ACS Assessment Tool

for Chemistry in Two-Year College Programs

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Introduction and Instructions

Scope of assessment tool

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.

Motivations for self-assessment vary by institution, including

* Identification of program strengths
* Identification of opportunities for program improvement and/or growth
* Strategic planning
* Background for funding requests
* Internal program review
* College’s accreditation
* National or regional benchmarking

Institutions may have alternative goals in using the assessment tool. The assessment tool is designed to address all motivations. As a consequence, not all questions in the tool will apply to all institutions. Institutions are encouraged to consider only those questions that support their goals.

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Tips for using the assessment tool

***Identify what you want to accomplish.***The assessment tool compiles a broad range of information to suit a variety of goals. New goals may arise as you work, but having a goal in mind at the start will help you focus your efforts.

***Share work and the results of the tool internally.***Users of the assessment tool have reported that collaborating with colleagues and administrators fosters rich discussion about the status and future of the program. Even those users who complete the assessment tool on their own have found great value in sharing the results with colleagues and administrators.

***Complete only those sections that help you with your goals.***Not all sections of the assessment tool are applicable to all programs. Not all questions lead you to answers that support your goals. You can save time and effort by skipping those sections that do not support your goals.

***Use the Guidelines as a reference.***The assessment tool is based on the *ACS Guidelines for Chemistry in Two-Year College Programs*. You may find it useful to refer to the Guidelines as you work. Electronic copies can be downloaded at www.ac.sorg/2YGuidelines, and hardcopies are available upon request from 2Ycolleges@acs.org.

***Work on one section at a time.***With the exception of Section XII, the assessment tool sections can be completed in any order. Users of the tool have recommended starting with whichever section seems easiest, putting the tool aside for a day or two, then starting another section.

***Plan ahead.***A number of factors affect how long it takes to complete the assessment tool, but previous users averaged 15-25 hours. Plan accordingly. It may help to collect the data ahead of time and enter it into the tool all at once.

***Be honest and complete.***Any assessment is only as good as the information you put into it. Providing complete information and looking at it with an open mind will result in more robust results. Remember that the only people who will see the assessment report are those you share it with.

Completing the comments sections in the form is recommended, as it provides extra nuance to your assessment. For example, a question may ask whether funds are available for faculty professional development, and you may indicate that it is. In the comments section, you could then describe whether these funds are sufficient to keep faculty current in their fields, whether faculty are encouraged to use these funds, and so on.

***Ask for help.***If you need help at any time, email the ACS Undergraduate Programs Office at [2YColleges@acs.org](mailto:2YColleges@acs.org) or call 1-800-227-5558, ext. 6108. Staff will be happy to answer any questions regarding the assessment tool.

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ACS review of assessment reports (optional)

If you would like objective feedback your assessment report, ACS offers an optional review process. Reports are reviewed annually by the Assessment Review Panel, a group of two-year college chemistry faculty with experience using the tool.

The Assessment Review Panel will:

* Review your report
* Compile a list of strengths
* Suggest opportunities for continued growth
* Identify resources that support two-year college chemistry education

Participants receive customized feedback based on the Assessment Review Panel review. They will also be able to seek in-depth assistance from panel members regarding completion of the assessment tool and implementation of their results.

Please contact the Undergraduate Programs Office ([2YColleges@acs.org](mailto:2YColleges@acs.org); 1-800-227-5558, ext. 6108) for more information on the review process and the deadlines for participation.

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Development of the assessment tool

When the 2009 revision of the *ACS Guidelines for Chemistry in Two-Year College Programs* was released, the Society Committee on Education (SOCED) appointed the Task Force on Two-Year College Activities. The task force was charged with determining the interest in and viability of strategies for engaging and supporting two-year college programs.

In 2010, the task force partnered with the governing body of the Two-Year College Chemistry Consortium (2YC3), the ACS Division of Chemical Education Committee on Chemistry in the Two-Year College (COCTYC). Together, the task force and COCTYC developed several resources for the two-year college chemistry community.

One such resource was the *ACS Assessment Tool for Chemistry in Two-Year College Programs*. This tool was developed in recognition of the increasing pressure on two-year college programs to document and assess their activities. The tool was piloted and refined in 2011–2012 and released to the general public in 2013. It is managed by the ACS Undergraduate Programs Office with input from the Undergraduate Programs Advisory Board and the Assessment Review Panel.

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I. Overview and Institutional Information

A. Contact information and assessment goals

1. **Who is the contact for the assessment report?**

|  |  |
| --- | --- |
| Institution name: | Click here to enter text. |
| Mailing address: | Click here to enter text. |
| City, State, ZIP code: | Click here to enter text. |
| Contact person: | Click here to enter text. |
| Email address of contact: | Click here to enter text. |
| Telephone number of contact: | Click here to enter text. |

1. **Who was involved in completing the assessment?**

|  |  |
| --- | --- |
|  | Individual |
|  | Small committee |
|  | All full time faculty |
|  | All full-time and part-time faculty |
|  | Other (specify): **Click here to enter text.** |

1. **What are your goals in completing the assessment? (Check all that apply.)**

|  |  |
| --- | --- |
|  | Identify program strengths |
|  | Identify opportunities for program improvement and/or growth |
|  | Aid in strategic planning |
|  | Provide background for funding requests |
|  | Conduct internal program review |
|  | Acquire support for college’s accreditation |
|  | Conduct national or regional benchmarking |
|  | Other (specify): **Click here to enter text.** |

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B. Program snapshot

1. **Provide your department’s or program’s mission statement.**

Departmental/program mission statement is attached.

Departmental/program mission statement is copied and pasted below.

Click here to enter text.

1. **Program(s) offered**

*Select all that apply.*

|  |  |
| --- | --- |
|  | ***Degree(s) offered*** |
| Chemistry | AA  AS  AAS  Certificate  AAS  Other (specify): Click here to enter text. |
| Chemistry-based technology (specify program name, if applicable: Click here to enter text.) | AA  AS  AAS  Certificate  AAS  Other (specify): Click here to enter text. |
| Natural sciences, physical sciences, and/or a chemistry-related field | AA  AS  AAS  Certificate  AAS  Other (specify): Click here to enter text. |
| General degree program that can be transferred to a four-year program in chemistry or chemistry-based technology | AA  AS  AAS  Certificate  AAS  Other (specify): Click here to enter text. |
| Transfer programs (without degrees) in chemistry or chemistry-based technology | Yes  No |
| Other (specify): Click here to enter text. | AA  AS  AAS  Certificate  AAS  Other (specify): Click here to enter text. |

1. **Faculty assignments**

Additional information is attached.

| **Faculty member** | **Status (Select all that apply.)** | **Courses taught** | **Number of sections taught** | **Total contact hours[[1]](#footnote-1)** | **Total student contact hours[[2]](#footnote-2)** | **Additional responsibilities** |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| 2. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| 3. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| 4. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| 5. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| 6. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| 7. | Full-time  Part-time  Permanent  Temporary | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

1. **Chemistry student demographics**

Additional information is attached.

