Evidence-based Approaches for Improving EH&S Program Image

A CSHEMA Research and Survey CoP Webinar

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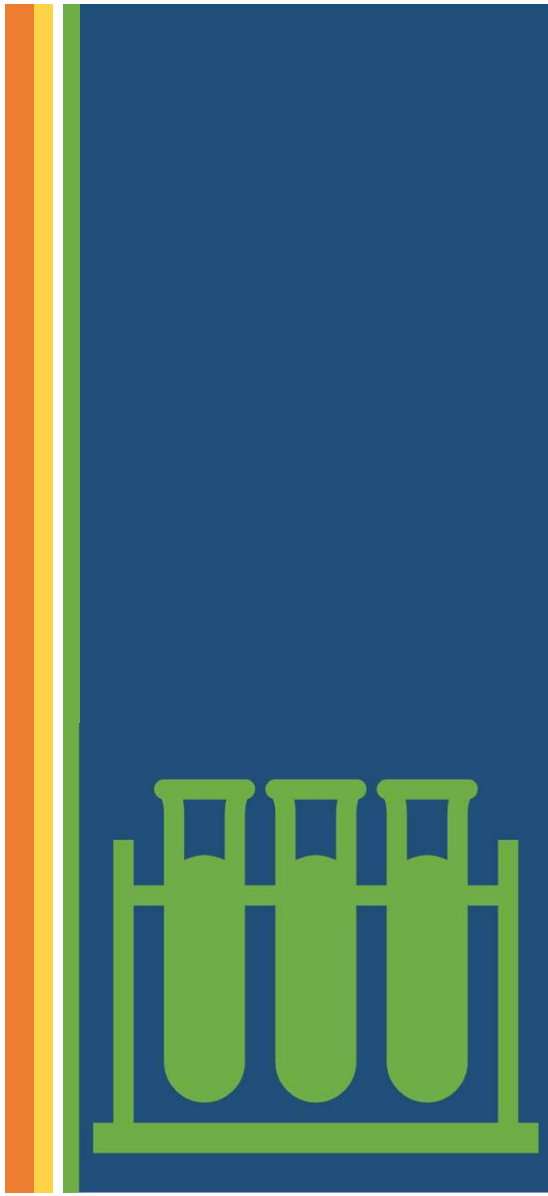
Introduction

- The CSHEMA Research & Survey Community of Practice (CoP), with the help of several energetic graduate students, recently engaged in a series of summer projects aimed at characterizing the initial image of college and university EH&S programs.

- The term "image" is specifically being used because it means: *"the general impression that a person, organization, or product presents to the public"*.

- Our efforts focused on three key ways individuals gain a first impressions of an EH&S program:
  - (1) the EH&S departmental web page,
  - (2) EH&S staff identification and recognition on campus, and
  - (3) the EH&S departmental organizational chart



1. EH&S Departmental Website Assessment

- Goal was to develop a template that could be used to objectively assess if a university EH&S program's website affords **ready access** to commonly needed information and services (in a measurable manner). The tool would be used for both **internet** and **intranet** assessments.
- Examples of assessment considerations:
  - Is the appropriate website easy to find?
  - Is the website structure confusing for the viewer?
  - Is the website easy to navigate and neatly organized?
  - How quickly can information be found?
  - Is contact information easily visible and easily accessible?
  - Important information such as hours of operation, location, and contact details should be extremely easy to find on any section of the webpage. People expect a quick solution to their problem or a quick answer to their questions.

Examples of EH&S Search Terms/Phrases

- Safety
- Occupational Safety
- Environmental Health and Safety
- EHS
- SHE
- Industrial Safety
- Research Safety
- Laboratory safety
- Lab Safety
- Biosafety

Biological safety

Radiation safety

Fire safety

Fire and Life safety

How do I contact the safety department? (not security or police)

Who is responsible for what in safety?

Where is the safety department located?

Who oversees safety? Where are they located?

Example Staff EH&S Search Phrases

- I need documentation that my PI has the authorization to use radioactive material in his/her research project.
- I need documentation that my PI has authorization to use potentially infectious agents in his/her research project.
- I need documentation that my PI has authorization to use hazardous chemicals in his/her research project.
- What safety training am I and other staff required to have?
- What is the required dress in a teaching lab?
- We just had a chemical spill
- I have an indoor air quality complaint
- Reporting an injury or exposure – to whom?
- Reporting a safety concern
- I need our hazardous waste picked up

Typical Faculty EH&S Search Phrases

- I need authorization to use radioactive material in my proposed research project
- I need authorization to use potentially infectious material in my proposed
- I need authorization to use hazardous chemicals in my proposed research project
- I just had a chemical spill
- I have an indoor air quality complaint
- How and where do I get **FIT tested*** for a respirator?
- How do I ship a specimen?
- What safety training am I required to have?
- Reporting an injury or exposure
- Reporting a safety concern
- I need my hazardous waste picked up
- I want a **dosimeter***
- I have questions about the results of my recent lab inspection
- How do I get my **biosafety cabinet*** certified? How do I get my **fume hood*** checked?

How do I get my **emergency shower*** and **eyewash*** checked?

- What adjustments do I need to make with my research project as it pertains to COVID?
- Where do I access safety information on EH&S?
- Where do I access safety information on Occupational Safety?
- Where do I access safety information on Industrial Safety?
- Where do I access safety information on Research Safety?
- Where do I access safety information on Lab Safety?
- Where do I access safety information on Chemical Safety?
- Where do I access safety information on Biosafety?
- Where do I access safety information on Biological Safety?
- Where do I access safety information on Radiation Safety?
- Where do I access safety information on Fire Safety?

Example Clinical EH&S Search Terms

- I need my biohazard waste picked up
- Am I required to take safety training and if so, where do I find it?
- I had a needlestick exposure
- What signage do I need to post in my clinic and where do I find it?
- What logs do I need to maintain (AED, Emergency Cart, CLIA)?
- How do I store sample medication?
- I need to dispose of my expired medications
- I have controlled substances in my clinic. How do I store them and dispose of them?
- I want to add an X-ray unit
- How do I get a CLIA certificate?
- What Point of Care Test machines are best for my needs?

Scoring System

- A scoring system was developed based on the number of clicks to find desired information – This provided a measure of the **accessibility** of the website.

1 click = Effortlessly found desired information

2 clicks = Easily found desired information

3 clicks = Difficult to find desired information

4 clicks = Unable to locate desired information

Any of the 68 search terms that were not found within 4 clicks or accessing a means of finding assistance (e.g., phone number) while browsing was classified as 'unable to locate desired information.' This measurement was determined based on information gathered through webpage building sites and recommendations.

More clicks = time-consuming and discouraging (frustration, alienation).

Is the number of clicks really that important?: Debunking the 3-click rule. Qualaroo Blog - User Research and Customer Feedback Trends. (2022, July 8).

Data Table for UTHealth Houston SHERM Internet Assessment

(based on a total of 68 search terms and phases)

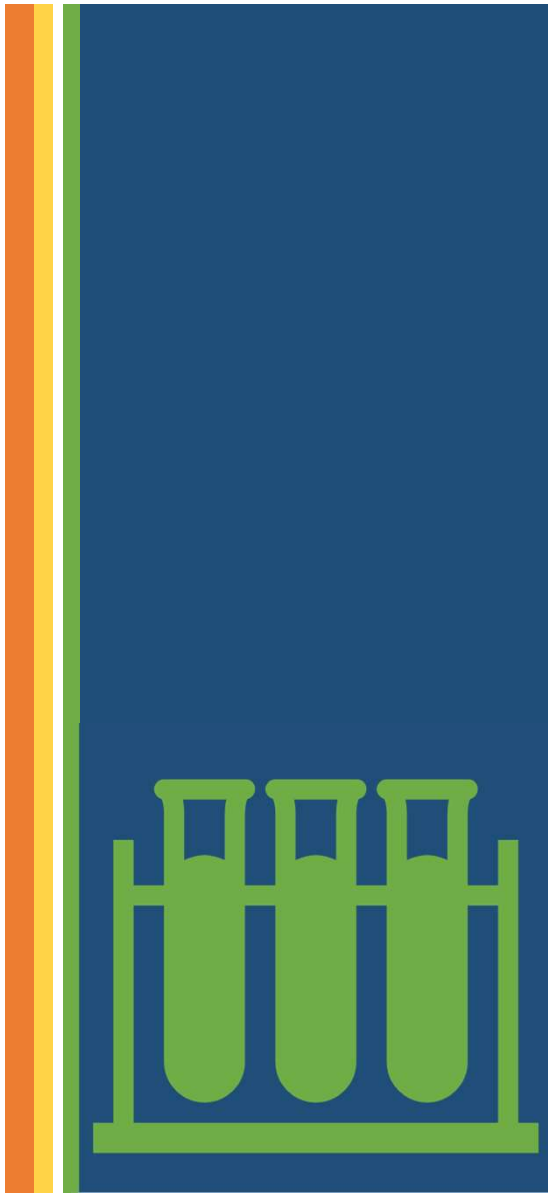
University of Texas Health Science Center (UTHealth) Internet – External Website Evaluation			
***Typical audience**: Prospective students, faculty, and staff* ***Scoring system 1-4**: Based on number of clicks to find desired information - a measure of the accessibility of website* **1 click** = Effortlessly found desired information, **2 clicks** = Easily found desired information, **3 clicks** = Somewhat easy to find desired information, **4 clicks** =Unable to locate desired information			
Typical Environmental Health & Safety (EH&S) Search Terms & Phrases	***Could the desired information be found within at least 4 clicks Yes or No***	***Number of clicks (1-4) to find desired information***	***Was there at least a phone number or email provided where I can find additional assistance? (Access to phone number or information? Checked daily? Hours of operation? (M-F, 8-5?)***
Safety	**Yes**, Directly prompted to EH&S website	1 = Effortlessly found desired information	**Yes**, EH&S main office, hotline, & emergency phone numbers were easily located on website. Location of main office, hours of operation and contact information were present.
Occupational Safety	**Yes**, Directly prompted to EH&S Occupational Safety website	1 = Effortlessly found desired information	**Yes**, Phone number for EH&S main office, hotline, and emergency were easily located on website. Location of main office, hours of operation and contact information were present. Photos and list of occupational safety dept. staff was located along with their contact information (email, office number, and phone numbers).
Environmental Health and Safety	**Yes**, Directed to EH&S main page	1 = Effortlessly found desired information	**Yes**, EH&S main office, hotline, & emergency phone numbers were easily located on website. Location of main office, hours of operation and contact information were present.
EHS	**Yes**, Directed to EH&S main page	1 = Effortlessly found desired information	**Yes**, EH&S main office, hotline, & emergency phone numbers were easily located on website. Location of main office, hours of operation and contact information were present.

