet in between personnel and within work areas.<br><input type="checkbox"/> Designated drop-off/pick-up areas for shared tools and equipment. |                                  |

|   |  |  |
|---|--|--|
| <p>2. Describe how you are communicating physical distancing requirements to workers, customers and visitors.</p> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Posters/signage/floor markings installed or posted.</li> <li><input type="checkbox"/> Communicated during staff meetings.</li> <li><input type="checkbox"/> Email communication.</li> <li><input type="checkbox"/> Established procedures.</li> </ul>  |  |
| <p>1. Describe the plans that should followed when personnel test positive for COVID-19.</p>                      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Determine the party that employees will go to when testing positive or with questions and/or concerns, and who will contact Facilities Management for cleaning in the event of a positive employee.</li> </ul>   |  |
| <p>1. List the product(s) used to clean and disinfect.</p>  | <ul style="list-style-type: none"> <li><input type="checkbox"/> Alcohol solution with at least 70% alcohol</li> <li><input type="checkbox"/> 10% bleach/water solution</li> <li><input type="checkbox"/> <a href="#">EPA-registered disinfectant for use against SARS-CoV-2:</a> <ul style="list-style-type: none"> <li><b>a.</b> Manufacturer: _____</li> <li><b>b.</b> Name: _____</li> </ul> </li> </ul>        |  |
| <p>2. Describe the safety precautions that are taken when using disinfectant(s).</p>                              | <ul style="list-style-type: none"> <li><input type="checkbox"/> Reviewing safety data sheet (SDS) for each product.</li> <li><input type="checkbox"/> Reviewing <a href="#">EPA-registered disinfectant for use against SARS-CoV-2.</a></li> <li><input type="checkbox"/> Following manufacturer's instructions for product use.</li> <li><input type="checkbox"/> Using personal protective equipment.</li> </ul> |  |
| <p>3. Communicate hazards and safeguards to protect personnel.</p>  | <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide information about working safely with disinfectants.</li> <li><input type="checkbox"/> Communicate the hazards and safeguards required to protect individuals from exposure.</li> </ul>  |  |

## Prior to Returning, Supervisors Should Ask the Hard Questions

- Does our workplace have a communication plan in place (e.g. phone tree, email, etc.)?
- What are our telework and flexible schedule policies? How can these help us maintain physical distancing?
- How will schools/camps/daycares being closed impact our team and how do we adapt?
- What are our essential functions and are we prepared to pivot back and forth between routine and suspended operations? What do we need to achieve flexibility?
- Have all plans been shared and communicated to employees, clients, and contractors?
- What are our plans for employees and/or employee's family members who become sick?
- What are our plans if an employee becomes ill while in the office?
- Have we identified the areas in our workplace with the greatest potential for transmission, and what controls have we put in place?
- Have we trained our employees on proper hygiene and prevention methods?
- Have we ensured that all resources have been distributed equitably, and that employees with elevated or different needs are being met?
- How will we safely navigate community gatherings and/or meetings?
- Do we have the resources to routinely disinfect, such as tissues, hand sanitizer, disinfecting wipes, etc.?
- Have we provided communication and postings reminding employees about best practices?

## Department/Unit PPE and Signage Order Form

(Please check with our building manager. Some items may have been ordered already.)

| ITEM   | ORDER | DESCRIPTION  |
|--|-------|--|
| <b>PPE - MASKS</b>   |       | <b>Disposable Face Masks</b>                       |
| <b>PPE- HAND SANITIZER</b>   |       | <b>Hand sanitizer</b>                              |
| <b>PPE - GLOVES</b>  |       | <b>Gloves</b>                                      |
| <b>DISINFECTANT/BOTTLES</b>  |       | <b>Disinfectant for common surfaces and spaces</b> |
| <b>1</b>   |       | <b>Sign 1 - 11 X 17" or 18 X 28" Signs</b>         |
| <b>2</b>  |       | <b>Sign 2 - 11 X 17" or 18 X 28" Signs</b>         |

|   |  |   |
|---|--|---|
|    |  | <p><b>Sign 3 - 11 X 17" or 18 X 28" Signs</b></p> |
|    |  | <p><b>Sign 4 - 11 X 17" or 18 X 28" Signs</b></p> |
|  |  | <p><b>Sign 5 - 17 X 11" or 28 X 18" Signs</b></p> |
|  |  | <p><b>Sign 6 - 17 X 11" or 28 X 18" Signs</b></p> |
|  |  | <p><b>Sign 7 - 17 X 11" or 28 X 18" Signs</b></p> |

