College of Science Re-Entry Plan

JULY 22, 2020
COLLEGE OF SCIENCE RE-ENTRY TASK FORCE
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Overview

**Purpose:** The College of Science plan is designed to ensure a safe and healthy campus re-entry in Fall 2020. This plan includes key considerations in addressing instructional delivery, workspace, personnel, and operational issues in ensuring compliance with University of Arizona Re-entry Task Force directives. General elements common to all areas of operation are described in the main plan, with individual unit/department plans attached in the Appendix. In all cases, campus-wide plans and directives supersede College-wide and unit-wide plans, and these plans will be modified as needed to remain in compliance with campus-wide plans.

The Department and College Operating Plans are living documents that will 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.

**Key Milestones**

Key milestones are provided for each task in the plan. Milestones mark a significant event or decision point. Here are some initial milestone dates:

- 6/5: Unit operating plan due to CoS Dean
- 6/18: Dean submits plans to Provost
- 6/18: Determine modality for all courses
- **6/24:** University releases re-entry guidelines for fall semester
- 6/30 (or before): Provost approves revised plans
- 8/24: Fall semester begins

**Budget Summary Information**

Specific requests for additional supplies, equipment, personnel costs associated with re-entry are described in the unit plans in the Appendix. In some cases, costs are known. See Department plans for details.

**Goals and Tasks**

Goals and tasks common to all College of Science units are described here. More specific tasks are described in the individual unit plans in the Appendix.
Goal 1: **Instructional Delivery and Student Engagement.**

We will develop solutions specific to our disciplines and their normal modes of instructional delivery and student engagement that will allow us to accommodate a wide range of scenarios in instructional delivery and student engagement for fall semester, including:

- The possibility that students will be participating remotely for the whole semester;
- The possibility that instructors will be participating remotely for the whole semester;
- The possibility of shifting from in-person to remote instruction, or vice versa, at some point during the semester; and
- The possibility that individual students or instructors may become ill or be quarantined during the semester and need to continue teaching/learning remotely even if they started the semester in person.

When traditional modes of instruction and student engagement cannot be adapted to these scenarios, we will seek alternate experiences equally relevant to the discipline.

Goal 2: **Facilities, Spaces, and Environment.**

We will ensure our facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

Goal 3: **Personnel and Operations.**

We will develop processes and procedures that provide flexible and equitable treatment of faculty and staff and do everything possible to protect vulnerable populations while also ensuring we have the intellectual capital and support needed for operations in fulfillment of the unit’s mission. Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.

**Data Management and Assessment**

Data collected by the Re-Entry Task Force will be stored in a secure University of Arizona “Box” folder accessible to the committee members and CoS Department Heads. This includes individual department re-entry plans and related unit-specific protocols. Information related to individual employees and students will only be communicated with appropriate HR representatives to comply with HIPAA, FERPA, and other data-related requirements.

**Communication**

The College of Science Dean’s office will communicate with individual units via Department Head and Associate Department Head listserv messages and regular meetings. Department leadership will transmit messaging as appropriate to employees and students in their units.
Task #1.1
Goal 1: **Instructional Delivery and Student Engagement.**

**Task Name:** College of Science Instructional Modifications

**Description:** Modify curriculum, course offerings, space usage, and procedures for social distancing in classrooms

**Responsible Person or Unit:** Department Leadership and Faculty

**Key timelines and decisions to effectively manage task:**

5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/15/20: Identify necessary changes to schedule and/or curriculum to achieve social distancing requirements
7/1/20: Identify modalities of instruction for specific courses
7/15/20: Develop “teaching succession” plan in case of instructor illness
6/24/20?: UA Announcement of return to campus

**Key protocols that need to be in place to effectively support outcomes:**

Determine occupancy limits of classrooms to comply with social distancing requirements prescribed in UA Re-Entry Plan.
Develop ability to livestream and/or record video of classes. Some students and instructors may not be able to attend in-person, so this is crucial.
Obtain supplies and equipment for disinfection and socially-distanced instruction.
Revise curricula/course offerings as necessary to comply with classroom occupancy limits:
  - Determine if more sections can be offered; if not, how can class meetings be modified to maintain occupancy within specified limits?
  - Can instructor teaching assignments be modified for instructors who are not comfortable teaching in-person?
Develop list of substitutes in the case of instructor/TA absences due to illness, etc.
Determine protocols needed for disinfection, proper social distancing, etc.
Develop guidelines and policies for outreach and campus visitors.

**Identification of necessary equipment (face coverings, technology, etc.) and other supplies:**

Disinfection solutions, wipes, gloves for decontaminating surfaces
Cameras/microphones to record and stream video from classrooms
Masks or face shields for instructors

**Financial Considerations:**
Offering more sections will likely result in higher instructional costs if more instructors and/or TAs need to be hired. Technology and costs of face coverings.
Risk/Uncertainty:
Not sure if UA technology can support livestreaming from this many students at once. Concern about student traffic control in building/stairs/elevators/classrooms.
Task # 2.1

Goal 2: Facilities, Spaces, and Environment.

Task Name: College of Science Space and Environment Modifications

Description: Modify Departmental/College spaces

Responsible Person or Unit: Department Faculty and Staff

Key timelines and decisions to effectively manage task:
5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/15/20: Identify necessary workspace changes to achieve social distancing requirements
6/24/20?: UA Announcement of return to campus
8/1/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc as outlined in UA Re-Entry Plan

Key protocols that need to be in place to effectively support outcomes:
Determine occupancy limits of Departmental spaces to comply with social distancing requirements prescribed in UA Re-Entry Plan.
Ensure chairs/desks/seating in Department common spaces such as conference rooms, tutor rooms, large offices are at least 6 ft apart.
Designate person(s) responsible for posting and updating signage in Departmental spaces.

Adopt flexible work schedules if needed, to comply with space occupancy limits.
Determine protocols needed for disinfection, proper social distancing, etc. and ensure all Department members are properly trained in these practices.

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:
Disinfection solutions, wipes, gloves for decontaminating surfaces.
Possible modifications to spaces (dividers, plexiglass shields, etc) to ensure social distancing.
Masks or face shields for employees, students, and visitors.
Signage, labeling for walls, floors to maintain distancing and communicate COVID guidelines.
Flexible work plans may require new technology for employees who work from home.

Financial Considerations:
Space modifications and flexible work plans may involve costs in equipment and technology.
Face coverings and disinfectants for employees and office spaces.

Risk/Uncertainty:
Concern about student traffic control in building/stairs/elevators. Ensuring student/visitor compliance. Monitoring and enforcing social distancing in large spaces such as conference rooms.
Task # 3.1

Goal 3: Personnel and Operations.

**Task Name:** College of Science Modifications to Unit Operations

**Description:** Adapt daily unit operations and practices to comply with social distancing and minimize risk of disease transmission

**Responsible Person or Unit:** Department Faculty and Staff

**Key timelines and decisions to effectively manage task:**

- 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
- 6/18/20: Identify necessary changes to achieve social distancing requirements
- 6/24/20?: UA Announcement of return to campus
- 8/1/20: Implement necessary changes to work space, schedules, and practices to comply with UA Re-Entry Plan requirements

**Key protocols that need to be in place to effectively support outcomes:**

- Determine essential functions and services of the unit. Allow for flexible participation for employees and students where possible. Options may include allowing employees (especially at-risk employees) to work from home if possible, creating staggered work schedules, reducing business hours in public-facing offices and units.
- Determine which Department and College operations absolutely require face-to-face interactions, and which can be done remotely. **All meetings and instructor office hours should be carried out remotely, unless sufficient space is available to ensure 6’ distance between attendees.**
- Designate individual(s) responsible for disinfecting shared equipment in each Departmentally-controlled space.
- Designate individual(s) responsible for updating signage related to health and safety practices in each Departmentally-controlled space.
- Ensure employee workspaces follow 6’ social distancing requirement. Rearrange workspace if needed to accommodate this.

**Financial Considerations:**
Costs may be associated with rearranging workspaces. Working from home may involve technology costs.

**Risk/Uncertainty:**
Task # 3.2

Goal 3: **Personnel and Operations.**

**Task Name:** College of Science Assurance of Equitable Outcomes

**Description:** Establish procedures to assure equitable outcomes for all students, staff, and faculty regardless of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or their need to refrain from in-person activities due to concerns about COVID-19. According to the CDC, “Long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age. Among some racial and ethnic minority groups, including non-Hispanic black persons, Hispanics and Latinos, and American Indians/Alaska Natives, evidence points to higher rates of hospitalization or death from COVID-19 than among non-Hispanic white persons.” ([https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html)). In addition, graduate students and postdoctoral fellows are particularly vulnerable because of their lack of permanent positions.

**Responsible Person or Unit:** Department Faculty and Staff, College-wide Committee

**Key timelines and decisions to effectively manage task:**

- 7/14/20: Ad hoc committee on working conditions for TAs and Postdocs established
- 8/1/20: Ad hoc committee operational

**Key protocols that need to be in place to effectively support outcomes:**

The College will follow the guidelines for fair accommodations laid out by Human Resources, involving their guidance and processes, and involving the Disability Resources Center when appropriate. The College will emphasize the need for supervisors to be familiar with the “Return to Workplace Decision Tree,” and to deal sensitively with the issues that employees may have.

The College will establish an ad hoc COS committee to deal with fall re-entry and its impact on working conditions and assignments for graduate students and postdocs. The committee will help develop reasonable expectations and responsibilities for graduate student assistants and associates (including both TAs and RAs) and postdocs during re-entry. TAs will be essential in classrooms and (course-related) labs, and RAs and postdocs will be essential in research activities, so we want to anticipate situations where GAs and postdocs may be unfairly coerced to bear the brunt of transmission risks in classroom and lab settings, and develop measures to deal with these situations. The committee will charged with balancing these concerns with reasonable and responsible expectations respecting the curricular and research related needs of departments and PIs, as well as recognizing the sources and conditions of financial support for GAs and postdocs. The committee will also develop provisional policies for Temporary Modified
Work Conditions requests, and act as a first option for mediating between GAs/postdocs and supervisors.

**Financial Considerations:**
There may be costs associated with ensuring adequate staffing with TAs, while also ensure adequate safety for those TAs.

**Risk/Uncertainty:**
Appendix

Department re-entry plans
Lunar and Planetary Laboratory Re-Entry Plan

JUNE 17, 2020
TIMOTHY SWINDLE, LPL DIRECTOR
Overview

As LPL returns to offices in the LPL buildings, Drake, Kuiper and Sonett, all plans have two overriding priorities. First, we want to minimize the impact of COVID-19, both by minimizing its spread and by minimizing the chances that those in higher risk categories will become infected. Second, we want to maximize our productivity, in part because we simply want to fulfill our mission to learn and teach, and in part because the more productive we are, the better the financial situation of both LPL and the University of Arizona.

In all cases, any policies implemented are subject to change, and are superseded by policies announced by the University of Arizona or the UA College of Science. In particular, the status of laboratories is subject to the rules set up by the Office of Research Impact & Innovation, and the status of classroom teaching is subject to the recommendations and requirements of the university. All guidelines are designed to be consistent with “UArizona_Safe_Work_Return_Comprehensive_Guidance_DRAFT_5-19-2020”.

Basic strategy:

The basic goal is to reduce the occupancy of all buildings to 25-50% of the pre-COVID levels.

Employees and students who can work effectively from home are encouraged you to do so. This minimizes those individuals’ chances of becoming infected, and reduces the number of people in the building who can potentially transmit the virus. Staff will work with their supervisors to coordinate scheduling and assignment details.

Those who cannot work effectively from home, but are at high risk of complications, or are in close association with someone who is, must contact their supervisor or the LPL Director as soon as possible to try to either find ways to perform their current duties effectively or to find other duties that they can perform effectively.

For those who cannot work effectively from home, but are not in a high-risk category for complications, the intent of these guidelines is for them to be able to work in their laboratory or office, and not to have a greatly increased risk of infection. Again, staff should work with their supervisors to coordinate scheduling and assignment details.
Goal 1: Instructional Delivery and Student Engagement.

Task #1.1: Lunar and Planetary Laboratory Instructional Modifications

Description: Modify curriculum, course offerings, space usage, and procedures for social distancing in classrooms

Responsible Person or Unit: Department Leadership and Faculty

Key timelines and decisions to effectively manage task:

- 6/5/20: Plan submitted to College of Science
- 6/19/20: Plan submitted by College of Science to Provost’s office
- 6/24/20?: UA Announcement of return to campus
- 6/26/20: Approval of plan.
- 7/15/20: Determination of final teaching plan based on allowed capacity, requirements for in-person vs. online, etc.
- 8/14/20: All necessary equipment installed.

Key protocols that need to be in place to effectively support outcomes:

Determine allowed in-person occupancy limits of classrooms to comply with social distancing requirements prescribed in UA Re-Entry Plan.
Develop ability to livestream and/or record video of classes. Some students and instructors may not be able to attend in-person, so this is crucial. This will build on technologies acquired and lessons learned during the second half of Spring 2020. All instructors will be required to use D2L.
Revise curricula/course offerings as necessary to comply with classroom occupancy limits:
  - Determine if class meetings can be modified to maintain occupancy within specified limits
  - Determine if instructor teaching assignments can be modified for instructors who are not comfortable teaching in-person
Develop list of substitutes in the case of instructor/TA absences due to illness, etc.
Determine protocols needed for disinfection, proper social distancing, etc.
Obtain supplies and equipment for disinfection and socially-distanced instruction.
All outreach will be carried out remotely, unless sufficient space is available to ensure 6’ distance between attendees.

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:

Disinfection solutions, wipes, gloves for decontaminating surfaces
Cameras/microphones to record and stream video from classrooms
Masks or face shields for instructors
Separate microphones for each instructor

**Financial Considerations:**
Technology and face covering costs.

**Risk/Uncertainty:**
Not sure if UA technology can support livestreaming from this many students at once. Concern about student traffic control in building/stairs/elevators/classrooms (see Space and Environment).
Goal 2: Facilities, Spaces, and Environment.

Task #2.1: Lunar and Planetary Laboratory Space and Environment

Description: Modify LPL space to allow faculty, staff and students to meet CDC social distancing guidelines

Responsible Person or Unit: Department Faculty and Staff

Key timelines and decisions to effectively manage task:
5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/5/20: Plan submitted to College of Science
6/19/20: Plan submitted by College of Science to Provost’s office
6/24/20?: UA Announcement of return to campus
6/26/20: Approval of plan.
8/1/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc as outlined in UA Re-Entry Plan

Key protocols that need to be in place to effectively support outcomes:
Unless CDC social distancing guidelines can be maintained with more than one person in an office, all offices should have only one occupant at a time. For shared offices, such as graduate student office, staggered shifts will have to be negotiated by the individuals, in consultation with the department leadership.
Ensure chairs/desks/seating in Department common spaces such as conference rooms and large offices are at least 6 ft apart.
Adopt flexible work schedules if needed, to comply with space occupancy limits.
Determine protocols needed for disinfection, proper social distancing, etc. and ensure all Department members are properly trained in these practices.

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:
Disinfection solutions, wipes, gloves for decontaminating surfaces.
Possible modifications to spaces (dividers, plexiglass shields, etc) to ensure social distancing.
Masks or face shields for employees, students, and visitors.
Signage, labeling for walls, floors to maintain distancing and communicate COVID guidelines.
Flexible work plans may require new technology for employees who work from home.

Financial Considerations:
Space modifications and flexible work plans may involve costs in equipment and technology.
Face coverings and disinfectants for employees and office spaces.

Risk/Uncertainty:
Ensuring student/visitor compliance. Monitoring and enforcing social distancing in large spaces such as conference rooms.

**Task #2.2:** Traffic flow in Kuiper Space Sciences building during times of high traffic

**Description:** Designate three stairways as one-way between the ground floor and the 3rd floor, where classrooms are, during times before and after large classes, to enable smoother traffic flow and less contact between students. Specifically, the stairway from the main entrance will be designated “up” (entrance) and the stairways on the west side of the building and in the center of the east side of the building will be designated “down” (exit).

**Responsible Person or Unit:** Building manager

**Key timelines and decisions to effectively manage task:**
- 6/5/20: Plan submitted to College of Science
- 6/19/20: Plan submitted by College of Science to Provost’s office
- 6/26/20: Approval of plan.
- 8/1/20: Installation of all necessary signage.

**Key protocols that need to be in place to effectively support outcomes:**
Signage installed at each of the three stairways and at the exits to the largest classrooms. Directional signage installed between classroom exits and stairways.

**Identification of necessary equipment (face coverings, technology, etc.) and other supplies:**
Signage described above.

**Financial Considerations:**
Cost of signage

**Risk/Uncertainty:**
Ensuring compliance.
Goal 3: Personnel and Operations.

Task #3.1: Lunar and Planetary Laboratory Modifications to Unit Operations

Description: Adapt daily unit operations and practices to comply with social distancing and minimize risk of disease transmission, while maximizing productivity.

Responsible Person or Unit: Department Faculty and Staff

Key timelines and decisions to effectively manage task:
6/5/20: Plan submitted to College of Science
6/19/20: Plan submitted by College of Science to Provost’s office
6/24/20?: UA Announcement of return to campus
6/26/20: Approval of plan.
7/1/20: Begin of return to campus of staff
8/1/20: All necessary equipment installed, return of all staff and students who will be working in person.

Key protocols that need to be in place to effectively support outcomes:
Flexible participation for employees and students will be allowed where possible. All employees who can work from home will be encouraged to do so. To minimize the transmission of potentially contaminated surfaces and to allow as many people as possible to work from home, all forms (“paperwork”) will be electronic, to the extent allowed by university rules and federal law.
All meetings and instructor office hours should be carried out remotely, unless sufficient space is available to ensure 6’ distance between attendees. Other than classes, no meetings of more than 10 individuals are allowed without the prior consent of the LPL director.
Support for administrative, IT, business, and academic issues will be available, during normal working hours on weekdays, but as much support as possible will be remote. The business and academic offices in the Kuiper Building will each have at least one person present during times when the building is unlocked (mid-day on weekdays, depending on the schedule of classes).
Individual(s) will be designated to be responsible for disinfecting shared equipment in each LPL-controlled space.
Signage related to health and safety practices will be updated in each LPL-controlled space.
Workspaces will follow 6’ social distancing requirement for employees and students. Rearrange workspace if needed to accommodate this.
The Kuiper Space Sciences building will have the front door unlocked for limited hours when classes are being taught. The Sonett and Drake buildings will be accessible by key only.
Lunch and breaks will be taken in individuals’ offices or outside, not in common rooms.
**Financial Considerations:**
Costs may be associated with rearranging workspaces. Working from home may involve technology costs.

**Risk/Uncertainty:**
Loss of productivity of organization with large numbers of staff working from home.
Operating Plan Overview

The Arizona Geological Survey (AZGS) is a non-academic unit in the College of Science. The re-entry plan for AZGS will follow campus and College of Science guidelines. AZGS has been able to successfully transition to nearly all staff/operations being remote. Staff will be allowed to continue working remotely for the near term if they choose to do so. AZGS rarely receives visitors. Most visitors that wander into AZGS offices are usually there by mistake. AZGS does not participate in any teaching activities and most of the research/field work is done in isolated area (without coming into close contact with others).

AZGS is housed in the old Arid Lands Building, which is leased to UA and all building issues are communicated by UA Provost Business Office employees to UA Facilities. AZGS is not responsible for any aspects of the building management. Randi Bellassai (Assistant Director for Business and Finance) will work with the designated building managers and communicate building specifics to AZGS staff as they become available.

Key Milestones

Arizona Geological Survey is operating effectively remotely and is not under undo pressure to return staff to their offices. We will adhere to any milestones provided by campus and the College of Science.

AZGS has hard deadlines in early September for deliverables for several sponsored project. Staff will be on a staggered work schedule in the weeks prior to the deadline in order to limit the number of personnel on campus. This schedule will be communicated to all staff by August 10, 2020.

Budget Summary Information

Minimum increases are expected. Hand sanitizer and wipes were always kept on hand in the department, but its frequency of use will increase.