Webpage Internet Assessment Comparison

Institution	Total number of terms & phrases searched	Total number of "Yes" (Found desired information)	Total number of "No" (Unable to find desired information)
UTHealth Houston	68	58 (85%)	10 (15%)
X University	68	33 (49%)	35 (51%)

2. EH&S Program Recognition on Campus

- Colleges and universities are dynamic environments with students, faculty, and staff constantly changing
- These populations carry with them general impressions of "*how things were on my previous campus*"
- From our experience, certain service units seem to be consistently recognizable on campus – for example police, security, or facilities
  - Note: appearance consistently ranks high in customer surveys regarding service industries
- But what about EH&S – how are they recognized or identified on campus?
- CSHEMA prevalence survey conducted, 86 respondents: "*how is EH&S recognized on your campus? Check all that apply*"

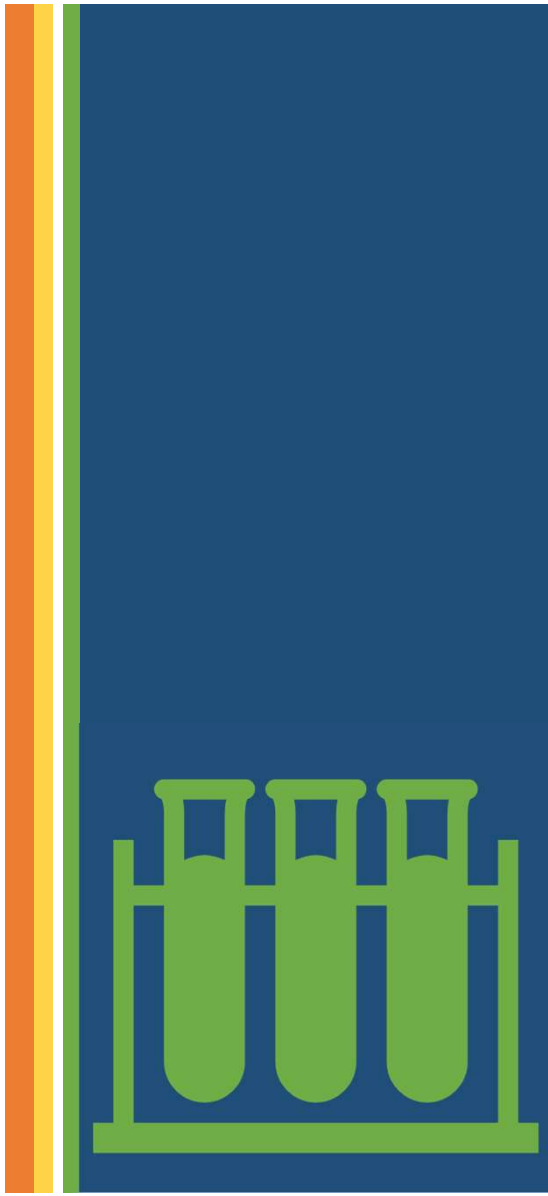


2. EH&S Program Recognition on Campus

(n = 86, multiple choices permitted, 3 week sampling period, Sept 2022)

• Shirts or jackets with dept name	56%
• Reputation	51%
• Provision of services to clients	49%
• ID badges	47%
• Provision of training (live or video)	45%
• Staff photos in dept webpage	43%
• Hi viz vests during drills/emergency	36%
• Lab coats with dept name	26%
• Name badges	19%
• Hats or other headwear (hard hats)	13%
• Social media presence	7%
• Uniforms	5%
• None	5%
• COVID masks with dept name	0%

Also noted:
Typically voluntary and no specific EH&S logo



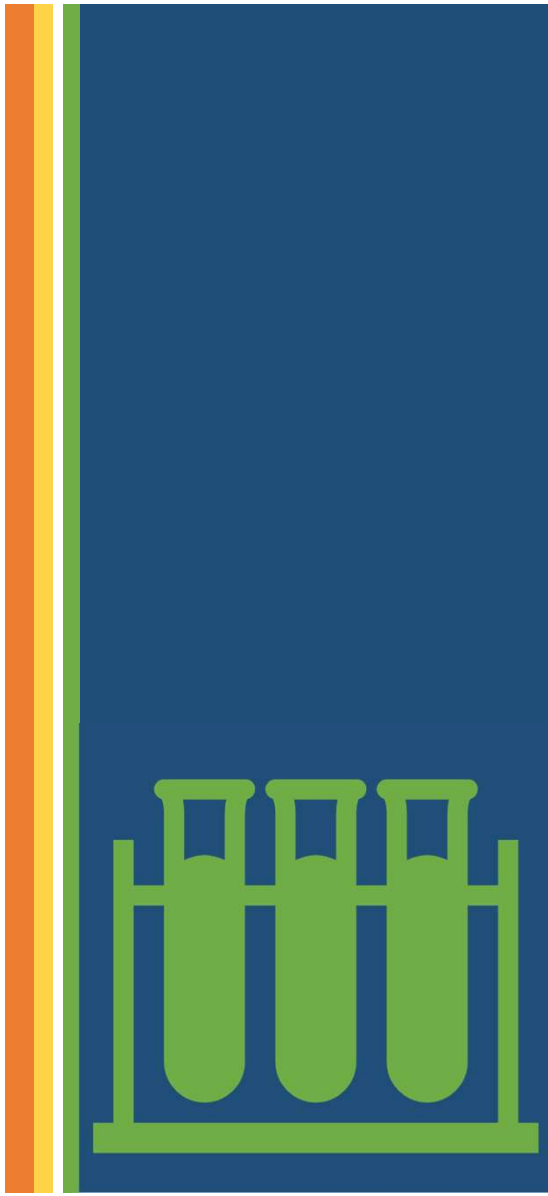
3. EHS Program Org Charts

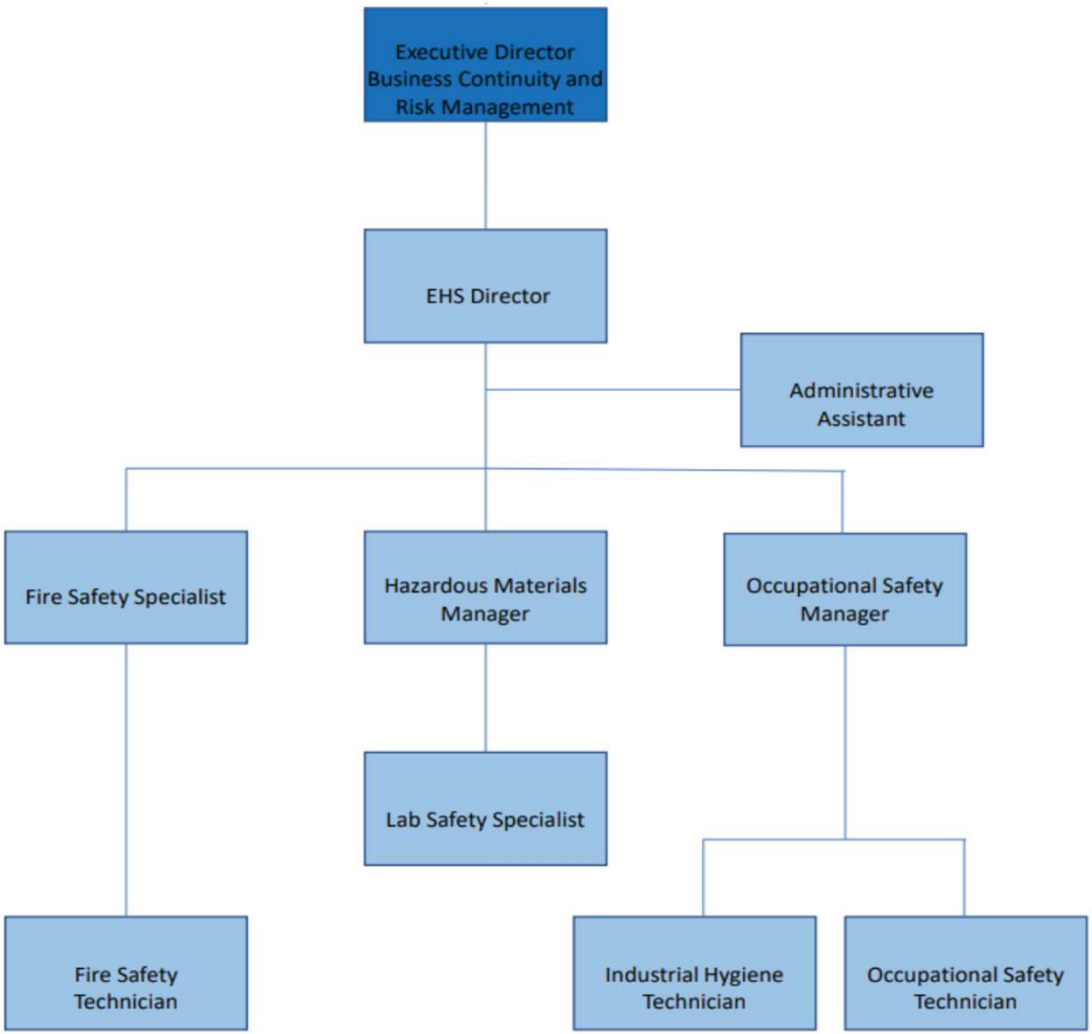
- One of the first things we ask for prior to a requested EH&S program peer review is a departmental org chart