|                  |  |   |
|------------------|--|---|
| <p><b>8</b></p>  |  | <p><b>Sign 8 - 17 X 11" or 28 X 18" Signs</b></p> |
| <p><b>9</b></p>  |  | <p><b>Sign 9 - 12" Rounds</b></p>                 |
| <p><b>10</b></p> |  | <p><b>Sign 10 - 12" Rounds</b></p>                |
| <p><b>11</b></p> |  | <p><b>Sign 11 - 12" Rounds</b></p>                |
| <p><b>12</b></p> |  | <p><b>Sign 12 - 11 X 8.5" Sign</b></p>            |

|   |  |  |
|---|--|--|
| <p><b>13</b></p>   |  | <p><b>Sign 13 - 24" or 12" Round</b></p> |
| <p><b>14</b></p>   |  | <p><b>Sign 14 - 8.5 X 11" Sign</b></p>   |
| <p><b>15</b></p>   |  | <p><b>Sign 15 - 12" Round</b></p>        |
| <p><b>16</b></p>  |  | <p><b>Sign 16 - 24 X 16" Arrow</b></p>   |

## **7.0 Contingency Planning (ReOp Team 6)**

### **7.1 Summary Recommendation:**

Continuously work with college stakeholders regarding contingency plans. This includes reviewing the scenario plans from the UA Reentry Implementation team.

### **7.2 Detailed Content - Contingency Planning subcommittee**

This subcommittee will develop plans or processes for situations or circumstances that are not the norm. These include, but are not limited to students, faculty or staff that are at high risk for the COVID, those that have contracted COVID, potential for hybrid teaching and working solutions and the potential for individuals working from home for the longer term. An example of solutions includes - are there (long-term) intermediate solutions (e.g. on-campus, BUT: isolated in sanitized carrel or at outdoor tables w/ laptop or parking lots for car-campus) that can help with technology disparity (e.g. WiFi access/speed).

#### **Subcommittee Members:**

Leo Enfield  
Margie Puerta Edson - Co Lead  
Moe Momayez  
Brad Ross – Co Lead  
Pavlo Krokhmal

#### **Questions/Issues to address:**

1. **1) How will the risks for individuals be managed within the College of Engineering?**
  - C) Privacy issues involved in disclosing risk status will be addressed in compliance with UArizona policy.
  - C) Issues regarding equitable treatment of all persons with regard to implementation of policies to ensure that staff and faculty members must have equal opportunity to a safe work environment.
  - C) Accept that all persons have some level of risk - either personally or within their contacts/households, and seek to create recommendations that protect all employees.
  - R) In all cases, options to alternative work situations should be explored.
  
2. **2) What to do with situations where someone has contracted COVID?**
  - C) Who has a “right to know” - supervisors, co-workers, department, college or UA wide (UA protocol?)
  - C) The issue of “Individual privacy vs Public safety” in the context of campus reopening may warrant further and broader discussion. Some committee

members felt that public safety should be prioritized over the privacy of COVID-positive status of an employee/student.

- R) It is therefore recommended that legal advice is obtained whether employees and students can be required to sign a privacy waiver regarding their possible COVID-positive status.

### **3) Managing an employee's work while recovering from COVID without putting extra stress on other staff, faculty, or graduate students.**

- R) Our recommendation is that the UA develop specific guidelines for how to manage COVID outbreaks on campus. Until further guidelines are developed, the committee makes the following recommendations as outlined in the scenarios below:
- R) The situations in which an employee or a student test positive/become ill/seriously ill incur a number of possible scenarios for which there is currently no guidance in official UArizona reentry documents. Some of the scenarios and possible resolutions are presented below:
- C) Scenario I: A student identifies him/herself to the class instructor as COVID-positive, thereby informing of prolonged class absence. Should this information be shared by the instructor, and with which parties?
- Recommendations:
  - (a) The instructor shares this information with the Department Head and the Dean for Academic Affairs office. The Dean's office identifies the other courses that this student is enrolled in and informs the corresponding instructors and university administrators.
  - (b) The instructor, in addition to (a), also shares this information with the rest of the class, without revealing the identity of the student in question.
  - (c) The instructor, in addition to (a), shares the information with the rest of students in the class, including the identity of the student in question. This will allow the other students who were in closer proximity/contact with the infected student to request COVID testing, consider self-quarantine, etc., so as to possibly minimize the spread of the disease.
- C) Scenario II: The university administration identifies a student as COVID-positive, e.g., during on-campus testing.
- Recommendations:
  - (a) The university administration informs the relevant administrative units and the instructor(s) of the courses that the infected student is enrolled in.
  - (b) Similarly to Scenario I above, the university administration shares the information with the other students in relevant classes, without

revealing the identity of the infected student, or **(c)** with identifying the student in question.

- **C) Scenario III:** A number of students in the class become COVID-positive/ill.

**Recommendations:**

- i. **(a)** college/university-wide policy should be in place on when to move a course into an online teaching mode; for example, the course is moved into online teaching mode when X% of students enrolled in the class become COVID-positive/ill.

