ACS Assessment Tool

for Chemistry in Two-Year College Programs

Section III. Chemical Safety

Scope of assessment tool section

The following is Section III of the *ACS Assessment Tool for Chemistry in Two-Year College Programs*. The form will guide you through a self-assessment of the following topics:

* Institutional safety culture
* Safety personnel and training
* Chemical safety resources
* Chemical storage facilities

Other sections of the tool address other aspects of chemistry-based education. For a more in-depth evaluation of chemistry or chemistry-based technology education at your institution, use the complete *ACS Assessment Tool for Chemistry in Two-Year College Programs*.

***Note:*** for ease of use, the assessment tool is password-protected. If you wish to edit the form, you may unlock it using the password, “assess.”

The assessment tool is a resource developed by ACS to facilitate the assessment of chemistry education with respect to the *ACS Guidelines for Chemistry in Two-Year College Programs*. The assessment tool is designed to allow chemistry faculty and administrations to assess the achievements and areas for improvement of the chemistry-based programs and courses at their institution. Developed by two-year college chemistry faculty, it is managed by the ACS Undergraduate Programs Office with input from the Undergraduate Programs Advisory Board and the Assessment Review Panel.

III. Chemical Safety

A. Institutional safety culture

(See Section 2.5 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 4-5.)

1. **Indicate who has an active role in developing, establishing, and/or implementing chemical safety policies on your campus and/or department.**

|  |  |
| --- | --- |
| [ ]  President and/or Chancellor [ ]  Vice-president and/or provost[ ]  Dean[ ]  Chair | [ ]  Faculty [ ]  Staff [ ]  Other (specify): Click here to enter text. |

1. **Briefly describe the overall culture of safety on your campus.**

Click here to enter text.

B. Safety personnel and training

(See Section 4.5 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 12-14.)

1. **Provide the number of people providing full- or part-time support for ensuring safety compliance.**

|  |  |  |
| --- | --- | --- |
|  | Full-time | Part-time |
| Chemical hygiene officer | Choose an item. | Choose an item. |
| Environmental Health & Safety team | Choose an item. | Choose an item. |
| Lab or stockroom personnel | Choose an item. | Choose an item. |
| Student helpers | Choose an item. | Choose an item. |
| Other staff (specify): Click here to enter text. | Choose an item. | Choose an item. |
| Other (specify): Click here to enter text. | Choose an item. | Choose an item. |

1. **Indicate the frequency of training in the following topics.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Chemical safety protocols | Proper use of equipment | Waste management | ***Other safety topics (specify): Click here to enter text.*** |
| Full-time faculty | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Part-time faculty | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Laboratory staff | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Student helpers | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Other (specify): Click here to enter text. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |

C. Chemical safety resources

(See Section 4.5 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 12-14.)

1. **Are all laboratories, chemical storage areas, and safety equipment inspected and/or tested, in accordance with federal, state, and local regulations?**

[ ]  Yes

[ ]  No

If no, briefly describe efforts to improve compliance with federal and state regulations.

Click here to enter text.

1. **Do all labs and chemical storage areas comply with all federal and state regulations for safety and accommodation?**

[ ]  Yes

[ ]  No

**If no, briefly describe efforts to improve compliance with federal and state regulations.**

Click here to enter text.

1. **Does the campus, division, department, or program have a written chemical hygiene plan?**

[ ]  Yes

[ ]  No

Describe efforts to develop or update the chemical hygiene plan, if needed.

Click here to enter text.

1. **Are mechanisms in place for aligning the chemical hygiene plan with all teaching and any research activities?**

[ ]  Yes

[ ]  No
[ ]  N/A

Describe efforts to align chemical hygiene plan with teaching and/or research activities, if needed.

Click here to enter text.

1. **Indicate which of the following are addressed, either as part of the chemical hygiene plan or some other departmental or institutional policy.**

[ ]  Management of hazardous waste in accordance with federal, state, and local standards and regulations

[ ]  Maximum stockroom chemical holdings, including small quantities for especially hazardous materials
[ ]  Standard operating procedures (SOPs) for the storage, use, and disposal of any particularly hazardous materials

1. **Which of the following are readily available to all faculty and students?**

[ ]  Safety information and reference materials, such as safety data sheets (SDSs),
[ ]  Personal protective equipment (e.g., goggles, gloves, and other appropriate equipment)
[ ]  Safety incident reporting and investigation system that compiles information on incidents and near misses to identify trends, address challenges, highlight effective practices, and continuously improve chemical safety on your campus

Briefly describe any safety policies and practices not addressed above.

 Click here to enter text.

D. Chemical storage facilities

(See Sections 4.1 and 4.5 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 10-14.)

1. **Describe the types of rooms used for chemical storage and waste management.**

|  |  |
| --- | --- |
| ***Number of rooms with these attributes:*** | Click here to enter text. |
| Does room conform to government standards and regulations? | [ ]  Yes[ ]  No | **Comments:**Click here to enter text. |
| Is the room located in the vicinity of the laboratories? | [ ]  Yes[ ]  No | **Comments:**Click here to enter text. |
| Does the room provide safe chemical storage area(s)? | [ ]  Yes[ ]  No | **Comments:**Click here to enter text. |
| Does the room provide safe chemical preparation area(s)? | [ ]  Yes[ ]  No | **Comments:**Click here to enter text. |
| Does the room provide sufficient space and equipment for safe waste management? | [ ]  Yes[ ]  No | **Comments:**Click here to enter text. |

[ ]  Additional information on chemical storage rooms is attached.

1. **Indicate whether the following are available, as appropriate, in all laboratories and chemical storage rooms on campus**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Available in all laboratories** | **Available in all chemical storage areas** | **Comments** |
| First aid kit | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Eyewash station | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Shower station | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Fire extinguisher | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Segregated areas for acids and bases | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Segregated areas for reducing and oxidizing agents | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Segregated areas for particularly hazardous substances | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| Chemical storage cabinets and refrigerators that meet federal and state Occupational Safety and Health Administration (OSHA) regulations | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |
| National Fire Protection Association (NFPA) and Globally Harmonized System (GHS) labeling codes used on all reagents | [ ]  Yes [ ]  No [ ]  N/A | [ ]  Yes [ ]  No [ ]  N/A | Click here to enter text. |

Provide any additional comments on the laboratories and chemical storage facilities.

 Click here to enter text.