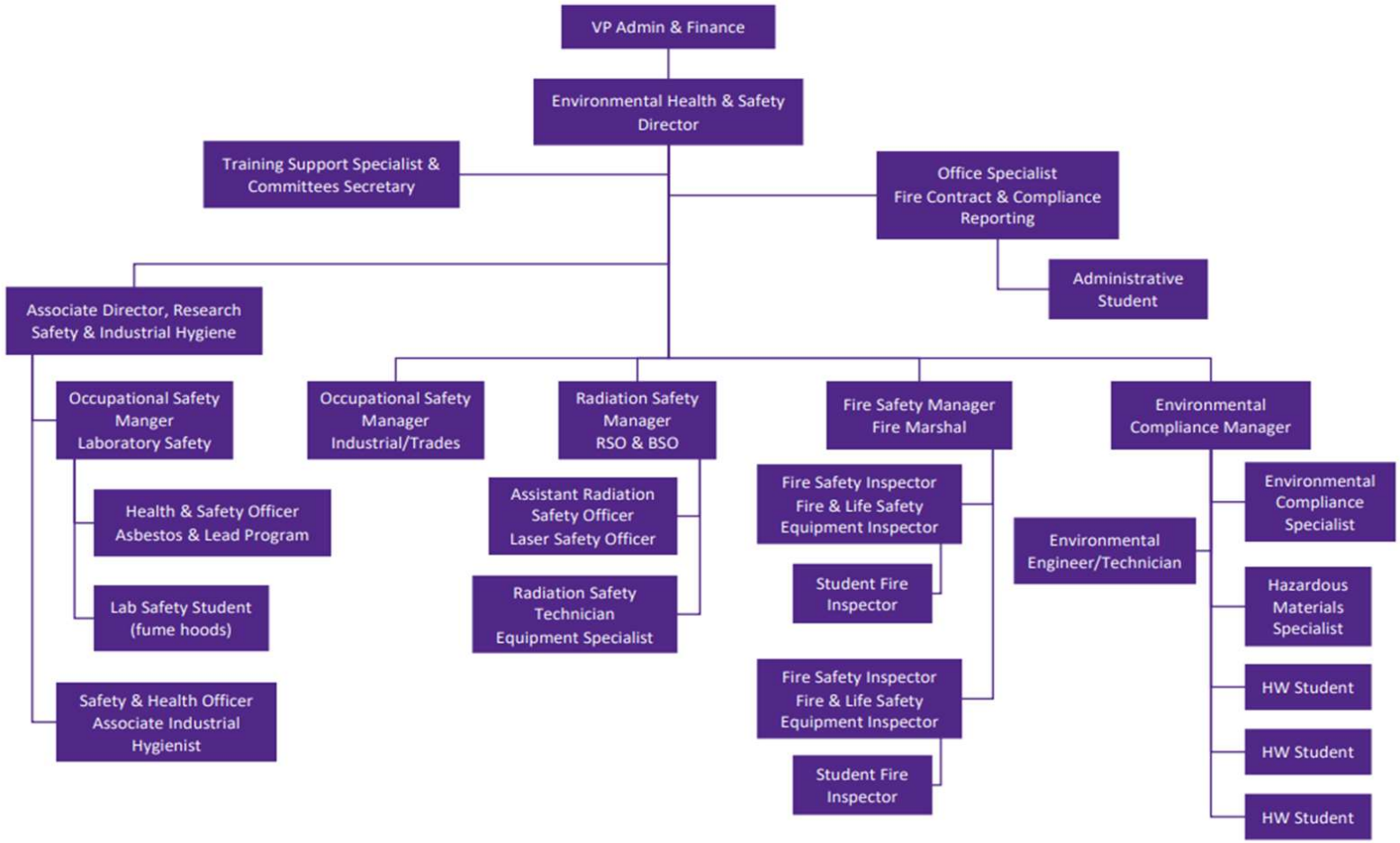
- Amazingly, in a significant proportion of cases, one does not exist!
  - And when one does exist, their quality greatly varies.
  - This is likely due to an absence of direction on what characteristics an org chart should exhibit

- Hence, a CSHEMA survey of org charts conducted, assembled and de-identified (n = 30)

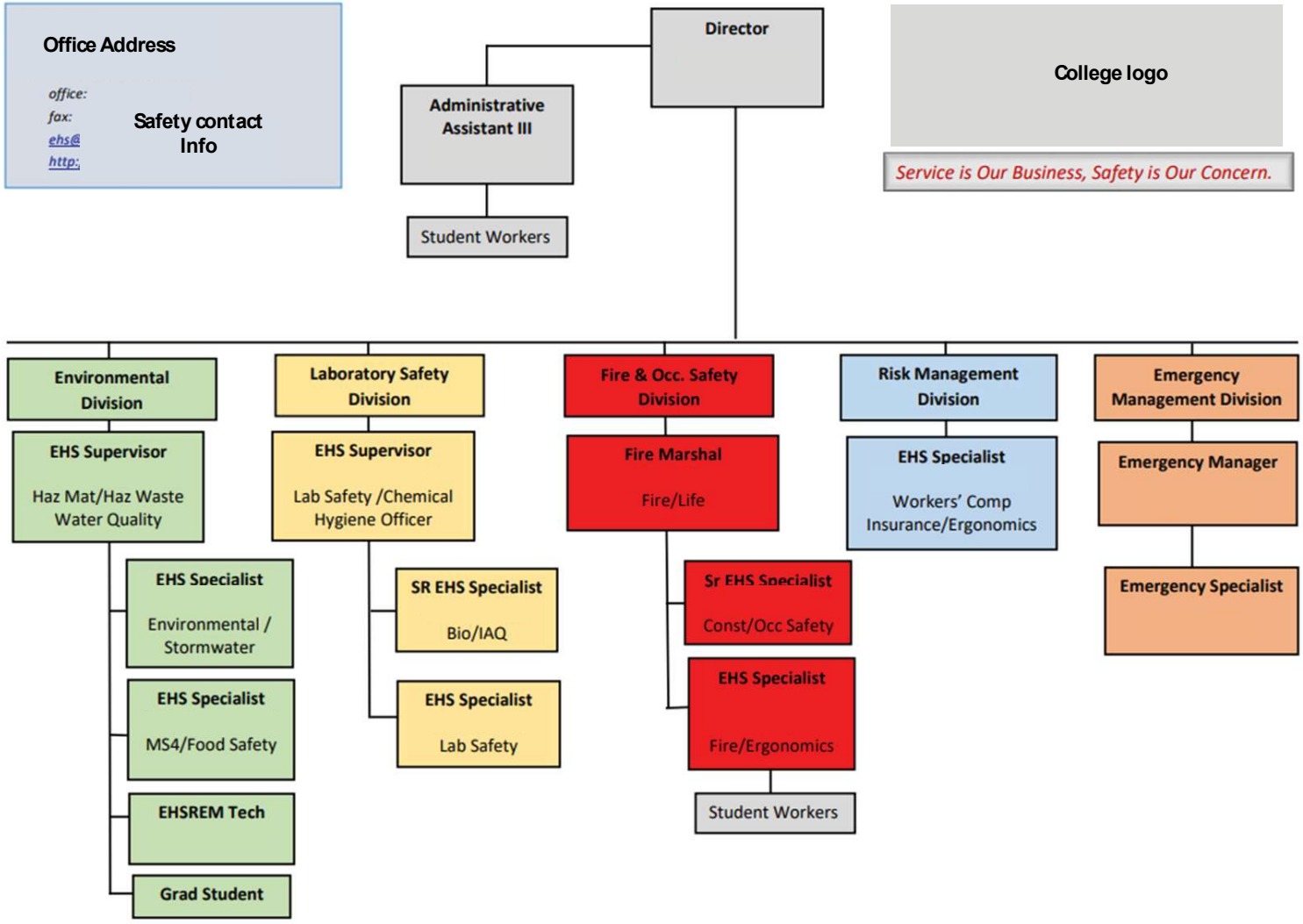
- So let's review some examples….




