How to Complete the COS Undergraduate Research Form

THIS FORM MUST BE COMPLETED EACH SEMESTER THAT A STUDENT INTENDS TO EARN RESEARCH CREDIT. THIS FORM IS INTENDED FOR STUDENTS WHOSE PRIMARY MAJOR IS IN THE COLLEGE OF SCIENCE ONLY.*

Virginia Tech - College of Science

Undergraduate Research/Independent Study Form (Variable Credit Courses numbering: 2974, 2994, 4974, 4994)

Use this form only if the student's primary major is in the College of Science. Form is to

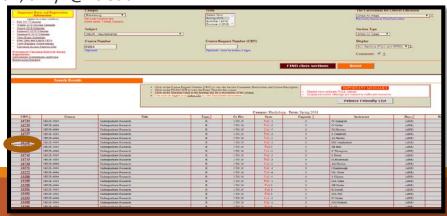
be completed by the STUDENT and the INSTRUCTOR/ Type all information in the spaces below and secure the re				
Course: 2974 2994 4974 Summer I SUBJ: CRN: Number of Credits: Grade: A-F P/F	4994 Summer II			
Student's Name (print): VT email: Primary Major: Previous UR/IS Credits: Local Phone #: Overall GP Planned Credits this	ID#: PA: In-Major GPA: s term (including this course):			
Title of Project:				
Brief description of project (limit 800 characters includi	ding spaces):			
Method of graded evaluation (check all that apply) Student will give a presentation, talk, or poster at a formal research meeting and/or conference Student will write a paper on the project that is submitted to the instructor Student will contribute to a manuscript for publication Other (please explain)				
Required Signatures				
Student: Date:				
Instructor: Date:	Print:	_		
Advisor;	Print:			
Date:				
Dept Head of Inst:	Print:	_		
Date: Assoc Dean (COS):	Print: Dr. Robin Panneton			
Data	-			

The form must **be FULLY TYPED.** With the exception of signatures, no handwriting is permissible (including edits).

	4974 Summer I	I Summer II	

1. Course \rightarrow

- 1. 2974: Use for TAing or lower-level independent study
- 2. 2994: Use if a student is doing research and this is their first or second semester in your lab
- 3. 4974: Rarely used. Use only if a student is doing upper-level independent study (not for TAing)
- 4. 4994: Use if a student is doing research and this is their third or later semester in your lab. CHEM 4994 students will be expected to create a more formal poster presentation and present at the Chemistry Undergraduate Research Poster Symposium at the end of each semester.
- **2. Term** → check the applicable box for the term that the student will be enrolled in the research or independent study for credit
- **3. SUBJ** \rightarrow typically use "CHEM".
- **4. CRN** \rightarrow enter 5 digit CRN for research
 - CRNs can be found on the timetable of classes: https://banweb.banner.vt.edu/ssb/prod/HZSKVTSC.P_DispRequest
 - 2. To find your CRN, select the appropriate term, subject, and course number within the timetable (linked above). Find your last name or the last name of the faculty member representing your lab group. Look to the far left of the table in the same row. The five digit number is the CRN.
 - 3. If your PI does not have a "CHEM" CRN, but should, please contact Ms. Amy Kokkinakos, 117B Davidson Hall, amyk@vt.edu
 - 4. If you cannot find your CRN or should have a CRN for a different department, please contact that department.



Number of Credits:	Grade: A-F P/F
1. Number of C	redits →
 For fall and 	spring semesters (~15 weeks):
	average of 3 hours of work per week per credit earned. Students only go above research in extenuating circumstances.
1. Example:	3 credits = ~9 hours of work per week
2. For summe	r sessions (~5-6 weeks):

2. Grade \rightarrow

1.