Goals and Tasks

All in person activities conducted in the common areas of our building will require the use of protective face masks and safe distancing. This plan is not meant to be exhaustive but just to add to and comply with the U of A re-entry plan.

Goal 1: Institutional Delivery and Student engagement

Arizona Geological Survey is a non-academic unit that employs student workers. Currently, all have transitioned successfully to working remote. If the students choose, they will be permitted to work in our office once the College has deemed e-entry appropriate. Workstations will be configured to provide social distancing.

Goal 2: Facilities, Space, and Environment

Arizona Geological Survey is prepared to follow guidelines for best practices for health and safety to employees and visitors. Randi Bellassai will coordinate with other UA entities that share our building
(primarily UA Online and Provost Business Office) to manage joint facilities, such as stairways, hallways, and restrooms.

**Key protocols that will be in place to effectively support outcomes:**

- Allow for flexible schedules for employees, including allowing employees to continue to work remotely.
- Meetings will continue to be carried out remotely.
- During peak times (i.e., approaching project deadlines), staff will have staggered shifts to limit congestion.
- Add floor indicators to encourage 6’ social distancing in offices.
- Randi Bellassai will serve as the primary AZGS contact with other occupants in our building to ensure all health and safety guidelines are being followed.
- Other occupants of building are already working on protocols and plans for reentry that follow campus guidelines. Arizona Geological Survey will participate in these meetings and implement applicable signage and modifications as needed.
- Monitoring social distance in our library is not possible, so limited use/access will be enforced.
- Prior to the current COVID-19 crisis, AZGS received occasional visitors from the general public, and visits from other researchers at the UA. We have announced the closure of our office on our website and will leave that in place for the foreseeable future. If visitors do stop by our office, we will enforce social distancing guidelines.

**Identification of necessary equipment**

- Continue to purchase hand sanitizer and wipes.
- Ensure all seating are at least 6’ apart.
- Follow signage guidelines.

**Financial Considerations:**

May increase costs in supplies and technology, but increases are not anticipated to significantly impact our budget.

**Risk/Uncertainty:**

AZGS does not have visitors often. We will discourage visitors via our website information. Most visitors in the building wander into AZGS space by mistake; we will erect signage that asks visitors to stop just inside the entrance to our offices.

**Goal 3: Personnel and Operations**

AZGS will continue to provide a flexible work environment, allowing personnel to work in the office if necessary or preferable, but following any guidelines provided by the UA or COS.
Department of Geosciences
Re-Entry Plan

JUNE 16, 2020
BARBARA CARRAPA & ANDY COHEN
Operating Plan Overview
This plan describes basic guidelines for re-opening in-person activities in the Department of Geosciences for Fall 2020 in compliance with the U of A re-entry plan.

Key Milestones
7/1/2020: Determine modality for all courses.

Budget Summary Information
An average of 50k is estimated based on extra TA duties (and support), supplies and costs to accommodate students in the field (e.g. about 3x the number of vehicles will be need based on safe distancing requirements).

Goals and Tasks
*All in person activities conducted in the Department of Geosciences will require the use of protective face masks and safe distancing. This plan is not meant to be exhaustive but just to add to and comply with the U of A re-entry plan.*

**Goal 1: Create occupancy plan and signage for shared spaces in Gould Simpson so that social distancing is maintained.**

**Task 1:** The number of people in each of the shared spaces will be limited to the following (based on safe distancing requirement and size of the room and on the modality of usage):
- GS 2nd Floor Kitchen - 2 People
- GS 2nd Floor Copy/Mail Room - 2 People
- GS 2nd Floor Conference Room 226 - 4 People
- GS 1st, 2nd, 3rd, 5th Floor Bathrooms - 2 People

The number of individuals in shared offices and laboratories will depend on the size of the space and on safe distancing requirements (6ft). If individuals cannot share the same space safely at the same time (i.e. by maintaining safe distancing) an appropriate schedule will have to be implemented.

Tables, handles and all other common use surfaces must be sanitized after each meeting. Disinfectant wipes and hand sanitizers will be provided to all common spaces by MF. The Department will provide extra sanitizers if needed. Although a special cleaning schedule for all classrooms has been implemented at the University level, instructors and TAs will be responsible for organizing and implementing a cleaning schedule for their classes. Moveable Plexiglas barriers are being emplaced in several higher occupancy class laboratory spaces (GS 201 and 211) and closely-spaced microscope spaces are being spread out into multiple rooms to eliminate close student contact during relevant labs.

Signage in the Department on main doors and common spaces is currently been implemented by the department and FM.

**Goal 2: Offer flexible, hybrid options for all required courses**

**Task 1:** Determine best practices for remote/hybrid learning following U of A guidelines

Description: see Appendix A – all classes offered originally in person will be delivered in one of three ways; in person, in hybrid (flex in-person) or remote (online) mode, following U of A Fall class modality guidelines. All students will be required to wear protective masks within the department and in class and to use hand sanitizer frequently. If room capacity and enrollment does not allow for safe distancing, the class (including labs) will go in hybrid mode (e.g. flipped class mode).
Financial Considerations: extra work by instructors and TAs will be necessary to comply with U of A guidelines. This will require extra compensation/support for instruction.
Risk/Uncertainty: Given the uncertainty of the situation, we are not sure which mode of teaching instructors will be able to offer.

**Goal 2: Allow flexibility for research**

Task 1: Determine what essential research needs to be conducted within the department in person. Lab managers will be required to submit the necessary documentation for continuing essential research through RRI and will be responsible for managing safe laboratory and fieldwork operations for their students.

Description: Essential research activities will be evaluated and in person laboratory activities if essential will take place following safe distancing protocols and using appropriate face coverings following university guidelines. Occupancy in laboratories and offices will be limited to two individuals at a time.

Financial Considerations: delay in data analyses will impact commitments to funding agencies, outside users with impacts on project outcomes, laboratory revenues and student graduation deadlines.

Risk/Uncertainty: Given the uncertainty of the situation, we are not sure about the full extent of the financial and scientific impact. Individual laboratories are responsible for tracking COVID related losses.

Task 2: Determine best practices for fieldwork

Description: see Appendix B (this applies to both fieldwork for research and for teaching)

Financial Considerations: delay in sample and data collection in the field will impact commitments to funding agencies, project outcomes, and student graduation deadlines.

Risk/Uncertainty: Given the uncertainty of the situation, we are not sure about the full extent of the financial and scientific impact.

**Goal 3: Allow flexibility for staff activities with regards to the business office, advising, laboratories, etc.**

Task 1: Determine which essential staff activities need to be conducted within the department in person and which staff members can safely conduct in person activities (i.e. are not high risk individuals).

Description: The DH will make a plan for each staff member to create the best possible plan to ensure that operation of the business office, advising, program coordination and laboratories will continue in the safest possible way.

Financial Considerations: see above.

**Data Management and Assessment**

NA

**Communication**

The Department Head (Barbara Carrapa) and Associate Department Head are committed to regular communication to faculty, students and staff about this plan.
Given the strong possibility that classes may continue in a mixed in person and on-line mode during the fall semester the Department of Geosciences needs to begin preparation as soon as possible. This document is meant as a first step in what will undoubtedly be an ongoing conversation on how to best accomplish this, specifically in reference to the use of D2L for the upcoming semester. The University of Arizona (and more specifically the College of Science) are in the process of creating a policy requiring the use of D2L for all classes but have left the specifics of how this is to be implemented to individual departments. In this document we take the opportunity to lead this effort and define our own guidelines in light of future requirements. We lay out guidelines in terms of minimum requirements for the adoption of D2L as an instructional tool, as well as best-practice recommendations whose adoption will enhance our teaching experience. It is uncertain at this point how or whether the university will monitor adoption of D2L, but it is important for us to remain at or ahead of the curve within COS should this become an evaluation tool of departments in the allocation of more limited financial resources for teaching, such as funding for TA support going forward.

**D2L as a Critical and Valuable Instructional Tool for Geoscience Faculty**

Those of us who have made extensive use of D2L know all too well that it has its problems. Nevertheless, it does provide several functions that are going to be critical for our on-line teaching mission:

*Connectivity:* D2L provides a means for easy, effective and systematic communication between instructors and students in a way that cannot be matched by emails.

*Storage and Organization of Instructional Materials:* D2L provides ready access to students, TAs and instructors of all class materials without requiring time-consuming individual requests from students to their instructors.

*Record Keeping and Grading Access:* D2L allows grades to be automatically compiled (and if desired, linked to the grading of individual assignments) in a way that is far superior to instructors maintaining an off-line spreadsheet. It also fulfills university requirements for record keeping, transparency and administrative access to records if needed (as in the case of grade disputes etc.).

**Minimal Requirements for Adoption of D2L in the Department of Geosciences for the Fall 2020 Semester**

1. **All formal courses of record for the Fall 2020 semester must establish a D2L website.** The only exceptions to this rule are for individualized instruction courses like *Independent Study, Masters or Doctoral Candidate Reports* etc. Setting up a new D2L website can be done very easily as follows:
   a. Go to D2L.arizona.edu and log in when prompted with your UA NetID Login
   b. Click on the Course Site Request Tool (green box part way down the page)
   c. Click on UA NetID login again. This should take you to a page where you have the option of Modifying a previously requested course, Request a new D2L course or Request a D2L playspace. Choose **new D2L Course Site** (note, the system will only allow you to establish a D2L site for a course for which you are the instructor of record.
   d. You will be prompted to indicate the semester and number of D2L sites you want to set up, then click Continue
   e. A box will next appear listing all the classes you are scheduled to teach during the selected semester. **Grab and drag** the appropriate class over to the D2L course ties box and then click Continue
   f. At this point you will be prompted to either copy an existing course (i.e. from a prior semester) or to build a new D2L site from scratch. On the assumption that anyone who has previously used D2L knows how to proceed with copying, and that you are doing this for the first time continue with the “Build” option. This will then create the basic D2L website framework for your course.
Beyond this point there are many options for how to set up the site and how to use it, which are best handled individually, drawing on prior users’ expertise in the Department or by contacting the D2L Support Team.

The Department is also exploring the possibility that D2L can automatically set up web sites for all official classes in time for the fall semester. We will let you know if this is feasible.

- 2. All Geoscience courses on D2L are required to post a syllabus in the course website. This is best placed within the Content area of the website. All content, regardless of how it is organized, can be easily placed in the website, using drag and drop, into the indicated box. The syllabus needs to include information about the instructor’s office hours. Assuming these will still need to be held remotely the best option for holding office hours is to schedule them as a recurring event through the Zoom portal in D2L (see Point 2- Provision of Lectures below). This way the link will always appear on the student’s (and the instructor’s) calendar when they log into D2L - no need for anyone to search for this link in old emails throughout the semester. The UA’s current online Syllabus template and policies can be found at https://gened.arizona.edu/proposal-guidelines/syllabus-template
  - &/or
  - https://policy.arizona.edu/faculty-affairs-and-academics/course-syllabus-policy-undergraduate-template

3. All Geosciences courses on D2L need to make use of the Grades on-line record keeping for managing grades. The student names are automatically populated into the gradebook but you will have to set up your individual grading scheme with graded items through the Manage Grades and Schemes tools. The grade book gives access to the students to see how they are doing on individual assignments and cumulatively through the semester.

4. All emails to the class as a whole should be done through the emailing function in D2L rather than through private/university email accounts. This is easily done by clicking on Classlist, then scrolling down to the list of names, checking the box at the upper left (which will select everyone on the list - you have the option to deselect specific names if needed) and then clicking the Email icon just above the selection box. This will generate a blank email that you can add a subject and message body to in the boxes below. All recipients by default are bcc’ed. Instructors should regularly reach out to their classes. We are learning that taking classes remotely is proving very stressful for many students and human contact is important for insuring good educational outcomes under these difficult circumstances.

Additional Suggested Best-Practices for all Department of Geosciences D2L websites

Based on prior experience of instructors from classes that were already on-line or making use of D2L prior to Spring 2020, or that transitioned to on-line instruction during Spring 2020 we strongly recommend that all classes also make use of the D2L website for the following functions:

1. Posting of Instructional Materials. This includes powerpoint lecture outlines, homework, pre-recorded lectures, videos, lab exercises etc. These are all very easily organized through D2L and using the Assignments Tools it is possible to grade and automatically store grades in the gradebook.

2. Provision of Either Live (Zoom) or Pre-recorded (Panopto) Lectures. Simply providing powerpoint slides and outlines of instructional material is unlikely to be an effective teaching strategy by itself. Students need the face-to-face “interaction” that can only come from a lecture, either delivered live or pre-recorded. Both Zoom and Panopto can be accessed directly through your D2L Homepage via the UA Tools button at the top of the page (many other resources are available at this same site). A tutorial prepared by Paul Goodman on the use of Panopto for pre-recording and posting lecture materials is available at your UA Box site (box.arizona.edu) then in the folder On line Teaching Resources for
Geosciences). Zoom lectures, if scheduled through the class D2L website, can be automatically recorded and then posted to the site.

3. We recommend using the D2L Calendar functions (under Course Admin at the class site home page), which allows to create a regularly scheduled event reminder and links to, for example, the Zoom videoconference when you will be holding your class or holding office hours. This makes it very easy for students (or faculty!) to join scheduled zoom events without having to remember the url or constantly refer to the syllabus

4. Allowing Undergraduate Advisors Access to D2L sites. If you are teaching an undergraduate class, consider giving Shawna and/or Anne access to your class D2L site as a way for them, as advisors, to keep track of student progress and advise students if they are confused about the class site or class requirements. D2L also allows you as the instructor to see a log of when students log into the D2L site (e.g. for classes, discussions, exams etc). You can easily add people who are not students (as guests, TAs, Anne, Shawna or any others with a UA NetID) to the classlist and you can set the level of access/privileges given to these individuals.

5. Use of Intelligent Agents. The “Intelligent Agent” tool in D2L allows you to easily (<2 minutes) set up automatic communications with students who are either not attending class/checking in virtually to the class D2L site on a regular basis. You can set this up at the beginning of the semester and then the notifications will go out automatically as emails according to the parameters you chose (frequency, threshold of attendance etc).
   a. To use this tool go to “Course Admin” at the top of your class home page
   b. Click on Intelligent Agents” (under Communication).
   c. If you are doing this for the first time for a particular message chose “New”
   d. Select the Criteria, D2L Log-in or D2L Course Activity for the student you want to monitor, type of Action you want (if you select “Send an Email” a popup window will appear that sets up the automatic email message) and Scheduling (frequency that the student will receive email reminders).
   e. Save and close
APPENDIX B
Guidelines for conducting field work in Geosciences

Note: this document assumes that safety protocols for fieldwork that are developed in all departments meet normal safety standards. What follows are guidelines peculiar to the current Covid-19 problem. A significant challenge of all fieldwork will be to minimize contact with potential corona virus infections. Above all, use common sense and urge all fieldworkers and students to be even more vigilant than usual about all aspects of safety.

Before you go:
• Self-quarantine to the extent possible for two weeks prior and post to any travel in case you experience any symptoms of discomfort-malaise.
• Anyone with symptoms of illness (fever, cough, sneezing, aches and pains, etc.) will not be allowed to participate in fieldwork.
• Self-educate about the Covid-19 situation on your route and at your destination.
• If traveling internationally check with State Department for alerts and warnings re. Covid-19; be sure to check for face covering requirements at all airports that will be visited en route, both ways.
• Learn about locations of clinics/hospitals in the area/region you will be working in.
• Have in place a system of communication (cell phones, sat phones) among all participants and local collaborators.
• All participants should assemble an emergency kit to include in carry-on baggage if traveling by air or train (hand sanitizer, extra face coverings, water bottle, power bars and snacks, extra clothing).
• Anyone with allergies or other issues with medications should carry a written description in a safe but accessible place; this will be useful in hospitalization situations.

1. Research
Ground Travel:
• Keep field teams to a minimum number of people.
• Make sure that all vehicles used have been properly cleaned before any participants enter them.
• Wear masks always and be equipped with enough including face coverings to deal with any needs.
• More than usual, pay attention to clothing with emphasis on reducing exposure.
• In vehicles maintain maximum of two persons per row in vans and trucks.
• Keep the vehicle well aerated whenever passengers are on board.
• When switching drivers, be sure to sanitize steering wheel, gear shift, and other relevant surfaces.
• Minimize movement in the vehicle and require passengers to not switch places.
• Minimize contact with gas station staff, equipment, and facilities; sanitize hands immediately afterward.
• Be prepared to spread out in taxis and other public transportation.
• Sanitize hands frequently.

Air Travel, Domestic and International:
• Avoid air travel in general, but if necessary, follow all airport and airline protocols, including face coverings, social distancing, and avoiding physical contact with surfaces and equipment. Sanitize hands frequently.
• Avoid crowds as much as possible. The latter will be difficult in customs and immigration lines.
Department of Neurosciences
Re-Entry Plan

JUNE 5, 2020
ALAN NIGHORN AND JENNIFER LAWRENCE
Goal: To facilitate re-occupancy of departmental space and continuation of the department’s missions while mitigating risks associated with COVID-19.

Personnel Roles:
- Jennifer Lawrence – administrative coordination/facilities
- Tracey Purcell – facilities/contact for activities & support involving FM
- Becca VanSickler– coordinate/interface with students/student needs

Plan:
1. Masks/Face Coverings
   a. Masks will be worn in the corridors on the 4th and 6th floors and in all common areas of the Gould-Simpson building
   b. University is provided two face coverings per person. FM is coordinating distribution. Timeline TBD.
   c. Disposable face coverings will be kept on hand for visitors and occasional use. FM is facilitating distribution.

2. Cleaning & Supplies
   a. FM will provide disinfectant cleaner (Oxivir Five) in bottles and will refill as needed. (Tracey).
   b. FM will clean restrooms & classrooms daily. Will wipe down doorknobs daily. Will clean offices on current schedule. Disinfectant will be available in kitchen to use for cleaning countertops, handles, knobs throughout the day (individual responsibility)
   c. FM will continue with normal lab cleaning procedures. FM does not clean lab benches and countertop so labs should follow their current practices Use disinfectant cleaner provided. (Lab personnel)
   d. Hand sanitizer stations will be placed in common areas (kitchen, main office) and at the entrance to shared facilities. FM will provide bulk supplies for refill. (Tracey)

3. Lobbies & Hallways
   a. Front and back hallway doors on the 4th and 6th floors will be locked.
   b. FM will provide signage for hallways & common areas as well as other signage (Tracey)
   c. Clear furniture, filing cabinets, etc. from hallways and lobbies
      i. FM will store furniture (4th, 6th floor lobbies, 4th floor student lounge upholstered furniture)
      ii. Filing cabinets and other active storage cabinets will be moved into rooms (Tracey/Jennifer coordinating)
      iii. Water dispensers in hallways and room 408 will be removed for duration
4. Restrooms
   a. FM installing contactless paper towel dispensers, foot door openers, may provide toilet seat covers

5. Kitchens (4th & 6th)
   a. Remove shared dinnerware, cups, and cutlery (per FM guidelines). Tracey & Lupe have begun this task. Employees will be responsible for bringing/maintaining their own.
   b. Kitchen will be open for coffee & water service (use your own cups)
   c. Microwave and refrigerator use will be at individual’s discretion. Expectation to disinfect between use.
   d. Some paper dishware will be available (but this should be exception)
   e. Doorway between 611 and 6th floor kitchen will be locked – access kitchen through conference room

6. 601/401 Conference rooms
   a. Eliminate classes held in 401/601
   b. Seminars – should be remote/zoom.
   c. Conference rooms can be used for occasional in person meetings with no more than 6 people.