**(b)** If the instructor of the course in question teaches multiple classes, all such classes are moved to online mode, since the instructor him/herself may become the transmission agent.

ii.

**(c)** The Dean's office monitors situation with infected students in the class(es) and may authorize a return to in-person instruction mode if the percentage of COVID-positive students in a class drops below Y%.

- **C) Scenario IV:** Class instructor becomes COVID-positive/ill.

**Recommendations:**

**(a)** The instructor notifies the Department Head and the Dean's office and with their approval moves all of his/her classes to an online teaching mode. After medical providers allow the instructor to resume work duties, the instructor may obtain an authorization from the Dean's office to resume in-person teaching mode.

**(b)** If the instructor becomes incapable of teaching online/remotely, the Department involves substitute instructor(s) to teach the corresponding class(es), in accordance with a previously developed and approved teaching substitution plan.

**(c)** The Department allows the substitute instructors to choose, at the substitute instructor's discretion, whether to substitute in an online or in-person/hybrid teaching mode.

**(d)** In the event that no substitute instructors are available, the following options may be considered by the Department and Dean's office:

(i) With a recommendation of primary course instructor, the class TA(s), conduct teaching in an online or in-person/teaching mode, if appropriate, feasible (e.g., to comply with the TAs position FTE requirements, the Department may temporarily hire additional TAs/graders to allow the qualified TA to teach, etc.).

(ii) If the course has no TAs or no TAs qualified to teach, the class students are asked to engage in "self-instructing" mode, where they master the class material on their own. The department may temporarily hire additional TAs/graders to provide more TA office hours during this period.

- (iii) Alternatively, the course is suspended until the primary instructor is able to resume teaching duties.
- (iv) The course is cancelled.

#### **4) How can long-term work from home be facilitated where appropriate?**

C) Technology issues - WIFI and internet access for people who have inadequate technology- The UA gear-to-go has some Hotspot units that can be distributed to individuals with poor internet access. <https://arizonauits.getconnect2.com/>

R) Insuring “safe” data controls. Instructional videos for recommended security controls for individual home offices can be found here: <https://remote-learning.arizona.edu/campus-technology-how-tos/faculty>

C) Availability of resources:

- i. R) ENGR-IT recommends using a small footprint low-end home office system to remote connect to the current office computer for optimal use of UA resources.
- ii. R) Switch to Virtual Desktop Infrastructure so both UA Office system and Home Office connect to the same desktop environment online.
- iii. R) Offices with poor air circulation and with multiple employees may want to invest in an air purifier such as the Winix 5300-2 Air Purifier.
- iv. R) Stager workforce (work 4 days together the apart 10 days) Based on this discussion:

[https://www.ted.com/talks/uri\\_alon\\_a\\_covid\\_19\\_exit\\_strategy\\_to\\_end\\_lockdown\\_and\\_reopen\\_the\\_economy?language=en#t-43391](https://www.ted.com/talks/uri_alon_a_covid_19_exit_strategy_to_end_lockdown_and_reopen_the_economy?language=en#t-43391)

C) Best for non-teaching positions.

- v. R) Teaching in a mask may necessitate the use of a portable USB mic such as the Samson XPD2 Lavalier USB Digital Wireless System.

#### **5) What if essential personnel are not able to work?**

- C) Managing operation when key personnel are unavailable:
  - R) Administration: Identify individuals who have experience for a given position.
  - R) Instruction: Identify other faculty who are able to teach a course.
  - R) May have to hire qualified individual outside the university.
  - R) Use recorded lectures from previous semesters.
  - R) Record lectures before or at the start of the semester.
  - R) Face-to-face meetings should be restricted to in-class lectures only. All other meetings and advising should be conducted remotely.
  - R) Wherever possible, TAs could be asked to substitute for the course instructor.
  - R) Limit travel to one person per team or department.
  - R) Limit presence in the office to one or two team members if occupying common office space.
  - R) Protect and shield (instructors) first and foremost.
  - R) Identify Use previous people that were in that positions.
  - R) Identify essential positions and backup for that position before it happens.
  - R) Use of pre-recorded lectures.

R) Use of Tas.

R) Cancel class at last resort.

R) Consider recording lectures before start of semester for class where substitute is not possible.

R) To reduce the potential that all members of a single team do not become ill at the same time, co-workers should not hold meetings, attend conferences, events or travel at the same time. For example, all members of the MARCOM would not be in the office at the same time or all members of the Development & Alumni Team would not travel to the same event out of state or all members of the Academic Affairs team would not host a student recruitment activity together.

#### **6. I) Streamline process of where reporting goes and decisions are made**

R) Create a committee of internal and external experts to review reentry plans as well as implementation of plans.

R) Recommend that DRC develop a plan for accommodating quizzes/exams for DRC students using Zoom, etc. In Spring 2020, the task of quiz/exam accommodations for DRC students fell upon instructors.

