



## COMP SCI/STAT 403 | Internship Course in Comp Sci and Data Science

### **Course Information**

Internship Course in Comp Sci and Data Sci  
COMP SCI/STAT 403 (1 Credit)

### **Description**

Enables students with outside internships to earn academic credit connected to their work experience related to the Computer Sciences or Data Science Major.

### **Prerequisite(s)**

Consent of Instructor

### **Breadths**

LAS Credit | Intermediate Level

### **Instruction Mode**

Online

### **Department and College**

Departments of Computer Sciences & Statistics | College of Letters & Sciences

### **Term Dates**

Summer 2021: June 14<sup>th</sup> – August 8<sup>th</sup>, 2021

Canvas Course: <https://canvas.wisc.edu/courses/254900>

Course number: CS/STAT 403

### **How Credit Hours are Met**

Students will be expected to spend one hour participating in asynchronous course and course activities and 2 hours per week on assignments in addition to their internship requirement. This will include weekly discussion topics and responses, weekly journal reflections, and a final project.

### **Instructors**

Lead Instructor: Mollie Stolbov

Assistant Instructor: Sara Rodock

### **Office Hours**

By appointment: Please email the instructor to schedule a meeting.

Instructors will participate in the online discussions by responding to student posts and provide written feedback on journals and assignments each week in addition to office hours. Student can also ask questions through email or discussion threads.

### **Why an internship in a liberal arts education?**

Internships can be an integral part of a liberal arts education. Students in majors such as computer sciences and data science often focus on building their technical skills through their major coursework. High-impact practices, such as an internship, can be a ideal way for students to practice their important technical skills, but also build upon broader skills such as oral and written communication, critical and creative thinking, teamwork, problem solving, and field specific information literacy. Internships are one of the recommended high-impact practices suggested in the Association of American Colleges and Universities LEAP (Liberal Education and America's Promise, <https://www.aacu.org/leap>) initiative.

For a number of students, they must pair a critical experience like an internship with the opportunity to gain credit. In particular, this is very important for students studying in the US on an F-1 visa and who wish to take advantage of the Curricular Practical Training employment authorization (<https://iss.wisc.edu/employment/f1-employment/f-1-curricular-practical-training-cpt/>).

## Grading and Course Materials

### Course Learning Outcomes

1. Understand the challenges and opportunities in Computer Sciences and Data Science professions
2. Be prepared to find, apply, and interview for a job and/or additional education
3. Articulate your career goals and long-term trajectory

### Grading and Final Grades

There is a total of 8 weeks of the term. For each weekly topic students will need to complete readings, utilize resources, or watch videos and then provide a journal entry (private) and discussion post (public) based on provided prompts. Students will also need to provide feedback on at least two of their peer's discussion posts as well per week.

Students must participate in a minimum of 12 of each and submit one of the final project options to achieve an A in the course. Each assignment will be graded as complete or incomplete and a rubric will be posted on Canvas for each assignment to outline what is a complete assignment. Students are expected to spend about 3 hours per week on the weekly topic materials, journal, discussion, and comments on discussion.

All assignments are due by 11:59 pm on Monday for the previous week. There are no points for late assignments.

Additional details regarding each of the final projects is available on Canvas.

Students who have a significant personal issue should contact the instructors by noon on Friday to make arrangements due to very unique circumstances.

### Final Grades

| Grade | Grade Breakdown <sup>^</sup>   |
|-------|--|
| A     | Final project, 12+ <u>each</u> for journal, discussion, and comments |
| AB    | Final project, 11 <u>each</u> for journal, discussion, and comments  |

|    |   |
|----|---|
| B  | Final project, 10 <u>each</u> for journal, discussion, and comments   |
| BC | Final project, 9 <u>each</u> for journal, discussion, and comments  |
| C* | Final project, 8 <u>each</u> for journal, discussion, and comments<br><i>Or</i> no final project, 12+ each for journal, discussion, and comments      |
| D  | No final project and 10-11 journal, discussion, and comments submitted<br><i>Or</i> 8 for final project, 7 each for journal, discussion, and comments |
| F  | No final project and less than 10 journal, discussion, and comments submitted   |

^Completing extra assignments from one category cannot improve your grade category. For example, if a student only provides comments in 11 of the weeks then their maximum grade is an AB even if they submit more than 11 journal or discussion assignments.

\*Students who do not complete the final project will not be able to get higher than a C for the course regardless of their total points.

There are no exams in this course.

Required Text: None. Readings will be assigned based on course topic.