Executive Director Business Continuity and Risk Management
EHS Director
Administrative Assistant
Fire Safety Specialist
Hazardous Materials Manager
Occupational Safety Manager
Lab Safety Specialist
Fire Safety Technician
Industrial Hygiene Technician
Occupational Safety Technician

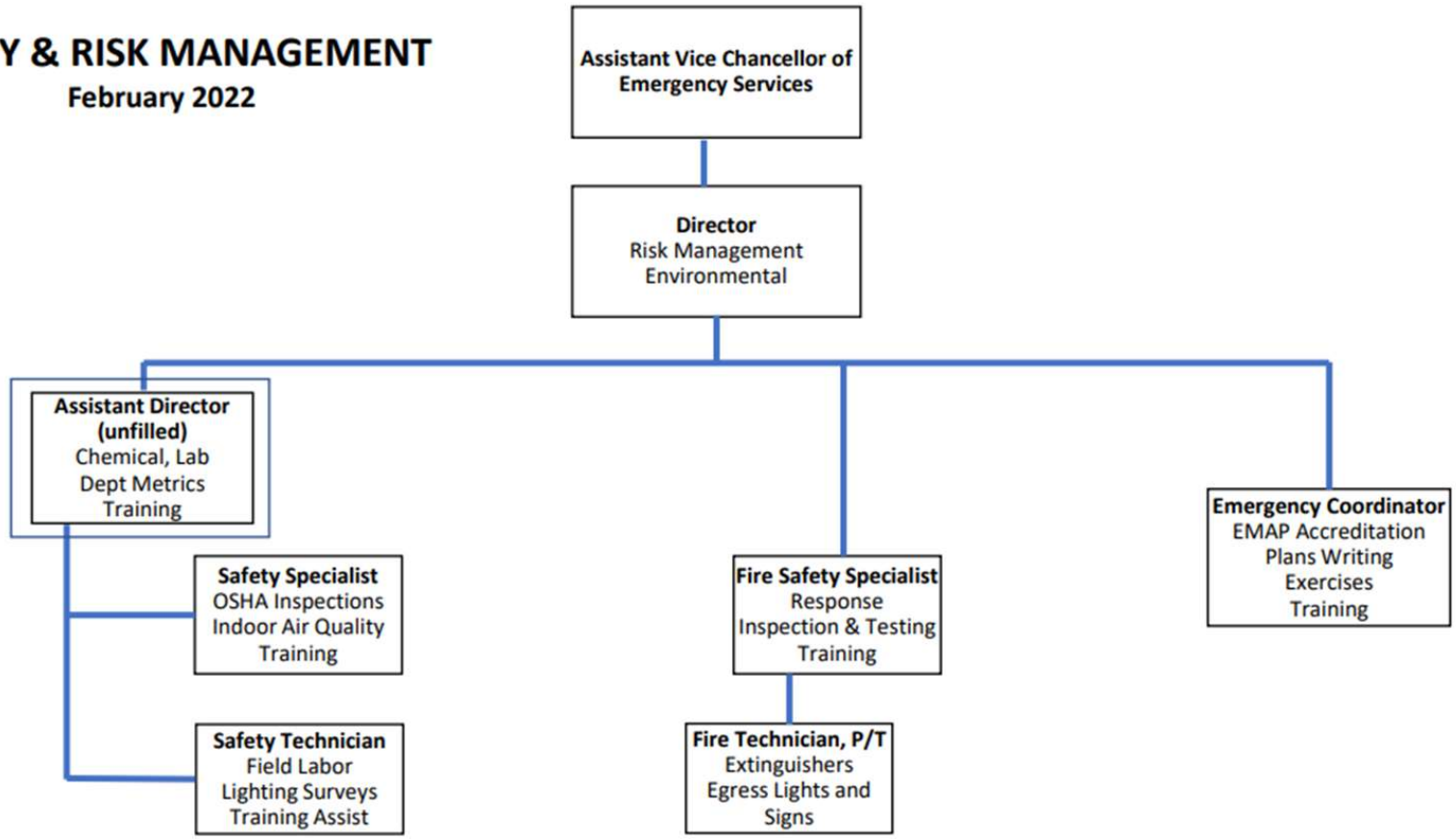


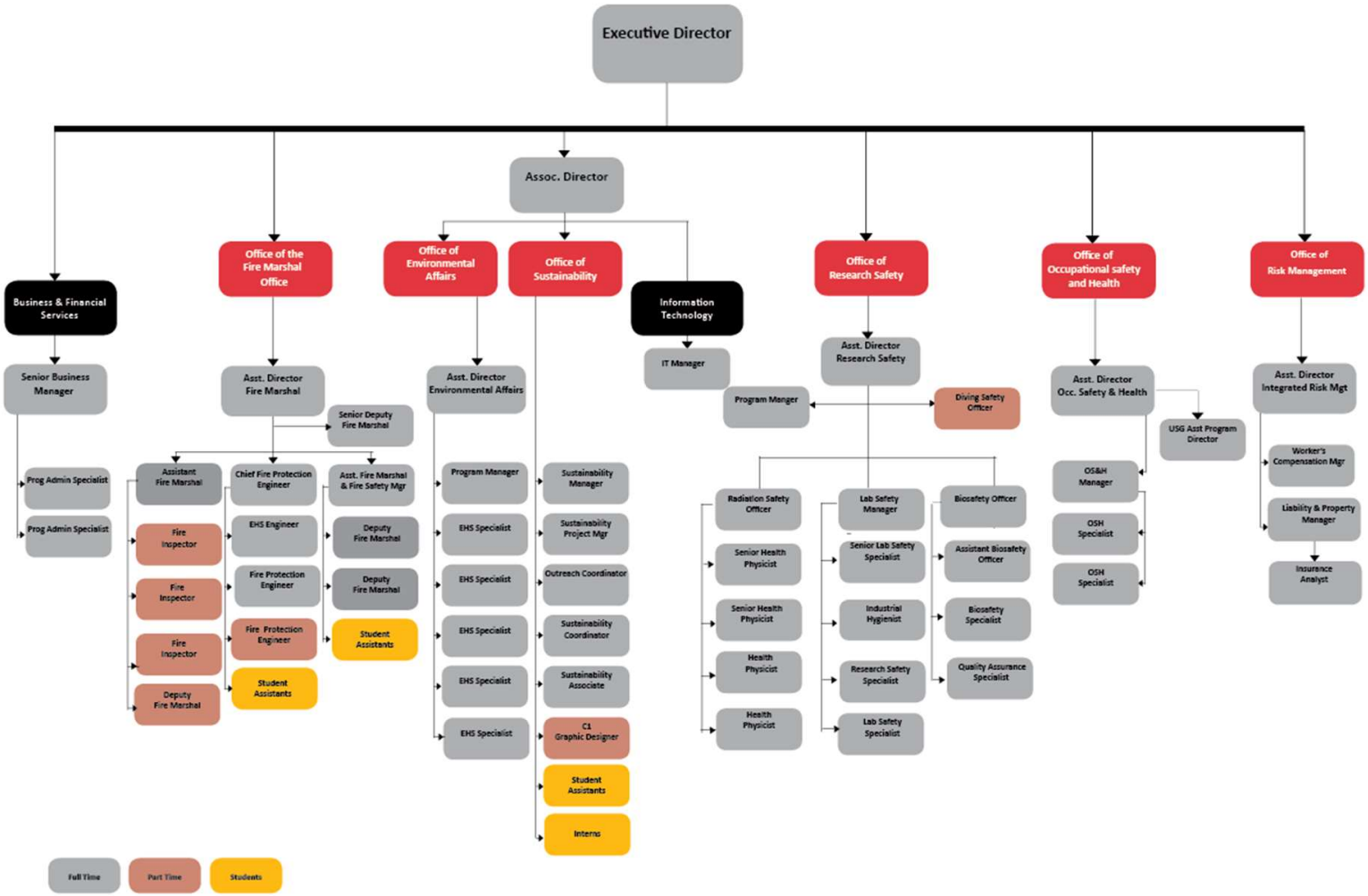
Revised 6/2022


Office Address
office:
fax:
ehs@
http:
Safety contact Info
Director
Administrative Assistant III
Student Workers
College logo
Service is Our Business, Safety is Our Concern.
Environmental Division
EHS Supervisor
Haz Mat/Haz Waste Water Quality
EHS Specialist
Environmental / Stormwater
EHS Specialist
MS4/Food Safety
EHSREM Tech
Grad Student
Laboratory Safety Division
EHS Supervisor
Lab Safety /Chemical Hygiene Officer
SR EHS Specialist
Bio/IAQ
EHS Specialist
Lab Safety
Fire & Occ. Safety Division
Fire Marshal
Fire/Life
Sr EHS Specialist
Const/Occ Safety
EHS Specialist
Fire/Ergonomics
Student Workers
Risk Management Division
EHS Specialist
Workers' Comp Insurance/Ergonomics
Emergency Management Division
Emergency Manager
Emergency Specialist