*If demographic information is not available for chemistry or chemistry-based technology students, skip this section.*

| Chemistry Student Demographics | ***Current chemistry enrollment***  ***(Year: Click here to enter text.)*** | ***Previous, preferably 5 years ago***  ***(Year: Click here to enter text.)*** | ***Projected, preferably 5 years into the future***  ***(Year: Click here to enter text.)*** |
| --- | --- | --- | --- |
| Total for-credit students | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number enrolled in chemistry or chemistry-based technology program | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number taking chemistry as part of other programs | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number who completed program | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percentage of students receiving federal financial assistance | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Median age | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent male | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent female | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Caucasian | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent African-American | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Latino | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Asian | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Native American | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent other demographic (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent other demographic (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number of dual-enrollment students[[3]](#footnote-3) | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number of for-credit distance learning students | Click here to enter text. | Click here to enter text. | Click here to enter text. |

Provide any additional relevant information on the institution’s chemistry or chemistry-based technology mission, faculty, or students.

Click here to enter text.

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C. Institutional snapshot

1. **Provide your institution’s mission statement**

Institutional mission statement is attached.

Institutional mission statement is copied and pasted below.

Click here to enter text.

1. **Institutional demographics**

|  |  |  |  |
| --- | --- | --- | --- |
| Student Demographics | ***Current***  ***(Year: Click here to enter text.)*** | ***Previous, preferably 5 years ago***  ***(Year: Click here to enter text.)*** | ***Projected, preferably 5 years in the future***  ***(Year: Click here to enter text.)*** |
| Total for-credit students | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number of credits required for full-time status | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number of full-time equivalent (FTE) students[[4]](#footnote-4) | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Completion rate | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percentage of students receiving federal financial assistance | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Median age | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent male | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent female | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Caucasian | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent African-American | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Latino | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Asian | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent Native American | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent other demographic (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Percent other demographic (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number of dual-enrollment students[[5]](#footnote-5) | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Number of for-credit distance learning students | Click here to enter text. | Click here to enter text. | Click here to enter text. |

1. **Service area**

|  |  |
| --- | --- |
| Number of campuses | Choose an item. |
| Area served | Rural  Suburban  Urban |
| Number of four-year institutions in a 50 mile radius | Choose an item. |
| Additional two-year colleges in a 50 mile radius | Choose an item. |

Provide any additional relevant information on the institution’s mission, scope, and service area.

Click here to enter text.

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II. Institutional Environment

See Section 2 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 2-4.

A. Accreditation

**List all organizations that currently provide accreditation for the institution.**

Click here to enter text.

**Provide any additional comments regarding institutional accreditation.**

Click here to enter text.

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B. Faculty policies

1. **Indicate your agreement with the following statements. ­**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| Faculty are involved in the establishment of faculty salaries. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty are involved in the establishment of teaching loads. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty are involved in the establishment of faculty promotions. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty are involved in decisions on tenure and/or continuing contracts. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty are involved in the establishment of leave (sabbatical or other). |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty are involved in the establishment of hiring practices. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty are involved in a faculty recognition program. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

1. **Indicate your agreement with the following statements.**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| Faculty have input into chair selection. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty have input into faculty teaching assignments and other responsibilities. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty have input into hiring qualifications for chemistry faculty. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty have input into selection of permanent chemistry faculty. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty have input into selection of temporary chemistry faculty. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty have input into selection of dual enrollment chemistry faculty. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty have input into chemistry curriculum. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

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C. Administrative structure

**Indicate your agreement with the following statements.**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| The chemistry program resides in an appropriate department. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The department chair responsible for the chemistry program is trained in a scientific discipline. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

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D. Program budget

1. **Indicate your agreement with the following statements.**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| The chemistry program has continuing and stable support. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has a sustained commitment from the institution at a level that is consistent with the resources of the institution and its educational mission. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has a sufficient number of qualified faculty. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has adequate staff and resources for administrative support services, stockroom operation, and instrument and equipment maintenance. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has a physical infrastructure that meets modern safety standards with appropriate chemical storage, waste-handling, and disposal facilities. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has sufficient budget to cover the costs of teaching a laboratory-based discipline. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has resources for capital equipment acquisition, long-term maintenance, and expendable supplies to ensure that equipment remains useful throughout its lifetime. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has support for maintaining and updating instructional technology. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has modern chemical information resources. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has opportunities for professional development for the faculty, including sabbatical leaves. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has resources to support faculty-mentored research as appropriate to the institutional mission. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The chemistry program has personnel support to assist with the acquisition and administration of external funding. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

1. **Budget forecast**
   1. **Is your department’s budget increasing, decreasing, or staying the same?**

Click here to enter text.

* 1. **Is the number of faculty/staff positions increasing, decreasing, or staying the same?**

Click here to enter text.

* 1. **What external factors could significantly affect the budget?**

Click here to enter text.

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E. Student support services

1. **Indicate your agreement with the following statements.**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| The institution has advising staff who specialize in helping students with career and transfer plans and any associated resources. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The institution has academic and personal support for students with physical, communication, learning and other disabilities. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The institution has tutorial services for students to improve their study skills and become more effective learners. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The institution has open and reliable access to technology, such as computers. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The institution has programs and organizations to support and engage targeted communities of students, such as student clubs. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The institution has programs that increase the participation of underrepresented groups. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The institution has assistance for students in acquiring financial aid. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

1. **Provide any additional relevant information on student services.**

Click here to enter text.

Provide any additional comments on the institution’s environment, policies, administration, budget, or student resources.

Click here to enter text.

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III. Faculty and Staff

See Section 3 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 4-6.

