Optical Sciences AY21 Re-Entry Plan

JULY 27, 2020

OPTICAL SCIENCES RE-ENTRY TASK FORCE
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List of Acronyms

- AP  Academic Programs
- DL  Distance Learning
- FM  Facilities Management
- IT  Information Technology
- OPTI  UA course name abbreviation for Optical Sciences
- OSC  Wyant College of Optical Sciences
- PPE  Personal Protective Equipment
- RA  Research Assistant
- RLSS  Research and Laboratory Support Services
- TA  Teaching Assistant
- UA  University of Arizona
Wyant College of Optical Sciences Operating Plans for Fall 2020 Campus Re-entry

Operating Plan Overview
The Wyant College of Optical Sciences (OSC) plan for campus re-entry for Fall 2020 includes individual operating plans addressing instructional delivery, laboratories, workspace, personnel, and operational issues in ensuring compliance with University of Arizona Re-entry Task Force directives. Hereafter this is called the operating plans. Other plans include research plan (for re-entry into research labs) and modality plan (for designation of the delivery of lectures).

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 (some of these dates are draft).

- 5/18/20: 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 re-entry to research activities
- 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
- 6/16/20: OSC operating plan due to OSC Dean
- 6/18/20: Dean submits operating plans to Provost
- 6/22/20: Draft modality plan provided to Registrar
- 6/24/20: UA Announcement of return campus re-entry plan
- 6/24/20: Provost Council reviews modality plan
- 6/26/20: Goal for actionable list of RCS changes from modality plan
- 6/30/20: Provost approves revised operating plans
- 7/01/20: OSC students informed of flexible instructional participation plan
- 7/02/20: Identify budget, personnel, and equipment needs for plans
- 7/10/20: Purchase equipment needed for instruction
- 7/24/20: UA announces in-person courses or modification plan for Fall semester
- 7/31/20: Install equipment in classrooms and teaching laboratories
- 8/01/20: Finalize specific teaching plans for all curricular offerings
- 8/01/20: Finalize “teaching succession” plan in case of instructor illness
- 8/01/20: Revised TA guidelines and workloads finalized
- 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
- 8/03/20: Technology training for instructors starts
- 8/14/20: Technology training for instructors ends
- 8/15/20: Revised TA training complete
• 8/15/20: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
• 8/15/20: Deadline for all members of OSC to complete RLSS COVID-19 training
• 8/24/20: Fall semester begins

Budget Summary Information
See individual goals for description of plans and needs. Actual budget summary of anticipated costs is anticipated on 7/02/20; see Key Milestones section above.

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 Optical Sciences 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 lectures during the Fall semester, including:
- The possibility for four modalities of lecture delivery: in-person, flex in-person, live online, and iCourse;
- 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 College’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 4: Outreach and Visitors.
Policies to handle visits from external individuals to the Wyant College of Optical Sciences. Included in this part is the policy for outreach efforts including potential visits to external units and visits to the College by groups.
Goal 1: Instructional Delivery and Student Engagement.

Task 1.1: Name: OSC Flexible Participation for Lecture Classes

Description: Offer flexible participation for all OPTI lecture-based courses. Offer remote and hybrid learning and teaching options for students and faculty to protect individuals vulnerable to COVID-19 and reduce crowding. Academic Programs (AP) will work with instructors to designate courses as one of four levels based on modality of instruction and synchronicity. Different sections may be provided for a given course such that one course may have different modalities (e.g., all current Distance-Learning (DL) classes will have an asynchronous section in addition to potentially another section with a different modality).

All levels will provide synchronous and/or asynchronous options for students who are not able to attend in-person for some or all of the semester due to a COVID-19 infection, quarantine, or health concerns. This requirement is met by livestreaming (synchronous) and/or posted recordings (asynchronous). For synchronous content delivery the In-Person or Flex In-Person sessions are recorded via Zoom, Panopto, or other technology. For asynchronous content delivery of DL classes the DL recordings will be posted in the Panopto area for the class.

Initial estimates of the number of scheduled OPTI courses that are likely to fall into each category described below are provided. These estimates are subject to change. Accurate assessment of room needs still awaits data from faculty engagement constraints that will become known only when faculty make elections for seeking Temporary Modified Work Conditions. A course and modality survey of instructors is currently in progress and will inform a report to the Registrar on 6/22/20. For reference regarding numbers given below, 43 OPTI courses will be offered in the Meinel building in the Fall semester, where a co-convened course is counted once.

Level 1 (In-Person) – Instructor in-person, students in-person, audio and media live
- Enrollment size is capped at 50% of normal maximum occupancy to allow for sufficient social distancing within the room.
- All classes will be live and in-person for the duration of the course, except if circumstances develop to limit such.
- Livestreaming (synchronous): may be provided via Zoom, Panopto, or other technology for students not able to attend due to an extended absence related to COVID-19, and will be provided to such students if asynchronous content delivery is not provided. For DL students this content is provided at the discretion of the instructor.
- Recordings (asynchronous): will be provided for DL students (see Level 4) and may be available for on-campus students for courses that have a DL section. For on-campus students this content is provided at the discretion of the instructor.
- We estimate that 34 OPTI courses (79%) will be held using Level 1 modality. We anticipate enrollments of approximately 505 main-campus students in these 34 courses. This estimate is likely to drop somewhat if instructors choose to switch their
class to Level 3 or Level 4, but these courses will likely not need to be changed to Level 2 if enrollments remain as expected and classroom assignments are not changed.

