# Classroom & Activities Instructional Safety Audit California Polytechnic State University, San Luis Obispo Audit Report 20-3 September 23, 2021

## **EXECUTIVE SUMMARY**

# OBJECTIVE

The objective of this audit is to ascertain the adequacy of student safety related activities and documentation for in-person academic courses that include a lab, field trip, or an activity that may present a safety risk to the enrolled student.

## SCOPE

Audit and Consulting Services (ACS) obtained the listing of in-person courses for the Fall 2020 term from the respective college deans. Based on the course descriptions listed in the Cal Poly catalog (<u>http://catalog.calpoly.edu/coursesaz/</u>), ACS selected 56 courses to review. Course selection was based on key terms listed in the description such as "lab", "activity", "field-trip", "chemicals", "machinery", "livestock", "electricity", "fire", etc.

For the courses selected, ACS independently obtained the course rosters from the Registrar's Office and selected a subset of the student listing from each course to test as part of the audit procedures.

The procedures selected for this audit were based on the Student Health and Safety Training Program (Program) guidelines maintained by Environmental Health and Safety Department (EH&S). The Program applies to all Cal Poly student activities, including attending classes, conducting research, and participating in club events where potential risk of exposure to known hazards, such as biological, chemical, and/or physical hazards are present.

The Program outlines requirements related to the administration of student safety training and the required evidence and retention of student safety training documentation.

Documentation obtained and reviewed by ACS included the course syllabus, lab instructions, course presentations, field trip waivers, sign-in sheets, etc. For the purpose of the audit, ACS assessed the requested course materials to determine if:

- Evidence of the safety risks and related safeguards specific to the course were communicated as part of a student safety training which includes:
  - Explicitly identifying hazard exposures and communicating to students
  - Student safety performance is evaluated as part of the course

- Communication was completed before the potential exposures
- A process to report any safety concerns or incidents
- Evidence that proper use of any required personal protective equipment is required for the course
- Documentation was included for the course and properly retained to evidence that safety training was administered to the students
- Evidence that safety training was administered to students prior to participating in the related course activity
- Student acknowledgement or evidence of completion of safety related documentation

## CONCLUSION

Based upon the results of the work performed within the scope of the audit, except for the weaknesses described below, the documentation related to student safety trainings for the Fall quarter 2020, taken as a whole, provide reasonable assurance that the safety risks were being managed and objectives were met.

ACS noted that the campus had an appropriate framework and guidelines set out for student safety provided by the office of EHS. As mentioned above, this program lists out the safety training requirements for academic student activities along with the respective required student safety training documentation. The requirements are specific to what is to be communicated to the students in the training (i.e. list specific course hazards and safeguards) and the methods of administering the training (virtual course with student's scores or signature on a sign-in sheet for a training presentation).

ACS found that some campus departments did not have documented student health and safety trainings or training records that were not always obtained or kept on file. Further, ACS notes that there is lack of consistency in the application of the specific safety program requirements at the individual course level. The documentation of required safety trainings, communication of known hazards, safeguards, and personal protective equipment was not explicitly documented within the course material. However, many of the courses reviewed evidenced communications of general versus specific safety elements via an alternative method of communication such as course quizzes, detailed lab instructions, signed syllabus acknowledgments and student sign-off waivers.

In summary, professors and instructors across campus are providing elements of the student safety training, however, they need ensure that the course materials and related safety trainings are complying with the Program. Specific observations, recommendations, and management responses are detailed in the remainder of this report.

#### **OBSERVATIONS, RECOMMENDATIONS, AND RESPONSES**

#### 1. REQUIRED STUDENT SAFETY TRAINING

#### OBSERVATION

The following items detail the findings related to the review of the course documentation in the aggregate (for all colleges) in comparison to the overall program requirements. The numbers in parenthesis following each item denotes the numbers of occurrences identified.

