

Internship Learning Agreement Overview

Your learning agreement provides an important opportunity to create a meaningful plan for your internship. It will allow you and your site supervisor to create clear expectations so that ultimately you can maximize what you learn during your experience. Your learning agreement should be completed in partnership with your internship site supervisor so that you are both invested in the internship experience and the outcomes related to your internship.

The **Internship Position Information** describes your on-the-job tasks, responsibilities, and projects in the form of a job description. This helps you understand the expectations of your supervisor and the learning opportunities available. We also ask your supervisor to rate the relevance of the CLA Core Career Competencies to help you understand the importance and value of the competencies in the internship setting.

The **Internship Learning Goals** are intended to help you identify how you will use your internship experience to make connections to the concepts, theories, and practices of your major and your liberal arts education. There are 4 main elements to writing an effective learning goal:

1. **Your Learning Goals:** Articulate your purpose for doing the internship at your organization through specific learning goals. Each learning goal should address a minimum of one of the **Core Career Competencies**, which are transferable and desirable to many professions. You may also create learning goals based on the areas in which you want to focus your development during the internship:
 - Knowledge Development - understanding factual information associated with the profession, and application of discipline - specific theories or concepts
 - Professional/Personal Development - exploring a career interest or learning the values, attitudes, and rules of a desired profession to succeed in the field
 - Skill Development - demonstrating the specific skills associated with the profession or industry
2. **Action Steps:** What activities will you perform to reach your learning goals? Consider the following
 - Who will you consult with or shadow?
 - What resources (written, verbal, etc.) will you utilize?
 - What activities will you observe or take part in?
 - What steps can you take beyond your job description (reading related books or articles, interviewing professionals in the field, attending a board meeting)?
3. **Measurement of Learning Goals:** How will you objectively and tangibly measure your success? Ideas include:
 - Journals with observations, activities, reflections, or analysis connected to learning goals
 - Completion of **RATE** to demonstrate development of Core Career Competencies
 - Portfolio with examples of your projects or work
 - Mid-point or final evaluations, feedback from supervisor
 - Final presentation or reflective/analytical paper
4. **Rationale:** Explain why this learning goal is important to you.

To effectively use the *Internship Learning Agreement* form, follow these steps:

1. Prepare a rough draft to show your site supervisor.
2. Meet with your site supervisor to review each goal, the action steps, and how you'll measure your progress. Remember that you are creating something that you'll be using throughout your internship experience to evaluate your progress.
3. After meeting with your supervisor, update the form with any changes and add any additional detail to your goals, action steps, or methods.
4. Print out a copy of the completed form, sign it, and have your supervisor sign it. Keep a copy for yourself, and give a copy to your supervisor (and instructor, if you're earning academic credit).

Internship Learning Agreement

Internship Position Information:

To be completed by the student intern with approval from the site supervisor.

STUDENT INFORMATION:

Student Name: Jackson Balch Major: Statistical Science
Student Email: balch027@umn.edu Phone: 802-369-4335

SITE & SUPERVISOR INFORMATION:

Name of Site: Institute of Social Research and Data Innovation
Internship Site Address: 50 Willey Hall, 225 19th Avenue S, Minneapolis, MN 55455
Supervisor's Name & Title: Poornendu Attupurath Narayanan, Data Engineer
Supervisor's Email: anp@umn.edu Supervisor's Phone: Unknown

INTERNSHIP POSITION INFORMATION:

Internship Position Title: Data Engineer Intern
Start Date: 1/18/24 End Date: 4/29/24
Average number of hours anticipated at the internship site, per week: 20
(Total hours needed depends on the number of credits a student is registered for and course requirements.)
Is the internship paid (stipend or hourly) or unpaid? Paid (hourly)

DESCRIPTION OF INTERN'S DUTIES AND RESPONSIBILITIES:

(On a day-to-day basis, what is expected of the intern? What projects will be included in the intern's assignments, etc? Attach an additional page if necessary or a copy of the position description.)