**Level 2 (Flex In-Person) – Instructor in-person, student subgroups in-person, audio and media livestreaming**

- If enrollment cap exceeds safe maximum occupancy (expected 50% of normal maximum occupancy), then instructors will meet with course sections to enable social distancing.
- Level 2 is flexible, encompassing a variety of teaching modalities, and will include any courses in which in-person instruction is supplemented by online instruction (synchronous and/or asynchronous).
- Examples of Level 2 class structures include rotational meetings (e.g., meeting with ½ class Tu, ½ class Th, accompanied by livestreaming), flipped classrooms (e.g., asynchronous online lectures, in-person meetings for discussion or activities), and any other methods that combine online and in-person instruction.
- Livestreaming (synchronous): will be provided via Zoom, Panopto, or other technology for all students.
- Recordings (asynchronous): will be provided for DL students (see Level 4) and may be available for on-campus students. For on-campus students including those in non-DL courses, recorded content is provided at the discretion of the instructor.
- Level 2 courses are required to provide a minimum of one in-person engagement per student per week (e.g., one of two class sessions).
- We estimate that 3 OPTI courses (7%) will be held using Level 2 modality. We anticipate enrollments of approximately 105 main-campus students in these 3 courses. These are particularly large courses for the rooms in which they are assigned. One of these courses (OPTI 200 section 1, with an anticipated enrollment of 32) would be held with Level 1 modality if we are able to hold the course in room 408/410, which appears to be available during that time slot. All of these courses will permit one in-person engagement per week for each student.

**Level 3 (Live Online) – Synchronous online instruction**

- Instructor is remote and provides content synchronously via Zoom, Panopto, and/or other technology. The TA may be in person or remote (TBD on a course-by-course basis once TAs are placed and have the opportunity to speak with their respective instructor).
- Livestreaming (synchronous): the course will meet at the UAccess scheduled time and room (if any) and instruction will be provided via Zoom, Panopto, or other technology for all students. Students can partake in the lectures remotely.
- Recordings (asynchronous): will be provided for DL students (see Level 4) and may be available for on-campus students. For on-campus students including those in non-DL courses, recorded content is provided at the discretion of the instructor.
- We estimate that 2 OPTI courses (5%) will be held using Level 3 modality. We anticipate enrollments of approximately 52 main-campus students in these 2 courses.
**Level 4 (iCourse) – Asynchronous online instruction**

- Instructor and/or TAs are remote and provide primary course content asynchronously via Zoom, Panopto, and/or other technology.
- OPTI DL classes will provide the asynchronous content via lectures that are recorded during an in-person lecture or that have been pre-recorded.
- Students will view recorded lectures remotely.
- Livestreaming (synchronous): there is no standard lecture content, but the instructor and/or TA may have a live online component such as a question and answer session.
- Recording (asynchronous): the standard lecture content is provided through a recording. Any extra live online sessions may be recorded such that students may view them remotely at a later time.
- **We estimate that 4 OPTI courses (9%) will be held using Level 4 modality.** We anticipate enrollments of approximately 131 main-campus students in these 4 courses.

This chart shows the provided content based on modality for a course section and whether the student is on-campus or DL.

<table>
<thead>
<tr>
<th></th>
<th>On-Campus Student</th>
<th>DL Student</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Livestreaming (synchronous)</td>
<td>Recording (asynchronous)</td>
</tr>
<tr>
<td>In Person</td>
<td>May</td>
<td>May</td>
</tr>
<tr>
<td>Flex In Person</td>
<td>Yes</td>
<td>May</td>
</tr>
<tr>
<td>Live Online</td>
<td>Yes</td>
<td>May</td>
</tr>
<tr>
<td>iCourse</td>
<td>May</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**May** = the instructor may provide this option at their discretion  
**Yes** = this option will be provided  
**Possible** = DL students may elect to partake in livestreaming aspects

**Responsible Person or Unit:** Academic Associate Deans, OSC Distance Learning Manager, and AP.

**Key timelines and decisions to effectively manage task:**
- 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
- 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
- 6/22/20: Draft modality plan provided to Registrar
- 6/24/20: UA Announcement of return campus re-entry plan
- 6/24/20: Provost Council reviews modality plan
- 6/26/20: Goal for actionable list of RCS changes from modality plan
• 7/01/20: OSC students informed of flexible instructional participation plan
• 7/15/20: Identify budget and personnel needs for plans
• 7/24/20: UA announces in-person courses or modification plan for Fall semester
• 8/01/20: Finalize specific teaching plans for all curricular offerings
• 8/01/20: Revised 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:

Distance Learning (DL) courses are defined as those that have an ArizonaOnline component, which includes graduate level courses, and undergraduate 400-level courses that co-convene with such a graduate level course.

AP will work with instructors to designate courses as one of four levels based on modality of instruction and synchronicity. This will be conducted through a survey, which is discussed in a succeeding task.

All courses will have plans to be offered online (synchronously and/or asynchronously) to accommodate on-campus students who need to attend remotely. All instructors will be requested to have recordings for all lectures, but provided at the discretion of the instructor.

Finalize occupancy limits of classrooms to comply with social distancing requirements prescribed in UA Re-Entry Plan. This includes Meinel rooms 305 and 307, which are fully controlled by OSC.

Continue development of methods to livestream and/or record video of classes, since some students and instructors may not be able to attend in-person. Ensure that instructors are provided training to assist with online delivery of lectures (e.g., software training). This training will come through other units on campus, OSC instructors who have more experience, and AP.

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

• Determine if more sections must be offered with the demanded modality
• Work with instructors to modify lecture content in the event they are not able to meet in person. Note that OSC instructors have gained experience in doing this during the Spring 2020 semester

Determine protocols needed for disinfection, proper social distancing, etc. and obtain these supplies and equipment for disinfection and socially-distanced instruction

All instructor and TA office hours and advising will be held remotely.

All courses must have D2L sites. Instructors will encourage and permit electronic submission of work as much as possible.

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Students will be expected to disinfect their seats upon entry into a classroom, and instructors or other OSC personnel may be expected to assist in disinfection and management of student flow through classrooms. Disposal routines for supplies and flow protocols TBD. If not provided by the UA: disinfection solutions, wipes, gloves for decontaminating surfaces in the classroom.

Additional technology needs (e.g., cameras, microphones, etc.) to record and stream video from classrooms. See a succeeding task.

Masks or face shields for instructors. Note that at minimum two cloth masks will be provided to instructors.

**Financial Considerations:**

Additional funds for technology may be needed. Technology includes individual microphones, tablet computers, etc. to limit the number of items that have to be shared. The modality survey includes questions about technology needs. See a succeeding task.