## EVIDENCE OF COMPLETION OF HAZARD SPECIFIC ONLINE TRAINING PROGRAM OR STUDENT TRAINING SIGN-IN SHEET

- Course did not include evidence of online training programs via Skillsoft for Students, understanding of department specific student training platforms such as PolyLearn, Dozuki, etc., or student signature on a training sheet attached to copy of training content (50)
- ACS noted that alternative forms of communication of safety related information were utilized as part of the course versus the online training programs or signature on a training sheet. Courses reviewed may have included one or more of the following alternative communications:
  - Student signed acknowledgement outlining the student safety responsibilities listed on the syllabus or waiver (9)
  - Safety quiz was administered to the students to evaluate the safety training or material comprehension (6)
  - General safety guidelines were provided or presented to students (1)
  - Safety training was administered as part of the course or lab (7)
  - Safety related information was communicated via e-mail from the professor to the student (4)
- Supporting documents for the administered course were not provided as evidence (2)
- No evidence of individual student sign-off (98) or completion of training retained for the course (21)

#### DOCUMENTATION OF KNOWN HAZARDS

- Course documentation does not explicitly state the specific hazards pertaining to the course, lab, field trip, or activity (28)
- ACS could not verify that the safety training was administered prior to exposure of the known hazards (20)

## COMMUNICATION OF CORRESPONDING SAFEGUARDS TO STUDENTS

- Specific safeguard to the course risk(s) or hazards are not listed in the course material (26)
- Specific safeguards are not listed in the course material, however, general lab or activity precautions were provided to the students (5)

## REPORTING SAFETY HAZARDS OR CONCERNS

• Evidence of reporting course specific safety hazards were not included in syllabus, waivers, or safety training documents (39)

#### REQUIRED PERSONAL PROTECTIVE EQUIPMENT

• Course documentation did not include evidence that the proper use of any personal protective equipment, such as safety glasses/goggles, hand protection, foot protection, etc. were required for the activity (21)

#### STUDENT PERFORMANCE EVALUATION

• Course documentation did not include explicit evidence that student safety performance is evaluated as part of the course to ensure that required safety practices are being completed correctly (38)

#### RECOMMENDATION

ACS recommends that respective college deans, department heads, and instructors be reminded of the program requirements outlined in the EH&S Student Safety Training Program. In addition to the roles and responsibilities outlined for each level of personnel (EHS Program Administrator, AVPs/Deans, Directors/Department Chairs, Faculty, Lecturers, Lab Supervisors) within the document, an emphasis of the "Required Student Safety Training" and "Required Student Safety Training Documentation" should be highlighted.

ACS recommends faculty and lecturers be reminded to include the required student safety training as part of their courses that may include a lab, activity, or field-trip in which students are exposed to biological, chemical, and/ or physical risk. Further, faculty and lecturers should ensure that they administer this safety training prior to exposures to the mentioned risks and hazards. Faculty and lecturers should ensure that hazards are identified and proper safeguards are provided to students for their safety in the educational setting.

This may include but not limited to ensuring that there is proper evidence of guidance on how to approach livestock, how to operate machinery or tools in the laboratory, wearing proper personal protective equipment, and providing a reporting process for students to report safety hazards or concerns.

ACS noted as part of this review that instructors and lecturers conducted some form of communication of the general safety requirements, however, evidence of the required student safety training documentation was not consistent or was not retained in line with the requirements set out in the EH&S program. This training may have not be readily identifiable within the supporting documentation or not in the form of a formal training session as outlined by the EH&S program. ACS recommend that faculty and lecturers complete one of the require student safety training documentation requirements which dictates that a student should complete a formal training program via a hazard specific training program via Skillsoft for Students, student signature on training sign-in sheet attached to a copy of training content, or documentation to include understanding of content of department specific student training platforms (i.e. PolyLearn, Dozuki, etc. via quiz).

#### MANAGEMENT RESPONSE

We concur with the above recommendations of ACS pertaining to required student safety training, have begun implementing changes to our processes.

Anticipated implementation date: March 31, 2022.

#### 2. STUDENT SIGN OFF AND WAIVERS

#### OBSERVATION

The following items detail the findings related to the review of course documentation requiring student signature. The numbers in parenthesis following each item denotes the numbers of occurrences identified. Observations excluding the number of occurrences are considered general observations noted as part of the audit.