A. Faculty Demographics

1. **Enter the total number of chemistry faculty currently employed in each category.**

|  |  |
| --- | --- |
|  | Total Faculty |
| Permanent Full-time Faculty: | Click here to enter text. |
| Temporary Full-time Faculty: | Click here to enter text. (in an average term) |
| Permanent Part-time Faculty: | Click here to enter text. |
| Temporary Part-time Faculty: | Click here to enter text. (in an average term) |

1. **Enter the total number of chemistry faculty currently employed that can be described by each category.**

|  |  |  |
| --- | --- | --- |
|  | Total Full-Time Faculty | Total Part-Time Faculty |
| Male: | Click here to enter text. | Click here to enter text. |
| Female: | Click here to enter text. | Click here to enter text. |

|  |  |  |
| --- | --- | --- |
|  | Total Full-Time Faculty | Total Part-Time Faculty |
| African-American: | Click here to enter text. | Click here to enter text. |
| Asian-American: | Click here to enter text. | Click here to enter text. |
| Caucasian: | Click here to enter text. | Click here to enter text. |
| Latino: | Click here to enter text. | Click here to enter text. |
| Other (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. |

|  |  |  |
| --- | --- | --- |
| Highest chemistry-based degree earned is | Total Full-Time Faculty | Total Part-Time Faculty |
| Doctorate: | Click here to enter text. | Click here to enter text. |
| Master’s: | Click here to enter text. | Click here to enter text. |
| Bachelor’s: | Click here to enter text. | Click here to enter text. |
| Other (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. |

Provide any additional comments on the chemistry faculty demographics.

Click here to enter text.

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B. Faculty workloads and professional development

1. **Enter the number of faculty members that attended externally-sponsored scientific meetings in the past 12 months.**

|  |  |  |
| --- | --- | --- |
| Number of meetings attended | Total Full-Time Faculty | Total Part-Time Faculty |
| One meeting | Click here to enter text. | Click here to enter text. |
| Two meetings | Click here to enter text. | Click here to enter text. |
| Three or more meetings | Click here to enter text. | Click here to enter text. |

1. **Enter the number of faculty members that are members of the following professional organizations:**

|  |  |  |
| --- | --- | --- |
|  | Total Full-Time Faculty | Total Part-Time Faculty |
| American Chemical Society (ACS) | Click here to enter text. | Click here to enter text. |
| ACS Technical Division (such as Chemical Education, Organic Chemistry, Inorganic Chemistry, etc.) | Click here to enter text. | Click here to enter text. |
| ACS Two-Year College Chemistry Consortium (2YC3) | Click here to enter text. | Click here to enter text. |
| Labor union | Click here to enter text. | Click here to enter text. |
| Other professional organization (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Other professional organization (specify): Click here to enter text. | Click here to enter text. | Click here to enter text. |
| No professional affiliations | Click here to enter text. | Click here to enter text. |

1. **Enter the average teaching loads for full- and part-time chemistry faculty:**

|  |  |  |
| --- | --- | --- |
|  | Full-Time Faculty Average | Part-Time Faculty Average |
| Average lecture contact hours per week | Click here to enter text. | Click here to enter text. |
| Average laboratory contact hours per week | Click here to enter text. | Click here to enter text. |
| Average student contact hours per week\* | Click here to enter text. | Click here to enter text. |

**\*Note:** Student contact hours = (# individual students taught) x (# hours each student spends in lab + lecture)

For example, if a faculty member teaches two 4-hour lecture sessions with 32 students each, and each section is split into a three-hour lab of 16 students each, his/her student contact hours are:

(32 + 32) x (4 + 3) = 448

1. **Indicate the average ratio of teaching credit given for lab hours compared to lecture hours:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Click here to enter text. | lab contact hour(s) | is/are considered equivalent to | Click here to enter text. | lecture contact hour(s) |

1. **Indicate the amount of load credit (i.e., equivalence to one lecture contact hour credit) given for each of the following:**

|  |  |  |  |
| --- | --- | --- | --- |
| Supervision of student research | No load credit given | Some load credit given | Click here to enter text. hours of load credit given |
| Curriculum development | No load credit given | Some load credit given | Click here to enter text. hours of load credit given |
| Administrative duties | No load credit given | Some load credit given | Click here to enter text. hours of load credit given |
| Other (specify): Click here to enter text. | No load credit given | Some load credit given | Click here to enter text. hours of load credit given |

1. **Indicate which of the following the institution provides support for or opportunities to participate in.**

Sabbaticals

Professional meetings

Individual professional affiliation

Mentoring new faculty

Performance review for faculty

Institutional professional affiliations

Other professional development opportunity (specify): Click here to enter text.

Provide any additional comments on the chemistry workloads and professional development.

Click here to enter text.

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C. Support staff and safety

1. **Indicate the number of staff hours available per week to support the chemistry program and/or courses.**

|  |  |
| --- | --- |
| Laboratory technician | Click here to enter text. |
| Secretary, clerk, office manager | Click here to enter text. |
| Student Worker(s) | Click here to enter text. |
| Other (specify): Click here to enter text. | Click here to enter text. |

1. **Indicate who is responsible for safety compliance and the number of hours per week allotted for chemistry safety responsibilities.**

|  |  |  |
| --- | --- | --- |
|  | Dedicated responsibility for safety compliance | Hours per week allotted for chemistry safety responsibilities |
| Faculty |  | Choose an item. |
| Staff |  | Choose an item. |
| Other (specify): Click here to enter text.) |  | Choose an item. |
| There is no position dedicated to safety compliance |  | Choose an item. |

1. **How are chemical waste disposal and management funded? (Check all that apply)**

Departmental funding

Institutional funding

District funding

State funding

Other (specify): Click here to enter text.)

1. **What is the full-time/part-time faculty breakdown of chemistry sections instructed, including distance learning and dual enrollment sections?**

<25% full-time

26% - 50% full-time

51% - 75% full-time

>75% full-time

Provide any additional comments on the chemistry faculty and staff demographics, responsibilities, benefits, or achievements.

Click here to enter text.

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IV. Infrastructure

See Section 4 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 7-10.