**Risk/Uncertainty:**

Need to balance instructors’ self-assessment of risk with ensuring that multiple modalities are available for students to take.

The 50% capacity metric by the UA is being finalized at this time. The final percentage will depend on room characteristics such as spacing of seats and the layout of the room.

The one student engagement per week is being finalized by the UArizona campus re-entry team at this time. Note that OSC does not anticipate an issue with providing this metric for its students.

Instructors may experience difficulties maintaining remote instructional delivery unless properly trained in appropriate technology.
Task 1.2: Name: OSC Flexible Participation for Lab Classes

Description: Offer flexible participation for all OPTI lab-based courses. Offer remote and hybrid learning and teaching options for students and faculty to protect individuals vulnerable to COVID-19 and reduce crowding. Academic Programs (AP) will work with instructors to designate laboratory aspects of the course are provided as one of two levels based on modality of instruction: in-person or live online. The lab lecture will follow the policies of lecture-based courses, and may be provided through a different format at the discretion of the instructor.

In the Fall 2020 semester, all core undergraduate lab courses (OPTI 201L, OPTI 380A, and OPTI 471A) will be conducted as Level 1 courses. The one non-core undergraduate lab course (OPTI 469L) will co-convene with its respective graduate lab course, and is discussed in the next paragraph. (See Level definitions below)

In the Fall 2020 semester, two of the three hands-on graduate lab courses (OPTI 502L and OPTI 511L) will be conducted as Level 1 courses. The remaining lab course OPTI 469L/569L will be conducted as a Level 3 course. DL students have the potential to take advantage of OPTI 569L through Level 4, iCourse, but currently such a section has not been designated for this lab course. (See Level definitions below.) OPTI 571L and OPTI 512L are computer-based graduate lab courses and are considered under Task 1.1 for the purposes of re-entry planning.

Level 3 labs will provide synchronous (livestreaming through Zoom) and asynchronous (remote through D2L Zoom and Panopto storage) options.

Level 1 (In-Person) – Instructor in-person, students in-person, audio and media live
- Enrollment caps for Level 1 – In-Person class size will be set in conjunction with the number of lab tables in each lab at below stated 50% room capacity in a succeeding task.
- All Level 1 lab courses will be live and in-person for the duration of the course, except if circumstances develop to limit such. These lab courses require hands-on training that is impossible to provide to non-in-person students.
- Per existing rules, students not able to attend lab in any given week will be able to make up their missed lab session on a prearranged Friday or Monday. Make up labs must be scheduled in coordination with the Lab Manager and class TA.

Level 2 (Flex In-Person) – Instructor in-person, student subgroups in-person, audio and media livestreaming
- Not needed for OPTI labs.

Level 3 (Live Online) – Synchronous online instruction
- Instructor and TAs are remote and provides content synchronously via Zoom, Panopto, and/or other technology.
- Students are also remote and attend class ‘live’ but remotely.
• Synchronous course times are input into UAccess as with a normal in-person course. The scheduled Level 3 OPTI lab lectures and to-be scheduled TA and Instructor office hours will be held via Zoom.
• Instructor and TAs are remote and provide content synchronously via Zoom, Panopto, or other technology.
• The asynchronous aspects of the course includes storage of the scheduled lab lecture in D2L, Zoom, and/or Panopto.

Level 4 (iCourse) – Asynchronous online instruction
• Potentially OPTI DL lab courses will provide the asynchronous content via recordings of the on-campus section of the course and/or recordings from previous years.
• Students will view recorded lectures remotely.
• Currently, no lab courses will be provided through this format, but this part of the plan ensures we have a protocol in place to handle such.

Responsible Person or Unit: Academic Associate Deans, OSC Teach Lab Manager, and AP.

Key timelines and decisions to effectively manage task:
• 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
• 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
• 6/22/20: Draft modality plan provided to Registrar
• 6/24/20: UA Announcement of return campus re-entry plan
• 6/24/20: Provost Council reviews modality plan
• 6/26/20: Goal for actionable list of RCS changes from modality plan
• 7/01/20: OSC students informed of flexible instructional participation plan
• 7/15/20: Identify budget and personnel needs for plans
• 7/24/20: UA announces in-person courses or modification plan for Fall semester
• 8/01/20: Finalize specific teaching plans for all curricular offerings
• 8/01/20: Revised 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:
AP will work with instructors to designate courses as one of two levels based on modality of instruction and synchronicity. This will be conducted through a survey, which is discussed in a succeeding task.

In the event that lab courses need to move online, the instructors and Teaching Lab Manager have developed alternate plans, including moving to kits for OPTI 201L and OPTI 380A, and efforts similar to what occurred in the Spring 2020 semester for other Level 1 lab courses.
Only one student per optical table in the teaching labs. This policy ensures that room capacity is well below the 50% room capacity guideline.

Continue development of methods to livestream and/or record video of classes, since some students and instructors may not be able to attend in-person. Ensure that instructors are provided training to assist with online delivery of lectures (e.g., software training). This training will come through other units on campus, OSC instructors who have more experience, and AP.

More sections must be offered for each lab section due to the reduced lab capacity.

For Level 1 labs, we must have non-chemical methods to sterilize the lab room and equipment therein, such as using UVC (germicidal UV). This requirement is due to the equipment, especially optics, not being tolerant to chemical treatment.

All instructor and TA office hours and advising will be held remotely.

All courses must have D2L sites. Instructors will encourage and permit electronic submission of work as much as possible.

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

If not provided by the UA disinfection solutions, wipes, gloves for decontaminating surfaces in the classroom.

Additional technology needs (e.g., cameras, microphones, etc.) to record and stream video from classrooms. See a succeeding task.

Masks or face shields for instructors. Note that at minimum two cloth masks will be provided to instructors.

Financial Considerations:

Additional funds for technology may be needed. Technology includes individual microphones, tablet computers, etc. to limit the number of items that have to be shared. The modality survey includes questions about technology needs. See a succeeding task.

Purchasing supplies for Level 3 labs. For OPTI x69L we currently have 10 lab kits with a plan to get to at least 12. Each kit costs around $1,000 and will be purchased through the standard Teaching Labs budget.