#### STUDENT ACKNOWLEDGEMENT AND CERTIFICATIONS

ACS noted that the use of student acknowledgements was not consistently applied throughout the content of the student signed acknowledgements amongst the courses. Acknowledgements received were in the form of the course syllabus, sign-in sheets, or separate documentations. Examples of certifications and acknowledgements provided include:

- Certification that student has read the lab safety rules
- Acknowledgement that student will implore the basic safe working practices for a lab
- Certification that safety instructions were given to students
- Certification that the student received a copy of the general laboratory safe practice procedures
- Acknowledgement of Covid-19 safety protocols
- Acknowledgement that student has completed the lab risk assessment

#### UNIVERSITY WAIVERS

• The use of the "Release of Liability, Promise Not to Sue, Assumption of Risk and Agreement to Pay Claims" should not be used in lieu of proper student training and communication of related hazards and safe guards for the course (2)

## **ON-CAMPUS ACTIVITIES**

• On-campus activities that include visiting Poly Canyon or working near water ways on campus do not require forms or safety waivers for students (2)

## FIELD TRIPS

- Safety waivers were not completed for a required field trip or off-campus activity (2)
- Safety waivers do not outline specific safety risk pertaining to the field trip (3)
- Field trip safety waivers are focused more on the transportation than the actual risk of the field trip themselves. The notion is that students are "just walking" the beach or an open area.

#### RECOMMENDATION

ACS recommends that the respective colleges and departments work with faculty and lecturers to develop consistent criteria for the use of student acknowledgements/certifications, documentation for on-campus activities, and field trips. ACS recommends that student acknowledgements/ certifications include enough detail to evidence that:

- Specific safety training has been administered to the student by either the faculty, lecturer, or lab manager
- Student safety training outlined the specific hazards pertaining to the course in addition to respective safeguards to mitigate the risk of the chemical, biological, and/or physical harm to students
- Student signature or evidence of completion of training should be dated to evidence that the training occurred prior to exposure to the listed hazards
- For courses that include machinery, ensure that student certification includes that specific training on the machine has been completed prior to student operation
- For courses that have a high risk of physical injury, ensure that the risk of bodily injury (pain, suffering, disability), property damage, or even death could occur in participating in the course

- Students have read and understood college/department safety rules or guidelines
- Student safety training included methods in which students can report safety hazards or concerns
- Student feels comfortable in performing the required course activities

ACS recommends that faculty and instructors that require students to utilize the University "Release of Liability, Promise Not to Sue, Assumption of Risk and Agreement to Pay Claims" should be required to list out the specific hazards that warrant the use of the form in their course documentation (i.e. syllabus or activity instructions).

ACS recommends that courses with on-campus activities that are outside of the established classroom setting for the course (i.e. if a course takes place in a lecture hall but includes an on-campus activity to Poly Canyon) require a disclaimer of safety risks and proper safeguards when conducting class activities. For example, a course that requires the student to go to Poly Canyon should be identify the environmental risk visiting ecological area (i.e. ticks, poison oak, gravel, running water sources, rattle snakes, etc.). Further, the instructor should list safe guards for students such as wearing closed toe shoes or jeans while conducting the activity in Poly Canyon.

ACS recommends that courses with off-campus activities require a listing of safety risk and proper safeguards within the course documentation or training. Even though some off-campus activities only include a walk on the beach, a hike, or giving a presentation to the general public, student safety should be prioritized as the activities are part of a course grade requirement. Further, faculty and lecturers should be reminded that if students are required to go off campus for the course, that they request and require the necessary forms.

#### MANAGEMENT RESPONSE

We concur with the above recommendations of ACS pertaining to required student safety training, have begun implementing changes to our processes

Anticipated implementation date: March 31, 2022.

#### 3. COURSE MATERIAL

## OBSERVATION

The following items detail the findings related to the review of the specific course documentation. The numbers in parenthesis following each item denotes the numbers of occurrences identified.