A. Classrooms

**List the classrooms used for chemistry lecture (non-lab) activities.**

Additional classroom information is attached.

|  |  |  |  |
| --- | --- | --- | --- |
| ***Classroom*** | ***Seating capacity*** | ***ADA compliant?*** | ***Shared with other disciplines?*** |
| #1 | Click here to enter text. | Yes  No | Yes  No |
| ***Comments:*** Click here to enter text. | | | |
| #2 | Click here to enter text. | Yes  No | Yes  No |
| ***Comments:*** Click here to enter text. | | | |
| #3 | Click here to enter text. | Yes  No | Yes  No |
| ***Comments:*** Click here to enter text. | | | |
| #4 | Click here to enter text. | Yes  No | Yes  No |
| ***Comments:*** Click here to enter text. | | | |
| #5 | Click here to enter text. | Yes  No | Yes  No |
| ***Comments:*** Click here to enter text. | | | |

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B. Offices

**List the offices used by chemistry faculty.**

Additional office information is attached.

|  |  |  |
| --- | --- | --- |
| ***Office*** | ***Number of occupants*** | ***Comment*** |
| #1 | Click here to enter text. | Click here to enter text. |
| #2 | Click here to enter text. | Click here to enter text. |
| #3 | Click here to enter text. | Click here to enter text. |
| #4 | Click here to enter text. | Click here to enter text. |
| #5 | Click here to enter text. | Click here to enter text. |

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C. Laboratories

1. **List the rooms used for laboratory activities.**

Additional information is attached.

| ***Laboratory*** | ***Square footage*** | ***Student capacity*** | ***Number of*** | ***ADA compliant?*** |
| --- | --- | --- | --- | --- |
| #1 | Click here to enter text. | Click here to enter text. | Fume hoods: Click here to enter text.  Safety showers: Click here to enter text.  Eye washes: Click here to enter text.  Fire extinguishers: Click here to enter text. | Yes  No |
| ***Comments:*** Click here to enter text. | | | | |
| #2 | Click here to enter text. | Click here to enter text. | Fume hoods: Click here to enter text.  Safety showers: Click here to enter text.  Eye washes: Click here to enter text.  Fire extinguishers: Click here to enter text. | Yes  No |
| ***Comments:*** Click here to enter text. | | | | |
| #3 | Click here to enter text. | Click here to enter text. | Fume hoods: Click here to enter text.  Safety showers: Click here to enter text.  Eye washes: Click here to enter text.  Fire extinguishers: Click here to enter text. | Yes  No |
| ***Comments:*** Click here to enter text. | | | | |
| #4 | Click here to enter text. | Click here to enter text. | Fume hoods: Click here to enter text.  Safety showers: Click here to enter text.  Eye washes: Click here to enter text.  Fire extinguishers: Click here to enter text. | Yes  No |
| ***Comments:*** Click here to enter text. | | | | |
| #5 | Click here to enter text. | Click here to enter text. | Fume hoods: Click here to enter text.  Safety showers: Click here to enter text.  Eye washes: Click here to enter text.  Fire extinguishers: Click here to enter text. | Yes  No |
| ***Comments:*** Click here to enter text. | | | | |

1. **Is there a first aid kit convenient to each lab?**

Yes

No

1. **Do the labs comply with all federal and state regulations for safety and accommodation? (yes or no)**

Yes

No.

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

Click here to enter text.

1. **Indicate which of the following instrumentation is available to students, either onsite or at another convenient location. (Check all that apply.)**

Infrared spectrometer (IR)

Fourier transform infrared spectrometer (FT-IR)

Nuclear magnetic resonance spectrometer (NMR)

Fourier transform nuclear magnetic resonance spectrometer (FT-NMR)

UV-Vis spectrometer

Gas chromatograph

Mass spectrometer

Melting point apparatus

Centrifuge

pH meter

Top-loading balance

Analytical balance

High-performance liquid chromatograph (HPLC)

Ion chromatograph

Other (specify): Click here to enter text.)

1. **Indicate which of the following equipment students have adequate access to. (Check all that apply.)**

Volumetric glassware

Thermometers

Hot plates

Bunsen burners

Filtration equipment

Microscale or full scale organic kits

Software for data acquisition and analysis

1. **Provide any additional information about access to equipment.**

Click here to enter text.

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D. Chemical stockroom and storage facilities

1. **List the rooms used for chemical stockroom.**

Additional information is attached.

|  |  |  |
| --- | --- | --- |
| ***Stockroom #1*** |  |  |
| Does stockroom conform to government standards and regulations? | Yes  No | If no, describe efforts to improve compliance with federal and state regulations.  Click here to enter text. |
| Is the stockroom located in the vicinity of the laboratories? | Yes  No | If no, describe efforts to ensure safe distribution of the chemicals to the laboratories.  Click here to enter text. |
| Does the stockroom provide safe chemical storage area(s)? | Yes  No | Comments :  Click here to enter text. |
| Does the stockroom provide safe chemical handling area(s)? | Yes  No | Comments :  Click here to enter text. |
| Does the stockroom provide safe chemical preparation area(s)? | Yes  No | Comments :  Click here to enter text. |
| ***Stockroom #2*** |  |  |
| Does the stockroom conform to government standards and regulations? | Yes  No | If no, describe efforts to improve compliance with federal and state regulations.  Click here to enter text. |
| Is the stockroom located in the vicinity of the laboratories? | Yes  No | If no, describe efforts to ensure safe distribution of the chemicals to the laboratories.  Click here to enter text. |
| Does the stockroom provide safe chemical storage area(s)? | Yes  No | Comments :  Click here to enter text. |
| Does the stockroom provide safe chemical handling area(s)? | Yes  No | Comments :  Click here to enter text. |
| Does the stockroom provide safe chemical preparation area(s)? | Yes  No | Comments :  Click here to enter text. |

1. **Are chemicals stored in accordance with federal, state, and local standards and regulations?**

Yes

Yes, with the following exceptions: Click here to enter text.

No

Describe efforts to improve compliance with federal, state, and local standards and regulations, if needed.

Click here to enter text.

1. **Are segregated areas provided for acids and bases?**

Yes

No

N/A

1. **Are segregated areas provided for reducing and oxidizing agents?**

Yes

No

N/A

1. **Are segregated areas provided for particularly hazardous substances?**

Yes

No

N/A

1. **Do cabinets and refrigerators that store flammable materials meet the federal and state Occupational Safety and Health Administration (OSHA) regulations?**

Yes

No

N/A

1. **Are National Fire Protection Association (NFPA) labeling codes used on all reagents and storage facilities?**

Yes

No

N/A

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

Click here to enter text.

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E. Chemical safety and waste disposal

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

Yes

No   
 N/A

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

Click here to enter text.