RELEVANCE OF CLA CORE CAREER COMPETENCIES TO THE POSITION:

Select the top 3 Core Career Competencies relevant to this internship position overall:

- | | | |
|--|---|--|
| <input type="checkbox"/> Analytical & Critical Thinking | <input type="checkbox"/> Innovation & Creativity | <input type="checkbox"/> Active Citizenship & Community Engagement |
| <input type="checkbox"/> Applied Problem Solving | <input type="checkbox"/> Oral & Written Communication | <input type="checkbox"/> Digital Literacy |
| <input type="checkbox"/> Ethical Reasoning & Decision Making | <input type="checkbox"/> Engaging Diversity | <input type="checkbox"/> Career Management |
| | <input type="checkbox"/> Teamwork & Leadership | |

Internship Learning Agreement

Internship Learning Goals:

Describe four primary learning goals for this internship experience by completing all the prompts below for each goal. Please refer to the **Internship Learning Agreement Overview** for additional instructions on how to complete this portion.

Learning Goal #1:	Related Core Career Competencies (select all that apply)
Action Steps - What, when, where, and how will you accomplish your goal?	<input type="checkbox"/> Analytical & Critical Thinking <input type="checkbox"/> Applied Problem Solving <input type="checkbox"/> Ethical Reasoning & Decision Making <input type="checkbox"/> Innovation & Creativity
Measurement of Goal - How will you objectively measure your success?	<input type="checkbox"/> Oral & Written Communication <input type="checkbox"/> Teamwork & Leadership <input type="checkbox"/> Engaging Diversity
Rationale - Explain why this goal is important to you.	<input type="checkbox"/> Active Citizenship & Community Engagement <input type="checkbox"/> Digital Literacy <input type="checkbox"/> Career Management

Learning Goal #2:	Related Core Career Competencies (select all that apply)
Action Steps - What, when, where, and how will you accomplish your goal?	<input type="checkbox"/> Analytical & Critical Thinking <input type="checkbox"/> Applied Problem Solving <input type="checkbox"/> Ethical Reasoning & Decision Making <input type="checkbox"/> Innovation & Creativity
Measurement of Goal - How will you objectively measure your success?	<input type="checkbox"/> Oral & Written Communication <input type="checkbox"/> Teamwork & Leadership <input type="checkbox"/> Engaging Diversity
Rationale - Explain why this goal is important to you.	<input type="checkbox"/> Active Citizenship & Community Engagement <input type="checkbox"/> Digital Literacy <input type="checkbox"/> Career Management

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Learning Goal #3:	Related Core Career Competencies <i>(select all that apply)</i> <ul style="list-style-type: none"> <input type="checkbox"/> Analytical & Critical Thinking <input type="checkbox"/> Applied Problem Solving <input type="checkbox"/> Ethical Reasoning & Decision Making <input type="checkbox"/> Innovation & Creativity <input type="checkbox"/> Oral & Written Communication <input type="checkbox"/> Teamwork & Leadership <input type="checkbox"/> Engaging Diversity <input type="checkbox"/> Active Citizenship & Community Engagement <input type="checkbox"/> Digital Literacy <input type="checkbox"/> Career Management
Action Steps - What, when, where, and how will you accomplish your goal?	
Measurement of Goal - How will you objectively measure your success?	
Rationale - Explain why this goal is important to you.	

Learning Goal #4:	Related Core Career Competencies <i>(select all that apply)</i> <ul style="list-style-type: none"> <input type="checkbox"/> Analytical & Critical Thinking <input type="checkbox"/> Applied Problem Solving <input type="checkbox"/> Ethical Reasoning & Decision Making <input type="checkbox"/> Innovation & Creativity <input type="checkbox"/> Oral & Written Communication <input type="checkbox"/> Teamwork & Leadership <input type="checkbox"/> Engaging Diversity <input type="checkbox"/> Active Citizenship & Community Engagement <input type="checkbox"/> Digital Literacy <input type="checkbox"/> Career Management
Action Steps - What, when, where, and how will you accomplish your goal?	
Measurement of Goal - How will you objectively measure your success?	
Rationale - Explain why this goal is important to you.	