SAFETY & RISK MANAGEMENT

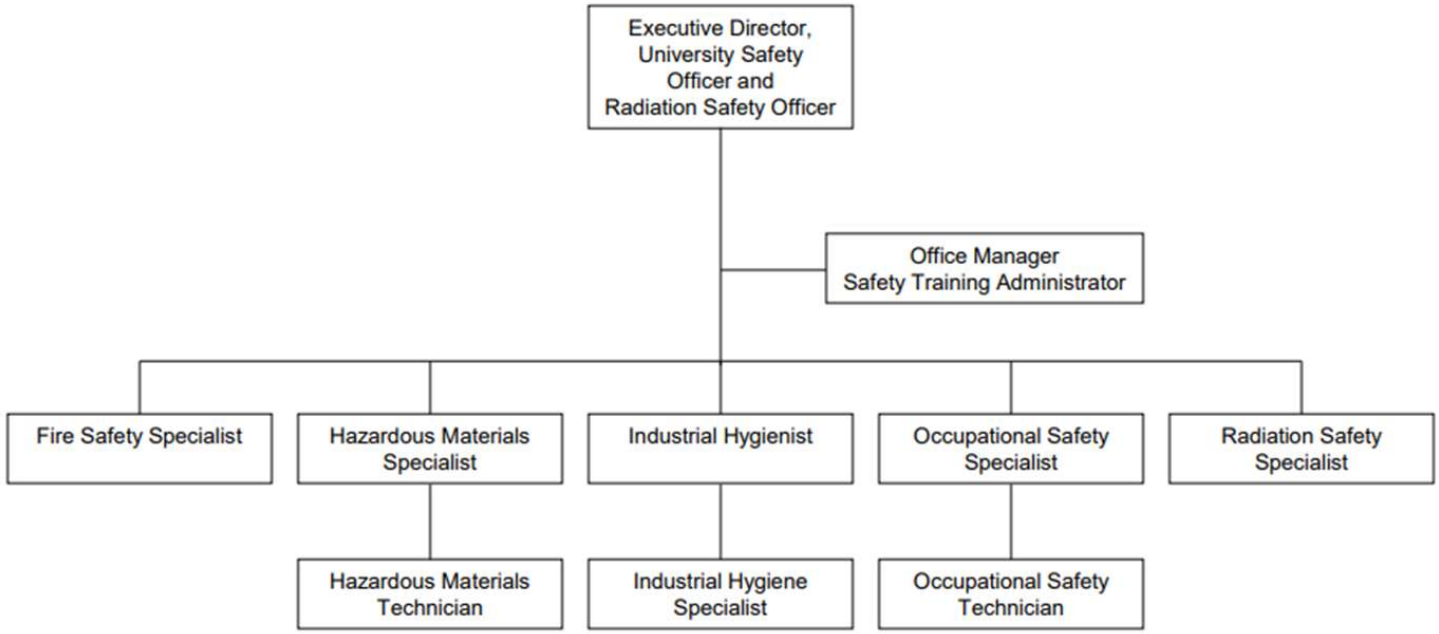
February 2022





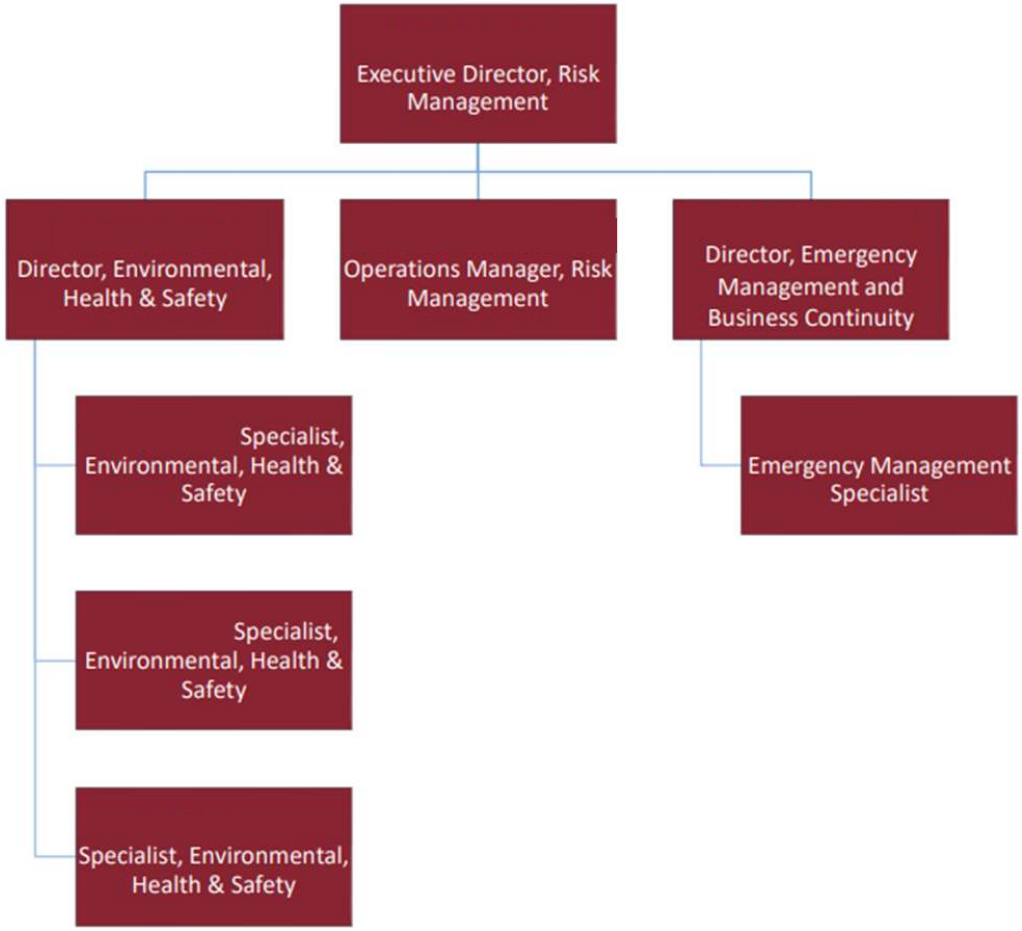
Revised 05/05/2022

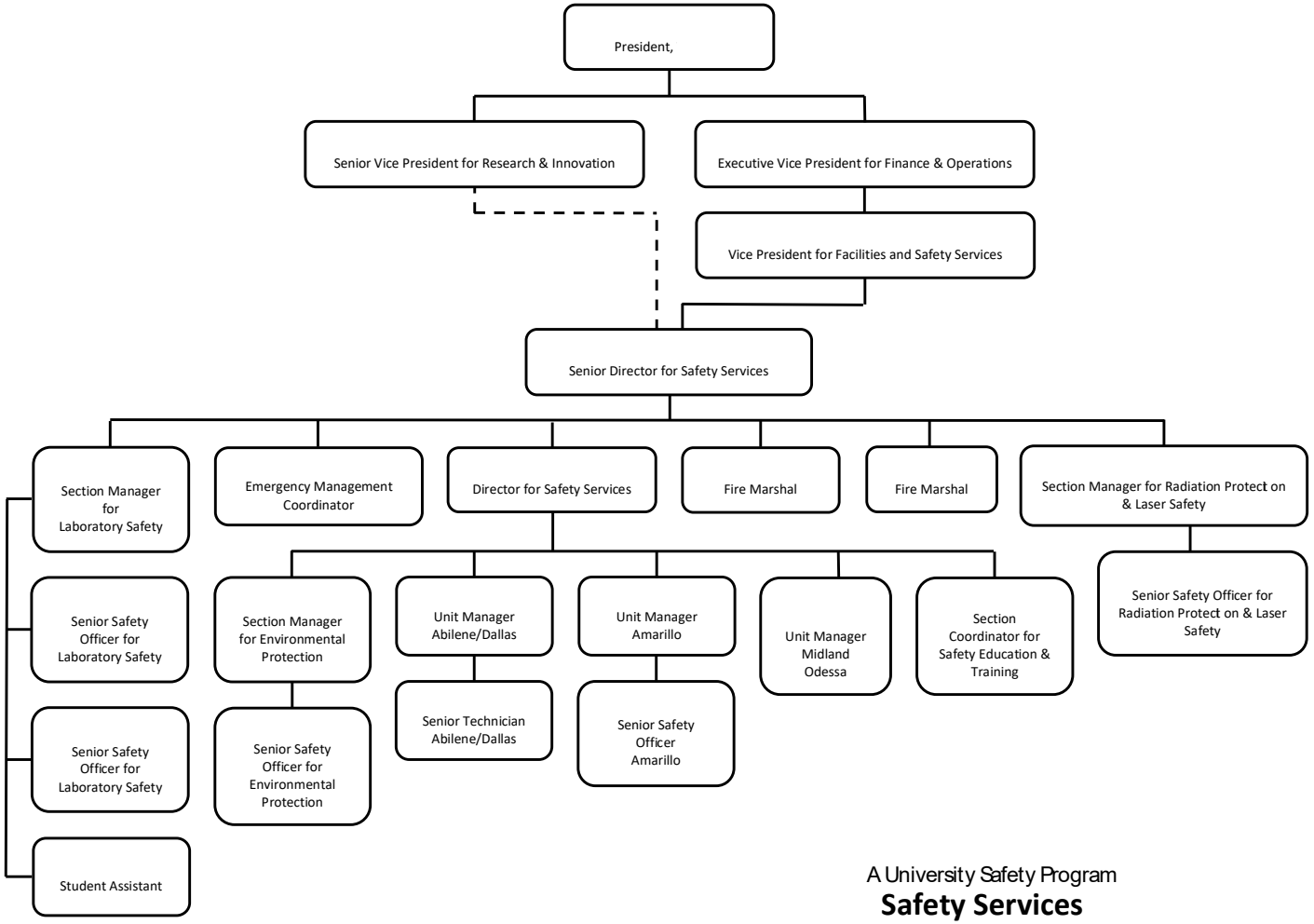
Environmental Health & Safety