For Level 1 labs, we must have non-chemical methods to sterilize the lab room, such as using UVC (germicidal UV). Portable UVC units cost $3,000 and up. There are other cheaper options available, but it is uncertain at this time if such units will be effective treatments.
**Risk/Uncertainty:**

Need to balance instructors’ self-assessment of risk with ensuring that multiple modalities are available for students to take.

The 50% capacity metric by the UA is being finalized at this time. The final percentage will depend on room characteristics such as spacing of seats and the layout of the room.

The one student engagement per week is being finalized by the UArizona campus re-entry team at this time. Note that OSC does not anticipate an issue with providing this metric for its students.

Instructors may experience difficulties maintaining remote instructional delivery unless properly trained in appropriate technology.

Optics labs typically require hands-on effort, such that online methods are difficult for labs. Thus, only one lab provides a non-Level 1 modality. It is required that students are in-person for all but this one Level 3 lab, such that the students gain the necessary knowledge. Therefore, the spacing in the labs with an aggressive disinfecting procedure using UVC is demanded.
Task 1.3: Name: Livestreaming for Remote Students

Description: Equip both classrooms, Meinel 305 and 307, with updated microphones for online streaming the instructor’s audio and student feedback.

Equip both classrooms 305 and 307 with software enabling equipment to stream media (e.g., PowerPoint slides).

Responsible Person or Unit: AP and OSC DL Manager

Key timelines and decisions to effectively manage task:
• 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
• 7/02/20: Identify budget, personnel, and equipment needs for plans
• 7/10/20: Purchase equipment needed for instruction
• 7/31/20: Install equipment in classrooms and laboratories
• 8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:
Determine current state of technology for both classrooms.

Supply microphones, recording equipment, and software for both classrooms.

Spreadsheet or database listing available technology in each classroom

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Additional technology needs (e.g., cameras, microphones, etc.) to record and stream video from classrooms.

Financial Considerations:
Hardware costs: microphones, room computers.

Labor: cost of labor for installing the hardware and software.

Risk/Uncertainty:
There is uncertainty that the University has enough bandwidth to simultaneously livestream all concurrent classes via Zoom, Panopto, and/or other technology. Based on Spring 2020 courses, this risk is considered minimal.

Training must be done to ensure instructors know how to use room technology. See a succeeding task.
**Task 1.4:** Name: Train instructors to use in-class technologies

**Description:** Ensure that all instructors are adept and feel comfortable with the current technology prior to the start of the first day of class.

Three methods employed to assist instructors in the use of technology for the online delivery of their lectures:

- Refresher course on the changes to recorded and live lecture teaching for DL courses using Meinel 305 or 307,
- Provide to instructors any notices of training using software (such as Zoom, Panopto, D2L, etc.) and hardware (camera, Elmo, etc.) that is provided by UITS, OIA, or any other pertinent unit, and
- Develop a list of OSC instructors who are skilled in using technology including both software and hardware. The list will include the technologies for which the instructors have skill

**Responsible Person or Unit:** OSC DL Manager, Instructors, OSC Academic Deans

**Key timelines and decisions to effectively manage task:**
- 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
- 6/22/20: Draft modality plan provided to Registrar
- 6/24/20: Provost Council reviews modality plan
- 6/26/20: Goal for actionable list of RCS changes from modality plan
- 7/02/20: Identify budget, personnel, and equipment needs for plans
- 7/09/20: Identify mitigation plans for potential equipment and training needs that might not be met and would lead to operational failure.

**Key protocols that need to be in place to effectively support outcomes:**
Determine current state of technology demands for Fall 2020 instructors with questions on the modality survey.

Supply microphones, recording equipment, and software for both classrooms.

Spreadsheet or database listing available technology in each classroom.

**Identification of necessary equipment (PPE, technology, etc.) and other supplies:**
Additional technology needs (e.g., cameras, microphones, etc.) to record and stream video from classrooms.

**Financial Considerations:**
None recognized.
Risk/Uncertainty:

Some instructors do not take advantage of the appropriate training.

Additional equipment does not arrive in time or cannot be installed by required times.
Task 1.5: Name: Ensure sufficient social distancing within the teaching labs

Description: The purpose of this task is to ensure sufficient social distancing by reducing the maximum number of students in a teaching lab at a given time. The students, TAs, and instructor will be informed as to their stations and spacing required during an OSC lab course.

Responsible Person or Unit: OSC Teaching Lab Manager, Instructors, OSC Academic Deans

Key timelines and decisions to effectively manage task:
- 7/21/20: Install equipment in classrooms and laboratories
- 8/01/20: Revised TA guidelines and workloads finalized
- 8/01/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- 8/15/20: Revised TA training complete
- 8/15/20: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/24/20: Start of classes

Key protocols that need to be in place to effectively support outcomes:
Determine the number of optical tables in a given teaching lab and ensure that spacing requirements more demanding than UA plans is maintained.
- Room 438 Capacity: 6 students, 1 TA,
- Room 450 Capacity: 6 students, 1 TA,
- Room 454 Capacity: 6 students, 1 TA,
- Room 436 Capacity: 3 students, 1 TA,
- Room 440 Capacity: 4 students, 1 TA, and
- Room 452 Capacity: 3 students, 1 TA.

Labs are currently configured to maximize social distancing. The room arrangement preserves over eight feet of separation between individuals. One lab stool per lab table will be made available.

New lab sections will be opened to allow for reduced occupancy in the teaching labs. Graduate lab sections will be established with lab section capacities. Updated maximum occupancy and enrollment caps will be reflected in UAccess.

Supply microphones, recording equipment, and software as determined.

Spreadsheet or database listing available technology in each teaching lab.

Identification of necessary equipment (PPE, technology, etc.) and other supplies: None recognized.
Financial Considerations:

None recognized. The additional TA support required for the increase in lab sessions will be handled through preceptors (undergraduate) and independent study (graduate students).

Risk/Uncertainty:

The TAs and instructors will have to ensure that everyone in the room maintains separation during in-person lab sessions.

