

## Syllabus

An internship position during academic study can be a great benefit to the student in terms of enhancing practical chemical knowledge and gaining experience in how chemistry is done in the workplace. It can also be an opportunity to learn whether you will enjoy and perform well in a work environment in your field, provide experience in meeting expectations in a structured situation, and enhance your skills at working with other people.

This course is designed for students who wish to hold an internship position and receive credit for it. The catalog description is as follows:

**495 Chemistry Internship-** 1- 4 hours. Internships of a chemistry nature, intended for juniors and seniors. Students desiring credit for internship work must have the internship approved by the Department before enrollment and must agree to requirements for the course. Open to Chemistry majors and minors who have completed 352 and 352L. Repeatable with approval from Department. A maximum of 4 hours may be counted as advanced electives toward the major.

Other requirements and expectations include:

1. Arrangement of an internship for credit is a collaborative process between the student, the supervising organization, and the academic department. Not all internships are appropriate for Chem 495: agreements about credit for internship work *must* be arranged prior to the start of the internship. This is done in consultation with the Chemistry internship coordinator. An Internship Agreement form should also be filed with the ISU Career Center. This form can be found by logging into the Sycamore Career Link on your Portal and submitting a Placement Agreement. Detailed instructions can be found here:

[http://www.indstate.edu/sites/default/files/media/Documents/PDF/How%20to%20Submit%20a%20Placement%20Agreement 12 2 15.pdf](http://www.indstate.edu/sites/default/files/media/Documents/PDF/How%20to%20Submit%20a%20Placement%20Agreement%2012%202%2015.pdf)

There is an additional application to be submitted to the Chemistry Department. (See later in this document.)

2. Only students with a chemistry GPA of 2.2 or higher may apply for Chem 495.

3. The student and the Internship Site Supervisor will provide a statement about the nature of the work in order to enable the Chemistry Department to evaluate its appropriateness for credit. The work must be primarily chemistry in nature. The nature of the supervision should be clearly established. The enrollment will have to be approved by the advisor and Internship Coordinator, so paper registration is required.

4. Expectations are that about 100 hours of internship work will be needed for an hour of credit. The student may enroll in the course for 1 - 4 credits. The course may be repeated for credit, but only if it can be demonstrated that the experience will be sufficiently different from past experiences. A maximum of four credits of 495 will count as advanced electives toward the

major.

5. An Internship Coordinator (in the Chemistry Department) will act as the liaison [University Sponsor] for all Chemistry student internships for credit.

6. The student will keep an electronic journal during the internship, to be submitted weekly or biweekly to the Internship Coordinator. The exact content of the journal will be arranged with the Coordinator. It will generally include such things as what kind of work was performed and what was learned, and it should also have a reflective component that comments on what challenges were encountered, what improvements need to be made, and how the experiences may apply to later working situations. At the end of the internship the student will fill out a short questionnaire (attached) and the journal entries should be such that they will amplify the short answers in the survey. The Coordinator may comment on the journal entries and ask for modification of the content as the internship progresses. For students funded by Focus Indiana, the Career Center may also ask the student to complete an evaluation of the experience with their own questions.

7. The internship Site Supervisor should agree to evaluate the student's performance and progress midway through the internship period, and again at the end, and provide these evaluations to the Internship Coordinator.

At the conclusion of the internship, the student will submit a formal report on the work, and give a presentation to a small group of Chemistry Department faculty.

8. Grading: The student's performance will be judged by a number of outcomes:

- ! Evaluation from Site Supervisor
- ! The weekly journal
- ! A final report (mainly dealing with the scientific aspects of the work)
- ! Presentation to faculty

Satisfactory performance in each of the above areas will lead to a grade of A; for one component that is lacking, a grade of B will be assigned; for two lacking components, a C, etc.. The Site evaluation should be positive overall to be considered satisfactory. However, in cases where the student intern or Internship Coordinator feels that the Site Supervisor's ratings are questionable, further discussion with the Supervisor may be appropriate and in extreme cases, that part of the grading scheme may be waived.

**Application** for Chemistry 495 consists of:

1. A copy of the completed Placement Agreement form (from the Career Link).
2. A resume.
3. A work description, to be provided by the Internship Host.
4. A narrative outline of how the internship relates to your major or projected career path; what chemical knowledge or skills you expect to gain during the internship; what professional knowledge you expect to gain.
5. (To be agreed upon with the Internship Coordinator): How will the IC be kept informed of your activities during the internship period?

### End-of-Internship Questionnaire for student

<b>Did the placement provide opportunities to apply or extend knowledge in:</b>	Consider-ably	Somewhat	Very little	N/A
Experimental techniques				
Theoretical knowledge				
Data analysis				
Report writing				
Chemical safety				
Professional behavior				
Personal interaction skills				
<b>Did the Site Supervisor:</b>				
Facilitate orientation to company				
Invite participation in meetings				
Facilitate my understanding of company policies and procedures				
Encourage self-assessment				
Provide fair, understandable feedback				
Make him/herself accessible for questions				
Model and encourage professional values and behavior				
<b>Did the Internship Coordinator:</b>				
Communicate clearly the expectations for obtaining credit				
Contact the intern regularly during the internship period				
Evaluate the intern's documents during the internship and encourage reflection and make suggestions about improvement?				

Additional comments may be included on another page.

**End-of-internship Questionnaire for employer**

Date \_\_\_\_\_

Respondent \_\_\_\_\_

Consent to disclose  
evaluation information? Y N

Organization \_\_\_\_\_

Signature Code \_\_\_\_\_

Intern Name \_\_\_\_\_

<b>Did the intern:</b>	Very well	Somewhat	Very little	N/A
Command chemical knowledge at the level of his/her academic experience?				
Display laboratory techniques expected for the level of his/her academic experience?				
Dependably complete assigned tasks?				
Work well with other people?				
Learn new techniques efficiently?				
Exhibit the ability to act independently when called for?				
Demonstrate the ability to synthesize knowledge?				
Prepare reports properly?				
Communicate in other ways appropriately with supervisors?				
Behave professionally?				

On a separate page, please give particular examples, either positive or negative, that elaborate on the above answers. In what ways did the student demonstrate motivation, display initiative, and grow professionally?

*Other questions:*

How many hours overall did the intern work?

Is it your intention to continue to work with ISU interns?

Would you like to discuss further possible ways to effectively utilize interns in your company?  
Are you or any of the employees of your organization an ISU alum?

In the future, we may have employer panel discussions to inform ISU faculty about employer hiring needs and perspectives on how ISU can better prepare our graduates. Would you be willing to serve on such a panel?