February 10, 2022

Risk Management





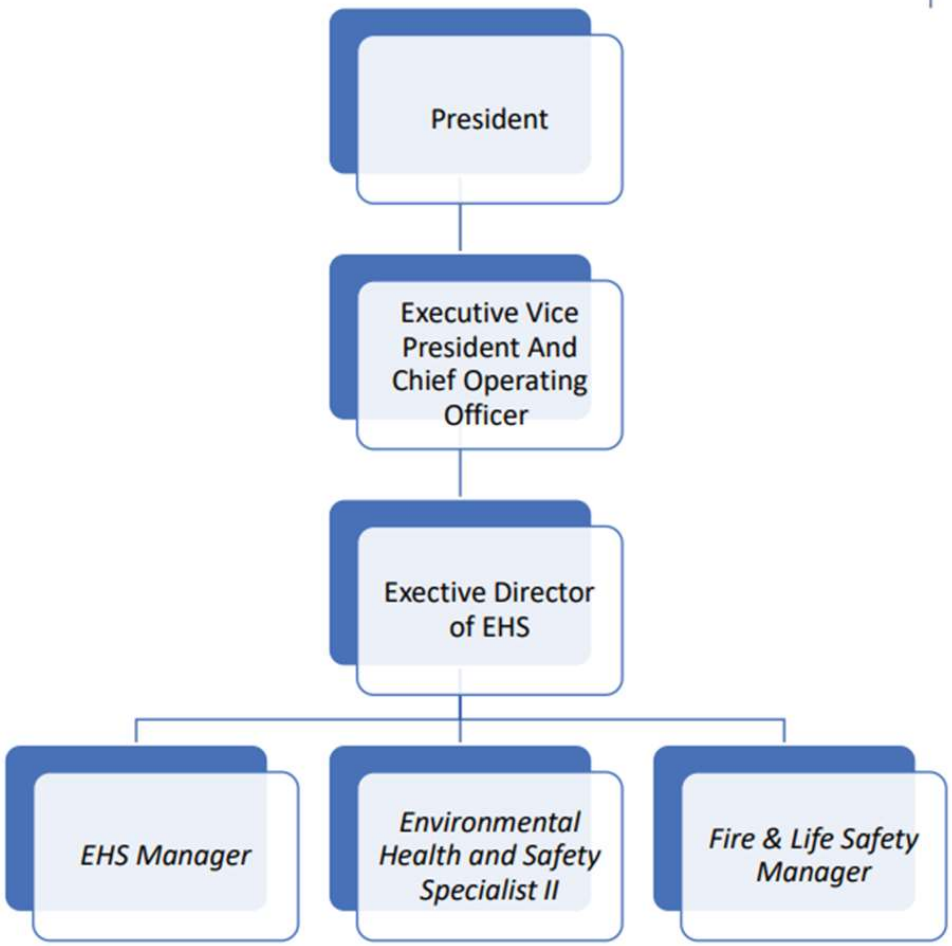
A University Safety Program

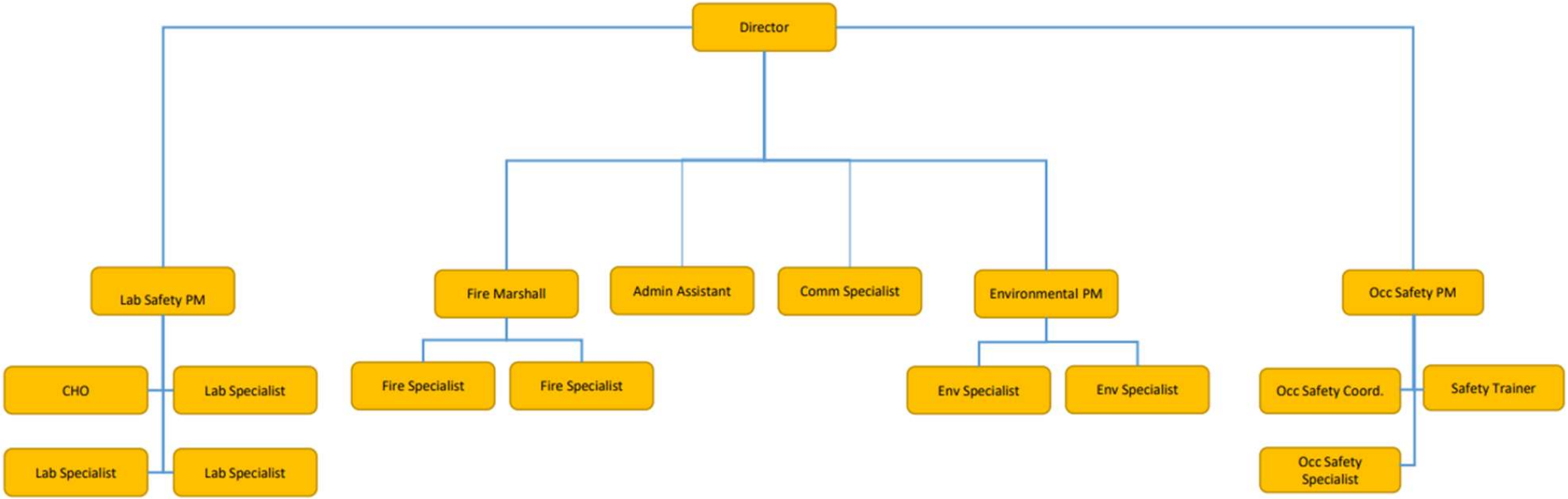
Safety Services

FY-22 Organizational Chart (Current)