7. Offices/Lab Space
   a. Occupancy document available
   b. Move personnel to temporary office spaces to achieve lower density
   c. Staggered work schedules/remote work options to reduce overall density in the building

8. Operations/Administrative/Academic Staffing
   a. Administrative/Operations staff will continue to WFH through August and possibly the fall semester
   b. Staggered scheduling when we do return to work
   c. All personnel – expectation to stay at home when not feeling well
   d. No in-person advising on 6th floor (Potential scheduling of 4th floor conf room as it is right off the corridor or 4th/6th floor lobbies if needed)
   e. Receiving – Packages should be addressed and sent to individual labs rather than the central office.
9. Outstanding items
   a. Office hours for classes – emphasis on zoom meetings as much as possible.
   b. Protocols for use/cleaning of shared equipment (Faculty – need to assign individuals)
      - Autoclave
      - Dishwasher
      - Ice Machine
      - Chemi-doc
      - 80 Freezers
      - Ultra Pure Water – Millipore
      - Double-headed scope
   c. Coordination with other Gould-Simpson occupants on use of common areas
   d. Stairwells one directions to be decided with Risk Management and rest of building
   e. Elevators – distancing in elevators – potential increased use of the freight elevator
      (avoid class change times - post standardized class schedule in our lobby for reference)

10. Budget Considerations
    A. To be continued

11. Research will be performed according to RII Guidelines

12. Teaching will be done according the joint NSCS plan submitted under separate cover.
CBC Re-Entry Plan

JUNE 5, 2020
CBC RE-ENTRY TASK FORCE
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# List of Acronyms

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<tr>
<th>Acronym</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>OC</td>
<td>Old Chemistry</td>
</tr>
<tr>
<td>CSML</td>
<td>Carl S Marvel Laboratories</td>
</tr>
<tr>
<td>CSB</td>
<td>Chemical Sciences Building</td>
</tr>
<tr>
<td>TSO</td>
<td>Teaching Services Office (Koffler 201)</td>
</tr>
<tr>
<td>BSW</td>
<td>Biosciences West</td>
</tr>
<tr>
<td>ILSG</td>
<td>Instructional Laboratories Support Group (Koffler 109)</td>
</tr>
<tr>
<td>RLSS</td>
<td>Research and Laboratory Support Services</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
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Department of Chemistry and Biochemistry
Operating Plans for Fall 2020 Campus Re-entry

Operating Plan Overview
The Department of Chemistry and Biochemistry (CBC) plan for campus re-entry for Fall 2020 includes individual operating plans addressing instructional delivery, workspace, personnel, and operational issues in ensuring compliance with University of Arizona Re-entry Task Force directives.

Key Milestones
A cumulative list of the key milestones for significant events and decision points for the goals of the re-entry plan are listed here.

- 5/18/2020: Safe Return to Workplace Draft Document Released
- 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
- 6/01/20: Begin process for reentry to research activities.
- 6/05/20: Unit operating plan due to CoS Dean
- 6/10/20: Determine modality of all courses.
- 6/12: Dean submits plans to Provost
- 6/15/20: Identify necessary workspace changes to achieve social distancing requirements
- 6/24/20: UA Announcement of return campus re-entry plan
- 6/30/20: Provost approves revised plans
- 7/01/20: Budget request for reduced class sizes finalized
- 7/01/20: Identify specific teaching plans for all curricular offerings
- 7/15/20 Develop “teaching succession” plan in case of instructor illness
- 7/15/20: Alternate instructors in place
- 7/15/20: TA guidelines and workloads finalized
- 7/24/2020: UA Announce in-person courses or modification plan for fall semester
- 8/01/20: Implement necessary changes to work space, schedules, and practices to comply with UA Re-Entry Plan requirements
- 8/01/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc as outlined in UA Re-Entry Plan
- 8/01/20: Ensure engineering controls for building entry/exit, stairwells, and elevators are in place and properly signed.
- 8/15/20: Revised TA training complete
- 8/15/20: Ensure that Departmental spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/15/20: Deadline for all members of CBC to complete RLSS COVID-19 training.
- 8/24: Fall semester begins
Budget Summary Information
See individual goals.

Goals Overview
Please list tasks your unit will engage in toward successful realization of each of the following goals. See examples of college-wide tasks. Use new page for each task.

Goal 1: Instructional Delivery and Student Engagement.
We will develop solutions specific to our disciplines and their normal modes of instructional delivery and student engagement that will allow us to accommodate a wide range of scenarios in instructional delivery and student engagement for fall semester, including:

- The possibility that students will be participating remotely for the whole semester;
- The possibility that instructors will be participating remotely for the whole semester;
- The possibility of shifting from in-person to remote instruction, or vice versa, at some point during the semester; and
- The possibility that individual students or instructors may become ill or be quarantined during the semester and need to continue teaching/learning remotely even if they started the semester in person.

When traditional modes of instruction and student engagement cannot be adapted to these scenarios, we will seek alternate experiences equally relevant to the discipline.

Goal 2: Facilities, Spaces, and Environment.
We will ensure our facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

Goal 3: Personnel and Operations.
We will develop processes and procedures that provide flexible and equitable treatment of faculty and staff and do everything possible to protect vulnerable populations while also ensuring we have the intellectual capital and support needed for operations in fulfillment of the unit’s mission. Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.
Goal 1: Instructional Delivery and Student Engagement.

**Task Name:** CBC Instructional Modifications (Lecture Classes)

**Description:** Modify curriculum, course offerings, space usage, and procedures for instructional delivery and student engagement in a pedagogically sound manner while striving to protect the health of our instructors, teaching staff, and students.

The COVID-19 situation is evolving rapidly and requires CBC to plan its instructional delivery proactively and for different scenarios. Considerations pertain to instructional personnel, delivery method, available space, scheduling and the special circumstances of teaching large freshmen and sophomore lecture classes as well as a large number of laboratory classes and the inclusion of a large number of teaching assistants.

Our general approach is to enable instructors to choose a teaching modality that respects their personal health circumstances, and where this is not possible, to change teaching assignments. We are currently conducting a survey to understand which faculty are able and willing to teach in person or flex in-person, and who will opt for online only instruction. We will use current enrollment, historic enrollment and a 15% reduced enrollment to guide our understanding of required classroom and teaching lab space, and optimize a match with instructional personnel. We will also determine suitable alternate instructors in advance in case individual faculty fall ill during the semester and are incapacitated. Finally, we will modify traditional teaching assistant responsibilities to accommodate the changes in delivery and course modality.

Our advisors will guide students to meet as best as possible degree requirements and accommodate preferences and health needs.

We expect to receive University guidance and measures in place to avoid congestion in teaching building entrances, teaching space entries, facilities etc. to ensure social distancing for students, TAs, preceptors and instructors. This will be particularly important for instructional laboratories which are on the upper floors of the Koffler Building with limited elevator and stairwell access.

**Responsible Person or Unit:** Department Leadership and Faculty

**Key timelines and decisions to effectively manage task:**

- 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
- 6/10/20: Determine modality of all courses.
- 6/24/20?: UA Announcement of return to campus
- 7/01/20: Budget request for reduced class sizes finalized
- 7/1/20: Identify specific teaching plans for all curricular offerings
- 7/15/20: Develop “teaching succession” plan in case of instructor illness
- 7/15/20: Alternate instructors in place
7/15/20: TA guidelines and workloads finalized
8/15/20: Revised TA training complete
8/24/20: Fall semester begins

**Key protocols that need to be in place to effectively support outcomes:**

All courses will be made available online (synchronously or asynchronously) to accommodate students who need to or elect to attend remotely. As a general rule, we will reduce the meeting size (not enrollment) of each laboratory section as indicated in the CBC Teaching Lab Modifications task (vide infra), and each lecture section by at least 50% to enable social distancing. To accommodate the enrollment, we will use multiple class-rooms simultaneously if possible, live-stream and rotate different groups on and off campus, or hold more sections.

Graduate courses have small enrollments (historically 8-25) and will be held in-person or fully online. Our experience from the spring 2020 semester shows that this is successful, and instructors are able and ready for both of these modalities.

Determine occupancy limits of classrooms to comply with social distancing requirements prescribed in UA Re-Entry Plan.

Develop ability to livestream and/or record video of classes. Some students and instructors may not be able to attend in-person, so this is crucial.

Obtain supplies and equipment for disinfection and socially-distanced instruction.

Revise curricula/course offerings as necessary to comply with classroom occupancy limits:

- Determine if more sections can be offered; if not, how can class meetings be modified to maintain occupancy within specified limits?
- Can instructor teaching assignments be modified for instructors who are not comfortable teaching in-person?

Develop list of substitutes in the case of instructor/TA absences due to illness, etc.

Determine protocols needed for disinfection, proper social distancing, etc.

Develop guidelines and policies for outreach and campus visitors.

All instructor office hours and advising will be held remotely.

All courses must have D2L sites, with calendars and grades at a minimum. Instructors will encourage and permit electronic submission of work as much as possible.

Provide opportunities for training in remote instructional technologies within CBC by more experienced instructors.

**Identification of necessary equipment (face coverings, technology, etc.) and other supplies:**
Disinfection solutions, wipes, gloves for decontaminating surfaces.
Cameras/microphones to record and stream video from classrooms.
Masks or face shields for instructors.

Financial Considerations:
Additional funds may be necessary to break large classes into smaller sections, supported e.g. by TAs or preceptors. We also expect that classrooms will be equipped with recording equipment to record and stream classes with an in-person component. We anticipate a need for more laboratory specific disinfection protocols and equipment. Several of our laboratories are based on group assignments which may not be possible under distancing guidelines, requiring some additional equipment purchases. We will also need engineering controls to direct the flow of students into and out of learning spaces, as well as within the classroom and laboratory environment.

Risk/Uncertainty:
Instructors may experience difficulties maintaining remote instructional delivery unless properly trained in appropriate technology.
Certain teaching modalities are dependent on new infrastructure installment in appropriately sized classrooms, which may not be accomplished in time for the start of the fall semester.
Not sure if UA technology can support livestreaming from many students at once.
Concerns about student traffic control in building/stairs/elevators/classrooms (see Goal 1 and Goal 2 Risk/Uncertainty section).
Task Name: CBC Instructional Modifications (Laboratory Classes)

Description: Modify curriculum, space, and procedures for social distancing in lab courses.

Responsible Person or Unit: CBC Teaching Lab Managers, Instructional Lab Support Group (ILSG)

Key timelines and decisions to effectively manage task:

5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/24/20?: UA Announcement of return to campus
6/10/20: Determine Modality of all courses.
7/15/20: TA guidelines and workloads finalized
8/15/20: Revised TA training complete
8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:

- Limit occupancy of each lab room to 8 students (or less), 1 TA, and possibly 1 preceptor. We have examined our lab room layout (Figure 1), and determined this is the maximum number that can fit in the room while maintaining 4 ft radius (50 sq. ft.) around each person.
Figure 1. Layout of typical Koffler lab room. Circles indicate 4 ft radius around each person.

- Ability to livestream and record video from Koffler lab classrooms
- Removal of desks/chairs from Koffler labs
- Obtain supplies and equipment for disinfection, socially-distanced instruction
- Mark lab room floors, benches to indicate student work zones
- Revise lab curricula to achieve social distancing (see Table 1)

<table>
<thead>
<tr>
<th>Lab Course</th>
<th>Enrollment per section</th>
<th>Revised course format</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 15X</td>
<td>24</td>
<td>Split lab session time into two segments. Eight students attend first half, with 4 of their group members watching remotely for 70 minutes. Then after a 20 minute break, second cohort of students arrives/participates.</td>
<td>20 minute break between sessions to limit traffic in rooms and other building areas, and allows time to disinfect lab area.</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>24</td>
<td>Divide class into three cohorts of 8 students. Each cohorts comes for a 4-week intensive boot camp in person. Remaining work done online.</td>
<td></td>
</tr>
<tr>
<td>CHEM 243/244</td>
<td>20-24</td>
<td>Create teams of 4 students. Each week, team selects one group member to appear in person to perform experiment. Teams meet online to discuss experiment.</td>
<td></td>
</tr>
</tbody>
</table>
Break class into two cohorts. Alternate times and/or days for each cohort to meet in person. Other activities done remotely.

Labs meet twice per week, so each student will be in person at least once per week.

These classes are small enough to have all students attend in person. Lab traffic will be carefully controlled through reconfiguration, communication, and training.

These courses will be held virtually.

- Revise ILSG and instructor protocols for disinfection, proper social distancing, etc.
- Develop materials for training army of Teaching Assistants in proper COVID-19 protocols in the lab
- Additional student assistant or preceptor will run all student samples on instruments in small side rooms to minimize occupancy in those rooms
- Designate (and label) entry-only and exit-only doors in each lab room
- No shared PPE in lab rooms
- TA staff meetings of more than 6 people will be held online

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:

- Mobile white boards will be required for TAs to instruct students in the lab rooms
- Digital cameras for TAs to record videos and livestream lab sessions, office hours
- Cell phone holders to mount on lab benches for students to stream in-lab activities to their lab partners
- Touchless paper towel dispensers in lab rooms to prevent contamination/infection
- Plexiglass shields in satellite prep areas to protect students and ILSG employees while distributing lab equipment
- Disinfection solutions, wipes, gloves for decontaminating equipment, lab benches, etc between each lab session
- To minimize student movement in lab rooms, additional supplies and equipment (glassware, reagents) will be needed to ensure each student has all necessary items within their reach during the lab session

Financial Considerations:

The equipment needs mentioned above will cost money.

Constant disinfection and management of student traffic in lab requires additional personnel (student worker) hours.

The desks removed from the Koffler lab classrooms need to be put in offsite storage, which costs money (~$3,400/year)
Risk/Uncertainty:

If COVID suddenly disappears and we go all in-person, we have done all this preparation (removing desks, modifying curriculum, etc) for nothing.

Not sure if UA technology can support livestreaming from this many students in Koffler at once.

Concern about foot traffic in Koffler building/stairs/elevators, even with reduced number of students in the labs.
Goal 2: Facilities, Spaces, and Environment.

Task Name: CBC Space and Environment

Description: Modify Departmental spaces

Responsible Person or Unit: CBC Faculty and Staff

Key timelines and decisions to effectively manage task:

5/18/2020: Safe Return to Workplace Draft Document Released
5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/01/20: Begin process for reentry to research activities.
6/15/20: Identify necessary workspace changes to achieve social distancing requirements
6/24/20: UA Announcement of return campus re-entry plan
7/24/2020: UA Announce in-person courses or modification plan for fall semester
8/1/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc as outlined in UA Re-Entry Plan
8/1/20: Ensure engineering controls for building entry/exit, stairwells, and elevators are in place and properly signed.

8/15/20: Ensure that Departmental spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.

8/15/20: Deadline for all members of CBC to complete RLSS COVID-19 training.

Key protocols that need to be in place to effectively support outcomes:

Departmental spaces are shared use areas that are not covered by a CBC Addendum to the RII Re-Entry Check List and are defined in the table below. Responsibilities of the designated responsible person for each Departmental space are:

- Determine and post occupancy limits of Departmental spaces to comply with social distancing requirements prescribed in UA Re-Entry Plan. If appropriate, mark off workspaces with signs or boundary lines to ensure social distancing.
- Ensure chairs/desks/seating/equipment in Department common spaces such as conference rooms, tutor rooms, large offices are at least 6 ft apart. Extra furniture/equipment will be stored or surplused.
- Ensure disinfection solution and paper towels are available in each Departmental space with instructions on disinfection protocol posted.

<table>
<thead>
<tr>
<th>Departmental Space</th>
<th>Room Numbers</th>
<th>Designated Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC and CSB Conference Rooms</td>
<td>CSB 202 and 402</td>
<td>Admin Student Worker:TBD</td>
</tr>
<tr>
<td></td>
<td>OC 221B and 221C</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Contact Information</td>
<td></td>
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<td>---------------------------</td>
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<td></td>
</tr>
<tr>
<td>BSW Conference Rooms</td>
<td>BSW 257 and 347</td>
<td></td>
</tr>
<tr>
<td>Admin Student Worker: TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storeroom</td>
<td>OC 104</td>
<td></td>
</tr>
<tr>
<td>Scott Dreisbach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advising Rock Room and</td>
<td>OC 231 and OC 210</td>
<td></td>
</tr>
<tr>
<td>Lounge</td>
<td>Olivia Mendoza</td>
<td></td>
</tr>
<tr>
<td>ILSG</td>
<td>Koffler 109</td>
<td></td>
</tr>
<tr>
<td>Mark Yanagihashi</td>
<td></td>
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</tr>
<tr>
<td>TSO</td>
<td>Koffler 201</td>
<td></td>
</tr>
<tr>
<td>Laura Lustro/Peggy Humbert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Office Kitchen</td>
<td>BSW 364</td>
<td></td>
</tr>
<tr>
<td>Olivia Bernal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Instruments</td>
<td>BSW 339 and 348</td>
<td></td>
</tr>
<tr>
<td>Thomas Tomasiak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Instruments</td>
<td>BSW 441</td>
<td></td>
</tr>
<tr>
<td>Thomas Tomasiak/Matt Cordes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Instruments</td>
<td>BSW 435</td>
<td></td>
</tr>
<tr>
<td>Matt Cordes</td>
<td></td>
<td></td>
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<tr>
<td>Shared Instruments</td>
<td>BSW 535</td>
<td></td>
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<tr>
<td>Bill Montfort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Instruments</td>
<td>BSW 527</td>
<td></td>
</tr>
<tr>
<td>Rebecca Page/Jacob Schwartz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copiers</td>
<td>Various locations</td>
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</tr>
<tr>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golf Cart</td>
<td>Marty Lab</td>
<td></td>
</tr>
</tbody>
</table>

Each Department member must determine occupancy limits of their office to comply with social distancing requirements prescribed in UA Re-Entry Plan.

Each Department member is responsible for disinfection of their office/workspace.

Scott Driesbach (Building Manager) is responsible for working with facilities management in posting and updating signage in Departmental public spaces (i.e. doors, hallways, stairwells).

Advising Office, ILSG, Administrative Support, and Business Office operations units have adopted flexible work schedules to comply with space occupancy limits.

Employees will work from home and create schedules to minimize in-person on-campus staff.

Flexible work plans for the research enterprise are covered in the CBC Addendum documents for the RII Re-Entry Checklist approval.

Additional office space will be identified and assigned to groups whose current space does not allow proper social distancing if necessary. Space requests should be made to the Building Manager and will require approval from the Department Head.

Meetings will be held remotely when possible and any in-person meetings will be held in spaces/conference rooms where social distancing can be maintained as defined by UA Re-Entry Plan.
RLSS is developing a COVID-19 Training Video to train all employees on disinfection protocols, proper social distancing, proper face covering procedures, etc. All Department members will be required to complete this training once released.

Until classes start in August, the CBC buildings will remained locked with CatCard access only. Upon resuming classes only those with active teaching spaces will be open. CSML and CSB buildings will remain closed with CatCard access only.

Workplaces including offices, TSO, and Storeroom will keep doors closed/locked to reduce drop-ins and enforce occupancy limits. All in-person interactions will be done by appointment only such that occupancy and distancing requirements can be met. Drop-in services such as the Storeroom and TSO will post occupancy and only allow appropriate numbers of people into those spaces for services.

**Identification of necessary equipment (face coverings, technology, etc.) and other supplies:**

Face coverings, disposable masks or face shields for employees, students, and visitors will be available in the CBC Storeroom. The CBC Storeroom will also distribute 2 cloth face coverings per employee supplied by the University.

Disinfection solutions, wipes, gloves, and paper towels for decontaminating surfaces are available in the CBC Storeroom. The CBC Storeroom also sells bleach, ethanol and isopropanol for making 70% alcohol and dilute bleach solutions.

Plexiglas sneeze shields will be installed by facilities management in spaces where in-person interactions are required:

- CBC Storeroom roll window
- TSO roll window
- Lobby window in BSW

Signage, labeling for walls and floors to maintain distancing and communications of COVID guidelines is being provided by facilities management will be coordinated by our Building Manager, Scott Dreisbach.

Most employees in the operations units have appropriate technology to accommodate flexible work schedules. One of the student advisors has a desktop only.

**Financial Considerations:**

Purchase a laptop for Debra Armand-Cade $1500.00

Face coverings and disinfectants for employees and office spaces. Facilities management is currently supplying under the CARES Act funding. If that changes then the department anticipates a $2000/month expense for these products.