Additional TA support cannot be found through preceptorships or independent Study. Note that as of this date, significant interest has been voiced by the students of OSC.
Task 1.6:  **Name:** Survey Course Instructors

**Description:** Survey all Fall 2020 OSC course instructors to determine:

- Preferred class modality,
- Needs for technology training for both synchronous and asynchronous online lecture delivery,
- Additional technology needs for online instruction and safety protocols,
- If the instructor needs the addition of a recitation session for their course,
- Use of previous recordings for DL courses, and
- Suggested backup instructor for their course in case they become ill.

See attached documents for the survey conducted of OSC instructors.

**Responsible Person or Unit:** Instructors and OSC Academic Deans

**Key timelines and decisions to effectively manage task:**
- 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
- 7/02/20: Identify budget, personnel, and equipment needs for plans
- 7/10/20: Purchase equipment needed for instruction
- 7/31/20: Install equipment in classrooms and laboratories
- 8/03/20: Technology training for instructors starts
- 8/14/20: Technology training for instructors ends
- 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:**
The survey results need to provide the information required for courses that have DL sections, solely on-campus sections, and so forth. The survey that was developed and sent to Fall 2020 OSC instructors is included here in screen captures.
### Non-DL Lecture Delivery Method

**What modality do you intend to use for the delivery of the in-person campus class lecture content of your course in Fall?**

- [ ] Video
- [ ] Online
- [ ] Live Online (synchronous)
- [ ] Course (asynchronous)

---

**Non-DL whiteboard Use**

**Description (optional)**

- Lecture recording (p.e., camera) assistance through 14-0 marker
- One computer (p.e., tablet) with "whiteboard" application installed
- Classroom film with class assuming
- Other recording device (p.e., camera) used by you during lecture
- Other...

---

**DL Lecture Delivery Method**

Your course is a distance-learning (DL) course, and automatically will have a DL section for the course.
Wyant College of Optical Sciences Operating Plans for Fall 2020 Campus Re-Entry

Section 7 of 11
Course Recitation / Discussion Session Needs

Section 8 of 11
Additional Technology Needs

Section 9 of 11
Backup Instructor
Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Additional technology needs (e.g., cameras, microphones, etc.) for individual instructors to record and stream video.
Financial Considerations:

Additional funds for technology may be needed. Technology includes individual microphones, tablet computers, etc. to limit the number of items that have to be shared. The modality survey includes questions about technology needs.

Risk/Uncertainty:

Instructors do not know all their needs for teaching in the Fall, especially technology and modality demands.

Additional equipment does not arrive in time or cannot be installed by required times.

Additional technology is prohibitively expensive, so a limited amount is purchased and shared between instructors, raising the issue of contamination and spread of the virus.
Task 1.7: Name: Backup Instructors

Description: In the course instructor survey each instructor is asked for the suggested backup instructor for their course.

Responsible Person or Unit: Instructors, AP, Dean’s Office

Key timelines and decisions to effectively manage task:
- 6/12/20: Survey faculty on modality, backup instructor, etc. for all Fall courses
- 8/01/20: Finalize “teaching succession” plan in case of instructor illness
- 8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:
Backup instructors from the survey are suggestions; therefore, the Dean’s Office working in conjunction with AP must finalize the list by confirming the backups and contacting them individually.

Any compensation issues to be arranged by the Dean’s Office.

Protocols for handover of a course to the backup instructor need to be developed by the AP office.

Identification of necessary equipment (PPE, technology, etc.) and other supplies: None recognized.

Financial Considerations:
Backup instructors may have to receive additional compensation in the event they are needed.

Risk/Uncertainty:
Backup instructors must agree to serve in stated capacity.

Lecture modality may have to change due to the virus and needs of the backup instructor.

There may not be budget to cover all costs associated with backup instructors.

TAs, postdocs, graduate students, and research staff are not long-term solutions as backups, but, rather, short-term emergency solutions.
Goal 2: Facilities, Spaces, and Environment.

Task 2.1: Name: OSC Space and Environment
Description: Modify College spaces for increased safety.

Responsible Person or Unit: OSC Building Manager, Dean’s Office, AP

Key timelines and decisions to effectively manage task:
- 5/18/20: Safe Return to Workplace Draft Document Released
- 5/27/20: Social distancing guidelines given by UA Re-Entry Task Force
- 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: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/15/20: Deadline for all members of OSC to complete RLSS COVID-19 training
- 8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:
OSC spaces are shared use areas that are not covered by a OSC Addendum to the RII Re-Entry Check List and are defined in the table below. Responsibilities of the designated responsible person for each College space are:
- Determine and post occupancy limits of College 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 College 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 OSC space with instructions on disinfection protocol posted.

<table>
<thead>
<tr>
<th>College Space</th>
<th>Designated Responsible Person(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Office</td>
<td>Ruth Corcoran/John Koshel</td>
</tr>
<tr>
<td>Business Office</td>
<td>David Gonzalez</td>
</tr>
<tr>
<td>Dean’s Office</td>
<td>Luz Palomarez</td>
</tr>
<tr>
<td>Conference Rooms</td>
<td>Kristin Stone</td>
</tr>
<tr>
<td>Storage Rooms</td>
<td>Matt Grogan</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Shared/Social Spaces</td>
<td>TBD</td>
</tr>
<tr>
<td>DL Recording Rooms</td>
<td>Cindy Robertson</td>
</tr>
<tr>
<td>Teaching Labs</td>
<td>Hillary Mathis</td>
</tr>
<tr>
<td>Loading Dock</td>
<td>Matt Grogan</td>
</tr>
<tr>
<td>Copiers</td>
<td>TBD</td>
</tr>
<tr>
<td>Golf Cart</td>
<td>Matt Grogan</td>
</tr>
</tbody>
</table>

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

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

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

Each OSC supervisor is tasked with developing flexible work schedules to comply with space occupancy limits.

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

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 Dean. For example AP staff members should be moved from the 4th floor hallway to less busy areas.

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 OSC members will be required to complete this training once released.

Until classes start in August, OSC buildings will remain locked with CatCard access only. Upon resuming classes only those with active teaching spaces will be open.