1. **Is hazardous waste managed in accordance with federal, state, and local standards and regulations? (Note: this may be addressed in the chemical hygiene plan.)**

Yes

Yes, with the following exceptions: Click here to enter text.  
 No

Describe efforts to improve compliance with federal, state, and local regulations standards and regulations, if needed.

Click here to enter text.

1. **Is there a policy of maximum stockroom chemical holdings, including small quantities for especially hazardous materials? (Note: this may be addressed in the chemical hygiene plan.)**

Yes

No   
 N/A

1. **Is safety information and reference materials, such as material safety data sheets (MSDSs), readily available to all faculty and students?**

Yes, available to faculty

Yes, available to students  
 Yes, with the following exceptions: Click here to enter text.  
 No

1. **Is personal protective equipment, such as goggles, gloves, and other appropriate equipment readily available to all faculty and students?**

Yes, available to faculty

Yes, available to students  
 Yes, with the following exceptions: Click here to enter text.  
 No

Provide any additional comments on the safety resources available for chemistry faculty and students.

Click here to enter text.

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Provide any additional comments on the infrastructure used for chemistry education.

Click here to enter text.

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V. Curriculum

See Section 5 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 10-14.

A. Pedagogy and prerequisites

1. **Indicate your agreement with the following statements.**

|  | | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- | --- |
| Faculty members are encouraged to use a variety of pedagogical techniques. | |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | | |
| Support is available to help faculty members stay current with best practices in chemistry pedagogy and modern theories of learning and cognition. |  | |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | | |
| Chemistry faculty regularly take advantage of opportunities to learn and apply new pedagogical techniques. |  | |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | | |

1. **Indicate who is involved with determining course prerequisites. (Check all that apply.)**

Faculty

Administration

District

State

Other (specify): Click here to enter text.)

1. **Indicate who assesses student preparation and readiness for chemistry courses. (Check all that apply.)**

Faculty

Student services department(s)

Administration

District

State

Other (specify): Click here to enter text.

1. **Indicate who checks student compliance with course prerequisites. (Check all that apply.)**

Faculty

Student services department(s)

Administration

District

State

Other (specify): Click here to enter text.

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B. General, organic, and preparatory chemistry course offerings

Additional chemistry course information is attached.

|  | General Chemistry | Organic Chemistry | Preparatory Chemistry |
| --- | --- | --- | --- |
| Is this course offered? | Yes, as a single-term course  Yes, as a multi-term sequence  No | Yes, as a single-term course  Yes, as a multi-term sequence  No | Yes, as a single-term course  Yes, as a multi-term sequence  No |
| How often is this course offered, on average? | More than once per year  Once per year  Less than once per year | More than once per year  Once per year  Less than once per year | More than once per year  Once per year  Less than once per year |
| What is the total number of students enrolled in the course? | Click here to enter text.  per term  per year | Click here to enter text.  per term  per year | Click here to enter text.  per term  per year |
| What pedagogies are used in teaching lecture? | Traditional lecture  Inquiry-based/POGIL  Flipped classroom  Online lecture  Blended lecture/lab  Other (specify: Click here to enter text.) | Traditional lecture  Inquiry-based/POGIL  Flipped classroom  Online lecture  Blended lecture/lab  Other (specify: Click here to enter text.) | Traditional lecture  Inquiry-based/POGIL  Flipped classroom  Online lecture  Blended lecture/lab  Other (specify: Click here to enter text.) |
| What pedagogies are used in teaching lab? | Traditional, hands-on  Inquiry-based, hands-on  Team-based  Computer simulations  Other (specify: Click here to enter text.) | Traditional, hands-on  Inquiry-based, hands-on  Team-based  Computer simulations  Other (specify: Click here to enter text.) | Traditional, hands-on  Inquiry-based, hands-on  Team-based  Computer simulations  Other (specify: Click here to enter text.) |
| How is the effectiveness of the instruction assessed? | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| How effective is the instruction for this course? | Click here to enter text. | Click here to enter text. | Click here to enter text. |

***Provide any additional information about the general, organic, and preparatory chemistry course offerings.***

Click here to enter text.

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C. Chemistry for health majors, general education chemistry, and other course offerings

Additional chemistry course information is attached.

|  | Chemistry for Health Science Majors | General Education Chemistry (for non-chemistry majors) | Other chemistry (specify: Click here to enter text.) |
| --- | --- | --- | --- |
| Is this course offered? | Yes, as a single-term course  Yes, as a multi-term sequence  No | Yes, as a single-term course  Yes, as a multi-term sequence  No | Yes, as a single-term course  Yes, as a multi-term sequence  No |
| How often is this course offered, on average? | More than once per year  Once per year  Less than once per year | More than once per year  Once per year  Less than once per year | More than once per year  Once per year  Less than once per year |
| What is the total number of students enrolled in the course? | Click here to enter text.  per term  per year | Click here to enter text.  per term  per year | Click here to enter text.  per term  per year |
| What pedagogies are used in teaching lecture? | Traditional lecture  Inquiry-based/POGIL  Flipped classroom  Online lecture  Blended lecture/lab  Other (specify: Click here to enter text.) | Traditional lecture  Inquiry-based/POGIL  Flipped classroom  Online lecture  Blended lecture/lab  Other (specify: Click here to enter text.) | Traditional lecture  Inquiry-based/POGIL  Flipped classroom  Online lecture  Blended lecture/lab  Other (specify: Click here to enter text.) |
| What pedagogies are used in teaching lab? | Traditional, hands-on  Inquiry-based, hands-on  Computer simulations  Team-based  Other (specify: Click here to enter text.) | Traditional, hands-on  Inquiry-based, hands-on  Computer simulations  Team-based  Other (specify: Click here to enter text.) | Traditional, hands-on  Inquiry-based, hands-on  Computer simulations  Team-based  Other (specify: Click here to enter text.) |
| How is the effectiveness of the instruction assessed? | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| How effective is the instruction for this course? | Click here to enter text. | Click here to enter text. | Click here to enter text. |

***Provide any additional information about the chemistry for health majors, general education chemistry, and other chemistry course offerings.***

Click here to enter text.

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D. Course development and scheduling

1. **Indicate your agreement with the following statements.**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| The faculty have influence over the days, times, and how many sections of each course are taught. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| The faculty have influence over how many students are allowed per lecture/laboratory section. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Course scheduling allows students to complete all needed chemistry courses in order. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Course scheduling allows students to complete all needed chemistry courses in a timely fashion. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

1. **Provide any additional information pertaining to the statements in question 1.**

Click here to enter text.