### **Weekly Topics – see the end of the syllabus for a complete weekly schedule**

#### **Assignments**

- Journal (due weekly on Monday at 11:59 pm central for the previous week, i.e. 11:59pm September 7 for the September 2 week topic)
- Discussion topics (due weekly on Monday at 11:59 pm central)
- Comments on discussion posts (due weekly on Monday at 11:59 pm central)
- Final project (due Sunday, August 8<sup>th</sup> at 11:59 pm central), additional details on the options below are available in Canvas in the final project assignment
  - Resume and cover letter
  - Graduate school statement of interest and CV
  - Mock interview
  - Informational interview
  - Career development or networking event

#### **Participation Expectations**

Course topics will be assigned on a weekly basis with the week going from Tuesday (8am) to Monday (11:59 pm) Central Time. Students are expected to complete all assignments by Monday at 11:59pm, Central Time. Assignments can include discussion board reflections, comments, journal writings, video posts, website, etc. All assignments are outlined in the syllabus and will include an assignment guideline, rubric, or additional explanation available in Canvas. Here is a suggested timeframe for organizing your course participation. It is strongly recommended that you do not try to complete everything for a week in a single sitting/day.

Supervisors of your internship will also be asked to provide confirmation that you completed the internship. This will not impact the final grade in the course.

## 5 Day Rhythm Schedule

Students' schedule in blue and instructors' schedule in white.

| <b>Tuesday</b>  | <b>Wednesday</b>  | <b>Thursday</b>   | <b>Friday</b>   | <b>Monday</b>   |
|---|---|---|---|---|
| <ul style="list-style-type: none"> <li>-Course materials become available at 8am, check the schedule to understand workload for the week</li> <li>-Check weekly announcement for additional details</li> </ul>  | <ul style="list-style-type: none"> <li>-Complete readings and watch relevant videos</li> <li>-Review assignments that need to be completed</li> </ul> | <ul style="list-style-type: none"> <li>-Make progress on final project</li> <li>-Begin exploration of outside resources (website, articles, etc.) that you will need to complete assignments</li> <li>-Post initial response to weekly discussion question</li> </ul> | <ul style="list-style-type: none"> <li>-Provide required insightful commentary on your peer's posts.</li> </ul> | <ul style="list-style-type: none"> <li>-Submit other, non-discussion board assignments</li> <li>-Submit weekly journal writing</li> <li>-Confirm you have submitted everything</li> </ul> |
| <ul style="list-style-type: none"> <li>-Confirm that all materials launched correctly</li> <li>-Send weekly launch email</li> <li>-Begin grading assignments submitted on Monday</li> <li>-Contact students who have not submitted assignments or requested an extension</li> </ul> | <ul style="list-style-type: none"> <li>-Continue grading</li> </ul>   | <ul style="list-style-type: none"> <li>-Complete grading on all assignments and provide feedback to students.</li> </ul>  | <ul style="list-style-type: none"> <li>-Moderate the discussion board, provide commentary as needed</li> </ul>  | <ul style="list-style-type: none"> <li>-Continue discussion board moderation</li> </ul>   |

## **Late Assignments**

There are no accepted late assignments except for extraordinary circumstances in which the student has reached out to the instructor to make arrangements. There are 13 modules with a journal, discussion, and comment due, only 12 need to be completed, along with the final project, to receive an A.

## **Grading Timeline**

Grading will be completed for the prior week's submitted assignment by 11:55 pm on Wednesday. If a situation arises where this is not possible, I will send a communication with an updated grading timeline. Any unsubmitted assignments, that did not have a request for a deadline extension, will be given a zero at this time and will be re-graded if submitted late using the late assignment policy above.

## **Academic Policies**

### **Academic Integrity**

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the

highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review.

### **Accommodations for Students with Disabilities**

McBurney Disability Resource Center syllabus statement: “The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.”

### **Diversity & Inclusion**

Institutional statement on diversity: “Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.”

### **Religious Observances**

UW faculty policy states that mandatory academic requirements should not be scheduled on days when religious observances may cause substantial numbers of students to be absent. Refer to the university's Academic Calendar (<https://secfac.wisc.edu/academic-calendar/>) for specific information.