All workplaces including offices, except AP office, 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. AP will have a barrier to limit access into Meinel 403 so that interactions with significant spacing can be conducted.
Identification of necessary equipment (PPE, technology, etc.), supplies, and procedures:

Face coverings, disposable masks or face shields for employees, students, and visitors will be available in the AP office and a TBD location.

The Building Manager will distribute two cloth face coverings per employee supplied by the University.

Disinfection solutions, wipes, gloves, and paper towels for decontaminating surfaces will be made available in amounts and places TBD.

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

- AP office, Meinel 403
- As recognized by OSC personnel

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, Matt Grogan.

Most employees in the operations units have appropriate technology to accommodate flexible work schedules.

Financial Considerations:

Units responsible for costs TBD, unclear so far which units will bear the costs of additional masks, disinfectants, Plexiglas face shields, and other safety equipment. Costless touchless restroom modifications currently understood to be provided by FM.

Risk/Uncertainty:

Meinel will be unlocked when classes resume, and this will bring more people into the building.

Ensuring student/visitor compliance with OSC guidelines, particularly mask and distancing guidelines. Guidelines and procedures for the enforcement of compliance are to be released by UA. Also see succeeding task.

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

Restroom occupancy and modifications and touchless modifications. Discussions on ownership of responsibility and timelines are ongoing and no commitments can yet be cited.
Task 2.2: Name: Disinfection of Teaching Labs

Description: The purpose of this task is to ensure that each teaching lab is cleaned and disinfected after each use.

Responsible Person or Unit: Teaching Lab Manager, TAs, Instructor

Key timelines and decisions to effectively manage task:
- 5/18/20: Safe Return to Workplace Draft Document Released
- 8/15/20: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:
All equipment needed for each undergraduate lab session will be laid out on individual tables prior to the first lab session. All cabinets and drawers will be locked as to avoid any students removing extra equipment and returning it without it being sanitized.

Lab manager will sanitize each undergraduate and graduate lab room with a UVC sanitizing lamp after lab setup, prior to any students entering the lab space.

Lab manager, TA, or Instructor will sanitize each lab room after each lab session with a UVC sanitizing lamp. Disinfecting protocols will align with those recommended by SWERT C. I.

Training of TAs and instructors on how to sanitize with UVC lamp.

Custodial staff will be informed to not clean within teaching labs. All such chemical cleaning will be handled by OSC staff. Germicidal UV is the preferred method to sanitize all lab equipment.

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
UVC sanitizing lamp – see Goal 1 tasks 1.2 & 1.5.

Financial Considerations:
UVC sanitizing lamp – see Goal 1 tasks 1.2 & 1.5.

Risk/Uncertainty:
Safety supplies such as disinfectant must be maintained in the teaching labs.
Task 2.3: Name: OSC Safety Supplies

Description: The purpose is to provide safety supplies such as masks, disinfectant, and other safety supplied to OSC faculty, staff, and students to mitigate the transmission of the virus upon re-entry.

Responsible Person or Unit: Building Manager, Dean’s Office, AP

Key timelines and decisions to effectively manage task:
• 8/01/20: Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
• 8/15/20: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.

Key protocols that need to be in place to effectively support outcomes:
The College has obtained 2000 masks for distribution to research groups and staff, though the Building Manager.

The Building Manager is in process of getting two reusable masks for faculty and staff through FM/Bookstore. These masks are expected to have an associated cost of about $5.

Bottles of disinfectant are available, for labs, through Dean/Building Manager and can be refilled as needed.

OSC has started purchasing pump dispensers of hand sanitizer for some labs.

Hand sanitizers are currently expected to be placed at building and classroom entrances, also scattered throughout building as numbers allow. Labs will have their own hand sanitizing. Spray disinfectant will be issued as needed by Building Manager.

Supplies will be available and distributed from Matt Grogan’s office to faculty and staff.
The Building Manager will maintain master inventory of all safety supplies in OSC

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Facemasks, disinfectant, pumps, hand sanitizes, and other safety supplies have already been recognized.

Financial Considerations:
There will be costs for additional and replenished safety supplied that are needed and cannot be provided by the UA or others. Amounts are TBD and will depend on forthcoming UA decisions.

Risk/Uncertainty:
Uncertainty of continued availability of safety supplied supplied noted above.
Supply chain challenges and quality control checks of the safety supplies.
Task 2.4: Name: OSC Building Flow and Environment

Description: The purpose of this task is to document the flow within the Meinel Building, including into and out of classrooms and teaching labs.

Responsible Person or Unit: Teaching Lab Manager, TAs, Instructor

Key timelines and decisions to effectively manage task:
• 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: Ensure that Departmental spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.

Key protocols that need to be in place to effectively support outcomes:
Flow in one direction, with minimized passing
• Entrance: Fourth floor breezeway will be the only entrance.
• Fourth floor flow: Traffic will be both East to fourth floor classrooms (408/10, 422, & 432) and Teaching Labs, and West down the stairs to the third floor rooms (305 and 307).
• Other floor flow: Due to limited traffic, configuration, and different needs, floors 1, 2, 5, 6, 7, and 8 will remain two-way, but all individuals to maintain distance,
• Fourth floor classrooms and Teaching Labs:
  o Traffic past Hillary’s office to be limited to only those using teaching and research labs.
  o After class, those in the fourth floor classrooms will continue East, exiting bus stop door.
  o After lab, those in the Teaching Labs can exit either the bus stop door or the back door that leads to Cherry St. Garage.
• Third floor classrooms:
  o After class, those in the third floor classrooms will exit out third floor lobby doors.
• Stairs:
  o SW, W, and 3rd floor lobby stairs will be down only.
  o SE and NE stairs will be up only. Due to limited traffic, configuration, and different needs, floors 1,2,5,6,7,8 will remain partially two-way.
  o W stairwell between floors 7 and 8 will be two-way.
• Elevator protocols are under development by FM.
• People with disabilities are exempt from protocols that would prevent their ability to access spaces within the building.
Location of disinfectant
- Hand sanitizers will be placed at building and classroom entrances, also scattered throughout building as numbers allow.
- Research labs will have their own hand sanitizing.
- Teaching labs will have separate hand sanitizer unit at the entrance to the hallway.
- Spray disinfectant will be issued as needed by Building Manager.