Storage of desks and chairs from teaching labs off site will be $3400/year.
Installing keypads or temporary keyed entry into the exterior stairway of CSB. $500-15000

Risk/Uncertainty:
Student traffic control in building/stairs/elevators especially outside of OC lecture halls the atrium area of Koffler outside of the TSO, and into the upper laboratory floors of the Koffler building is a significant concern.

OC and BSW will be unlocked when classes resume, and this will bring more people into those spaces and in proximity of research labs.

Ensuring student/visitor compliance with CBC guidelines, particularly mask and distancing guidelines.

Monitoring and enforcing social distancing in large spaces such as conference rooms.

Restroom occupancy and modifications and touchless modifications.

Limited stairwells in the Chemical Sciences building (which could be mitigated by activating key pads or temporarily reinstalling keyed entry locks on the exterior stairwell).
Goal 3: Personnel and Operations.

Task Name: CBC Modifications to Unit Operations

Description: Adapt daily unit operations and practices to comply with social distancing and minimize risk of disease transmission

Responsible Person or Unit: Department Faculty and Staff

Key timelines and decisions to effectively manage task:

5/18/2020: Safe Return to Workplace Draft Document Released
5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/15/20: Identify necessary workspace changes to achieve social distancing requirements
6/24/20: UA Announcement of return campus re-entry plan
7/24/20: UA Announce in-person courses or modification plan for fall semester
8/1/20: Implement necessary changes to work space, schedules, and practices to comply with UA Re-Entry Plan requirements

Key protocols that need to be in place to effectively support outcomes:

Staff townhalls held by the Department leadership team will be held at least once a semester by Zoom to promote connectedness to the Department. Each of the operations units is encouraged to continue to meet regularly by Zoom to check-in.

CBC Managers meet at least one time per month to check in and discuss operations overlaps between units.

Face coverings must be donned (put on) before entering and occupying any UArizona work location except single occupancy offices as describe in the Safe Return to Work draft document dated 5/18/2020.

Practice elevated personal hygiene measures such as frequent hand washing and do not touch your face.

If you are not feeling well, please stay home.

All meetings should be carried out remotely, unless sufficient space is available to ensure 6’ distance between attendees. Appointment only operations are preferred so that this condition can be met when possible.

Each Department member is responsible for disinfection of their office/workspace and any Departmental space that they are assigned or utilize.

Each Department member must determine occupancy limits of their office/workspaces to comply with social distancing requirements prescribed in UA Re-Entry Plan. Rearrange office/workspace, if needed to accommodate this. Offices/workspaces in shared
environments can be marked to indicate 6 ft distance or alternate workspaces/offices can be arranged. Any new space requests should go to Scott Driesbach for approval by the Department Head.

**Specific protocols for each operations unit:**

**Research Support Services**
- Individual units will be operating as outlined in the CBC Addenda to the RII Re-Entry Check Lists.

**Advising**
- Limited access—Doors will remain locked and only students with appointments will be admitted. Lounges will not be available for open use by students, but it would be used as a meeting place for in-person interactions, if required.
- Flexible scheduling—The advisors schedules will be modified so that only one is present in the office at a time. Advisors will work from home unless on campus presence necessary. All but one staff member has a laptop.
- Paper-free processing—All paper forms are now electronic to limit exposure (directed research, thesis, preceptor forms).

**IT**
- Remote assistance will become the new standard for CBC IT. Using Teamviewer and other remote access applications our technicians will only physically interact with users when absolutely necessary. Staff have laptops to work remotely.
- People will be asked to remove themselves from their workspace when working on an office computer. We will allow 10-15 minutes for the air in an office to settle before starting work.
- When we retrieve hardware for repair for recovery reasons we will be leaving it in a designed sub office for a minimum of 24 h before working on it.
- CBC technicians will always wear surgical gloves when working on equipment that came into, or will be leaving our office. Hands will be washed immediately after before touching anything else.

**Teaching Services Office**
- Minimize paperwork and paper handling in the office. We will be using electronic forms, class rosters, TA schedule cards, etc instead of paper copies.
- Most instructors will be giving online exams. If they give paper exams, we will copy them but will not handle the exams after the students take them.
- Flexible work scheduling by TSO staff. We will work with the minimum number of in-person staff needed to keep office operations going. Staff all have laptops, and much of their work can be done remotely.
- TSO main door will be kept locked. Only personnel who work in the office will have access (no TAs, no students).
- Essential information for TAs and students will be posted on bulletin boards outside TSO and on monitors throughout Koffler.
• Instructors housed in the TSO will hold virtual office hours to eliminate student traffic in the TSO.

**Administrative Support**

• Ellie Warder will return to campus and work in her office beginning TBD.
• Alexis Montoya will continue to work remotely as much as possible and has a laptop to support remote work.
• If needed in Fall, we will hire a student worker to assist with in-person tasks in BSW, such as: delivering mail, accepting FedEx deliveries, checking-in/-out CBC community property, posting conference room schedules, blocking off every-other lobby chair, and sanitizing lobby chairs and conference rooms.

**Business Office**

• Business Office staff will offer flexible schedules to the team's employees, allowing them to continue to work remotely, and possibly work on site one or two days a week. Staff have laptops to support remote work environment.
• Employees in shared office spaces will not work on-site on the same day. They have been directed to coordinate any scheduled days in the office to ensure social distancing of at least 6 feet.
• Business Office Leads (Jennifer Rascon and Olivia Bernal) will be in charge of any signage that needs to be posted, alerting CBC of the mask requirements before entering our offices, business hours, and recommendations for scheduling meetings via zoom/call.
• We will be closing office doors leading into a hallway.
• If working on-site is preferred or required at some point, we will reach out to the building manager and ask for additional office space as needed (ex: HR/Payroll team).
• Bins will be moved into the BSW hallway for paper/receipt drop offs. Electronic forms will be utilized when possible.

**ILSG**

• ILSG coordinator shifts staggered to avoid having more than 2-3 coordinators in Koffler 109 at a time.
• Common cell phone, intercom and landline phones will be decontaminated with alcohol wipes between shifts and/or after each use.
• Time clock will be decontaminated with alcohol wipes between shifts.
• Koffler 109 break-area occupancy limited in accordance with square footage guidelines with appropriate supporting signage.
• Faucets decontaminated with 70% ethanol spray after each shift.

**Financial Considerations:**

Laptop purchase for one Advisor: $1500
TeamViewer license: $563.75/year
Administrative Support Student Worker (federal work study): $1000/semester
Announcement monitors: $1500
Window replacement: $1500

**Risk/Uncertainty:**

Student traffic control in building/stairs/elevators especially outside of OC lecture halls the atrium area of Koffler outside of the TSO, and into the upper laboratory floors of the Koffler building is a significant concern.

OC and BSW will be unlocked when classes resume, and this will bring more people into those spaces and in proximity of research labs.

Ensuring student/visitor compliance with CBC guidelines, particularly mask and distancing guidelines.

Monitoring and enforcing social distancing in large spaces such as conference rooms.

Restroom occupancy and modifications and touchless modifications.

Limited stairwells in the Chemical Sciences building (which could be mitigated by activating key pads or temporarily reinstalling keyed entry locks on the exterior stairwell).
General Policies and Mitigation of Congestion in Hallways of the Physics and Atmospheric Sciences Building (PAS).
The following is a plan for teaching restart of the Physics Department in the Fall of 2020 during the COVID-19 pandemic assuming students will be coming physically to campus, and that there will be University-wide protocols for virus and specific antibody testing and contact tracing with quarantines on campus, as well as University regimens for cleaning of classrooms, bathrooms and common areas and hand sanitizer stations maintained near doorways and staircases. This plan needs to be flexible, and must include preparation to resort to an earlier phase of the restart, (research labs mostly shut down and most students off campus) if the COVID-19 infection rate spikes, especially during influenza season. This plan will be needed for the next 2-3 years until COVID-19 treatments and vaccines are widely available.

Instructors will be required to comply with University rules on using the d2l calendar and gradebook for all courses, to give students a one-stop place to access course materials. Lectures will be recorded, or, when available, instructors will have the choice to use other’s prerecorded lectures.

Since the population of Arizona is now testing at around 4% positive for antibodies to the SARS-COV2 virus according to ADHS, we can assume the campus will have personnel quarantined or convalescing at any time this Fall. Thus all courses must be videotaped to allow quarantined students to access lectures, labs, and recitations online asynchronously, and a back-up instructor will be assigned ahead of time for each course in case the original one is incapacitated. The department has minimal funds and can pay for at most only one or two backup instructors if needed. Beyond that it will need financial assistance from the provost, and will also need extra funds and/or tech support and equipment for the videorecording of all classes.

Faculty, staff and students who are at high risk for complications (immunodeficient, over age of 65, having an underlying condition such as hypertension, etc.) will be accommodated by either working online (Zooming into class or lab meetings) or some other means not requiring them on campus.

The department will follow the University-wide policy of requiring the wearing of cloth masks and physical distancing inside buildings, although we worry about enforcement of these policies and of quarantine protocols. The department will work with fire safety officers to designate entrance and exit doors from the building and for large classrooms and will require students to wait outdoors before class to minimize congestion in hallways. All tables and other obstructions will be removed from hallways, and 6 foot marker signage will be placed on the walls and/or floors. Department student workers will be designated as hallway guides to help direct the flow of traffic during the first few weeks of term, especially near the larger classes during transitional periods. The PAS floor diagrams, Figures 1 and 2, and the Excel spreadsheet attached to this plan show the issue with crowded hallways on the second floor of PAS during filling and emptying of PAS201, 220 and 224 as well as the labs 208, 212 and 216.

The department is waiting for official University-designated occupancies for the centrally scheduled classrooms, but assumes that these will decrease to roughly 25% pre-COVID-19
occupancy so that the area per person would be 50-140 ft$^2$. The Physics Department controlled rooms including the computer lab, 170C and 372 will be occupied at that areal density.

The undergraduate and graduate lounges will be closed during the pandemic and repurposed to accommodate computer stalls from the computer labs so that physical distancing can be accomplished in class for those students who do not have access to a working computer in their dorm room or home. Tutoring and faculty office hours will need to be all online, similar to the last semester after spring break.

Waiting lines for bathrooms and congestion in bathrooms in PAS has been a problem in the past and must be minimized. The two bathrooms on floor 2 of PAS (208 and 226) near the large lecture hall PAS 201 are sufficiently large to allow 2-3 people access at the same time, but in ordinary times there is a long line outside the women’s bathroom PAS 208. We will put up signs showing the locations of other bathrooms in the building, and would prefer to minimize this congestion by having the university place portapotties somewhere outside the PAS building in a location that is convenient for students to access between classes. We prefer to make the other 4-5 small bathrooms on other floors in the PAS building unisex and allow only one person access at a time by putting locks on the doors.

A communication plan for department faculty, staff and students will be created this summer, in order to inform them of current University and department policies and protocols, the new teaching plans, and any changes as they occur.

Courses and Teaching Plans

1. **Large Year 1 and 2 Lectures in PAS 201, 220 and 224** – students must wait outside of the building and be guided to separate entrance and exit doors of lecture halls and classrooms to avoid hallway and lobby crowding and touching of door handles. The specific plan for traffic flow will be developed in concert with fire safety personnel, and provisions will be made for emergency exit and handicapped accessibility. There is generally significant congestion on the second floor as the large classes fill and empty. See Figures 1 and 2 the floor diagrams of PAS, and the Excel spreadsheet depicting the current schedule and registration numbers for courses in PAS 201, 220 and 224.

Note that PAS201 has an area of 3686 ft$^2$ and a pre-COVID-19 occupancy of 379, with auditorium style chairs bolted to the floor. PAS220 and 224 each have areas of 842 ft$^2$, also auditorium style bolted seating with preCOVID-19 occupancy of 54. The course numbers xyz depicting the course Phys xyz are in bold below.

102 – 300 students in lecture. The lecture portion will be taught entirely online (asynchronous or synchronous) thus freeing up PAS201 for Phys 261H; synchronous online recitations of ~90 students will be held using Zoom chat rooms and several TAs.

103 – 150 students in lecture. PAS 201 can accommodate around 95, the remainder of the students will need to be online. We currently don’t have an online version of this
course. Therefore, will need to have the lectures videotaped for students to watch synchronously or later.

140/141 - 2 x 175 students in lectures, recitations of 30 students, 14x25 students in lab. Lectures will be held online either synchronously or asynchronously at the instructor’s discretion. If held synchronously, the recorded lecture will be made available for students who want/need to watch asynchronously. Recitations can be single Zoom meetings with the 30 students broken into breakout rooms of ~4 people. Labs will have to be run with half the student numbers. To accommodate this, we will break the students into two groups, with the groups alternating weekly between in person labs one and an “at-home” modality involving either watching videos and doing data analysis, or doing experiments and data analysis with items that are readily available. An online version of this course is also currently being developed for UA Online. It is not clear whether this material will be available for the Fall, but in the case that it is available, the instructor may be able to access and use some or all of this material.

142/143 – 100 students in lecture, 3 x 24 labs. Lectures and labs and same as 140/141. There is also an online version of this course being developed for UA Online with the same timeline as for 141.

240/241 – 300 students in lecture, 110 in recitations, 14x24 students in labs. Not working on an online version of this course as of yet, but this is high priority. Will need to be videotaped synchronous lectures, only allowing up to ~95 students to watch in person, remainder online. Labs and recitations same as 140/141.

261H – 50 students in lecture scheduled in PAS 220 – could move to PAS201, 2 x 24 in lab – synchronous videotaped lecture, will need to move to a larger room if we allow all students to attend. The labs will need to be treated the same as for 241.

161H – 2 x 40 students in lecture, 4x20 labs – same as 261H, one of the timeslots could move to PAS201

162H – 50 students in lecture, 2x24 lab – same as 261H and could move to PAS201

2. Labs not yet covered above

105A – 2 x 20 students computer lab – Teach synchronously online, allowing students to come in person if they can’t borrow a laptop –up to the room occupancy of 10-12 with 10-12 extra computers moved to grad and undergrad lounges.

181/182 – 15x24 students. intro labs. Will need to have half occupancy, 1 week on, 1 week watching videos and doing data analysis. Same procedure as labs for 141/241.

305 – 26 students computational physics lab – similar to 105A

381/382 - MTR 3x12 students in advanced lab. Students pair up for the semester to perform 5 experiments of ~20. Either increase hours or add W or F to reduce crowding. May require more TAs. Five labs are videotaped, with some interactive questions in the videos. Students can choose some of those if they don’t feel comfortable to come in, but maybe only up to two online labs.

There will be lecture section on Friday, first for error analysis lectures then student presentations of creative project proposals. This can be done by Zoom.
There is considerable hallway loitering around the three lab classrooms both on the second and third floors that needs to be managed.

3. **Smaller courses, mostly upper division or graduate**
   - 204 – 50 students
   - 263H, 321, 331, 371 – 30 students
   - 320, 332, 426, 476 – 20 students
   - 450, 472/572, 511, 515B, 528, 560A, 570A, 579B – 10 students
   Can be synchronous in person but in a larger classroom that can accommodate physical distancing; still need to be videotaped. Some can use PAS 170C or 372.

**Attachments**

**Figure 1.** PAS Classrooms 2-3-4.pdf

Floor plans of the second, third and fourth floor of PAS depicting in color the classrooms and labs, as well as offices.

**Figure 2.** 81.2.pdf

Larger floor plan of the second floor of PAS with room numbers.

**Excel Spreadsheet.** PHYS Enrollment Collisions Fall 2020.xlsx

Worksheet 1 lists the Fall 2020 Physics courses, instructors, previously scheduled classrooms and the current enrollments.

Other sheets show the time map of various classes and their current known enrollments in each of the big lecture halls and labs on the second floor of PAS.
Laboratory of Tree-Ring Research Re-Entry Plan

JUNE 18, 2020
DAVID FRANK & MARTIN MUNRO
The overriding principle for the LTRR is to mitigate individual and community risk during the COVID-19 pandemic whilst upholding our impactful and crucial research, teaching, career development, service and outreach missions. This document is an addendum to College and University Policies and frameworks for the current pandemic. The long-term perspective afforded by tree rings shows that rare and extreme events such as the current pandemic and ongoing climate change are intertwined with societies, ecosystems, and our environment and provide lessons for their successful management. The LTRR community has so far dealt with these intertwined and challenging work-life situations with remarkable flexibility and collaboration, and the administration would like to thank everyone for their past, present, and forthcoming roles as we move through these challenging times.

We will continue to realize this principle by:

i) maintaining a low-population density in the LTRR (e.g., activities that can be reasonably performed at home environments should continue to do so)

ii) following and upholding best practices on social distancing and hygiene (e.g., facemasks will be worn in the LTRR, except within single-occupancy rooms)

iii) upholding College and Universities policies as are being specified for research, instruction, and personnel management

iv) maintaining and fostering a safe, respectful, inclusive working/learning environment.

The remainder of this document: 1) overviews four major goals, and 2) provides departmental and building specific considerations.
This page overviews a few overarching goals coordinated across the College of Science (CoS)

CoS Goal 1: Instructional Delivery and Student Engagement
We will develop solutions specific to our disciplines and their normal modes of instructional delivery and student engagement that will allow us to accommodate a wide range of scenarios in instructional delivery and student engagement for fall semester, including:
- The possibility that students will be participating remotely for the whole semester;
- The possibility that instructors will be participating remotely for the whole semester;
- The possibility of shifting from in-person to remote instruction, or vice versa, at some point during the semester; and
- The possibility that individual students or instructors may become ill or be quarantined during the semester and need to continue teaching/learning remotely even if they started the semester in person.
When traditional modes of instruction and student engagement cannot be adapted to these scenarios, we will seek alternate experiences equally relevant to the discipline.

CoS Goal 1 on Instructional Delivery and Student Engagement will be achieved following College of Science specific guidelines and timelines, whilst also interfacing and considering contexts of other partner departments and colleges.

We will ensure our facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

CoS Goal 2 on Facilities, Spaces, and Environment will be achieved following University and College of Science specific guidelines, timelines, and milestones.

We will develop processes and procedures that provide flexible and equitable treatment of faculty and staff and do everything possible to protect vulnerable populations while also ensuring we have the intellectual capital and support needed for operations in fulfillment of the unit’s mission. Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.

CoS Goal 3 on Personnel and Operations will be achieved following College of Science specific guidelines and timelines, whilst also interfacing and considering contexts of other partner departments and colleges.

UArizona, CoS & LTRR Goal 4: Research Advancement
We will uphold and advance our leadership position in inter-disciplinary tree-ring research and fulfill agreements with our state, Federal, and international partners.

LTRR, CoS and UArizona Goal 4 on Research Advancement will be achieved following RII guidelines and procedures including continuation of activities and procedures authorized via the essential operations waivers, and transition into the RII checklist system on a group-by-group basis.
The remaining pages overview LTRR specific considerations for operations under COVID-19

Graduate Student Open Carrels
LTRR Graduate students and visiting scholars are typically situated in the central carrel spaces on the 3rd and 4th floors. While social distancing guidelines are broadly achieved in the current configuration, the open floor plan, centralized location, and modest partitioning between work-spaces and walking corridors suggest it is prudent to find additional flexible locations for graduate students not working at home. Options include:
1) use of single occupancy offices that are e.g. vacated due to faculty working from home
2) use of meeting rooms (315 and 415) on an individual basis
3) continued use of conference room 424 for writing sessions provided face-mask usage, social distancing, and sanitization are upheld.

Shared Offices
Offices shared by two or more individuals will be managed by i) attempting to utilize temporary alternative office locations to reduce shared usage and/or ii) scheduling coordination of office occupants for staggered work schedules. This primarily includes shared offices of post-doctoral scholars and the business office.

Outreach Programming
Recently, the LTRR Outreach program brings over 4000 individuals on tours of the Tree-Ring Lab per year. It is foreseen to (continue) to focus on remote outreach programming during the fall semester. Yet, phased return to on-site tours and programming will be considered by i) limiting group size, ii) visiting select parts of the lab such as the main lobby area, iii) coordination with general building occupancy, and iv) supplying visitors with facemasks, etc.

