



SCHOOL OF ENGINEERING
**Wonderful Institute for
Sustainable Engineering**



Understanding Safety Culture

Attendance
Check-in



SCAN HERE

Presented by the
WISE Safety Committee





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Meet the KU-WISE Safety Committee

The mission of the Safety Committee is to promote a culture of safety within the Wonderful Institute for Sustainable Engineering. The Safety Committee organizes Safety Meetings on the third Wednesday of each month.





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What does it mean to have a Safety Culture?

The ACS Institute defines **safety culture** as “a reflection of the actions, attitudes, and behaviors of its members toward safety” and suggests seven characteristics of a strong safety culture:

- 1 strong leadership and management for safety;
- 2 continuous learning about safety;
- 3 strong safety attitudes, awareness, and ethics;
- 4 learning from incidents;
- 5 collaborative efforts to build safety culture;
- 6 promoting and communicating safety;
- 7 institutional support for funding safety





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Leadership and Management of Safety

Leaders are the key to building a strong culture of safety. Leaders inspire others to value safety, seek open and transparent communications to build trust, lead by example, accept responsibility for safety, and hold others accountable for safety.





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Teaching Basic Laboratory and Chemical Safety through Continuous Learning

A strong safety culture develops superior safety skills and strong safety ethics by building year after year, beginning with the first year undergraduate curricula and continuing through the entire undergraduate experience and into graduate studies and postdoctoral training. Building a strong base of knowledge and skills in laboratory safety throughout the undergraduate course of study requires teaching numerous safety topics.



Reference: <https://institute.acs.org/acs-center/lab-safety/safety-basics-and-ramp/what-is-safety-culture.html>



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Safety Attitudes, Safety Awareness, and Safety Ethics

Following safety policies and procedures in a lab is just as important as the information the students receive in a presentation or the knowledge a student gains from an experiment. Everyone teaching in chemistry needs to know and follow the appropriate safety practices in the laboratory. The proper attitude for safety is reflected in the “Safety Ethic”—value safety, work safely, prevent at-risk behavior, promote safety, and accept responsibility for safety.





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Learning from Incidents

Much of what is known about safety has been learned from mistakes or incidents. Using these incidents and the lessons learned as case studies throughout the undergraduate and graduate learning experience provides an opportunity to capture the interest and imagination of students while forcing them to think about how safety measures could have prevented or minimized these incidents. An important element of a strong safety culture is establishing a system for reporting and investigating incidents, identifying direct and root causes, and implementing corrective actions.





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Collaborative Interactions that Help Build Strong Safety Cultures

For a sustainable safety program, the institution must establish an active safety committee system that includes members representing a cross-section of the campus. Committees need to be active and productive, and publish informative documents regularly. A critical part of every safety program is to establish collaborative and trusting interactions among members of the institution, especially among faculty, staff, and environmental health and safety professionals.



Reference: <https://institute.acs.org/acs-center/lab-safety/safety-basics-and-ramp/what-is-safety-culture.html>



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Promoting and Communicating Safety

Probably the best way to promote safety is through personal example.

Promoting safety at your institution is, in part, dependent upon a continuous effort to advocate for a strong safety program to faculty, staff, and students. Departments can have open seminars to discuss topical safety issues or incidents, recognize individuals for doing an outstanding job in safety, and establish a procedure for soliciting suggestions for improving safety and identifying safety concerns.





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Encouraging Institutional Support of Safety by Funding Safety Programs and Supplies

Many of the suggestions discussed can be implemented at little or no additional cost. The first step in establishing a continuing budget for a safety program is determining institutional needs. Department of Environment, Health, and Safety (EHS) support may be required for a safety program. Printing, office and safety supplies, and training materials are recurring expenses that often come from departmental budgets.





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SAFETY TRIVIA

TEST YOUR KNOWLEDGE



POSTER ACTIVITY



OBJECTIVE

**Design a visually
engaging and
informative poster
that reflects your
assigned safety
theme.**

KU

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THEMES

COMMUNICATION

SPEAKING UP ABOUT UNSAFE BEHAVIOR; ENCOURAGING DIALOGUE

COLLABORATION

SUPPORTING OTHERS IN STAYING SAFE; TEAM RESPONSIBILITY

PERSONAL RESPONSIBILITY

LEADING BY EXAMPLE; OWNING YOUR ROLE IN LAB SAFETY

LEARNING FROM INCIDENTS

USING PAST MISTAKES TO IMPROVE; FOCUSING ON GROWTH, NOT BLAME

PLANNING AND PREPARATION

DOCUMENTING PROCEDURES, PREPARING FOR HAZARDS, EMERGENCIES

BASIC LABORATORY AND CHEMICAL SAFETY

SAFE LAB PRACTICES: PPE, LABELING, STORAGE, ORGANIZATION

SAFETY ETHICS, ATTITUDE, AND AWARENESS

SAFETY AS A SHARED RESPONSIBILITY; STAYING ALERT AND FOCUSED



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Safety Resource List

- EHS website - <https://ehs.ku.edu/>
- Emergency - <https://ehs.ku.edu/emergency-phone-numbers>
- Manuals - <https://ehs.ku.edu/manuals>
- Forms - <https://ehs.ku.edu/forms>
- Safety Data Sheets (SDS) - <https://chemicalsafety.com/sds-search/>