Large issue: Restrooms
- FM is addressing hands-free fixtures for restrooms.

Spacing of seats in classrooms
- Seats will be blocked/coded maintaining UA-directed guidelines.

Putting up barriers in labs, offices, and classes
- Plexiglas barrier to be installed at Ruth’s desk in 403. Additional installations will be made as requested and approved by FM.
- Offices to be moved or reconfigured as necessary.

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Han sanitizers as delineated, signage dictating flow, and written documentation showing building flow rules and other rules.

Financial Considerations:
Costs for hand sanitizer and signage if such is not provided by UA.

Risk/Uncertainty:
Individuals who do not follow building flow rules.
Hand sanitization units must be readily supplied.
Restrooms remain one of the most critical points.
Goal 3: Personnel and Operations.

Task 3.1: Name: OSC Guidelines for Personal Safety

Description: The University has general policies that must be maintained within the College. These policies are applied to OSC in this task.

Responsible Person or Unit: OSC Campus

Key timelines and decisions to effectively manage task:
- 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: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/15/20: Deadline for all members of OSC to complete RLSS COVID-19 training

Key protocols that need to be in place to effectively support outcomes:
Everyone in OSC will follow the best practices for personal safety laid out by the UA. These best practices include, but are not limited to, avoiding class when symptomatic, distancing at all locations within the College, disinfecting work spaces, proper hand hygiene, avoiding congregating in hallways and bathrooms, etc.

The University of Arizona provides each employee and students with two UA facemasks. The UA will indicate the delivery of these facemasks. Currently, employees are to receive facemasks from the UA via their individual units, while students will receive facemasks by visiting the Arizona Bookstore.

Optical Sciences will have available additional masks, gloves, and hand sanitizer for individuals in the event that they forget such. It will be available in the AP Office (Meinel 403) and TBD location

Everyone in OSC is mandated to wear facemasks indoors, including classrooms, labs, and when space does not allow for appropriate social distancing, except when the individual is isolated in a private office, workspace, or formal meeting area where physical distancing of at least six feet is possible.

Everyone entering the teaching labs will use the hand sanitizing station at the entrance of the lab hallway prior to entering lab and when they leave the lab.
Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Additional disinfect, facemasks, etc. may need to be purchased. The disinfectant is for
general use, while the facemasks are for those individuals who do not have one or have
forgotten theirs.

Financial Considerations:
OSC currently has some disinfectant and other safety supplies available for this task;
however, during the semester additional materials may need to be purchased.

Risk/Uncertainty:
While it should be possible to have faculty inform students of personal safety best
practices, it may be difficult to actually enforce these safety practices, especially outside
the classroom.

Amount of emergency disinfect/safety supplies needs to be tested against demand to
determine if the supply is enough.
Task 3.2: Name: OSC Communication

Description: The University has maintained a central website hub for communication about COVID-19, and the College will develop a secondary website hub for communication within the College.

Responsible Person or Unit: Media Manager, AP, Dean’s Office

Key timelines and decisions to effectively manage task:
- 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: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/15/20: Deadline for all members of OSC to complete RLSS COVID-19 training

Key protocols that need to be in place to effectively support outcomes:
An OSC website will be maintained by the College containing the following information:

- Graphical and text interface to current rules within the College including these plans, modality plans, building flow, spacing requirements, and so forth;
- Links to UA COVID-19 websites will be provided;
- Suggestion box form; and
- Over time a FAQ will be established.

In order to stop confusion and misinformation, queries should be directed to this website.

Staff, faculty, and students will be informed of this website via email, and a conspicuous link on the front page of the OSC website will link directly to it.

Email updates and the like from OSC leadership will be archived at this website.

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
None recognized.

Financial Considerations:
None recognized.
Risk/Uncertainty:

This website must be continuously maintained in order to have the most up to date information. Lack of updates has the potential to lead to misinformation and confusion.

The amount of suggestions received is unknown at this time. Currently the Academic Deans will reply to all suggestions, but if the burden becomes too great, an alternate policy will have to be developed.

All internal and external queries should be directed to or use the information posted on this and UA-linked websites dedicated to COVID-19. Not using the information posted at these sites has the potential to lead to misinformation and confusion.
Task 3.3: Name: OSC 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.” See https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html for more details. In addition, students, including undergraduate and graduate, and postdoctoral fellows are particularly vulnerable because of their lack of permanent positions.

Responsible Person or Unit: OSC AP and OSC Human Resources, with assistance from OSC Diversity Subcommittee

Key timelines and decisions to effectively manage task:
- 7/27/20: Addition of the task
- 8/01/20: 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:
OSC will follow the guidelines for fair accommodations laid out by UA Human Resources, involving their guidance and processes, and involving the Disability Resources Center when appropriate. OSC will emphasize the need for supervisors to be familiar with the return to workplace protocols and to deal sensitively with the issues that OSC individuals may have. AP and Human Resources (in conjunction with the OSC Diversity Subcommittee) will deal with Fall re-entry and its impact on working conditions and assignments for all OSC individuals, especially students and postdocs.

For students and postdocs: OSC AP and OSC Human Resources will communicate on an ongoing basis by conveying reasonable expectations and responsibilities to the following groups:

- Undergraduate students working in research labs under a wage position, volunteer, senior design, research/independent study, and so forth. Hereafter these efforts are generically listed under RAs;
- Graduate students working in research labs under a research assistant (RA), wage position, volunteer, dissertation, thesis, research/independent study, and so forth. Hereafter these efforts are generically listed under RAs;
- Undergraduate students working in a classroom or teaching lab environment as a preceptor, teaching assistant (TA), volunteer, and so forth. Hereafter these efforts are generically listed under TAs;
• Graduate students working in a classroom or teaching lab environment as a preceptor, teaching assistant (TA), volunteer, and so forth. Hereafter these efforts are generically listed under TAs; and
• Postdocs working in research labs, classroom, teaching lab under any means;

TAs will be essential in classrooms and teaching labs, and RAs and postdocs will be essential in research activities, so we want to anticipate situations where TAs, RAs, and postdocs may bear the brunt of transmission risks in classroom and lab settings, and develop measures to deal with these situations. AP is charged with balancing these concerns with reasonable and responsible expectations respecting the curricular and research related needs of supervisors, as well as recognizing the sources and conditions of financial support for TAs, RAs, and postdocs. AP will also develop as required provisional policies for Temporary Modified Work Conditions requests, and act as a first option for mediating between supervisors and the TAs, RAs, and postdocs.