LTRR Business Office
The LTRR business office will continue to uphold a mixture of remote and in-person operations with the recommended protocol of upholding primarily remote activities through the summer and presumably the fall 2020 semester. Potentially faculty-staff mail can be distributed to individual offices to mitigate traffic flow into the business office and the small mailroom section.

Meetings & Seminars
Faculty-staff meetings will be conducted via Zoom until further notice. Our regularly occurring Brown-Bag seminar will also be conducted via Zoom until further notice.

Visiting Scholars
The Laboratory of Tree-Ring Research is host to numerous national and international students and scholars per year including those on the Haury Fellowship program. We will continually revisit the planning frameworks based upon general information on community transmission. We foresee hosting fewer visiting scholars in the coming year.

Field Activities
Any and all fieldtrips/work for research or instructional activity are expected to comply with established LTRR, College, and University guidelines for field safety including submission of travel waiver requests to be approved at departmental, College, and University administrative levels. It is recognized that typical guidelines which often emphasize “safety in numbers” are at odds with practices to mitigate COVID-19 transmission.

Building Management
The building manager (Martin Munro) will interface with FM and the LTRR community on needs (e.g., hand sanitizer, signage, etc.) as they evolve during the pandemic, order appropriate signage for the building, and oversee infrastructural and technological solutions.

The multipurpose room (#110) will be measured/configured for appropriately social distanced in-person activities / instruction. Consideration for the mode of operation for the Introduction to Dendrochronology Lab and the microscopes along the wall is required.

The conference room (#424) will be measured/configured for appropriately social distanced in-person activities / instruction / meetings / writing workshops. Two modes, one using the conference table, and one with room occupants seated on room perimeter will be explored.
The Elevator should only be used by a single occupant at a given time.

It is not presently foreseen to establish walking directions and routes with the exception that LTRR members leaving the building via stairs are encouraged to use the north-east stairwell.

**Kitchen Area**

The department kitchen area will be managed according to guidelines from FM. Concerns about COVID-19 transmission intersect those with accidental ingestion of disinfectants/sanitizers. At present it is foreseen that chairs will be removed from the tables, and the counter decluttered from all communally used / available dishware and utensils.

Individuals working/studying in the LTRR will be encouraged to place a small personal coolbox at their workspace and reuse with re-usable cooling packs on a daily basis rather than the departmental refrigerator. The microwave (& oven) could remain available under the provision that only closed containers are placed in the microwave and/or oven and that cleaning is conducted (handles, buttons, touched surfaces) both prior to and following individual use. Guidelines for usage will be posted prior to August 1, 2020.

**Possible Facilities Upgrades for Consideration by LTRR, Risk Management, FM & Administration**

- Installation of AV equipment in the multi-purpose room (room 110) to permit live instruction & lectures to remote participants. (Would be needed prior to August 15, 2020)
- Installation of AV equipment in the conference room (room 424) to permit live instruction & lectures to remote participants. (Ideally prior to August 15, 2020)
- Touchless bathroom operations including sinks and paper towel dispensers.
- Assess low water usage sink nozzles to determine increased risk for aerosol formation and adjust as prudent.
- Change to toilet seats including lids to reduce aerosol spread during flushing, and single-use seat covers.
- Touchless water fountain installation?
- Other?

**Personnel Planning**

It is hypothesized that an easy to use online program to communicate planned and realized work schedules may be helpful to mitigate population density in building areas at a given time, and also be useful for potential contact tracing if/as needed. Presuming that most other departments and colleges share similar needs it is feasible (& proposed) for a single (cost) effective solution to be developed centrally.
Department of Computer Science Re-Entry Plan

JUNE 16, 2020
TODD PROEBSTING
The Department of Computer Science is planning a very conservative approach to the threats posed by the COVID-19 pandemic. Our approach is to have everybody work remotely as much as possible. Where it is not possible, we will follow all university and college guidance on safe work practices.

**Business Office Staff**
The department employs two people in its business office. Both will work remotely and conduct business virtually.

**Information Technology Lab Staff**
The department employs two people in its lab. Both will work remotely and conduct most business virtually.

The head of the lab staff (Eric Collins) will likely visit the machine rooms once a week to make sure there are no undetected disasters. He may also visit if there is a problem with a machine.

We have installed monitoring equipment since the lockdown to make status-check visits much less necessary.

**Academic Affairs and Advising**
The department employs eight people in the Academic Affairs office. All will work remotely and conduct business virtually.

The administrative assistant or the manager may come to campus to handle a delivery or some other necessity.

**Research Assistants, Teaching Assistants and Tutors.**
The department has many student assistants. All will work remotely and conduct their employment duties virtually.

**Faculty**
The department employs almost 30 faculty. Many will work remotely and conduct business virtually. Those not working remotely will be asked to isolate themselves in their offices when on campus.

**Teaching**
Instructors will be given the choice to teach fall courses in-person or remotely, and the department will honor their requests. Based on early indications, more than 50% (16/23) of undergraduate course instructors will choose an in-person mode.

The department will work to find appropriate accommodations for instructors wishing to teach in-person. This will likely entail finding larger rooms to allow for social distancing.

**Research**
The vast majority of our research can be conducted remotely with a laptop, an internet connection, and Zoom, which is how we expect that work to be conducted. Should in-person meetings be conducted, all university and college safety guidelines will be followed.
Budget
The department only expects incidental additional expenses. (E.g., sanitizers, face coverings, remote teaching equipment, etc.)
Operating Plan Overview
The College of Science Administration plan for reopening includes guidance in accordance with the University’s guidelines to safely return to on-campus activities for staff.

Budget Summary Information
Budgetary impacts would include cleaning / disinfecting equipment and supplies for staff and visitors that isn’t covered by FM.

Communication
College of Science Administration will communicate safety guidelines, protocols and expectations to staff via written communications (emails and procedural documents) as well as through training sessions and regular team meetings.

GOAL 1: Instructional Delivery and Student Engagement
N/A

GOAL 2: Facilities, Spaces, and Environment
We will ensure workspaces and public spaces are prepared to accommodate staff and students and occasional campus visitors while mitigating risks associated with COVID-19 and following best practices for the health and safety of staff and visitors.

Responsible Person or Unit: COS Dean’s office

Key protocols needed to effectively support outcomes:

- Work with FM on installation of signage on walls for social distancing, hand hygiene and safety guidelines and expectations
- Designate person(s) responsible for posting and updating signage
- Create written protocols for increased cleaning and disinfecting throughout the facility
- Review and revise opening and closing procedures
- Limited occupancy and disinfecting protocols for the staff break room
- Modifications to shared office spaces to ensure proper distancing
GOAL 3: Personnel and Operations
We will develop protocols and procedures to mitigate the risks of COVID-19 to safely reopen for our staff, students and visitors. We will provide flexibility and equitable treatment of staff and do everything possible to protect vulnerable populations while also ensuring we have the necessary capital and support required for the continuation of operations and mission.

Key protocols needed to effectively support outcomes:

- Staff will be required to wear a mask at all times, except for when alone in a private office or in meeting rooms where 6’ spacing is possible
- All Visitors will be required to wear masks
- We will allow flexibility for some staff to work remotely whenever possible
- We will ensure that all staff stay home if they are not feeling well
- We will adhere to the applicable group size protocol for group visit requests

Risk/Uncertainty:
A risk exists regarding maintaining adequate staffing to continue operations on campus, to the extent even needed, if some staff have to isolate due to exposure or illness from COVID-19.
Department of Mathematics
Re-Entry Plan

JUNE 5, 2020

Douglas Ulmer, Head, in collaboration with the department’s administrative team: Associate Heads Marta Civil, Kevin Lin, Rob Indik, Dave Glickenstein, and Joceline Lega, Director of Academic and Support Services Tina Deemer, and GIDP chairs Misha Chertkov and Joe Watkins.
The Department and affiliated GIDPs (Applied Mathematics, Statistics) will endeavor to carry out our instructional, research, and outreach missions while ensuring the health and safety of our employees, students, and community partners.

Milestones

June 12, 2020: Dean’s office approves this plan.
June 24, 2020: Provost’s office approves this plan.
August 24, 2020: Fall classes commence

Budgetary considerations:

a. We have requested equipment (webcams, doc cams) from CTS for departmentally controlled classrooms.
b. We expect to have significant expenses for equipment to be used by faculty for remote teaching.
c. We request additional temp teaching funds to hire Undergraduate Teaching Assistants to assist with the increased technological demands of running hybrid courses.

Goals and tasks:

1. Instruction
2. Facilities
3. Personnel and Operations
1. Instruction

We will build on our portfolio of asynchronous courses to offer most or all 100- and 200-level courses in a hybrid, Level 2 mode. These courses will have at least one weekly face-to-face meeting, with a significant fraction of the learning happening asynchronously and on-line. Students will have the flexibility to participate in a purely online fashion.

The "live" meetings of 107 and 112 will be in large sections. For many students, these live meetings will not be necessary, so there will not typically be large gatherings of students. There will be significant new support structures like on-line tutoring and problem sessions. In other words, we use our faculty and TA resources in a different mode for these courses: fewer parallel lectures and more as-needed support.

Other 100- and 200-level courses will stay in small to medium (35- to 70-student) sections, a majority of which will be hybrid.

The strategy for 107 and 112 outlined above frees up a considerable number of larger classrooms (60 student collaborative learning spaces). We will use these to offer many of our 300- and 400-level courses in Level 1 (in person). Those faculty who prefer to teach on-line may teach these courses in Level 2 or Level 3 modes.

Graduate courses may be offered at Level 1 or faculty may choose to offer them in Levels 2 or 3.

Determination of exactly which courses and sections will be offered at which levels is still ongoing, but we expect to have no trouble meeting University guidelines on the percentage of SCHs offered in levels 1 and 2.

Departmental Tutoring. Mathematics offers both lower division and upper division tutoring. These are expected to be online in the fall, using a combination of Zoom and other technologies like Microsoft Teams.
2. Facilities

Departmentally controlled spaces include the Math tower (building 89, with associated “MTL--Math Teaching Lab” building 89A) as well as several floors or partial floors in ENR2 (building 137), and offices on the 5th floor, north section of PAS (building 81).

The Tower:

The Math tower contains departmentally controlled seminar and classrooms, faculty and staff offices, as well as several outward-facing support areas, including Math 108, the main academic window, the Math Center (our undergraduate advising center), and offices for our graduate programs and those of the GIDPs in Applied Math and Statistics.

We plan that these buildings will mainly remain locked, with usage limited to those with keys. More precisely, faculty and staff will have access to private offices and to shared offices under distancing guidelines. Service offices will either be closed entirely or operate on a very limited schedule.

ENR2:

Our space in ENR2 consists of private faculty offices, cubicle space for graduate students, and department controlled seminar and meeting spaces. The building will be unlocked, but with very limited usage. More precisely, faculty will have access to private offices. We are still working on a plan to potentially allow graduate students limited access to cubicle space. Departmentally controlled seminar spaces may be used for graduate courses under strict distancing guidelines.

PAS:

Our space in PAS consists of offices for the TRIPODS project, a teaching laboratory for Applied Math, and a collaborative workspace and offices used by the CRR (Center for Recruitment and Retention) outreach unit. Our current plan is that the offices and outreach space will be closed throughout the fall, faculty and staff will have access to private offices and to shared offices under distancing guidelines, and the teaching lab may be used under strict distancing guidelines.

A group of our staff members is working with FM on signage, elevators, and other facilities issues.
3. Personnel and Operations

General Principles:

1. We will minimize the number of employees who are present on-campus. Staff will work remotely unless physical presence is needed in the building(s), in which case we will have a rotating group of people who will handle in-person duties, with only 2-4 staff in the building at any time. Note that although some staff will be available, offices will be closed.
2. Many faculty members and graduate students will be teaching remotely.
3. Employees who are uncomfortable returning to campus will be able to opt out of in-person duties, and will be reassigned to other work.
4. Staff will continue flex scheduling and remote work. Some staff members choose to work on non-standard schedules (such as four 10-hour days per week, or later start times), and this will continue to be allowable, so long as there is sufficient coverage for work during peak times every day.
5. All form processing will remain electronic, unless the university requires in-person or paper processes.
6. All meetings (departmental meetings, committee meetings, advising, etc.) will continue to be held online. In particular, faculty may not require students to come to campus for meetings of any kind.
7. Paper copies and mail/package deliveries should be minimized in order to reduce the amount of staff time needed on campus for such things. Every course should have a D2L site, and assignments should be collected electronically in an effort to eliminate the need to collect paper homework assignments. Students will no longer be allowed to turn in homework at Math 108.
8. General departmental requests will be centralized through our ticketing system for tracking and shared responsibility among staff.
9. We will develop a complete list of contacts, including phone numbers, email addresses, and office hours prior to the start of the Fall semester.

Academic Advising

Academic Advising for majors/minors will continue to be remote. Appointments and drop-in hours will continue to be held in Zoom/by phone, and are available to students through Trellis. Our helpdesk ticketing system will remain the primary method of communication between the Math Center staff and undergraduate students. Math Center phone calls will be routed to staff through Jabber softphone. The weekly newsletter will continue to be distributed. The Math Center will work to implement new methods of community building in a remote environment.

Undergraduate Student Support/Placement and Course Registration Assistance

Student support will continue to be remote. Students can contact our offices through various channels. Email will continue to flow through our helpdesk ticketing system. Phone calls to the “main office” phone number will be routed to Academic
Support Office staff through Jabber softphone. Academic Support Office staff will host scheduled office hours on Zoom. All forms and processes will be available online.

Microsoft Teams and email will be utilized as a way to share placement/registration/course-related information and updates with the advising and university community.

Instructional Support

Instructional support will largely continue to be remote. Instructors in online, hybrid, and in-person courses will be offered training and support remotely through various channels. Microsoft Teams will be utilized to provide real-time support to faculty and graduate students in all aspects of the teaching experience. Textbooks for most courses will either be online or available via inclusive access.

In-person support will be offered only during certain scheduled days/times.
- The office door will remain locked; all people will have to come to the window to retrieve items. We’ve requested plexiglass to cover the window with an opening at the top and bottom.
- Supplies will be available in the commons room across from room 108. There will also be a small stash in ENR2 (third floor) and in Math 401N, near the respective copy machines. All faculty/staff/students will need the 1070 key to access the Math building common rooms, and the ENR2 3rd floor key to access that area.
- Copies will be run on Mondays, and will be available Tuesdays.
- Mail will be picked up from Central Receiving on Mondays, and will be available Tuesdays. Absolutely no personal mail or packages. Instructors needing frequent mailbox access can be added to the outside wall.

IT Support

IT support will continue to be remote. Communication will primarily be through the ticketing system (email to system@math.arizona.edu). Computer assistance will be provided via remote computer access or Zoom as much as possible. Staff will come to campus as necessary for hardware issues, to check on servers, and to provide “live” support if essential.

Graduate Program/Student Support

Graduate Program Coordinators will continue to work primarily remotely. In-person meetings and interactions will be kept to a minimum; coordinators will continue to use Zoom for office hours and meetings whenever possible. Coordinators will continue to keep in contact with students and faculty via email, phone, text, Teams, Skype and Zoom. They will continue working closely with the DGS in their respective programs and continue calling, texting and Zooming several times each week to ensure the programs are running smoothly. Paper processing will be eliminated except where required by the university. Many forms are available via Adobe sign or as a Google form to eliminate paper processing.
Exams such as Comprehensive, Final Oral defense, and Qualifying will continue to be held via Zoom or Skype until restrictions by the University and CDC are lifted. Qualifying exams will be held either orally, as a take home exam, or using an online proctoring method. The final determination of the method will be made at a later date by the Graduate Committee and the exam authors.

The Integration Workshop is currently in the planning stages and will be finalized once it is determined whether or not students will be returning to campus for fall. The method of delivery will be based on the number of people able to gather at the time of workshop. All communications with the Graduate College, Global, ISS and other departments will continue using email, online form submissions and phone calls. The same methods will be used for communicating within the department with the addition of MS Teams.

Business Operations
Business services will continue to be remote. Department employees will be supported primarily through department email addresses that connect to our ticketing system, and through Microsoft Teams. All forms and processes will be available online.

Faculty/Department Head Support
Faculty and committee meetings will continue to be remote. Support staff will continue remote support and can be contacted via email. Staff will also offer office hours for those requiring assistance. Fall processes such as P&T, workloads, and Sabbatical requests will all be facilitated paper free and will be completed online. Ali will communicate with faculty departing and coordinate “contact-free” efforts as to where keys, etc. should be returned or left (if borrowed). New hires will be contacted and supported remotely. If guest visitors are permissible, the logistics will be discussed on a case by case basis.

Building/Facilities Support
Any problems with the building or facilities should be reported immediately through the ticketing system and/or Teams.

Events
The Mathematics Colloquium and all Departmental seminars will continue online through Zoom or Teams. There is interest in continuing the weekly tea online. We will need to determine the best way to proceed with larger events such as the Math Majors Engagement meeting in August (75-100 people). Also the New Hire meeting that we have with TAs and new faculty in August. We will need to determine if webinars or Zoom meetings work best.

In general, Fall events will proceed online and Spring events, such as the Arizona Winter School, will be TBD as to format.
Flandrau Science Center & Planetarium Re-Entry Plan

JUNE 5, 2020
COLLEGE OF SCIENCE RE-ENTRY TASK FORCE
Operating Plan Overview
The Flandrau Science Center & Planetarium plan for reopening includes guidelines to safely open the Science Center and Planetarium for public visitors while mitigating risks associated with COVID-19.

Key Milestones
• 6/5: Unit operating plan due to CoS Dean
• 6/12: Dean submits plans to Provost
• 7/1: Determine modality for all courses
• 6/24: University releases re-entry guidelines for fall semester
• 6/30 (or before): Provost approves revised plans
• 7/24: University announces modifications to the re-entry guidelines for fall semester
• 8/1: Flandrau staff are trained in proper protocols for social distancing and disinfecting practices
• 8/21: All COVID-19 signage, sanitizing stations, etc. are in place
• 8/24: Fall semester begins
• 9/6: All Flandrau student employees are trained in proper protocols for social distancing and disinfecting practices
• 9/7: Flandrau reopens to the public

Budget Summary Information
Costs include face masks for staff and visitors, cleaning/disinfecting equipment and supplies, additional microphones for planetarium operators (enough for each operator to have his/her own to eliminate sharing of microphones), fabrication of multiple sets of puzzle pieces, stylus pens for touchscreens, and possibly some computer/IT equipment for sustained long-term remote work.

Communication
Flandrau will communicate safety guidelines, protocols and expectations to staff via written communications (emails and procedural documents) as well as through training sessions and regular team meetings. Safety guidelines and expectations will be communicated to visitors via our website, including on-line ticketing, and Facebook.
GOAL 1: Instructional Delivery and Student Engagement
One course (PTYS206, Our Golden Age of Planetary Exploration) is scheduled to be taught in the Planetarium Theater this fall. We will work with LPL and Professor Steve Kortenkamp to ensure proper capacity, social distancing, and queuing meet University guidelines.

**Responsible Person or Unit:** Flandrau’s Executive Director, LPL Department Head and course Instructor
GOAL 2: Facilities, Spaces, and Environment
We will ensure Flandrau Science Center & Planetarium (FSCP) workspaces and public spaces are prepared to accommodate staff and students and welcome visitors while mitigating risks associated with COVID-19 and following best practices for the health and safety of staff and visitors.