1. **Indicate your agreement with the following statements.**

|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| --- | --- | --- | --- | --- | --- |
| Faculty, counselors, and advisers communicate internally with respect to student transfer issues. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty communicate regularly with four-year colleges regarding student transfer issues. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty communicate regularly with allied health schools regarding student transfer issues. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty communicate regularly with technical schools regarding student transfer issues. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |
| Faculty communicate regularly with transfer/articulation offices regarding student transfer issues. |  |  |  |  |  |
| *Comments:* Click here to enter text. | | | | | |

1. **Provide any additional information pertaining to faculty communication regarding student transfer issues.**

Click here to enter text.

Provide any additional comments on the chemistry curriculum.

Click here to enter text.

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VI. Original Scholarly Research and Related Activities

See Section 6 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 15.

1. **Which of the following are aligned with the mission and goals of the institution and/or program? (Check all that apply.)**

Original scholarly research

Student internships

Student co-operative learning experiences (co-ops)

Long-term student project

None of these are aligned with the mission and goals of the institution or program.

1. **Which of the following opportunities are available? (Check all that apply.)**

Faculty-led chemistry or chemical education research

Student-led chemistry research

Student internships

Student co-operative learning experiences (co-op)

Long-term student projects

None of these opportunities are available.

1. **Provide the following information for each type of research or related activity offered.**

Additional information is attached.

| ***Type of activity*** | Original research  Student internship  Student co-op  Long-term student project | Original research  Student internship  Student co-op  Long-term student project | Original research  Student internship  Student co-op  Long-term student project |
| --- | --- | --- | --- |
| ***Faculty or institutional unit(s) involved*** | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| ***Average faculty hours per week*** | Choose an item. | Choose an item. | Choose an item. |
| ***Average students participating each term*** | Choose an item. | Choose an item. | Choose an item. |
| ***Average total student hours per week*** | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Location | Choose an item. | Choose an item. | Choose an item. |
| ***Funding source (Check all that apply)*** | Institution  Government grant  Academic partners  Industrial or government partners  Other (specify): Click here to enter text. | Institution  Government grant  Academic partners  Industrial or government partners  Other (specify): Click here to enter text. | Institution  Government grant  Academic partners  Industrial or government partners  Other (specify): Click here to enter text. |
| ***Frequency of activity*** | Choose an item. | Choose an item. | Choose an item. |
| Student outputs (Check all that apply) | Journal articles  Internal written reports  Posters for external presentation  Posters for internal presentation  Student evaluations  Most projects have no outputs. | Journal articles  Internal written reports  Posters for external presentation  Posters for internal presentation  Student evaluations  Most projects have no outputs. | Journal articles  Internal written reports  Posters for external presentation  Posters for internal presentation  Student evaluations  Most projects have no outputs. |
| ***Student evaluators (Check all that apply)*** | Institutional faculty  Institutional staff  Faculty at partnering institutions  Industrial or governmental partners  Other (specify): Click here to enter text.  Students do not have formal evaluations. | Institutional faculty  Institutional staff  Faculty at partnering institutions  Industrial or governmental partners  Other (specify): Click here to enter text.  Students do not have formal evaluations. | Institutional faculty  Institutional staff  Faculty at partnering institutions  Industrial or governmental partners  Other (specify): Click here to enter text.  Students do not have formal evaluations. |
| ***Student compensation (Check all that apply)*** | Academic credit  Financial compensation  Tuition reimbursement  Other (specify): Click here to enter text.  Students receive no compensation. | Academic credit  Financial compensation  Tuition reimbursement  Other (specify): Click here to enter text.  Students receive no compensation. | Academic credit  Financial compensation  Tuition reimbursement  Other (specify): Click here to enter text.  Students receive no compensation. |
| ***Field(s) of study*** | Click here to enter text. | Click here to enter text. | Click here to enter text. |

Provide any additional comments on faculty-led research and other scholarly activities.

Click here to enter text.

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VII. Development of Student Skills

See Section 7 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 16-17.

1. **What chemical literature publications are available to students? (Check all that apply.)**

|  | ***Print*** | ***Online (full subscription)*** | ***Off-campus access*** |
| --- | --- | --- | --- |
| *Chemical Abstracts™* |  |  |  |
| Other journal databases (specify): *Click here to enter text.* |  |  |  |
| *Chemical & Engineering News* |  |  |  |
| *Science* |  |  |  |
| *Nature* |  |  |  |
| *Journal of the American Chemical Society* |  |  |  |
| *Accounts of Chemical Research* |  |  |  |
| *Analytical Chemistry* |  |  |  |
| *Biochemistry* |  |  |  |
| *Chemical Reviews* |  |  |  |
| *Environmental Science & Technology* |  |  |  |
| *Journal of Chemical Education* |  |  |  |
| *Journal of Medicinal Chemistry* |  |  |  |
| *Journal of Organic Chemistry* |  |  |  |
| *Journal of Physical Chemistry*  *A*  *B*   *C*   *Letters* |  |  |  |
| Other ACS journals (specify): *Click here to enter text.* |  |  |  |
| Other peer-reviewed journals (specify): *Click here to enter text.* |  |  |  |
| Textbook publisher materials (specify): *Click here to enter text.* |  |  |  |
| Other chemistry-related publications (specify): *Click here to enter text.* |  |  |  |

1. **Indicate the location(s) in which students are able to access chemical literature. (Check all that apply.)**

Online, via personal computer

Online, via resource center or other centralized on-campus location

In print, at campus library

In print, at departmental resource area

In print, at institutional media center

In print, at neighboring academic institutions

Other (specify): Click here to enter text.

1. **Indicate the frequency with which chemistry students are provided opportunities to develop the following chemical literature skills.**

| Course | ***Find appropriate information in technical articles*** | ***Critically evaluate technical articles*** | ***Identify and retrieve technical articles*** | ***Use scientific databases*** | ***Other chemical literature skills (specify): Click here to enter text.*** |
| --- | --- | --- | --- | --- | --- |
| General Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Organic Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Preparatory Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Chemistry for Health Science Majors | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| General Education Chemistry | Choose an item. | 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. | Choose an item. |

* 1. **Briefly describe the methods used to develop students’ chemical literature skills in chemistry courses.**Click here to enter text.
  2. **Briefly describe the methods used to assess students’ chemical literature skills in chemistry courses.**Click here to enter text.
  3. **Briefly describe the effectiveness of the methods used to develop students’ chemical literature skills in chemistry courses.**Click here to enter text.
  4. **Briefly describe the opportunities that chemistry students have to develop chemical literature skills outside of chemistry courses.**Click here to enter text.