March 2022

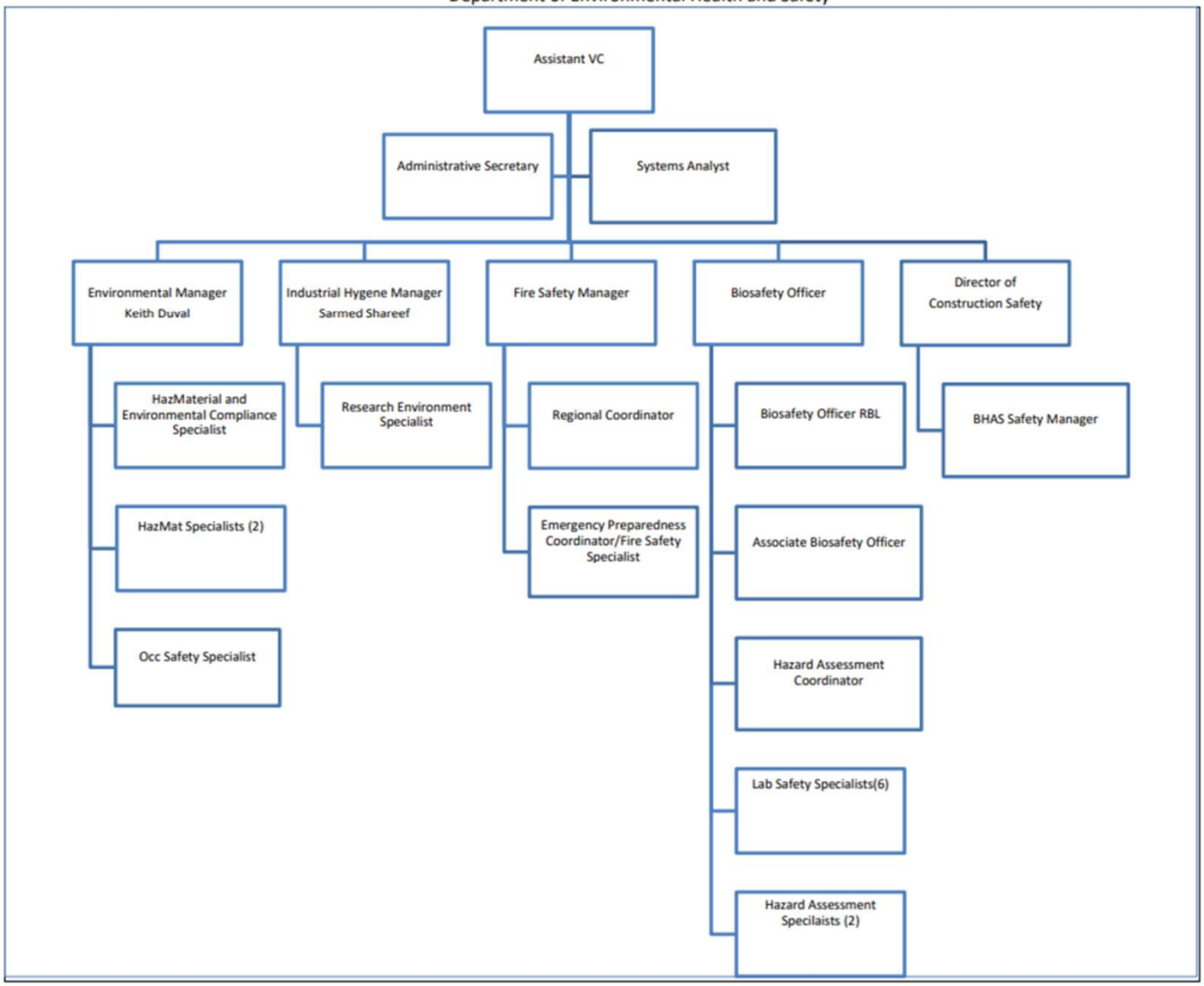
University Name | Univeristy Logo



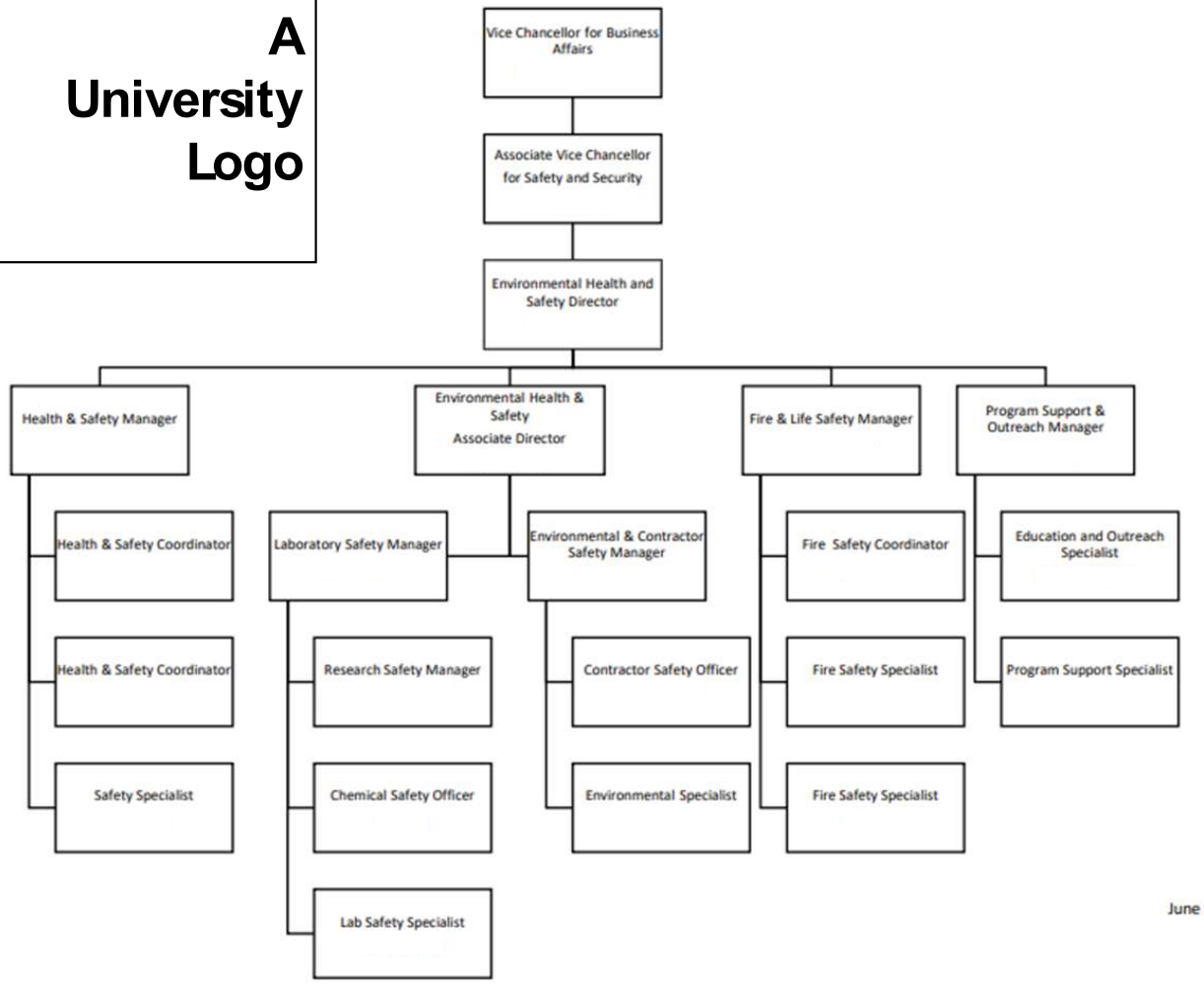


University Logo

Department of Environmental Health and Safety



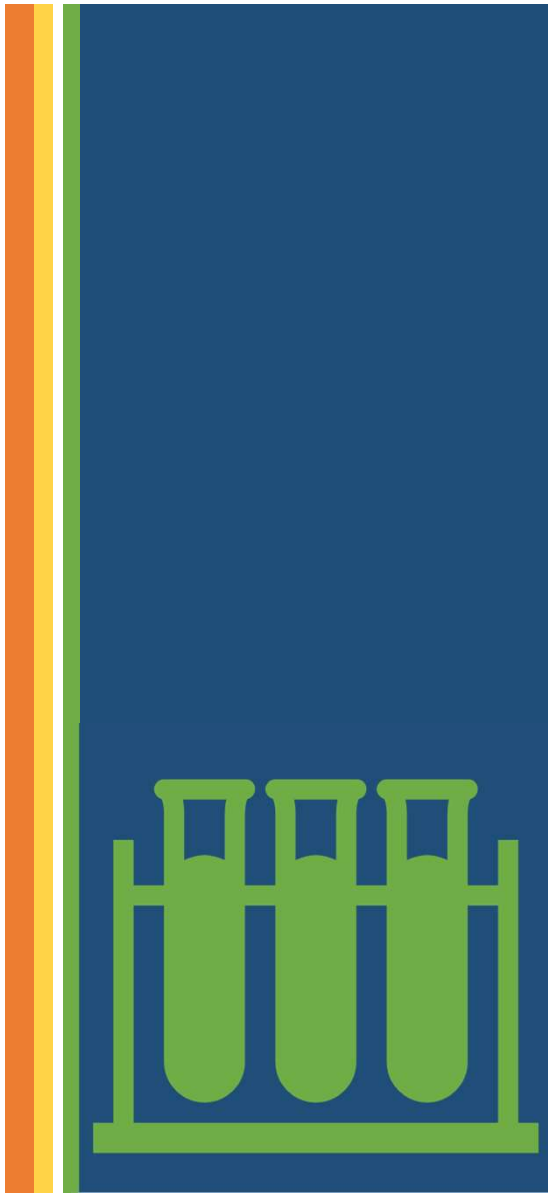
A University Logo



June 2022

Possible Org Chart "Best Practices": Questions We Can All Ask Ourselves

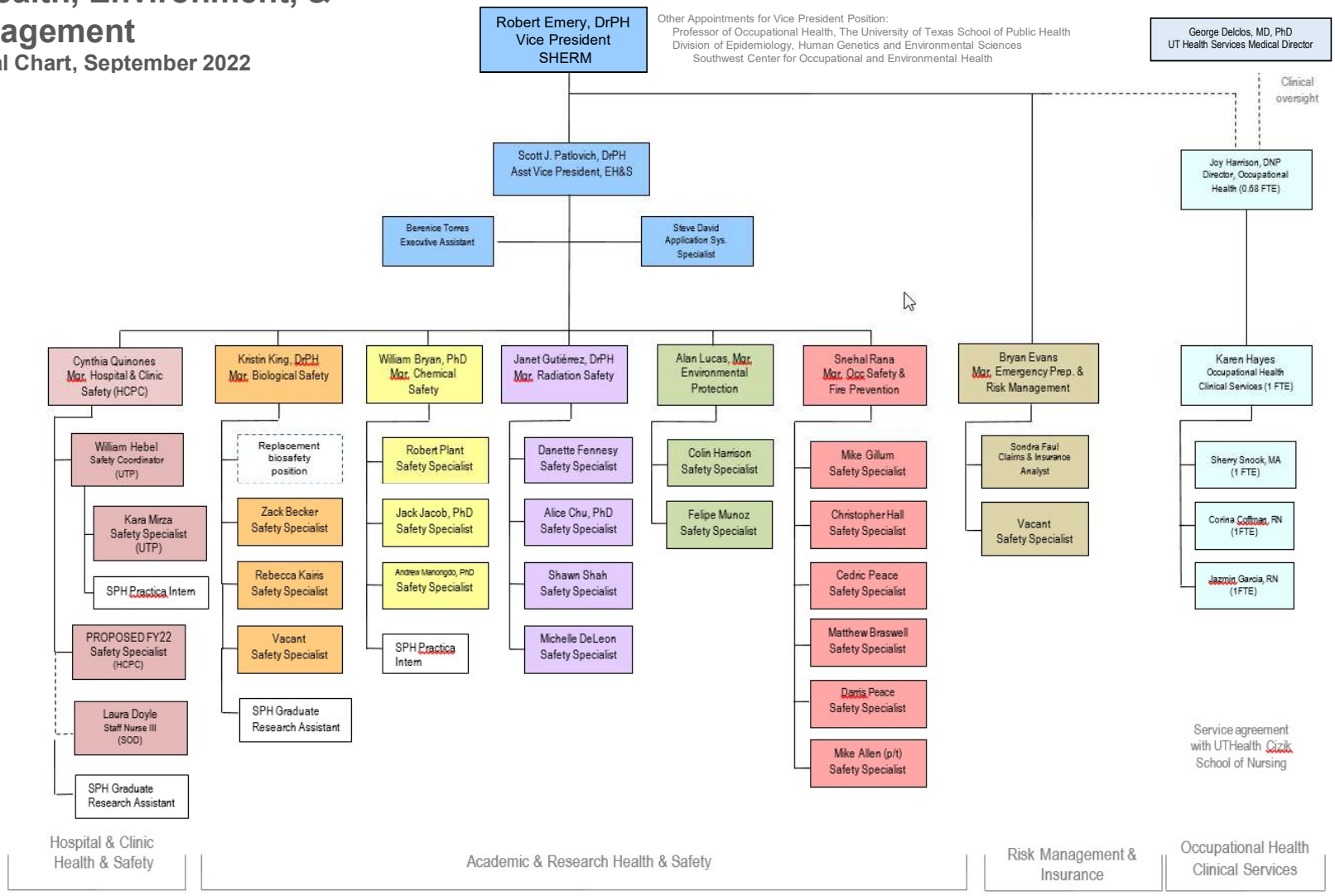
- ✓ Does the chart "stand by itself"? e.g. does it contain the name of the college or university? Contain the name of the department?
- ✓ Does the chart reflect who EH&S reports to?
- ✓ Does the chart have an effective date?
- ✓ What major operational elements are reflected in the chart – for example rad safety, lab safety, fire etc.
  - ✓ Does it have boxes that label units that are not positions?
- ✓ Do the connecting lines correctly and clearly reflect who reports to who?
- ✓ Are equivalent titles given equal weight, size, and alignment on the chart?
- ✓ Are full names written out in each box? Or maybe just last names or no names at all, just titles?
  - ✓ If names are included, are academic titles and/or professional certifications written in each box?
- ✓ Is the chart color coded to add clarity (for those who can see color)?
- ✓ Is it/should it be posted on the departmental inter or intra net webpage?