Responsible Person or Unit: FSCP Executive Director and Staff

Key protocols needed to effectively support outcomes:

▪ Determine capacity limits in the exhibit halls, planetarium theater, meeting rooms, gift shop
▪ Assess all exhibits and identify which exhibits and/or exhibit components need to be removed from the floor due to inability to safely disinfect or modify to meet safety guidelines
▪ Install signage on walls and floors for social distancing, hand hygiene and safety guidelines and expectations
▪ Designate person(s) responsible for posting and updating signage
▪ Create written protocols for increased cleaning and disinfecting throughout the facility
▪ Review and revise opening and closing procedures
▪ Limited occupancy and disinfecting protocols for the staff break room
▪ Modifications to shared office spaces to ensure proper distancing
▪ Work with the UA Bookstore to reduce gift shop inventory to allow for proper placement of fixtures to accommodate social distancing
▪ Continue to work with UA FM to acquire the necessary face coverings, signage, supplies, etc.
▪ Hand sanitizing stations will be installed throughout the building
▪ UA FM will be installing touch free paper towel dispensers in restrooms foot/arm pulls on restroom doors

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:

▪ Disinfecting solutions and wipes
▪ Disinfecting equipment (possibly a mister and a UV light sanitizer) for disinfecting the planetarium seats and space and puzzle pieces, exhibit components and stylus pens
▪ Gloves for disinfecting surfaces and use at the ticket desk
▪ Plexiglass shield at the ticket desk
▪ Masks for staff and visitors
▪ Headset microphones for planetarium operators
▪ Signage (wall and floor) for social distancing, COVID-19 guidelines
▪ Additional computer equipment may be required for long-term remote working

Risk/Uncertainty:
Concern about visitor and student traffic flow and control in the public spaces and ensuring visitor compliance with guidelines.
GOAL 3: Personnel and Operations
We will develop protocols and procedures to mitigate the risks of COVID-19 to safely reopen for our staff, students and visitors. We will provide flexibility and equitable treatment of staff and do everything possible to protect vulnerable populations while also ensuring we have the necessary capital and support required for the continuation of operations and mission.

Responsible Person or Unit: FSCP Executive Director and Staff

Key protocols needed to effectively support outcomes:

- Staff will be required to wear a mask at all times, except for when alone in a private office
- Visitors will be required to wear masks (age requirements need to be determined)
- Assess current business hours and modify hours to reduce costs and ensure proper staffing is available for operations during open hours
- Create a plan for timed ticketing to control visitor capacity
- Modify the planetarium show schedule to allow for time to disinfect the theater between shows
- Modify staff schedules to ensure adequate staffing to cover increased disinfecting protocols
- Create digital program offerings to provide remote options for the community to engage with FSCP
- Increase frequency of team meetings to ensure proper communication of new procedures, guidelines and protocols
- Hold training sessions for the new guidelines, protocols and procedures for all staff
- Allow flexibility for some staff to work remotely whenever possible
- Established expectation for all staff to stay home if they are not feeling well
- Revise ticket desk procedures to meet proper distancing requirements and reduce contact with visitors
- Work with the UA Bookstore and FSO to review and revise Point of Sale transactions
- Adhere to the applicable group size protocol for group visit requests

Risk/Uncertainty:
Concern about ensuring we have adequate staffing to continue operations if some staff have to isolate due to exposure or illness from COVID-19. Concern about having to close operations due to a spike in virus spread.
Department of Speech, Language, and Hearing Sciences Re-Entry Plan

JUNE 5, 2020

SLHS LEADERSHIP

Pagie Beeson – Department Head
Mary Alt - Teaching and Faculty Development
Robin Samlan - Clinical Education and Clinical Research
Kate Bunton – Curriculum and Student Communication
Jenny Hoit - Faculty Development
Kim Sasser - Building Management and Faculty Support

Additional contributors:
Leah Kapa (Research), Susan Bridgewater (Student support and communication)
Andrea Palacio (Undergraduate student communication), Kevin Phelan (Business manager)
Department of Speech, Language, and Hearing Sciences
Operating Plans for Fall 2020 Campus Re-entry

Operating Plan Overview
The Department of Speech, Language, and Hearing Sciences (SLHS) plan for campus re-entry for Fall 2020 addresses issues relevant to the environment, personnel, operations, and key activities (teaching, research, and community service). Re-entry planning for SLHS requires attention to each of the following areas:

1. Instructional delivery and student engagement including
   - Classroom and laboratory experiences
   - Clinical education on-campus
   - Clinical education off-campus

2. Workspace: Facilities, Spaces, and Environment

3. Personnel and operations

4. Research
   - On-campus
   - Off-campus

Key Milestones
- 6/5: Initial draft of re-entry to College of Science Dean
- 6/10: Faculty determination of teaching modality for fall classes
- 6/15: Submit plan for re-entry procedures for off-campus clinical placements to UArizona Teaching and Learning Implementation Planning Team
- 6/24: University release of re-entry guidelines for fall semester
- 6/30 (or before): Provost approves revised plans
- 7/1: Off-campus clinical practica/externships resume if procedures approved and site meets COVID-19 mitigation guidelines
- 8/3: Review and approval of off-campus clinical placements for Fall 2020
- 8/12: Building check to assure all appropriate signage in place
- 8/14/20 Finalize SLHS guidelines for classroom and clinical education guidelines for Fall 2020. Adequate face coverings procured for students, faculty staff, including those for specific clinical needs.
- 8/24: Fall semester begins
- 8/31: Clinical practica begin (on- and off-campus)

Budget Summary Information
Potential costs
- Standard sanitation supplies and face coverings provided by Facilities Management.
• Face masks for clinical service delivery: transparent face masks/face shields, surgical masks for specified clinical procedures
• Possible modifications of air handling in clinic/research rooms
• Potential cost of new teaching software/technologies

Goals and Tasks

Goal 1: **Instructional Delivery and Student Engagement**
To provide high quality instruction that supports student learning and engagement at all levels (undergraduate/graduate) and contexts (classroom, clinic, research, and other individual engagement) for all students.

Task 1: For classes, determine teaching modality, prepare courses and contingency plans.

Description, **Schedule, Persons responsible**
- Faculty will select teaching modality for each course (in-person, flex in-person, or live on-line) by **June 10. All faculty, Bridgewater.**
- Assure appropriate room scheduling for Fall 2020 by **August 1. Bridgewater, Bunton.**
- To assist faculty in the preparation of fall courses, SLHS leadership will establish a D2L site to serve as repository for instructional tools and plan several brainstorming/informational teaching preparation sessions for SLHS faculty. **June – August. Alt, Bunton.**
- Each faculty develop contingency plans for personal and external factors (e.g., personal or family illness/needs, spike in COVID-19 transmission) that would reduce in-person teaching or other plans. **August 15. Bunton, Beeson.**
- Communication to incoming and continuing students, **June, July, and August. Beeson, Alt, Bunton, Samlan, Bridgewater, Palacio.**

Financial Considerations:
- Assure that course fees are directed toward specific needs for Fall 2020
- Potential additional costs to support teaching modalities

Risk/Uncertainty: addressed by contingency plans.

Task 2: For clinical education and human subjects research, determine phased re-entry plans for full range of risk levels described by Human Subjects Research Re-entry Task Force.

Description, **Schedule, Persons responsible**
- Review and determination of student return to available off-campus clinical practicum/externship sites. By **June 15** for July 1st start dates. By **August 3** for August 31 start date. **Beeson, Samlan, Muller.**
- Translate Human Subjects Research Re-entry Guidelines to SLHS research activities and contexts, determine specific SLHS guidelines, and develop alternatives. **June-August. Beeson, Samlan, Kapa.**
- Determine guidelines for phased re-opening of Speech, Language, Hearing Clinic service delivery a) by faculty, b) faculty with students. Ongoing **June – August.**
Samlan, Beeson, and clinical faculty. Note that this includes review of available literature, guidance from CDC, UArizona, and relevant professional organizations.

- Determine face coverings needed for students who will be participating in off-site practicum experiences and supply if the facility will not. Sasser, Samlan, Muller, Beeson
- Evaluate and refine telehealth services. Ongoing June-August: Samlan and clinical faculty.
- Develop guidelines for students who wish to use department resources to practice testing procedures. Ongoing June-August: Beeson, Samlan, Kapa
- Communication to incoming and continuing students and community partners. Ongoing June – August. Samlan, Beeson, Kapa, Bridgewater, Palacio, and individual researchers.
- Plan COVID-19 and face covering curriculum for all students, with specific training for students participating in the clinical experiences and human subjects research, taking advantage of university resources with additional specifications as needed.

Financial Considerations:
- Revenue loss to clinics
- Reduced productivity in relation to grant-funded research
- Potential costs associated with optimizing telehealth platforms for clinical education
- Student loss of wages due to reduced/constrained research.

Risk/Uncertainty:
- Safety issues are major concern for face-to-face clinical and research activities.

Task 3: For individual student engagement experiences

Description, Schedule, Persons responsible
- Assist faculty in planning modifications for student engagement activities (independent studies, directed research, service). July-August: faculty brainstorming sessions. All faculty.
- Communication to incoming and continuing students. June – August. Alt, Bunton, Palacio.

Financial Considerations:
- Reduced opportunity to convert student engagement activities to paid positions

Risk/Uncertainty:
- Need to avoid any suggestion of coercion with regard to student/faculty engagement levels
Goal 2: **Facilities, Spaces, and Environment.**
Ensure that SLHS facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

**Task 1:** Communicate and implement university guidelines for building compliance with COVID-19 mitigation plans.

**Description, Schedule, Persons responsible**
- Stock and distribute cleaning/disinfectant supplies. **June-August. Sasser with Facilities Management.**
- Determine signage needs throughout the building and post appropriate signs. **June-August. Sasser, Barakat, Samlan, and clinical faculty.**
- Establish and confirm custodial cleaning schedule in relation to use of specific spaces. **June-August. Sasser with FM.**
- Communicate guidelines to all faculty to establish procedures for all spaces. Monitor appropriate signage and develop oversite plans for department scheduled classes, labs, clinic rooms. **June-August. Sasser, Samlan, Kapa, and all faculty and staff for respective spaces.**
- Each faculty develop contingency plans for personal and external factors that would shift teaching modality or plans by **August 15. Alt, Beeson.**
- Communication to students, **August. Sasser, Samlan, Bridgewater, Palacio.**

**Financial Considerations:** work with Facilities Management
**Risk/Uncertainty:**
- Need contingency plans if key faculty/staff are unable to perform duties

**Task 2:** Obtain and establish guidelines for face masks/coverings

**Description, Schedule, Persons responsible**
- Order and distribute UArizona face coverings to faculty, staff, students. **July-August. Sasser with Facilities Management.**
- Determine face masks/shields needed for specific clinical service delivery and research. Order necessary supplies and establish guidance for faculty/staff/students. **June-August. Sasser, Samlan, Muller, Beeson.**

**Financial Considerations:**
- Potential costs not covered by Facilities Management

**Risk/Uncertainty:**
- Need to affirm the safety/adequacy of face covering plans in relation to activities.
- Problems with non-compliance with COVID-19 mitigation guidelines
Task 3: Determine guidelines for use of spaces for clinical research and service delivery
Description, Schedule, Persons responsible
- Investigate air handling/circulation of rooms in relation to occupancy, distance, and duration of interpersonal interactions in addition to room down-time before terminal cleaning. **June-August, Samlan, Muller, Sasser, Beeson with Facilities Management.**
- Develop guidelines for room use and post guidelines for all relevant clinical and research spaces. Communicate with faculty/staff. **June-August, Samlan, Sasser, Beeson.**

Financial Considerations: work with Facilities Management
Risk/Uncertainty: Need to affirm the adequacy of mitigation plans in relation to use of rooms for typical durations (more than 15 minutes) in relation to air circulation. Overall risks to health of faculty, staff, and students, particularly in the context of clinical service delivery on- and off-campus.

Goal 3: **Personnel and Operations.**
Develop processes and procedures that provide flexible and equitable treatment and support of faculty and staff and do everything possible to protect vulnerable populations. Protect the intellectual capital and support needed for operations in fulfillment of the unit’s mission. Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.

Task 1: Proactively support faculty (tenure-track and career faculty) as they accommodate necessary changes to teaching and research, with consideration of promotion and tenure expectations.
Description, Schedule, Persons responsible
- Provide group and individual meetings with faculty to discuss the impact of COVID-19 mitigation plans on accomplishments critical to promotion and tenure, including discussion and guidance regarding alternate plans. **June-August, Hoit, with Story and Beeson.**
- Promotion and tenure committee and teaching review committees proactively consider appropriate adjustment to evaluation standards and procedures for activity during COVID-19 mitigation period. Discuss and communicate with faculty, particularly pre-tenure and mid-career faculty. **June-August, Hoit, Alt, Bunton, Beeson.**
- Identify and provide additional telehealth training opportunities for clinical faculty. **June-August and on-going, Samlan, Beeson.**
- Establish clinical education expectations for career faculty in the context of constraints imposed by COVID-19 mitigation plans. **June-August and on-going, Samlan, Beeson with clinical faculty.**

Financial Considerations:
- Need to evaluate faculty productivity in terms of student credit hours and clinic revenue
• Need to evaluate financial model for clinic

Risk/Uncertainty:
• Duration of the need for adjustments uncertain.
• Potential loss of talent in the department and effects on ability to meet national accreditation standards and to maintain national prominence.

Task 2: Proactively support faculty, staff, and students during this time.
Description, Schedule, Persons responsible
• Plan a distributed support network to assure adequate communication for all constituents. June-August and on-going. Beeson, Alt, Samlan, Sasser, and SLHS Advisory committee (Hoit, Kapa, Marrone), and SLHS Equity and Inclusion Committee.

Financial Considerations:
• Concern regarding loss/reduction of faculty/staff to perform key tasks, especially when service levels are already high

Risk/Uncertainty:
• Uncertainty regarding health and social-political distress in our county.
• Consequences of overburdened faculty and staff

Task 3: Evaluate department finances in relation to budgetary shortfall, and plan for the future.
Description, Schedule, Persons responsible
• Engage SLHS senior leadership in budget evaluation and planning with the goal of prioritizing areas that can sustain reduced resources and exploring revenue-generating programs. June-August and on-going. Beeson, Samlan, Alt, Phelan (with others).

Financial Considerations:
• Dealing with department, college, and university-level shortfalls

Risk/Uncertainty:
• Uncertainty regarding long-term sustainability of mitigation plans and financial consequences

Goal 4: Research Restart
Research restart plans will be submitted for approval using guidelines provided by Research Innovation and Impact (RII) Research Restart Plan
Detail for research plans not included here.
Department of Molecular and Cellular Biology

JUNE 17, 2020
RYAN GUTENKUNST, ASSOCIATE DEPARTMENT HEAD
Operating Plan Overview

Teaching: Our goal is to offer as many courses as possible face-to-face, with digital capture for those students unable or unwilling to attend in person. We will submit our requests for face-to-face instruction with 50% capacity for rooms, which can hopefully be accommodated. Our larger classes (larger than about 300 students) may need to be flex in-person due to lack of rooms, but we will consider moving those classes to off-peak morning and evening times to find open rooms. To enable face-to-face instruction, we will require and utilize additional face coverings that we expect will be furnished by the University. In addition, our plans include:

1) Upgrading three conference rooms in Life Sciences South to accommodate digital capture of instruction.
2) Expanding staffing to ensure continuity of instruction, particularly for our large introductory biology lab course.
3) Redeveloping the introductory biology lab course to minimize potential transmission and ensure instruction for isolated students.

Research: We expect most labs to ramp back up to full-time work, following additional protocols to minimize interpersonal interaction and deploy additional cleaning of lab spaces and face coverings to minimize transmission risk. Policies for individual labs have already been approved through the waiver process.

Administration: Business and administrative personnel will all have the option to work remotely if they desire. We anticipate having at least one administrative person on-site every day to ensure continuity of operations.

Physical Space: Per University guidelines, masks will be required in all share spaces within Life Sciences South. Additional sanitation stations will be installed outside all teaching spaces. Following University policies, enhanced cleaning will be implemented throughout the building.

Key Milestones
7/1/2020: Determine modality for all course
8/1/2020: Physical installation of new conference room audiovisual equipment completed.
8/15/2020: Installation of new conference room PCs completed.
8/24/2020: Training documents for upgraded conference rooms distributed to MCB teaching faculty.
8/1/2020: Identify and hire new graduate teaching assistants
8/24/2020: Complete training of new teaching assistants to begin courses.

Budget Summary Information
Conference room upgrades are anticipated to total roughly $45k.

At this point, additional staffing is expected to come from temporary teaching funds, which we hope to acquire from the College of Science.
Goals and Tasks

Goal 1: Upgrade three Life Sciences South conference rooms to enable digital capture of instruction

Task 1:
- Task Name: Upgrade audiovisual equipment
  - Description: These conference rooms are often used for instruction of small courses in MCB. Currently, the three rooms audiovisual equipment consists of only old projectors. To enable digital capture from these rooms, we will upgrade them with modern projectors, microphones, and cameras.
  - Responsible Person or Unit: Ryan Gutenkunst
  - Schedule/Duration: Completed by start of courses
  - Financial Considerations: Quote from CCS is $40,698.74.
  - Risk/Uncertainty: Initially, we contacted Classroom Technology Services, who ballpark estimated $12k-15k per room. They later informed us that they were unable to take on additional jobs, due to obligations to centrally-scheduled rooms. They suggested we contact CCS, who has previously worked on campus. Nevertheless, there is some uncertainty in going with an outside contractor.

Task 2:
- Task Name: Procure coordinating PCs
  - Description: CCS is providing the audiovisual equipment, but we need to provide PCs to interface with the equipment and serve as a platform for presentation and Zoom/d2l recording. We will work with WNC Computer Support, with supports IT within our department, to arrange this.
  - Responsible Person or Unit: Ryan Gutenkunst and WNC Computer Support
  - Schedule/Duration: Completed by start of courses
  - Financial Considerations: Guesstimate is $700 per room
  - Risk/Uncertainty: Our needs are relatively basic, so risks are low. We will need to ensure the PCs are theft-proof, however.

Task 3:
- Task Name: Train Instructors
  - Description: The upgraded conference rooms will have a somewhat different interface from centrally-scheduled rooms, so we will need to develop guides and training materials for instructors using the rooms.
  - Responsible Person or Unit: Ryan Gutenkunst
  - Schedule/Duration: Start of courses
  - Financial Considerations: None
  - Risk/Uncertainty: None

Goal 2: Expand staffing to ensure continuity of instruction

Task 1:
- Task Name: Expand graduate instructor pool for Introductory Biology Laboratory
  - Description: Our introductory biology laboratories are personnel-intensive to teach. Each section is headed by a graduate student, with each graduate student responsible for several sections. To ensure continuity of instruction in case of illness of these instructors, we will hire and train additional graduate teaching assistants.
  - Responsible Person or Unit: Emily Dykstra
Schedule/Duration: Hiring accomplished by two weeks before start of instruction, so new hires can be trained.

Financial Considerations: Hiring these additional instructors will require additional temporary teaching funds.

Risk/Uncertainty: We are unsure about whether additional funds will be available to hire these students.

Goal 3: Ensure quality and safe teaching of introductory biology labs

Task 1:
Task Name: Develop materials for flipped labs  
Description: Much of the instruction that normally took place within the labs will be moved to asynchronous online, via Panopto and d2l quizzes.  
Responsible Person or Unit: Emily Dykstra  
Schedule/Duration: Start of courses  
Financial Considerations: None  
Risk/Uncertainty: None

Task 2:
Task Name: Develop materials for synchronous online labs  
Description: For students in the synchronous online version of the lab, pictures and videos of activities and experiments being carried out will be used by the TA with the students over Zoom to recreate the experience of the students in lab. Students in these sections will also be assigned to groups of three for the duration of the semester and there will be time to collaborate in break-out rooms in order to decide the details of how they would like to carry out their experiments as well as make sense of experimental results. The pictures, videos and results for the various experimental conditions the students may be able to choose between will also be posted on D2L so that students can access them in order to complete their lab write-ups. The pictures and videos and experimental results will also be posted to D2L for the in-person lab sections so that students have access to them as a resource to completing lab write-ups.  
Responsible Person or Unit: Emily Dykstra  
Schedule/Duration: Start of courses  
Financial Considerations: None  
Risk/Uncertainty: These have already been developed for many of the experimental labs, so we expect them to be low-risk.