1. **Indicate the frequency with which chemistry students are provided opportunities to develop the following chemical safety skills.**

| Course | ***Understand and use responsible disposal techniques*** | ***Understand and use material safety data sheets*** | ***Recognize and minimize chemical/physical hazards in the laboratory*** | ***Align activities with U.S. Occupational Safety and Health Administration requirements*** | | ***Other chemical safety skills (specify): Click here to enter text.*** |
| --- | --- | --- | --- | --- | --- | --- |
| General Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | |
| Organic Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | |
| Preparatory Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | |
| Chemistry for Health Science Majors | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | |
| General Education Chemistry | Choose an item. | 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. | Choose an item. | |

* 1. **Briefly describe the methods used to develop students’ chemical safety skills in chemistry courses.**Click here to enter text.
  2. **Briefly describe the methods used to assess students’ chemical safety skills in chemistry courses.**Click here to enter text.
  3. **Briefly describe the effectiveness of the methods used to develop students’ chemical safety skills in chemistry courses.**Click here to enter text.
  4. **Briefly describe the opportunities that chemistry students have to develop chemical safety skills outside of chemistry courses.**Click here to enter text.
  5. **Describe any concerns regarding chemical safety education at this institution, along with any plans to address these concerns.**Click here to enter text.

1. **Indicate the frequency with which chemistry students are provided opportunities to develop the following problem-solving skills.**

| Course | ***Define and analyze problems*** | ***Develop a testable hypothesis*** | ***Design and execute experiments*** | ***Analyze data*** | ***Draw appropriate conclusions*** | ***Other problem-solving skills (specify): Click here to enter text.*** |
| --- | --- | --- | --- | --- | --- | --- |
| General Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Organic Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Preparatory Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Chemistry for Health Science Majors | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| General Education Chemistry | Choose an item. | Choose an item. | 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. | Choose an item. | Choose an item. |

* 1. **Briefly describe the methods used to develop students’ problem-solving skills in chemistry courses.**Click here to enter text.
  2. **Briefly describe the methods used to assess students’ problem-solving skills in chemistry courses.**Click here to enter text.
  3. **Briefly describe the effectiveness of the methods used to develop students’ problem-solving skills in chemistry courses.**Click here to enter text.
  4. **Briefly describe the opportunities that chemistry students have to develop problem-solving skills outside of chemistry courses.**Click here to enter text.

1. **Indicate the frequency with which chemistry students are provided opportunities to develop the following communication skills.**

| Course | ***Prepare written scientific reports*** | ***Prepare and deliver oral presentations*** | ***Create visual representations of complex data*** | ***Cite sources*** | ***Use appropriate technology*** | ***Other communication skills (specify): Click here to enter text.*** |
| --- | --- | --- | --- | --- | --- | --- |
| General Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Organic Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Preparatory Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Chemistry for Health Science Majors | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| General Education Chemistry | Choose an item. | Choose an item. | 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. | Choose an item. | Choose an item. |

* 1. **Briefly describe the methods used to develop students’ communication skills in chemistry courses.**Click here to enter text.
  2. **Briefly describe the methods used to assess students’ communication skills in chemistry courses.**Click here to enter text.
  3. **Briefly describe the effectiveness of the methods used to develop students’ communication skills in chemistry courses.**Click here to enter text.
  4. **Briefly describe the opportunities that chemistry students have to develop communication skills outside of chemistry courses.**Click here to enter text.

1. **Indicate the frequency with which chemistry students are provided opportunities to develop the following teamwork and leadership skills.**

| Course | ***Work effectively in a group to solve problems*** | ***Interact productively within a diverse group of peers*** | ***Lead a group to solve problems*** | ***Other teamwork skills (specify): Click here to enter text.*** |
| --- | --- | --- | --- | --- |
| General Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Organic Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Preparatory Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Chemistry for Health Science Majors | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| General Education Chemistry | 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. |

* 1. **Briefly describe the methods used to develop students’ teamwork and leadership skills in chemistry courses.**Click here to enter text.
  2. **Briefly describe the methods used to assess students’ teamwork and leadership skills in chemistry courses.**Click here to enter text.
  3. **Briefly describe the effectiveness of the methods used to develop students’ teamwork and leadership skills in chemistry courses.**Click here to enter text.
  4. **Briefly describe the opportunities that chemistry students have to develop teamwork and leadership skills outside of chemistry courses.**Click here to enter text.

1. **Indicate the frequency with which chemistry students are provided opportunities to develop the following ethics skills.**

| Course | ***Display high personal standards of standards and integrity*** | ***Demonstrate an awareness of contemporary issues related to chemistry*** | ***Recognize ethical applications of chemistry in industrial, governmental, and societal settings*** | ***Participate in service-learning opportunities*** | ***Other ethics skills (specify): Click here to enter text.*** |
| --- | --- | --- | --- | --- | --- |
| General Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Organic Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Preparatory Chemistry | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| Chemistry for Health Science Majors | Choose an item. | Choose an item. | Choose an item. | Choose an item. | Choose an item. |
| General Education Chemistry | Choose an item. | 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. | Choose an item. |

* 1. **Briefly describe the methods used to develop students’ ethics skills in chemistry courses.**Click here to enter text.
  2. **Briefly describe the methods used to assess students’ ethics skills in chemistry courses.**Click here to enter text.
  3. **Briefly describe the effectiveness of the methods used to develop students’ ethics skills in chemistry courses.**Click here to enter text.
  4. **Briefly describe the opportunities that chemistry students have to develop ethics skills outside of chemistry courses.**Click here to enter text.

Provide any additional comments on the development of student skills in the chemistry curriculum.

Click here to enter text.

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VIII. Student Mentoring and Advising

See Section 8 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 18.