Stage of Approval:

☐ Initial draft - needs review by supervisor
 ☐ Final copy - supervisor has approved the above learning goals

Student Signature: _____ Date: 1/24/24

Site Supervisor Signature: _____ Date: _____

Internship Responsibilities

- Develop high-quality Python and Rust code to further enable ISRDI's mission of democratizing and disseminating data
- Continue work on metadata access and modification tools
- Resume and complete revamp and modernization of existing utility script library
- Possibly contribute to Linking project or Time-Series data project
- Leverage team members for code review and feedback
- Attend daily standup and share continuous progress with team members

Learning Goal #1: Continue to develop technical data engineering coding skills in Python to be able to use language in a high-level professional environment

Action skills:

What: Continue work on script-emporium-revamp project in Python utilizing skills with database interaction and file parsing.

When: Daily work on script-revamp project

Where: Ipums-cli-tools repository

How: Complete script-emporium-revamp project utilizing Python to build and deploy consistently used scripts and tools for research. Collaborate with Poornendu, Riley, Joe, and Nikita for feedback and help, leveraging them to help me learn and develop.

Measurement: There is not an obvious objective measure, but my goal is to complete revamp of at least seven scripts by the end of April, including test files for such scripts. This will include a file comparison tool, a file parser, and a database interaction script at the least.

Rationale:

This is a project where I'm working on my own to complete it. This will build self-sustainability in regards to my ability to work and write high-quality code, and will function as a massive project of professional development. I will not be able to share/continue on any of this library after the end of my internship, but the skills I learn during it will function to boost my technical skills and better prepare me for my career.

Learning Goal #2: Continue to develop organizational skills as well as project management skills on an individual project, not limited to pre-planning, timelining, and post-project planning.

Action skills:

What: Manage and roadmap the script-emporium-revamp project. This will include working to plan the ongoing project, its timelines, its deliverables, and what work will remain for improvement after the duration of my internship. This will result in a Trello board outlining requirements and an accompanying timeline.

When: Early February

Where: Ipums-cli-tools repository and Trello board

How: Roadmap planning further work on this project, leveraging Poornendu and Willy for feedback on project planning and ongoing management.

Measurement: Identify potential scripts, identify testing capabilities, and begin to understand my limits and timings. Learn my timings in deliverables. Build out a high quality roadmap document for future work on this project, as approved by Poornendu.

Rationale:

This will be an individual project where I will have to consult stakeholders and users to determine what goals need to be accomplished. This will build my project management skills, while also requiring me to be highly organized in planning because this project will likely be passed on to someone else after I leave.

Learning Goal #3: Build proficiency with Rust programming language to be able to use effectively in a professional context.

Action skills:

What: utilize Rust to develop Script-Emporium-Revamp scripts

When: Throughout the internship

Where: lpums-cli-tools repository

How: Build scripts using Rust or Pyo3 plugin to contribute to finishing Script-emporium-revamp project and through professional development days where I focus on language basics and theory. Use Colin and Riley as professional mentors in this skill, working alongside them to learn and develop my skills.

Measurement: Complete a script from scratch utilizing rust as the primary programming language

Rationale:

This will help further develop my technical skills and make me more desirable as a prospective hire, as I'll add extra languages and skills under my belt. It will also force me to step outside my comfort zone and build a new skill. It will also work on memory management, optimization, and parallel processing skills.

Learning Goal #4: Continue to develop communication skills (public speaking, code review, commenting, feedback requests)

Action skills:

What: Continue with development of communication skills. This will include publicly sharing with the team my progress on ongoing projects during standup, where I will work to concisely and effectively communicate what I have been working on and plan to work on in upcoming time. I will also work to comment on my code in a better manner, with more explanatory comments that allow for future team members to read and understand my thought processes.

When: Commenting and explaining code, being able to explain code and current work in standup, document completed tasks and upcoming work

Where: Throughout the spring semester

How: Through written code and comments explaining my thoughts in an organized fashion and through daily standup where I contribute progress reports on ongoing work.

Measurement: Approved by team (Kevin)

Rationale:

Communication is a critical skill, and explaining code is crucial in a team setting. This will develop an extremely important skill for me, and work to better prepare me for future work.