Task 3:
Task Name: Develop fall-back option for ill students  
Description: Students who cannot attend in-person labs due to illness will have the option of attending a synchronous online section, joining one of those groups. If students are unable/unwilling to attend a synchronous online section, the Panopto, posted pictures, videos and experimental results will serve as an asynchronous alternative for these students.  
Responsible Person or Unit: Emily Dykstra  
Schedule/Duration: Start of courses  
Financial Considerations: None  
Risk/Uncertainty: These have already been developed for many of the experimental labs, so we expect them to be low-risk.
Data Management and Assessment
Significant data generation is not anticipated.

Communication
For the conference room upgrade, Dr. Gutenkunst will inform the teaching faculty regarding progress and the new equipment via email.
For staffing expansion, Dr. Dykstra will recruit students through her typical means, primarily email advertisement to graduate students in relevant units.
Department of Astronomy, College of Science
Re-Entry Plan

JUNE 18, 2020, VERSION 2

AUTHORS: XIAOHUI FAN, REGENTS’ PROFESSOR AND ASSOCIATE DEPARTMENT HEAD
CHRIS IMPEY, UNIVERSITY DISTINGUISHED PROFESSOR
AND CHAIR OF DEPARTMENT RE-ENTRY WORKING GROUP

APPROVED BY: BUELL JANNUZI, DEPARTMENT HEAD AND STEWARD OBSERVATORY DIRECTOR
Department of Astronomy, College of Science Unit Operating Plans for Fall 2020 Campus Re-entry

LAST UPDATED – Friday, June 5, 2020

Operating Plan Overview

The Department of Astronomy plan for campus re-entry for Fall 2020 includes key considerations in addressing instructional delivery, workspace, personnel, and operational issues in ensuring compliance with University of Arizona Re-entry Task Force directives. It also includes descriptions of the organizations of the Re-entry Task Force, timeline, budgetary needs, access to data and assessments, and methods of communications.

Note that Steward Observatory has developed a separate detailed re-entry plan on the research side, related to operations of our telescopes and various laboratories, both on campus and off campus, in close consultation with RII. Document here only deals with academic related issues. However, the re-entry teams on the academic and research sides are closely coordinated on all aspects of re-entry planning.

Key Milestones

Provide a list of the key milestones interspersed with those provided below. Milestones should mark a significant event or decision point. E.g., Milestone for an academic unit may be: 7/1/2020: Determine modality for all courses. Here are some initial milestone dates:

- 5/25: Establish Department Re-entry Working Group, chaired by University Distinguished Professor Chris Impey, with broad faculty and student participations.
- 6/3: Complete departmental student and instructor surveys for Fall 2020 instructional needs and lessons learned from Spring 2020 teaching by the Working Group.
- 6/4: Fall 2020 instructors submit their preferred modality choices (Level 1-3).
- 6/5: Unit operating plan due to CoS Dean
- 6/10: Submit final modality and instructional plan to CoS.
- 6/24: Campus re-entry plan
- 6/30 (or before): Provost approves revised plans
- 7/15: submission of draft class syllabi and instruction plans to working group; setting up D2L pages for each class
- 7/24: Campus re-entry plan announced
- 7/27: start of instruction/TA training sections
- 7/31: complete classroom and hallway modifications
- 7/31: finalize class syllabi, detailed instruction plan and D2L setup
- 8/7: complete instructor/TA training sections
- 8/24: Fall semester begins
**Budget Summary Information**

1. We do not currently anticipate significant additional costs for adjunct faculty or GTA based on our current plan for Level 1-3 instruction needs.
2. We assume that the University will provide costs related face coverings and reconfiguration of university-controlled classrooms.
3. We will need to reconfigure one department-controlled classroom, and purchase equipment for video/audio recording, for a cost of $2000. We will need $1000 on signages, sneeze guards, and reconfigurations of entrance and exit pathways in the building. These numbers are to be updated as we finalize our reconfiguration plan.
**Goals and Tasks**

Please list tasks your unit will engage in toward successful realization of each of the following goals. See examples of college-wide tasks. Use new page for each task.

**GOAL 1: Instructional Delivery and Student Engagement.**

We will develop solutions specific to our disciplines and their normal modes of instructional delivery and student engagement that will allow us to accommodate a wide range of scenarios in instructional delivery and student engagement for fall semester, including:

- The possibility that students will be participating remotely for the whole semester;
- The possibility that instructors will be participating remotely for the whole semester;
- The possibility of shifting from in-person to remote instruction, or vice versa, at some point during the semester; and
- The possibility that individual students or instructors may become ill or be quarantined during the semester and need to continue teaching/learning remotely even if they started the semester in person.

When traditional modes of instruction and student engagement cannot be adapted to these scenarios, we will seek alternate experiences equally relevant to the discipline.

A working group has been set up, led by University Distinguished Professor Chris Impey, with representation from faculty and graduate students, to plan the Department’s teaching strategy for Fall 2020 and beyond. The strategy will be flexible enough to accommodate a scenario of exclusively online instruction, face-to-face instruction with appropriate protections and social distancing, or a hybrid approach.

Data feeding into his activity will come from four surveys. One will tell us the lessons learned from Spring 2020 instructors who had to switch to online instruction mid-semester. A second will yield the expectations of the Fall 2020 instructors, along with the types of support they will need. The last two are polling astronomy majors and graduate students about their perspectives on online teaching, and their preferences for the best modes of instruction. It is well-established that maintaining student engagement is the central challenge of online instruction, so we will pay particular attention to that.

We will also identify local experts in core technologies like Zoom and D2L, and pull together a set of documents to bring faculty up to speed in best practices for online teaching. In particular, we will review all D2L site to ensure compliance and effectiveness.

Our current plan of teaching modality is attached.

GOAL 1 LEAD: Chris Impey
GOAL 2: Facilities, Space and Environment.

We will ensure our facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

Steward Observatory (SO) has established a Safety Committee responsible for safe reentry of the building and its offices and classrooms, chaired by Dr. Chad Bender. SO Safety Committee is developing guidelines for face covering use, social distancing and sanitation based on University-wide guidelines and regulations.

University-controlled classrooms already have AV equipment needed for remote instruction and we will reconfigure the only department-controlled classroom used mostly for grad classes.

GOAL 2 LEAD: Michelle Cournoyer
GOAL 3: Personnel and Operations.

We will develop processes and procedures that provide flexible and equitable treatment of faculty and staff and do everything possible to protect vulnerable populations while also ensuring we have the intellectual capital and support needed for operations in fulfillment of the Department of Astronomy’s mission.

Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.

GOAL 3 LEAD: Xiaohui Fan
Data Management and Assessment

Data related to Re-Entry Task Force will be stored in secure University of Arizona “Box” folders accessible to the committee members and related faculty/staff, including:

1. Ren-entry working group documentations
2. Hybrid teaching documentations
3. Class syllabi and notes documentations
4. Academic Program Committee’s collection of class data, including learning goals, student contact hours etc.

Information related to individual employees and students will only be communicated with appropriate HR representatives to comply with HIPAA, FERPA, and other data-related requirements.

Communication

The Department Leadership and the Re-Entry Working Group will have regular communications with all department members, including faculty, students and staff.

We have daily morning zoom updates from the Department Leadership, and hold regular faculty, staff and student meetings. We will fully utilize listserv, slack channels and social media to provide updated information, and to communicate issues and concerns with all department members.
Attachment: Preliminary Teaching Modality Plan.

See attached spreadsheet (COS-ASTRONOMY_Teaching_v1.xlsx) for teaching modality preferences for all Fall 2020 course instructors in the Department of Astronomy, as well as their capacities, current enrollments (which will likely grow, especially for GenEd classes) and current room assignments.

Notes:
1. We list two different schemes. One is the three level theme as outlined in the documents from the Provost’s Office (1: in-person, 2: flex in-person, 3: live online). The other is the six level theme as outlined in the documents from Re-entry Group 3. In both cases, the majority of instructors plan on Level 1 or Level 2, with in-person components. (the six-level theme column has been removed from the spreadsheet for clarity, but can be added back if needed).
2. We recognize that there are uncertainties in final enrollment numbers, as well as revised room capacity and scheduling. Therefore, the preferred modalities are subject to change as more detailed information becomes available.
3. For Fall 2020, we do not have any large lab course. One grad class has a computing component (listed as ASTR 501-001A). It will be taught in our reconfigured class room SO 208 at Level 2, with students divided into groups for social distancing.
4. We currently do not have any iCourse for fall 2020.
5. We have included PHYS 305 in our list. It is a physics class taught by E. Krause who has a joint appointment of astronomy and physics, and this is a class that we regularly share with physics in providing instructors.
HAS Unit Operating Plans for Fall 2020 Campus Re-entry

Operating Plan Overview
Hydrology and Atmospheric Sciences’ re-entry plan for Fall 2020 includes broad guidelines that should be adapted to individual and group needs. We focus here on key considerations in addressing instructional delivery, workspace, personnel, and operational issues in ensuring compliance with University of Arizona Re-entry Task Force directives.

As we return to the Harshbarger building, the penthouse in PAS, and field facilities at the West Campus Ag center there are two priorities. First, we want to mitigate the risk of contracting COVID-19, by minimizing exposure of those who are at high risk and more generally minimizing transmission. Second, we want to ensure that we are as successful as possible at meeting our teaching, research, and service missions maximize in an inclusive and equitable manner.

All policies contained herein are subject to revision and are subservient to University of Arizona and College of Science policies.

Key Milestones
Provide a list of the key milestones interspersed with those provided below. Milestones should mark a significant event or decision point. E.g., Milestone for an academic unit may be:
7/1/2020: Determine modality for all courses. Here are some initial milestone dates:

- 6/5: Unit operating plan due to CoS Dean
- 6/11/20: Identify modalities of instruction for specific courses and alter schedule of classes
- 6/12: Dean submits plans to Provost
- 6/19/20: Identify changes needed to permit work while meeting University requirements
- 7/1/20: Implement scheduling/curricular changes
- 7/25/20: Develop plan in case of instructor or TA illness
- 8/15/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- 8/24: Fall semester begins

Budget Summary Information
TBD
Goals and Tasks

Goal 1: Instructional Delivery and Student Engagement.
We will develop teaching solutions specific to our department’s and students’ needs through modes of instruction and engagement that will allow us to accommodate a wide range of scenarios including:

- The possibility that students will be participating remotely for the whole semester;
- The possibility that instructors will be participating remotely for the whole semester;
- The possibility of shifting from in-person to remote instruction, or vice versa, at some point during the semester; and
- The possibility that individual students or instructors may become ill or be quarantined during the semester and need to continue teaching/learning remotely even if they started the semester in person.

When traditional instruction modes and student engagement cannot be adapted to these scenarios, we will seek alternate experiences equally relevant to the discipline.

Goal 2: Facilities, Spaces, and Environment.
We will ensure our facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

Goal 3: Personnel and Operations.
We will develop processes and procedures that provide flexible and equitable treatment of faculty and staff and do everything possible to protect vulnerable populations while also permitting us to meet our unit’s teaching, research, and service missions. Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.

Data Management and Assessment
Data collected by the HAS team will be stored on Box and on department based secure servers. Information related to individual employees and students will only be communicated with appropriate Human Resources representatives to comply with appropriate university regulations, policies, and federal, state and local laws.

Communication
Department leadership will communicate information as appropriate to HAS employees and students via listserv messages, zoom meetings, phone calls and SMS messages.
Task #1.1

Goal 1: **Instructional Delivery and Student Engagement.**

**Task Name:** Hydrology and Atmospheric Sciences Instructional Modifications

**Description:** Modify curriculum, course offerings, space usage, and procedures for social distancing in classrooms

**Responsible Person or Unit:** Tom Meixner

**Key timelines and decisions to effectively manage task:**

- 6/5: Unit operating plan due to CoS Dean
- 6/11/20: Identify modalities of instruction for specific courses and alter schedule of classes
- 6/12: Dean submits plans to Provost
- 6/19/20: Identify changes needed to permit work while meeting University requirements
- 7/1/20: Implement scheduling/curricular changes
- 7/25/20: Develop plan in case of instructor or TA illness
- 8/15/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- 8/24: Fall semester begins

**Key protocols that need to be in place to effectively support outcomes:**

Occupancy limits of classrooms (11 people JWH 110, 6 people JWH 232 3 people JWH 316), to comply with social distancing requirements prescribed in UA Re-Entry Plan.

Develop ability to livestream and/or record video of classes. (Camera needs to be purchased for JWH 316). Some students and instructors may not be able to attend in-person, so this is crucial.

Obtain supplies and equipment for disinfection and socially-distanced instruction. Hand sanitizer and disinfectant has been ordered but disinfectant Facilities has stocked up on requires training, gloves, 5 minute period for application, and potentially eye protection.

Revise curricula/course offerings as necessary to comply with classroom occupancy limits: Determine if more sections can be offered; if not, how can class meetings be modified to maintain occupancy within specified limits? These decisions are in process and will be conveyed to Associate Dean Gomez next week.

Can instructor teaching assignments be modified for instructors who are not comfortable teaching in-person? Yes.
Develop list of substitutes in the case of instructor/TA absences due to illness, etc. *Discussion are ongoing with faculty and instructors as to how to fill that role if needed*

Determine protocols needed for disinfection, proper social distancing. *Awaiting uniform university guidance*

Develop guidelines and policies for outreach and campus visitors. *Currently our seminar series will focus on on-campus speakers and minimizing in person visits with the use of zoom and other distance communication tools.*

**Identification of necessary equipment (face coverings, technology, etc.) and other supplies:**
Disinfection solutions, wipes, gloves for decontaminating surfaces. *Disinfectant has been ordered but gloves and towels need to be stocked.*

Cameras/microphones to record and stream video from classrooms. *Cameras are being ordered for one of our small classrooms.*

Masks or face shields for instructors - *required and provided by campus.*

**Financial Considerations:**
Offering more sections will likely result in higher instructional costs if more instructors and/or TAs need to be hired. Technology and costs of face coverings.

**Risk/Uncertainty:**
Not sure if UA technology can support livestreaming from this many students at once. Concern about student traffic control in building/stairs/elevators/classrooms. *This is being worked on with the units we share our building with.*
Task # 2.1

Goal 2: Facilities, Spaces, and Environment.

Task Name: Hydrology and Atmospheric Sciences Space and Environment

Description: Modify Departmental spaces

Responsible Person or Unit: Tim Corley

Key timelines and decisions to effectively manage task:

- 6/5: Unit operating plan due to CoS Dean
- 6/11/20: Identify modalities of instruction for specific courses and alter schedule of classes
- 6/12: Dean submits plans to Provost
- 6/19/20: Identify changes needed to permit work while meeting University requirements
- 7/1/20: Implement scheduling/curricular changes
- 7/25/20: Develop plan in case of instructor or TA illness
- 8/15/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- 8/24: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:

Determine occupancy limits of Departmental spaces to comply with social distancing requirements prescribed in UA Re-Entry Plan. Based on the 6-foot social distancing guideline, preliminary reductions have made in seating capacities for departmental classrooms, conference rooms, student office spaces, and office space shared by researchers and/or other individuals.

Risk Management has been contacted to evaluate our decisions. Ensure chairs/desks/seating in Department common spaces such as conference rooms, tutor rooms. Where to store furniture is under consideration since there is no available storage space in Harshbarger and FM will not provide storage.

Designate person(s) responsible for posting and updating signage in Departmental spaces. Placement and frequency of signage are being finalized by the Building Manager in cooperation with HAS and other departments in Harshbarger/Mines.

Adopt flexible work schedules if needed, to comply with space occupancy limits.

Determine protocols needed for disinfection, proper social distancing, etc. and ensure all Department members are properly trained in these practices. Faculty, staff, and students will be provided with documents detailing the protocols that should be followed. They will all be
directed to FM’s website to watch the cleaning procedure video that FM will have available by mid- to late-June 2020.

Departmental breakroom and kitchen are closed until further notice
No food should be shared in communal spaces
No books, publications, journals, or pamphlets will be available in shared spaces.

Discuss with Mining, and Chemical and Environmental Eng. about hallway and staircase traffic control procedures- initial proposal Harshbarger mines Shared Staircase will be for upward traffic only. Risk Management has walked through Harshbarger/Mines with the Building Manager (6/1/20) and a preliminary assessment was conducted. Appropriate “traffic arrows” and labeling are being added to the signage request for both buildings.

**Identification of necessary equipment (face coverings, technology, etc.) and other supplies:**
Disinfection solutions, wipes, gloves for decontaminating surfaces-
Disinfectant spray bottles are being ordered for use in departmental classrooms, labs, and offices (faculty, staff and students).
Gloves will also be ordered because they will be needed for safe use of the disinfectant being provided by FM.

Possible modifications to spaces (dividers, plexiglass shields, etc) to ensure social distancing-
Polycarbonate shields have been ordered for HAS’ main office personnel and for student advisors.
Required masks or face shields for employees, students, and visitors must be available and provisioned.
Face coverings (2 each) for faculty and staff have been ordered but an exact delivery date is not known.
Face coverings for students (undergraduate and graduate) have not been ordered since the exact number needed is being finalized.
These will be available through the UA Bookstore sometime after July 1, 2020. Whether the face coverings for students can be picked up before July 1 is still being determined.
In addition, all entrances and rooms will be posted with signage indicating masks are required and that entry into any building or room can be prohibited if they are not wearing a mask.
Signage, labeling for walls, floors to maintain distancing and communicate COVID guidelines.
Signage for Harshbarger/Mines is being finalized by the Building Manager in consultation with other departments in these buildings.

**Financial Considerations:**
Space modifications and flexible work plans may involve costs in equipment and technology.
Face coverings and disinfectants for employees and office spaces. FM has indicated that departments will not be charged for a single polycarbonate shield for a “reception area.” Additional shields will be charged to departments.

**Risk/ Uncertainty:**
Concern about student traffic control in building/stairs/elevators. Ensuring student/visitor compliance. Monitoring and enforcing social distancing in large spaces such as conference rooms. Signage selection and placement is being finalized. Color-coded signage for entrances and exits with additional signage with matching color-coded traffic flow arrows will be placed strategically through Harshbarger/Mines. The single passenger elevator will have signage at every floor indicating a maximum capacity of two (2) persons.
Task # 3.1

Goal 3: Personnel and Operations.

Task Name: Hydrology and Atmospheric Sciences Modifications to Unit Operations

Description: Adapt daily unit operations and practices to comply with social distancing and minimize risk of disease transmission

Responsible Person or Unit: Erma Santander

Key timelines and decisions to effectively manage task:

- 6/5: Unit operating plan due to CoS Dean
- 6/11/20: Identify modalities of instruction for specific courses and alter schedule of classes
- 6/12: Dean submits plans to Provost
- 6/19/20: Identify changes needed to permit work while meeting University requirements
- 7/1/20: Implement scheduling/curricular changes
- 7/25/20: Develop plan in case of instructor or TA illness
- 8/15/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- 8/24: Fall semester begins

Re-Entry Plan requirements

Key protocols that need to be in place to effectively support outcomes:

Assess employee to space ratio for all department operational offices (Administrative, Business, Academic, IT and Operational) requiring face-to-face interactions, evaluating that sufficient space is available to ensure workspace is 6’ distance between employees. Rearranging workspace if needed to accommodate these guidelines.

In areas where a number of workers share space, employees will work staggered days (in person /work from home) to offset overcrowding.

Allow flexible participation for employees and students with options to include allowing employees (especially at-risk employees) to work from home if possible, creating staggered work schedules, reducing business hours in public-facing offices and units.

If absolutely necessary, face-to-face meetings should be by appointment only, limiting the number of attendees accordingly to comply with the 6’ distance requirements, along with the use of face masks.

Priority should be made to utilizing remote conferencing for all other meetings and office hours. Drop-in meetings should be discouraged to maintain control of space.
All employees will be provided cleaning solutions and will be responsible to wipe down their personal areas, as well as any common area or shared equipment which will be used within a departmental-controlled space. Additional cleaning solutions will be placed in conference rooms, classrooms and common areas. Facemasks will be provided to employees to be worn at all times within the building. Plexiglass shields will be provided at the departments expense, to be used in cases where close continued face-to-face contact may occur.