## Weekly Schedule – each week starts on Tuesday

| Week    | Module Topic  | Course learning outcome | Journal Prompt^   | Discussion Prompt^   | Due Date            |
|---------|---|-------------------------|---|--|---------------------|
| June 15 | Module 0: Course Orientation<br><br>Module 1: Careers in Technology | 1, 3                    | What is your career goal? What are 3 concerns that you have? How does your internship help your future career goals? What are the 3 things you hope to most get from your internship?   | Find an article, not used for learning materials about careers in CS or DS. Post a link and discuss why you selected this article.   | June 21 at 11:59 pm |
| June 22 | Module 2: What kind of job suits you?                               | 1                       | What did you learn about your job preferences from the Work Importance Locator? How are your preferences reflected or not reflected in your internship?   | What are your top 2 Work Importance Locator categories? Do you agree with these? If so, why. If not, what other categories would suit you better?  | June 28 at 11:59 pm |
|         | Module 3: Graduate school   | 1, 2, 3                 | Do you see graduate school in your future? Why or why not? What type of program would interest you and how would this help your career goals? Has your internship changed your views on graduate school? If so how?   | Find a graduate program that seems interesting to you. Post and link and why this one is interesting. Include details like time to degree, costs, funding availability, etc.   | June 28 at 11:59 pm |
| June 29 | Module 4: Job sectors and types of industries                       | 1                       | What 3 sectors, domains, or types of industry would suit you best? What are some of the pros and cons for each? How can you take these in to account when conducting your job search. What domain is your current internship in? Does this domain suit you, why or why not? | Participate in the online survey to brainstorm job sectors, domains, or different industry types. Once the course coordinators post the types to the discussion board, you will need to add different possible employers to 3 of the types and a link to their job posting page. You cannot repeat content already posted. | July 5 at 11:59 pm  |
|         | Module 5: Skills: resume and cover letter                           | 2                       | Post the current cover letter and resume you used to get your internship. Based on the learning activities, critique your   | Based on the learning activities, what is one common cover letter or resume mistake? Why does this mistake   | July 5 at 11:59 pm  |

|         |  |   |  |  |                      |
|---------|--|---|--|--|----------------------|
|         |  |   | materials. Write a summary of how you could improve your materials for future use.   | happen? What would you recommend to someone who have this mistake?   |                      |
| July 6  | Module 6: Skills: interviewing, behavioral questions | 2 | Pick one of the provided behavioral questions and write out your answer to this question using the STAR method ideally based on an example from your internship. Why might an employer ask this question?  | Post a specific skill or trait that you would like to convey to an employer (like attention to detail). Why would this skill be of use to an employer? You cannot repeat content already posted. | July 12 at 11:59 pm  |
|         | Module 7: Skills: interviewing, technical questions  | 2 | Thinking about your internship write 5 questions (at least 4 technical) that you would want to ask someone else interviewing for this position. Why did you pick these questions?  | Find a resources that posts “common interview questions” (can be technical or behavioral). Post a link and critique the questions. Which are good and which are bad.                             | July 12 at 11:59 pm  |
| July 13 | Module 8: Social identity and workplace culture      | 1 | Reflect upon your experience in your internship, how does your social identity come in to play at work? How does this make you feel?   | Find an article that relates to workplace culture, climate, etc. as it relates to CS or DS. Post the link. What did you learn and why did you pick this article?                                 | July 19 at 11:59 pm  |
| July 20 | Module 9: Ethics                                     | 1 | Write out an ethical situation that you encountered in the past (in your internship, during school, etc.). Explain the situation and the ethical questions at hand. Did you take action or not? If so, what did you do? If not, what action could have been taken?                             | With your assigned partner, review your provided ethical situation. Together you should summarize the situation and answer all of the questions on the discussion board.                         | July 26 at 11:59 pm  |
| July 27 | Module 10: Skills: offers and negotiations           | 2 | Reading through the resources, what are some of the things that are non-negotiables for you and which areas might you be willing to give a little more in your first job search? How might this change over time? How has your internship helped you in knowing what your non-negotiables are? | Find a resource online that gives advice on how to negotiate. Post the link and critique the advice provided.  | August 2 at 11:59 pm |

|          |                                |         |  |   |  |
|----------|--------------------------------|---------|--|---|--|
|          | Module 11: Networking          | 1, 2, 3 | Please identify 2 people that you would like to network with (one should be from your internship organization). Who are these people? Why would connecting with them be useful? How might you go about making contact? | Reflect on your education or work experience. Who is someone who has served as a mentor for you? What did you gain from this relationship?  | August 2 at 11:59 pm                               |
| August 3 | Module 12: Guest presentations | 1, 2, 3 | What presentation did you watch? What did you learn from the presenter that directly relates to your goals? What questions would you have for the presenter if you had watched them live?                              | Summarize the presentation you watched for others that didn't attend that session. What were your main take away points?  | August 8 at 11:59 pm                               |
|          | Module 13: Wrap up             | 1, 2, 3 | How have your career goals changed since the beginning of your internship and this class? What are 3 next steps that you can take to further your career goals and interests after this class?                         | A friend of yours is graduating and didn't receive any career services help during their undergrad. What advice would you give them? Another friend is an entering freshman, what advice would you give them regarding career exploration as they navigate college? | August 8 at 11:59 pm – including the final project |

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