**Financial Considerations:**
None recognized.

**Risk/Uncertainty:**
This task may have challenging circumstances arise, which may require assistance from other units on campus, in particular UA Human Resources.
Goal 4: Outreach and Visitors.

Task 4.1: Name: Visitors to OSC campus

Description: The OSC building receives many visitors each day. The visitors may be people that have appointments with faculty or staff, prospective students, or members of the general public interested in OSC. The purpose of this task is to outline how we deal with visitors that come from outside the University of Arizona community.

Responsible Person or Unit: OSC Staff and Faculty

Key timelines and decisions to effectively manage task:
- 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: Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/15/20: Deadline for all members of OSC to complete RLSS COVID-19 training
- 8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:
All visitors to the Wyant College of Optical Sciences building must adhere to the general building policies, and will only be permitted as allowed by University Policies in effect at the time of the visit. These policies include wearing a mask at all times, practicing social distancing, and following the direction of traffic flow indicated for the building. Visitors must follow directions on all posted signage.

Masks and other safety supplies, OSC policies, and other material will be provided to visitors as required. The policies will include a description of mask requirements, building flow, and so forth. If a visitor will not comply with the policies, they will be asked to exit the building. At this time, these safety supplies will be located in the Academic Programs office and another TBD location.

Identification of necessary equipment (PPE, technology, etc.) and other supplies:
Facemasks, disinfectant, and other safety supplies as recognized, and written materials explaining the safety policies and building flow/directions.

Financial Considerations:
Cost of signage; cost of labor for safety enforcement, additional facemasks, disinfectant, and printing of written documents. Most of these costs have already been covered in other tasks or by the UA as a whole.
**Risk/Uncertainty:**

It will be difficult to control visitor’s movements and behaviors throughout the building.

It will be important to assist visitors with proper protocol if we see them in violation.
Task 4.2: Name: OSC Outreach Activities

Description: The purpose of this task is to create guidelines to allow for students, staff, and faculty to continue doing optics outreach for the community.

Responsible Person or Unit: Outreach Coordinator

Key timelines and decisions to effectively manage task:
- 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 College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- 8/15/20: Deadline for all members of OSC to complete RLSS COVID-19 training
- 8/24/20: Fall semester begins

Key protocols that need to be in place to effectively support outcomes:
Part I: Off-Site Outreach
OSC will not participate in fair style outreach events for the Fall 2020 semester.

Spring 2021 participation will be determined toward the end of the 2020 calendar year.

OSC individuals doing outreach will be strongly encouraged to not participate in off-site outreach, but they will be able to participate in such events as long as they abide by the University of Arizona and OSC social distancing, safety protocols, and teaching policies as well as the off-site school’s policies. The more restrictive of two policies for a given item (e.g., social distancing) must be followed.

Upon its return, all equipment used during the outreach demonstration will be sanitized per the protocols in a separate task.

Participation in off-site outreach activities may be restricted by UA policies, and protocols stated above are subject to modification based on direction given by UA administration.

Part II: Virtual Outreach
OSC individuals are able to participate in unlimited virtual outreach stationed from either the OSC building, their home, or any other isolated venue of their choosing.

OSC individuals doing outreach will be required to abide by the University of Arizona and OSC social distancing, safety protocols, and teaching policies.
Upon its return, all equipment used during the outreach demonstration will be sanitized per the protocols developed for the teaching labs.

**Identification of necessary equipment (PPE, technology, etc.) and other supplies:**
UVC sanitizing lamp – see Goal 1 task.

**Financial Considerations:**
None recognized.

**Risk/Uncertainty:**
By not allowing OSC individuals to participate in off-site outreach efforts, it was felt that some individuals might do them anyways, and without safety protocols in place. Therefore, the best solution was to develop stringent policies.

Class sizes of off-site outreach may be large, so we will have to control such.

Guidelines of non-UA entities may create additional burdens.

All members of the OSC campus will be apprised of the outreach policies, but we cannot enforce it if individuals ignore the policies.
Task 4.3: **Name:** Clean and Disinfect Outreach Equipment

**Description:** The purpose of this task is to ensure that each outreach demo has been cleaned and disinfected after each use.

**Responsible Person or Unit:** Manage of Teaching Labs

**Key timelines and decisions to effectively manage task:**
- **8/01/20:** Ensure all employees are trained in proper protocols for social distancing, disinfection, etc. as outlined in UA Re-Entry Plan
- **8/15/20:** Ensure that College spaces have designated occupancy limits, staged for social distancing, and stocked with disinfection supplies.
- **8/15/20:** Deadline for all members of OSC to complete RLSS COVID-19 training
- **8/24/20:** Fall semester begins

**Key protocols that need to be in place to effectively support outcomes:**
Lab Manager will clean and disinfect each demo after each use. This will be done with a UVC sterilization lamp.

Disinfecting protocols will align with those recommended by SWERT C. I.

This protocol will be in place from the start of campus re-entry / start of classes until campus, local, state, and/or national health agencies deem it safe to end daily disinfecting.

**Identification of necessary equipment (PPE, technology, etc.) and other supplies:**
Germicidal UVC sterilization lamp. Other safety supplies for the Lab Manager for handling of the lamp prior to disinfection.

**Financial Considerations:**
Previously indicated in other tasks.

**Risk/Uncertainty:**
It will be important to ensure that the Lab Manager doing the disinfecting has appropriate safety equipment.

Need proper tracking in the event that a user of outreach equipment uses develops a confirmed case of COVID-19.

Backup for the Manager of the Teaching Labs is required. This individual is TBD by AP.