#### Syllabus

Syllabus did not include one or more of the following:

- Any safety risks or hazards (22)
- Outline of specific course safety hazards or risk (43)
- Outline of specific safeguards to the course safety hazards or risks (41)
- Instructions to report safety related concerns or incidents (52)
- Listing of any required personal protective equipment for the course (37)

ACS noted that the course syllabus did not outline the specific risk noted above but refers to one or more of the following:

• General safety documents provided by the department or EH&S that list general lab/activity risk (40)

#### Course Presentations, Administered Tests, or Other

Course presentation, administered tests, or other documentation did not include one or more of the following:

- Any safety risks or hazards
- Outline of specific course safety hazards or risk (7)
- Outline of specific safeguards to the course safety hazards or risks (10)
- Instructions to report safety related concerns or incidents (12)
- Listing of any required personal protective equipment for the course (9)

ACS noted that the course presentation, administered tests, or other documentation did not outline the specific risk noted above but refers to one or more of the following:

• General safety documents provided by the department or EH&S that list general lab/activity risk (5)

#### Safety Waivers and Acknowledgements

Safety Waivers and Acknowledgements did not include one or more of the following:

- Outline of specific course safety hazards or risk (12)
- Outline of specific safeguards to the course safety hazards or risks (9)
- Instructions to report safety related concerns or incidents (10)
- Listing of any required personal protective equipment for the course (9)

ACS noted that the safety waivers and acknowledgements did not outline the specific risk noted above but refers to one or more of the following:

• General safety documents provided by the department or EH&S that list general lab/activity risk (2)

## Lab Documentation and Instructions

Lab documentation and instructions did not include one or more of the following:

- Outline of specific course safety hazards or risk (13)
- Outline of specific safeguards to the course safety hazards or risks (14)
- Instructions to report safety related concerns or incidents (15)
- Listing of any required personal protective equipment for the lab (8)

ACS noted that the lab document and instructions did not outline the specific risk noted above but refers to one or more of the following:

 General safety documents provided by the department or EH&S that list general lab/activity risk (1)

#### Field Trip or Activity Documentation

Field Trip or Activity Documentation did not include one or more of the following:

- Outline of specific course safety hazards or risk (5)
- Outline of specific safeguards to the course safety hazards or risks (5)
- Instructions to report safety related concerns or incidents (6)
- Listing of any required personal protective equipment for the trip (6)

#### RECOMMENDATION

ACS recommends that faculty and instructors be reminded to review the virtual course offerings listed in the EH&S Student Safety Program and PeopleSoft. Faculty and instructors should require the students to take the virtual safety training in addition to the course safety trainings if the class or students in the course may meet any of the listed criteria in

the program. Communication of the applicable trainings should be documented via the syllabus, lab guides, activity instructions, etc. to evidence the communication.

ACS recommends that colleges/departments require faculty and instructors with courses that include a lab, activity, or field trip to explicitly list the hazards and "identified risks of participation" disclaimer in their course materials (i.e syllabus, lab instructions, field trip waivers, etc.) regardless of the degree of "risk" or if the course is relying on a prerequisite course that would cover safety training. The hazards and disclaimers should be specific to the course and individual activities and provide enough context to allow for students and an outside reviewer to adequately assess the risk and present any safety related concerns they may have for the course prior to the hazard exposures. This may include, but limited to, providing a brief summary of the lab, course activity, or field trip on the syllabus. The description should provide enough detail that an external reviewer or someone with limited background on the course/subject could safely identify hazards or risks. For the purposes of the audit, the safety risk and hazards listed are only pertaining to the course itself and not pandemic related risk.

ACS recommends that for each explicitly stated hazard or "identified risk of participation", the faculty or instructor provides a listing of the safeguards that will help mitigate the listed hazards and risks. Evidence of communicating the safeguards may be in the form of personal safety guides, explicit instructions on using machinery that is specific to the course, cleaning requirements, etc. Further, ACS recommends that there is a proper listing of PPE within the course material if not already stated in course instructions.

ACS recommends that if instructors or faculty are completing safety trainings as part of the course that they include the term "safety-training", or other applicable variation, on the class schedule/ syllabus to help substantiate those trainings were completed prior to exposures of course hazards.

# MANAGEMENT RESPONSE

We concur with the above recommendations of ACS pertaining to course material, have begun implementing changes to our processes.

Anticipated implementation date: March 31, 2022.