1. **Indicate your agreement with the following statements.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Strongly agree* | *Agree* | *Disagree* | *Strongly disagree* | *Not Applicable* |
| There is strong collaboration among the chemistry faculty, counselors, and advisers at the institution. |  |  |  |  |  |
| Collaborative efforts result in increased student matriculation. |  |  |  |  |  |
| Collaborative efforts result in efficient student transfer. |  |  |  |  |  |
| Collaborative efforts result in effective job placement. |  |  |  |  |  |
| Collaborative efforts help students reach their career goals. |  |  |  |  |  |
| The chemistry program provides information about combining a basic chemistry education with studies in other disciplines. |  |  |  |  |  |
| Chemistry faculty members encourage students to consider the career options available within chemistry. |  |  |  |  |  |
| Faculty members participating in formal student advising programs are compensated or given reassignment time. |  |  |  |  |  |
| Some (or all) advisers and counselors are familiar with the career opportunities for students who take chemistry, and advise them properly for their academic pathways. |  |  |  |  |  |
| The chemistry faculty members are effective mentors. |  |  |  |  |  |

1. **Provide any additional information about student mentoring and advising.**

Click here to enter text.

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IX. Self-Evaluation and Assessment

See Section 9 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 19.

1. **Are there clear, measurable, published learning outcomes for each chemistry and/or chemistry-based technology course?**

Yes

No

**Provide any additional comments on learning outcomes:** Click here to enter text.

1. **Is formal self-evaluation of the chemistry, chemistry-based technology, and/or science program performed on a regular basis?**

Yes, self-evaluation is conducted every Choose an item. years.

No

1. **Identify whether the indicated components of your program are assessed, how often they are assessed, how the results are shared and whether the results are used to improve the program.**

| Program Component | Is this assessed? | How often? | Who designs the assessment tools? (Check all that apply.) | Who looks at the results? (Check all that apply.) |
| --- | --- | --- | --- | --- |
| Student learning/content mastery | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |
| Student skills (i.e., assessment of those components described in section VII) | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |
| Quality of teaching | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |
| Pedagogy | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |
| Program goals and objectives | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |
| Student performance at their next academic institution | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |
| Other (specify): Click here to enter text. | Yes  No | Choose an item. | Instructor  Department or division  Institution  Third body external to the institution | Instructor  Department or division  Institution  Third body external to the institution |
| ***What tools are used?*** | Click here to enter text. | | | |

1. **Describe the mechanisms in place for using assessment results to improve the program.**

Click here to enter text.

***Provide any additional comments on self-assessment of chemistry education.***

Click here to enter text.

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X. Partnerships

See Section 10 of the ACS Guidelines for Chemistry in Two-Year College Programs, p. 20-22.

1. **Indicate the strength and frequency of the interactions of chemistry faculty with the following potential partners. Briefly describe any discussions or activities with the partners.**

| Partners | Strength of interaction | Frequency of interaction | Discussions and/or activities |
| --- | --- | --- | --- |
| Other academic departments and disciplines on campus | Choose an item. | Choose an item. | Click here to enter text. |
| Administrative and student campus units, such as admissions, advisement, and counseling | Choose an item. | Choose an item. | Click here to enter text. |
| Faculty on other campuses within a multi-campus institution | Choose an item. | Choose an item. | Click here to enter text. |
| Faculty at other two-year colleges | Choose an item. | Choose an item. | Click here to enter text. |
| Faculty and administration at four year institutions | Choose an item. | Choose an item. | Click here to enter text. |
| Faculty and administration local high schools | Choose an item. | Choose an item. | Click here to enter text. |
| Chemical professionals and hiring managers at local chemistry-related industries | Choose an item. | Choose an item. | Click here to enter text. |
| Chemical professionals and hiring managers at local government laboratories | Choose an item. | Choose an item. | Click here to enter text. |
| Other (specify): Click here to enter text. | Choose an item. | Choose an item. | Click here to enter text. |

1. **Indicate the success and frequency of the following activities in which chemistry faculty are involved.**

|  |  |  |
| --- | --- | --- |
| ***Activity*** | ***Success*** | ***Frequency*** |
| Participation in local professional organizations and conferences | Choose an item. | Choose an item. |
| Participation in community outreach activities with local museums, or elementary schools, or other group(s) | Choose an item. | Choose an item. |
| Support for training of working chemical professionals | Choose an item. | Choose an item. |
| Participation in academic or community consortia | Choose an item. | Choose an item. |
| Other (specify): Click here to enter text. | Choose an item. | Choose an item. |

Provide any additional comments on partnerships that support chemistry education.

Click here to enter text.

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XI. Strengths, Challenges, and Opportunities

1. **Considering the information provided in the assessment, what are the internal strengths of the chemistry or chemistry-based technology program at this institution? Focus on factors you can control, such as faculty, curriculum, mentoring, etc.**

Click here to enter text.

1. **Considering the information provided in the assessment, what are the internal areas of concern for the chemistry or chemistry-based technology program at this institution?**

Click here to enter text.

1. **Considering the information provided in the assessment and trends in the community, what are the major external opportunities for the chemistry or chemistry-based technology program at this institution? Focus on factors outside of your control, such as community demographic trends, growth in local employers, grant opportunities, etc.**

Click here to enter text.

1. **Considering the information provided in the assessment and trends in the community, what are the major external challenges for the chemistry or chemistry-based technology program at this institution?**

Click here to enter text.

1. **How can the program’s strengths and opportunities be used to address its areas of concern?**

Click here to enter text.

1. **How can the program’s strengths and opportunities be used to mitigate its challenges?**

Click here to enter text.

Provide any additional comments on the strengths, challenges, and opportunities for chemistry education at your institution.

Click here to enter text.

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1. This is the number of hours assigned to teach lecture and lab, not the number of hours determined for teaching loads. In other words:

   Assigned contact hours = (# hours physically spent in lecture) + (# hours physically spent in lab) [↑](#footnote-ref-1)
2. Student contact hours = (# individual students taught) x (# hours each student spends in lab + lecture)

   For example, if a faculty member teaches two 4-hour lecture sessions with 32 students each, and each section is split into a three-hour lab of 16 students each, his/her student contact hours are:

   (32 + 32) x (4 + 3) = 448 [↑](#footnote-ref-2)
3. ***Students enrolled at the college who are earning high school and college credit simultaneously*** [↑](#footnote-ref-3)
4. ***FTE students = (Total number of credit hours taken by all students)/(Number of credits required for full-time status)*** [↑](#footnote-ref-4)
5. ***Students enrolled at the college who are earning high school and college credit simultaneously*** [↑](#footnote-ref-5)