#### **Building Operations - Signage**

All department and unit heads along with their building managers will arrange a plan for signage. Using the guidance from the *UA Safe Return* training materials, plans for each of the five engineering buildings. As soon as the ENGR ReOp is approved by UA administration, five teams for each of the ENGR buildings will work to establish appropriate signage and placement that enable appropriate workflows and movement of students in and out of buildings. Special attention will be given to class schedules and times where many students need to convene for a lab activity. Additional attention will be to allow accessibility and ease of movement to all our students.

#### **Communications Plan**

We acknowledge the importance of clear and continuous communications before the Fall 2020 semester and throughout the entire semester. The ENGR Dean hosts two meetings per week to keep up to date with the department heads on directions and action items that occur throughout the week during the Provost's meeting and with others. The ENGR Dean also sends out a weekly email to highlight key communications to all ENGR faculty and staff. As our plan unfolds and more faculty, staff, students, and visitors return to campus, we need to increase our communications. ENGR leadership along with the department heads, unit heads, academic advising, and marketing and communications will establish plans for communicating UA policies regarding the shared and personal responsibility expected in the Fall Reopening.

Academic Advising will work with MarComm (Engineering Marketing and Communications) to establish a Fall 2020 ReOpening packet. This will be comprehensive and include guidance on the Wildcat Wellness check as well as campus-wide expectations of wearing face coverings.

MarComm will work with the departments to include key and essential Fall 2020 Reopening trainings on departmental websites. The UA Safe Return Training will be hosted.

The Associate Dean for Research will update faculty research groups on the expectation of the UA Safe Return Training to the research groups that opened under the Phase 3 reopening in June 2020.

### **Data Management**

Data will be maintained on shared College servers that will be accessible to various department heads, unit managers, and business managers in the college. Data to be maintained will be the

- Approved Research Restart Approvals.
- University Level Draft plans.
- ENGR ReOp plans.
- Building signage plans.
- Results from the courses and classes team that offers guidance to faculty regarding course syllabi and expectations.
- Recommendations from contingency plans developed at the University and College levels.
- Guidance from HR, OGC, and related offices regarding action plans as special situations unfold.
- Guidance from Academic Affairs on evolving student policies.

In addition to a soft copy on the College server, we intend to create up to three hard copy policy manuals (ENGR ReOp) that will be updated and can be used as a physical back up to the electronic copies stored on the servers.

### **OPEN QUESTIONS:**

As of June 14, 2020, no written guidance on how to handle staff, faculty, student, and outside visitors who self-report they have traveled outside the state. Communications are emerging that any faculty or staff who travel outside of the state (including outside the US) should undergo a 14 day self-isolation period before returning to campus. We will extend this constituency to include students, post-doctoral scholars, and DCCs. Upon returning to campus either for research activities in summer 2020 or for reopening in fall 2020: all out of state students, all students with out of state travel (including international travel), and all international students (newly arrived in Fall 2020) will undergo a 14 day period of self-isolation before returning to on campus activities.

As of June 14, 2020: the two most concerning questions for faculty, staff, and students are

- 1) What are the reporting rights for someone who may become sick, or who resides with someone who becomes sick? The balance of the rights to privacy (the sick person) and the rights to know (all other individuals who may have come in contact) must be determined. Current guidance is to contact Campus Health, but ENGR leadership needs to provide a clear process that all will follow.
- 2) PPE wearing compliance. The UA has not included “required” in terms of cloth face coverings. Many in the ENGR community (staff, faculty, and students) are quite concerned about how compliance will be enforced. Some are even concerned about retaliation.

June 16, 2020 Provost Memo Update regarding face coverings:

**Employees, students, and visitors must use face coverings as follows:**

- **Indoor** – You are required to wear a face covering in all University of Arizona buildings (including hallways, public spaces, restrooms, and common areas), with the exception of those private offices, workspaces, and formal meeting areas where physical distancing of at least six feet is possible.
- **Outdoor** – You are required to wear a face covering while in University of Arizona outdoor spaces except where physical distancing of at least six feet is possible.

**Los empleados, estudiantes y visitantes tienen que usar cubiertas de rostro tal como se señala a continuación:**

- **Bajo techo** – Tienen que usar cubierta de rostro en todos los edificios de la Universidad de Arizona (inclusive los pasillos, espacios públicos, baños y áreas comunes), a excepción de en aquellas oficinas privadas, espacios de trabajo y áreas de reuniones formales en que es posible guardar una distancia física de, por lo menos, seis pies.
- **A la intemperie (afuera)** – Tienen que usar cubierta de rostro mientras están en los espacios a la intemperie (afuera) de la Universidad de Arizona, a excepción de cuando es posible guardar una distancia física de, por lo menos, seis pies.