SHERM reports to the Executive Vice President & Chief Academic Officer

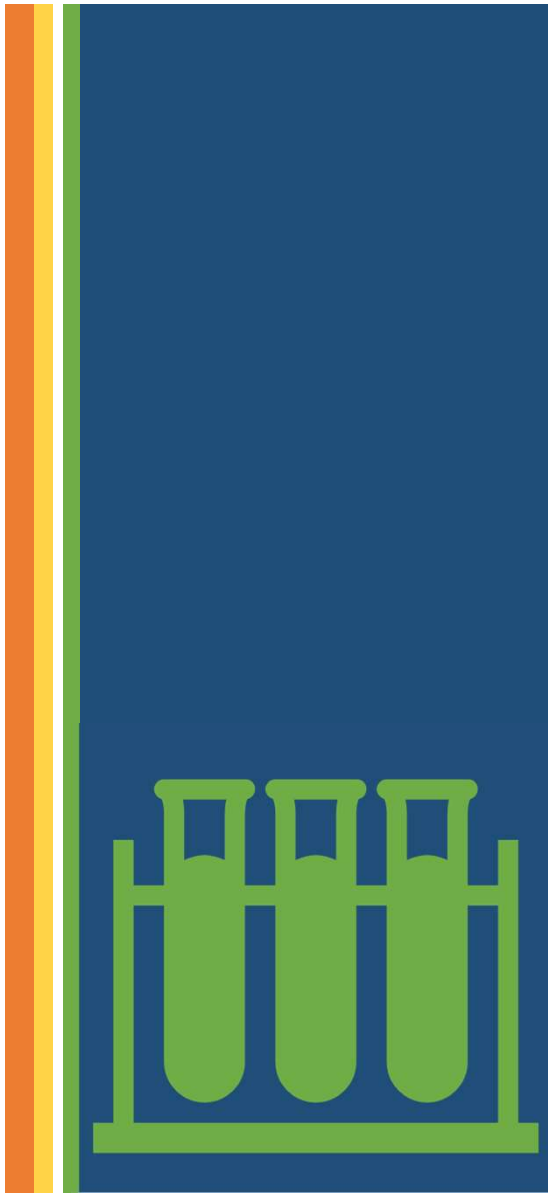
Safety, Health, Environment, & Risk Management

Organizational Chart, September 2022



Summary/Discussion

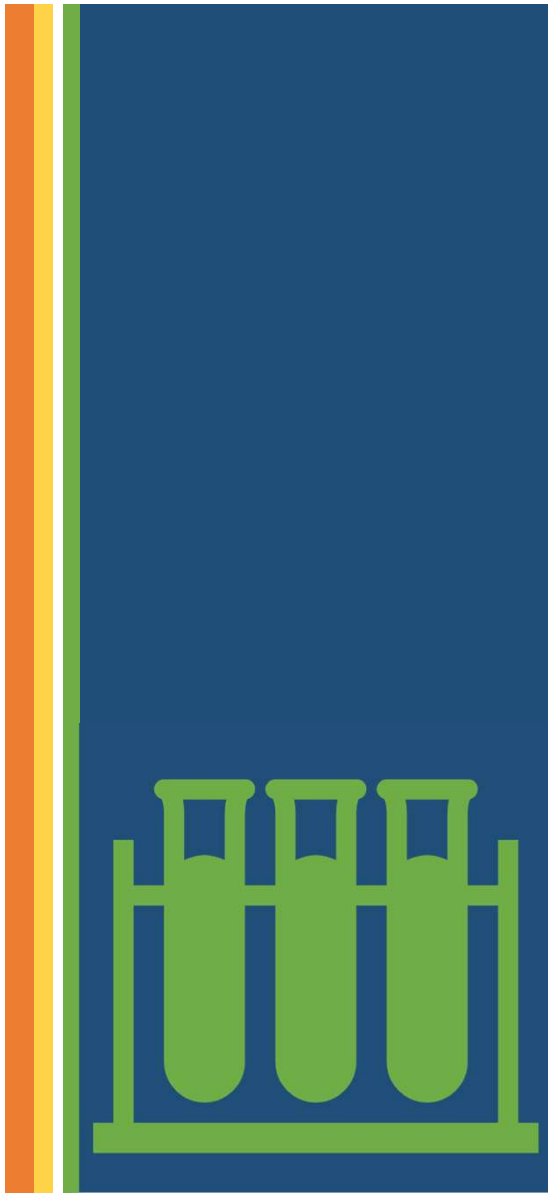
- The image of an EH&S program is important, particularly in the dynamic environment in which we operate – change is constant, but the notion of latent expectations and inevitable comparisons should be acknowledged.
- Three key sources of program image include: departmental webpages, on-campus recognition, and org charts
- All three of these image factors can be easily self-assessed and comparisons to benchmarked data can assist with resource justifications for any desired corrective actions
- The tools described can be accessed at: http://p2racademy.org/Calculator.html
- Your feedback is welcomed



Acknowledgements

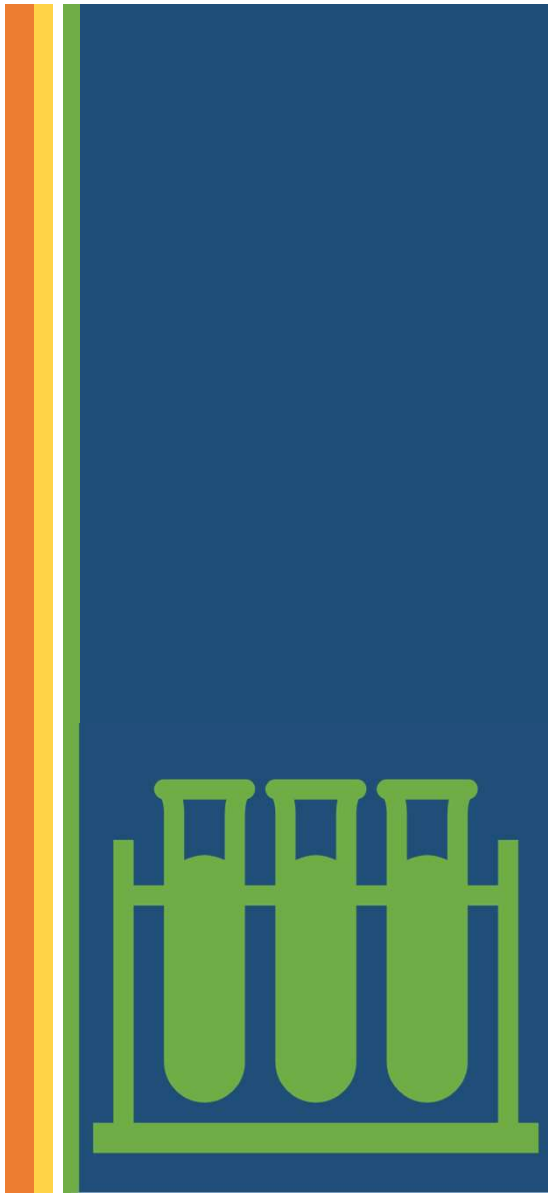
- Special thanks goes public health graduate students Estefania Gonzales and Kara Mirza (UT SPH) and Pricilla Phuong (Texas A&M Univ. SPH)

- And all of the members of CSHEMA who participated in these surveys efforts.



Request of CSHEMA Membership

- The Research and Survey CoP maintains a log of envisioned projects that would serve to benefit the entire membership, so if you have ideas or needs, please contact us
- Such input goes to further the welfare of the entire profession!



UTHealth®
Houston