**Fall phase-in plans for STEM-CTE Division**

1. **Instruction:**

After extensive conversation with faculty, staff and administration, we identified a small number of STEM and CTE lab sections that will require F2F instruction on campus. These courses are extremely difficult (if not impossible) to teach in an online format and achieve the course learning outcomes required of the student. The process to identify these courses was done taking into account transferability of these courses to CSU and UC system and following the practices that the four-year universities in California and our sister colleges in the district are following for the same courses under the COVID-19 pandemic situation.

The following lab courses were identified for offering as F2F instruction on campus, following physical distancing and other health and safety protocols established by the state and county health department and guidelines provided by the district.

**STEM:**

1. Biol 31 (Microbiology) 5 units course with 3 lecture hours and 6 lab hours
2. Chem 29A (Organic Chemistry Laboratory I) 2 unit course with 6 lab hours
3. Chem 1A (General Chemistry) 5 units course with 3 lecture hours and 6 lab hours
4. Chem 1B (General Chemistry and Qualitative Analysis) 5 units course with 3 lecture hours and 6 lab hours

**CTE:**

1. RN 75 (Intermediate Medical-Surgical Nursing) 5 units, 2.5 lecture hours and 7.5 lab hours
2. MFGT 60 (Introduction to Welding) 5 units, 3 lecture hours and 6 lab hours
3. MFGT 80 (Introduction to Machine Shop) 5 units, 3 lecture hours and 6 lab hours
4. MM 253B (Pneumatic Fundamentals) 0.5 unit, 0.25 lecture hours, 0.75 lab hours
5. MM 253C (Hydraulic Fundamentals) 0.5 unit, 0.25 lecture hours, 0.75 lab hours
6. MM 253B (Welding Fundamentals) 1 unit, 0.25 lecture hours, 2.25 lab hours
7. MM 253B (Electric Fundamentals) 1 unit, 0.25 lecture hours, 2.25 lab hours
8. CHDEV 3 (Introduction to Curriculum) 3 units, 3 lecture hours, 1 lab hour
9. PLS 2L (Soils Laboratory) 1 unit, 3 lab hours

**Table 1: List of STEM and CTE lab sections planned for F2F instruction on campus.**



While it is ideal and highly recommended to offer the above lab sections as F2F on campus because of the skill sets to be taught, due to the uncertainties of the pandemic situation, faculty have planned to front-load and offer as many of the lab skills and procedures to be taught F2F initially and be prepared to transition to fully on-line labs if situation warrants in the middle of the semester.

The laboratories will be utilized with the permissible number of students following physical distancing. Since each of the Biology and Chemistry lab can accommodate only 11 students, the proposal is to use AV1-120,126 and 130 concurrently for Biology 31 labs and AV1-140 and 144 concurrently for Chemistry 1A, 1B and 29 A labs. Biology labs will be CAPPED at 32 and Chemistry labs at 22. The lab sessions will end in 2.5 hours to provide enough time of at least 30 minutes or longer for custodial crew to clean and sanitize the rooms prior to arrival of the next group of students.

Students will be required to wear PPE (masks, gloves and lab coats (disposable or washable)) during the lab period. All labs have two doors and students will enter through one door and exit through another door. Students waiting to get into the labs for the next session will be required to stand outside in designated areas marked for physical distancing of 6’ apart.

Students will be advised to stay in their car or outside until five minutes before classes start to come to the AV1 lab area.

All other CTE labs have either less number of students or enough space in the respective labs to accommodate the physical distancing.

1. **Operation of Child Development Center:**

CDC will be open but without any children during fall semester. Faculty will use the CDC for CHDEV 3 students to complete practicum and observation. This will benefit over 50 CHDEV students who will be able to complete their educational goals on time. Classified staff will come to campus to assist students and to maintain the facility and complete pending projects at CDC.

1. **Staff returning to work:**

Based on the CDC, state and county health department guidelines and district decision, faculty and staff who will be providing lab instruction or support to the laboratories will be allowed to return to work in fall. Since we plan to offer Biology and Chemistry labs, the Science Lab Coordinators will work as per their regular schedule, but limited to Monday to Thursday on campus.

1. **Access and student flow in AV1 for Biology and Chemistry labs:**

Each of the labs will have a maximum seating of 11 students maintaining physical distance. All labs have two doors and entry and exit will be through designated doors only. Students waiting to enter the labs should wait outside the labs maintaining physical distancing in marked spaces that are 6’ apart. Restrooms in the first and second floor will be opened and will be cleaned and sanitized after every lab session ends.



1. **Access and student flow in CAM and CAT buildings:**

The Center for Advanced Manufacturing (CAM) and Center for Agriculture and Technology (CAT) buildings have larger lab space area which makes it easier to practice physical distancing. Welding and Manufacturing labs will be held in sections of 12 or less to provide for physical distancing and safe workplace to use welders and manufacturing machinery. Students will be wearing PPE equipment involving masks, goggles, welding face shield, gloves and lab coats.

Students will be given assigned seating in the labs and expected to sue the same seating arrangement for each lab session. Instructor will maintain a map of the seat assignment. This will assist in contact tracing of students if anyone develops COVID-19 symptoms and tests positive.

1. ***PPE Needed***
   1. Hand sanitizing stations will be needed in the labs and outside waiting areas.
   2. Sanitizing cleaners and disposable towels will be needed to clean surfaces and lab tables, microscopes, tools, and other equipment.
   3. Gloves will be needed for employees to wear when cleaning surfaces and at other times.
   4. A backup supply for face masks is needed for anyone who requires one.
   5. Students will be expected to wear lab coats during the lab sessions on campus. Each student will be provided a set of lab coat, safety goggles and gloves which they will be responsible for cleaning and storage on campus in lockers or taking to home and bringing it back to class.
2. ***Area Supervisor***
   1. A Dean/ Director will be designated as the COVID supervisor for the labs that are held on campus from Monday to Thursday.