1. A/F: Use if the student is doing CHEM2994 or CHEM4994 and will have a "gradable product" (i.e. one of the evaluation method boxes other than "other" or "student will contribute to a manuscript..." is checked)

1. Assume an average of 9 hours of work per week per credit earned.

Example: 3 credits = ~27 hours of work per week

- Student will give a presentation, talk, or poster at a formal research meeting and/or conference

 Student will write a paper on the project that is submitted to the instructor
- 2. P/F: Use for 2974 or 4974. Use for research that will not have a gradable product. Non-gradable products include:
 - 1. Attendance/participation

1. Gradable products include the following:

- 2. Lab notebooks
- 3. A manuscript on its own (not turned into a formal presentation or paper)
- TAing for a class

Student's Name (print): ID#:
VT email: Local Phone #:

Primary Major: Overall GPA: In-Major GPA:

 Student's Name, ID, Email, and Phone Number → Input typed full name of student, email, and phone number. The student should assist with this section.

- Primary Major → Insert full major title for primary major (e.g. "CHEM")
 - 1. If the student's primary major is *not* chemistry, they should input that major
- Overall GPA → This is the cumulative GPA that can be found on a student's transcript. Do not round up. GPA should always be truncated.
 - 1. First semester freshmen who do not yet have a GPA must wait to submit this form until they have a university GPA. Students in this situation should notify an academic advisor *prior* to the form's due date since forms will be due before semester grades are released.
- 4. In-Major GPA → This GPA is found on the students Degree Audit Report (DARs). Do not round up. GPA should always be truncated.
 - To access, student should go to hokiespa.vt.edu, click "degree menu," click "undergraduate student degree menu," click "degree audit report menu" and run either a regular DARs (if they have applied for their degree) or a "what if DARs" (if they have not yet applied for a degree)



Previous UR/IS Credits: Planned Credits this term (including this course):

Title of Project:

Brief description of project (limit 800 characters including spaces):

- Previous UR/IS Credits → insert total number of credits that the student has previously accumulated for any 4994, 4974, 2994, or 2974 coursework (both within and outside of chemistry). This can be found on a student's transcript.
- Planned Credits this Term → Insert total number of credits planned for the term that research will be occurring (including the research credits)
 - Note that the college is not permitted to add a student to more than 19 credits without an overload approval. Students should not hold a seat in a course with an intent to drop it once the research is added.
- 3. **Title of Project** → This title is up to the discretion of the student and faculty member.
 - 1. Proofread because typos will result in a returned form.

4. Brief Description of Project →

- 1. Insert a description no more than a few sentences (800 characters) briefly describing the project.
- 2. Proofread because typos will result in a returned form.

Method of graded evaluation (check all that apply)					
	Student will give a presentation, talk, or poster at a formal research meeting and/or conference Student will write a paper on the project that is submitted to the instructor Student will contribute to a manuscript for publication Other (please explain)				

- Method of graded evaluation → Check any and all boxes that apply.
 The only acceptable forms of graded evaluation are one of the top two boxes.
 - If only the fourth box is checked, grading scale must be marked as "pass/fail." "Other" may be checked alongside a gradable method of evaluation for a grading scale of A-F
 - 2. If a student is contributing to a manuscript, it is expected that they will also be giving a presentation or writing a formal paper in order for the A-F grade scale to be used.

Note that students participating in CHEM4994 research will be expected to create a formal poster presentation on their research. These presentations will be part of the Undregraduate Research Poster Presentation held at the end of each semester.

For CHEM2994 research, if the top box is checked, presentations may be less formal and can be presented to a smaller audience such as the student's research lab.

- 1. Required Signatures → Signatures must be obtained in the listed order. Printed names must be included alongside signature.
 - After both the student and faculty member have signed the form, the form should be brought to an advisor in the student's primary major to sign.
 - 2. If the student is doing research with a chemistry professor, the person who signs on behalf of the Chemistry Department Head is Professor Joseph S Merola, Hahn Hall South 3109, jmerola@vt.edu. Simply bring your form to HHS 3109. If Professor Merola is not in, slide the form under the door and he will contact you when it is signed.
 - After obtaining Professor Merola's signature, all COS studtnat should bring their forms to Ms. Amy Kokkinakos 117B Davidson Hall. That is different from what it indicates on the COS form, but all forms are now processed within the department.

NOTE THAT MOST LABS REQUIRE SIGNIFICANT RESEARCH TRAINING. SPECIFIC TRAININGS WILL BE MANAGED BY THE RESEARCH PI.