Information related to these practices and all guidelines will be maintained by the HAS department and available on the department website as well as posted throughout the building and various offices and conference rooms. Communication with employees regarding these practices will remain open and available for updating as necessary.

Financial Considerations:
Costs may be associated with rearranging workspaces. Working from home may involve technology costs. Protective items may be the responsibility of the department.

Risk/Uncertainty:
Ecology & Evolutionary Biology
Re-Entry Plan

JUNE 5, 2020
AUTHORS: EEB DEPARTMENTAL LEADERSHIP
EEB Unit Operating Plans for Fall 2020 Campus Re-entry

Operating Plan Overview
Ecology & Evolutionary Biology’s plan for campus re-entry for Fall 2020 includes broad guidelines for Department members to utilize and adapt to fit their needs. This plan includes key considerations in addressing instructional delivery, workspace, personnel, and operational issues in ensuring compliance with University of Arizona Re-entry Task Force directives.

As we return to EEB workspaces in Biosciences West, Biosciences East, Life Sciences South, Koffler and the Biochemistry Greenhouses, we want to keep two priorities in mind. First, we want to mitigate the impact of COVID-19, both by minimizing its spread and reducing opportunities for those in high-risk categories to become infected. Second, we want to maximize our productivity and fulfill our mission to learn and teach, while also adopting and engaging in practices that support equity and inclusion.

In all cases, any policies we suggest are subject to change, and are superseded by policies announced by the University of Arizona or the College of Science. Policies and guidelines related to research will be set by the Office of Research, Impact, & Innovation (RII).

Key Milestones
- 5/22/20: Submit BM checklist (signage, Plexiglas, & sanitizer station request) to FM
- 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
- 6/5: Unit operating plan due to CoS Dean
- 6/11/20: Identify modalities of instruction for specific courses
- 6/11/20: Identify necessary changes to schedule and/or curriculum to achieve social distancing requirements
- 6/12: Dean submits plans to Provost
- 6/15/20: Identify necessary workspace changes to achieve social distancing requirements
- 7/1/20: Implement scheduling/curricular changes
- 7/15/20: Develop “teaching succession” plan in case of instructor or TA illness
- 8/1/20: Modify departmentally-owned teaching labs according to occupancy limit of 8 students or less
- 8/1/20: Implement necessary changes to work space, schedules, and practices to comply with UA Re-Entry Plan requirements
- 8/15/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- 8/24: Fall semester begins

Budget Summary Information
TBD
Goals and Tasks

**Goal 1: Instructional Delivery and Student Engagement.**
We will develop solutions specific to our disciplines and their normal modes of instructional delivery and student engagement that will allow us to accommodate a wide range of scenarios in instructional delivery and student engagement for fall semester, including:

- The possibility that students will be participating remotely for the whole semester;
- The possibility that instructors will be participating remotely for the whole semester;
- The possibility of shifting from in-person to remote instruction, or vice versa, at some point during the semester; and
- The possibility that individual students or instructors may become ill or be quarantined during the semester and need to continue teaching/learning remotely even if they started the semester in person.

When traditional modes of instruction and student engagement cannot be adapted to these scenarios, we will seek alternate experiences equally relevant to the discipline.

**Goal 2: Facilities, Spaces, and Environment.**
We will ensure our facilities and workspaces are prepared to accommodate students, faculty, staff, and visitors/audiences in the fall semester while providing an environment that is in keeping with best practices for health and safety related to COVID-19.

**Goal 3: Personnel and Operations.**
We will develop processes and procedures that provide flexible and equitable treatment of faculty and staff and do everything possible to protect vulnerable populations while also ensuring we have the intellectual capital and support needed for operations in fulfillment of the unit’s mission. Further, we will take steps to promote connectedness among faculty and staff and promote mental health during a time of physical distance.

**Data Management and Assessment**
Data collected by the CoS Re-Entry Task Force will be stored in a secure University of Arizona “Box” folder accessible to the committee members and CoS Department Heads. This includes individual department re-entry plans and related unit-specific protocols. Information related to individual employees and students will only be communicated with appropriate HR representatives to comply with HIPAA, FERPA, and other data-related requirements.

**Communication**
Department leadership will communicate information as appropriate to EEB employees and students via listserv messages and/or meetings.
Task #1.1

Goal 1: Instructional Delivery and Student Engagement

Task Name: EEB Instructional Modifications

Description: Modify curriculum, course offerings, space usage, and procedures for social distancing in classrooms.

Responsible Person or Unit: Department Leadership, Faculty, Lab Directors, GTA’s, and Program Coordinators

Key timelines and decisions to effectively manage task:

5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/11/20: Identify modalities of instruction for specific courses
6/11/20: Identify necessary changes to schedule and/or curriculum to achieve social distancing requirements
7/1/20: Implement scheduling/curricular changes
7/15/20: Develop “teaching succession” plan in case of instructor or TA illness
8/1/20: Modify departmentally-owned teaching labs according to occupancy limit of 8 students or less

Key protocols that need to be in place to effectively support outcomes:

- Determine occupancy limits of classrooms to comply with social distancing requirements as prescribed in UA Re-Entry Plan.
- Revise curricula/course offerings as necessary to comply with classroom occupancy limits.
- Determine protocols needed for disinfection, proper social distancing, etc.
- Obtain supplies and equipment for disinfection and socially-distanced instruction.
- Develop ability to livestream and/or record video of classes. Some students and instructors may not be able to attend in-person, so this is crucial.
- Ensure plans for course delivery are developed in consideration of principles of universal design.
- Develop list of substitutes in case of instructor/TA absences due to illness, etc.
- Remove desks/chairs from Koffler & BSE teaching labs according to occupancy limit of 8 students or less. Mark teaching lab floors and benches to indicate student work zones, and designate and label entry-only and exit-only doors.

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:

- Disinfectant, wipes, gloves for decontaminating surfaces
• Cameras/microphones to record and stream video from classrooms
• Masks or face shields for instructors
• Digital cameras and other equipment for instructors and TAs to record videos and livestream lab sessions
• To minimize student, staff, and instructor movement between rooms, additional supplies and equipment will be needed to ensure each student has all necessary items within their reach during a lab session

Financial Considerations:
• Offering more sections will result in higher costs if more instructors, TAs, or support staff need to be hired.
• Technology and face covering costs.
• The equipment required to livestream from departmental teaching labs will be expensive.
• Constant disinfection and management of student traffic in labs and classrooms, as well as tech support for livestreaming, will require additional personnel/support staff.

Risk/Uncertainty:
• Concern that the modality and synchronicity options available in the flexible instruction participation plan will not be able to accommodate students who are disabled and/or at-risk. Will synchronous and asynchronous online course content/materials be both accessible to all students and equitable to the in-person experience? (i.e. Can courses that are livestreamed be auto-captioned in real time?)
• Not sure if UA technology can support livestreaming from departmentally-owned classrooms and teaching labs.
• Concern about student traffic in buildings/stairs/elevators, particularly Koffler which has three elevators that typically run all day and are packed with students during the regular academic year (even at 25% capacity ~240 students will need to use the outdoor stairwells to travel to and from labs each passing period, in addition to ~150 students who will be exiting/entering classrooms on the ground floor).
• Concern that re-entry plans are being developed under the assumption that GTAs and preceptors will be willing and able to put themselves at risk to offer in-person instructional support. (GTAs and preceptors are students themselves, first and foremost.)
Task # 2.1

Goal 2: Facilities, Spaces, and Environment

Task Name: Facilities, Space, and Environment

Description: Modify EEB-owned space and communal areas in EEB-occupied buildings

Responsible Person or Unit: Lauren Harrison, EEB space manager & Biosciences West (88) building manager; Jennifer Laczny, Biochemistry Greenhouses (111 & 111A) building manager

Key timelines and decisions to effectively manage task:

5/22/20: Submit BM checklist (signage, Plexiglas, & sanitizer station request) to FM
5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/15/20: Identify necessary workspace changes to achieve social distancing requirements
6/24/20?: UA Announcement of return to campus
8/15/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan

Key protocols that need to be in place to effectively support outcomes:

- Determine occupancy limits of Departmental spaces to comply with social distancing requirements prescribed in UA Re-Entry Plan.
- Reconfigure departmentally-owned communal spaces (i.e. conference rooms) to ensure chairs/desks/seating are a minimum of 6 feet apart.
- Adopt flexible work schedules to comply with space occupancy limits and safety requirements.
- Determine protocols needed for disinfection, proper social distancing, etc. and ensure all Department members are informed of these practices/guidelines.

Identification of necessary equipment (face coverings, technology, etc.) and other supplies:

- Disinfectant, wipes, gloves for decontaminating surfaces.
- Masks or face shields for faculty, staff, and graduate students.
- Assess potential need for installation of Plexiglas shields in areas where social distancing isn't possible (i.e. reception areas).
- Determine high-traffic areas in Biosciences West, and request signage for these locations that communicates distancing and COVID guidelines.

Financial Considerations:

- Face coverings and disinfectants for employees and office spaces.
Risk/Uncertainty:
- Controlling traffic flow in hallways/stairwells/elevators/building entrances & exits.
- Ensuring student/visitor compliance.
- Monitoring and enforcing social distancing in communal areas, such as hallways.
- Biosciences West has only one entrance/exit with an automated door that can accommodate people using wheelchairs, strollers, and/or delivery carts...how do we manage traffic in this area specifically, considering two automated entrance/exit doors will be required to maintain one-way movement flow through the building for these groups? (Bio West is home to many heavily research-active labs that frequently receive deliveries and/or utilize delivery carts, in addition to six centrally-scheduled classrooms with a combined capacity of 352 seats.)
Task # 3.1

Goal 3: Personnel and Operations

Task Name: EEB Modifications to Unit Operations

Description: Adapt daily unit operations and practices to comply with social distancing and minimize risk of disease transmission

Responsible Person or Unit: Department Faculty and Staff

Key timelines and decisions to effectively manage task:

5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
6/15/20: Identify necessary changes to achieve social distancing requirements
8/1/20: Implement necessary changes to work space, schedules, and practices to comply with UA Re-Entry Plan requirements

Key protocols that need to be in place to effectively support outcomes:

• Determine essential functions and services. Allow flexible participation for employees and students where possible (i.e. work from home, staggered work schedules, etc.). Employees and students who can effectively from home will be encouraged to do so.
• All meetings and instructor office hours should be carried out remotely, unless sufficient space is available to ensure 6’ distance between attendees.
• Masks/face coverings must be worn on campus at all times, unless employee is in a single occupancy office or vehicle with the door/s shut. Face coverings are necessary in shared spaces including but not limited to hallways, stairwells, elevators, restrooms and lobbies.
• Faculty, staff and students will be required to complete the UArizona COVID-19 training when it becomes available. If and when a COVID-tracing app becomes available, EEB faculty, staff and students are strongly encouraged to participate.

Financial Considerations:

• Flexible work arrangements may involve equipment/technology costs for employees who work from home

Risk/Uncertainty:
Psychology Re-Entry Plan

JUNE 14, 2020
AUTHORS: LEE RYAN, DEPARTMENT HEAD
Instructional Delivery and Student Engagement
Psychology Department

Task Name: Psychology Department Instructional Modifications

Description: Modify curriculum, course offerings, space usage, and procedures for social distancing in classrooms

Responsible Person or Unit: Lee Ryan, Ph.D., Professor and Head
John Allen, Ph.D., Professor and Associate Head

Key timelines and decisions to effectively manage task:

6/15/20: Identify necessary changes to schedule and/or curriculum to achieve social distancing requirements
7/1/20: Identify modalities of instruction for specific courses
7/15/20: Develop “teaching succession” plan in case of instructor illness

Key revisions to course administration:

- Undergraduate courses already assigned to rooms through RCS will remain in those classrooms.
- 80% of undergraduate courses will be offered in a hybrid format. Lectures will be live-streamed or posted online allowing for small groups of students to be present in the classroom on alternating days.
- Some hybrid courses will be “flipped”, meaning that the lectures and all materials will be posted online. Small groups of students will attend classroom sessions that will focus on discussions and other interactive activities.
- The number of students in each in-person session will be determined by the specific classroom that is assigned. This number should ideally be confirmed by Facilities Management.
- All hybrid course lectures will be taped using Panopto and posted to the D2L course website, to accommodate students who become ill or in quarantine.
- All courses that are currently listed as “I” courses will remain in that mode. Additional seats will be opened to main campus students to accommodate those students who cannot attend classes in person during the fall semester.
- Some courses currently listed as “in-person” (<10%) will become fully online synchronous or asynchronous. These will be allowed for faculty who are at high risk for COVID-19, including those over age 65 and faculty with pre-existing conditions.
- A spreadsheet listing each course (graduate and undergraduate) and the specific format for the course is being created.
- Each course will identify an alternate instructor and TAs who are familiar with the course content. These individuals will take over the course in the event that the instructor and/or TAs should become ill.

Face coverings, technology, etc.
• All classrooms used for undergraduate and graduate teaching are already equipped with WIFI, cameras, microphones, etc, required to record and stream video from classrooms.
• Instructors and TAs who are present in the classroom will wear face coverings.
• Students who are present in the classroom will wear face coverings. Instructors will be given information on how to deal with students who refuse to wear a face covering, consistent with the Provost’s office guidance.

**Financial Considerations:**
Face covering costs. No additional costs for course development or technology are anticipated.

**Risk/Uncertainty:**
• How will student traffic be controlled in and out of buildings, classrooms, and elevators?
• The plan for hybrid course format is not feasible until we have more specific guidance from FM on how many students can be present in a classroom at any given time. This is not a decision that should be left to faculty to determine.
Psychology Department
Facilities, Spaces, and Environment Re-entry Plan

Description: Modifications to Psychology Department building and protocols for mitigating risk

Responsible Person: Lee Ryan, Ph.D., Professor and Head

Building Manager: Todd Burgess (Note: The building manager will be responsible for updating and posting signage, maintaining cleaning and disinfecting protocols, and ordering and distributing disinfecting/cleaning and face coverings from Facilities Management)

Key timelines and decisions to effectively manage task:

<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 5, 2020</td>
<td>Identify necessary workspace changes to achieve social distancing requirements</td>
</tr>
<tr>
<td>June 15, 2020</td>
<td>Share plan for building management with faculty, staff, and students</td>
</tr>
<tr>
<td>July 15, 2020</td>
<td>• Complete all re-organization of furniture in common spaces</td>
</tr>
<tr>
<td></td>
<td>• Finalize flexible work schedules for office staff to ensure physical distancing</td>
</tr>
<tr>
<td>Aug 1, 2020</td>
<td>• Complete posting and updating of all signage in the Department</td>
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<tr>
<td></td>
<td>• Ensure all employees are trained in proper protocols for social distancing,</td>
</tr>
<tr>
<td></td>
<td>disinfecting, and rules for space utilization</td>
</tr>
</tbody>
</table>

General Building Guidelines:

- All personnel, including students and visitors, will be required to wear a face covering at all times while in all common areas or any shared work area occupied by more than one individual.
- Building entrances will be clearly marked with one-way Entrance and Exit doors.
- Hallway floors and stairwells will be clearly marked to direct traffic in high-use areas (2nd and 3rd floors).
- The elevator will be clearly marked as “Single Occupancy Only”.
- Bathrooms should not be occupied by more than two individuals at a time.
- Seating will be removed from all hallways. Students and staff should not congregate in the hallways.
- All individuals working in the Psychology building (faculty, staff, graduate students, postdocs, undergraduate employees) will be provided with training on disinfection and cleaning, use of face coverings, and a review of the guidelines for use of the building.
- Todd Burgess will work with Facilities Management to identify key placement of hand sanitizing stations, signage and sign placement, and other building modifications that may be necessary.

Main Office and Advising Areas:

- The main office, kitchen, and advising areas will be strictly off-limits to everyone except main office and advising staff. (The exception is Jamie Edgin whose office in the advising hallway.)
- Main office staff and advisors will use hand sanitizer each time they enter/exit these areas.
- All work surfaces, equipment, and furniture will be disinfected at the conclusion of each work day.
- The office front counter and advising check-in station have been outfitted with plexiglass screens to ensure that office staff and advisors are separated from visitors.
- Faculty may pick up their mail at the front counter during specific pick-up times to be determined.
- Office staff and advisors will establish a rotating schedule between working from home and in-person. The main office will have at least one person present at all times to field requests from
students and department employees. No more than four staff will be present in the main office area at a time.
- Meetings between faculty and office staff members will take place via Zoom rather than in-person.
- Staff meetings will also continue to take place via Zoom.
- Main office desks will be repositioned to maintain at least 6ft physical distancing between stations.
- Cloth chairs will be replaced with plastic chairs to allow easy disinfecting.
- Advising will create a separate plan to minimize face-to-face meetings with students. Face-to-face advising will only occur in the large ‘peer mentor’ room, occupied by one advisor and one student at a time. All other advising and drop-in visits will take place online.

Copier Room:
- The copier room will remain unlocked during normal business hours, as usual.
- No more than one person can occupy the copier room at a time. Others should wait in the hallway until the room is empty.
- Each person using the copier or picking up packages should wipe down the copier control panel and any other work surfaces they have come in contact with using Clorox wipes (provided).

Seminar Rooms (314, 321, 323):
Todd Burgess will create a floor plan for seating in the three seminar rooms that will allow 6ft physical distancing to be maintained. That plan will be shared with all Psychology personnel. Each room will have an occupancy based on the floor plan.

Laboratories and Offices:
- Most offices in Psychology are not large enough to hold more than one person at a time. It is strongly recommended that office spaces less than 144 sq ft (12x12) be considered single occupancy only. In single-occupancy spaces, face coverings are not necessary.
- Personnel in laboratories should follow the guidance laid out in the RII Research Re-entry plan, including re-organizing furniture to maintain strict physical distancing of 6ft or more between occupants, establishing flexible work schedules, wearing masks in multi-occupancy rooms, and creating schedules for cleaning/disinfecting all work surfaces, equipment, and furniture.

Supplies (face coverings, cleaning/disinfecting)
All cleaning supplies and face covering orders will be placed with FM through Todd Burgess. Supplies will be kept in Todd’ workshop on the 1st floor and will be distributed as needed. Contact Todd by email to request additional cleaning supplies.

Financial Considerations:
Currently it is not clear whether UA will pay for any or all face coverings and other supplies. Maryori Puentes is keeping a spreadsheet of all costs associated with COVID-19 mitigation plans. Researchers who require face coverings for their studies should purchase those supplies through FM using their grant accounts. Please keep track of the costs of the supplies.

Risk/Uncertainty:
The Psychology Building is an open-access building with multiple classrooms. High traffic from undergraduate students may be particularly problematic on the 2nd and 3rd floors. Bathrooms on these two floors also tend to have highest useage. The building has only one elevator, which is in high demand during times when classes are changing.
Personnel and Operations
Psychology Department

Task Name: Psychology Department Operations Modifications

Description: Adapt daily unit operations and practices to comply with social distancing and minimize risk of disease transmission.

Responsible Person: Lee Ryan, Ph.D., Professor and Department Head

Key timelines and decisions to effectively manage task:
6/15/20: Identify necessary changes to achieve social distancing requirements
8/1/20: Implement necessary changes to work space, schedules, and practices to comply with UA Re-Entry Plan requirements

Key modifications:
- The main office will be staffed on a rotating schedule with no more than 2-3 staff present in-person at any given time.
- Most staff members who can do so will continue to work from home.
- Staff members with increased risk for COVID-19 will continue to work from home.
- All department meetings, instructor office hours, and TA office hours will be carried out remotely.
- Staff members present in-person in the building will wear face coverings at all times, and will assist with cleaning and disinfecting shared work spaces and equipment.
- Details of the plans for the building, including the main office, are provided in the Psychology Department building plan.

Financial Considerations:
None expected.

Risk/Uncertainty:
If there is a resurgence of COVID-19 in the community or members of the department become ill with COVID-19, we may be required to return to working remotely.