Project Submission Guidelines

Project 1 and Beyond

This Will Be Different than Before…

- You can and should work together, but **you will be graded independently.**

- Therefore, you need an **audit trail** of all that you do.

- Assignment submissions have a lot of steps, but if you have done everything correctly as you go, it should be straightforward to submit your work.

I Made an Example for You

https://github.com/airavata-courses/Spring17-Students/wiki/Sample-Wiki-Entry-for-Project-Submission

First, Create Your Own Class Blog

- Suggestion: Use GitHub Wiki or Pages and Jekyll
- Why GitHub Wiki or Pages?
  - You get a commit log for all your work.
  - It integrates with other GitHub tools
- Why Jekyll?
  - Markdown
- **Each project submission is an entry in your blog.**
- **You submit the URL to the post through Canvas.**

Have a better idea? Great, tell us about it!
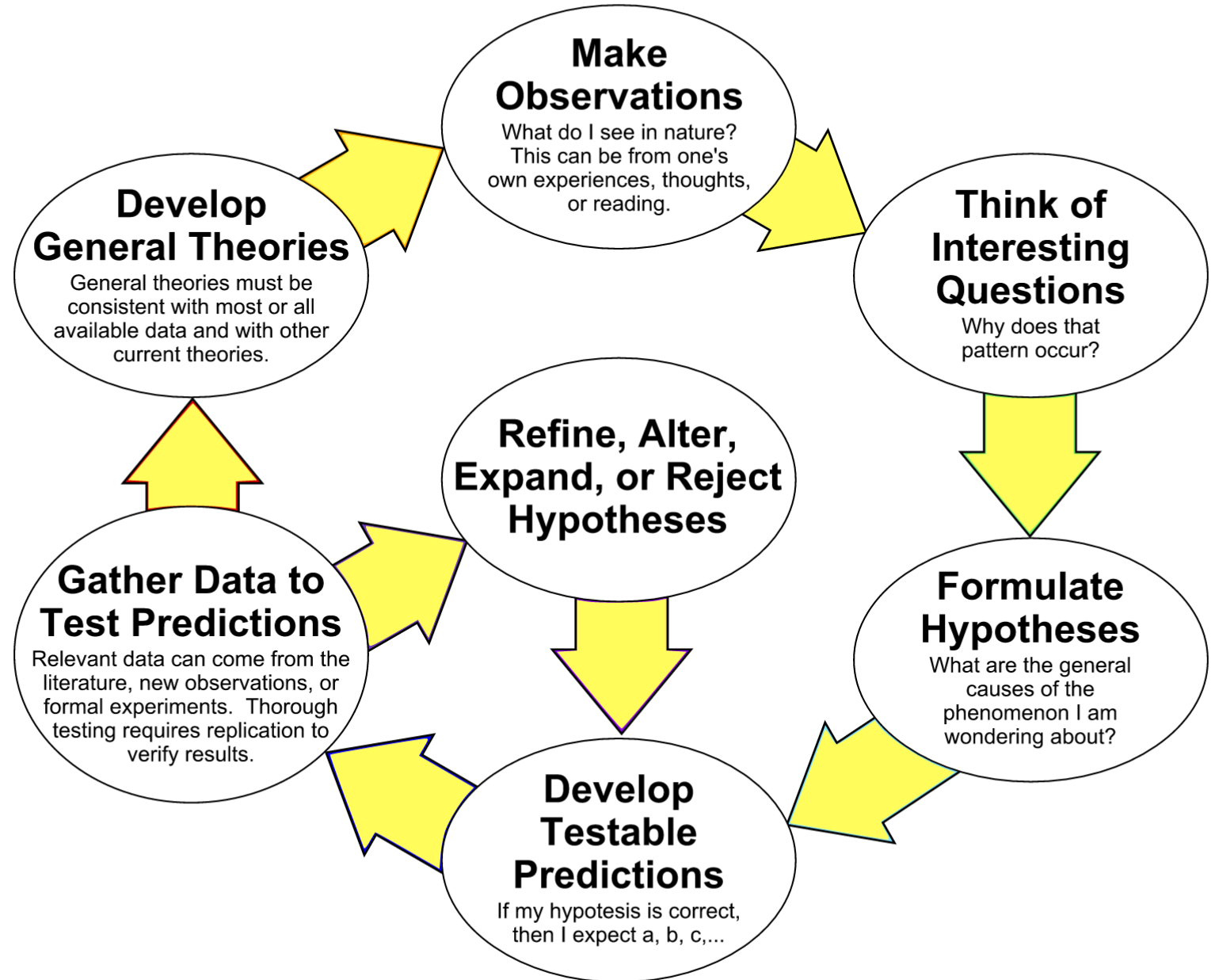
Here's What Your Blog Entry Should Contain

Remember: one blog entry per person per assignment

Blog Section 1: Your Report

- Section 1 is a report of what you did and your outcomes.
  - What was the problem you tried to solve?
  - How did you solve it?
  - How did you evaluate your solution?
- Why?
  - Describe your intellectual contributions to the project.
  - Describe how you formulated the project, your tests, your evaluations, your conclusions, etc.

The Scientific Method as an Ongoing Process

Why? Because Science, That's Why

Make Observations
What do I see in nature? This can be from one's own experiences, thoughts, or reading.

Think of Interesting Questions
Why does that pattern occur?

Formulate Hypotheses
What are the general causes of the phenomenon I am wondering about?

Develop Testable Predictions
If my hypotesis is correct, then I expect a, b, c,...

Gather Data to Test Predictions
Relevant data can come from the literature, new observations, or formal experiments. Thorough testing requires replication to verify results.

Refine, Alter, Expand, or Reject Hypotheses

Develop General Theories
General theories must be consistent with most or all available data and with other current theories.

Blog Section 2: Point to a Wiki Entry for Your Code Submission

- Section 2 contains a pointer to project repository wikis.
- Use the Wiki for the project repository or repositories that you worked on.
  - https://github.com/airavata-courses/spring17-API-Server
  - https://github.com/airavata-courses/spring17-devops
  - https://github.com/airavata-courses/spring17-laravel-portal
- This wiki entry may have multiple authors.
- The wiki describes how the instructors can check out and test your code.

Blog Section 3: Your Git Commits

- This section has pointers to your commit activity for this particular project?
- Why? Demonstrate to the instructors that you did concrete technical work on the project.

Blog Section 4: Discussions on the Developer List

- URLs pointing to your discussions of your work on the Apache Airavata developer's mailing list. This would be under http://mail-archives.apache.org/mod_mbox/airavata-dev/.

- Do this early and often.

- Dev discussions help you refine your ideas.

- Good ideas graduate to Jiras and pull requests.

Blog Section 5: Airavata Jiras Created

- URLs pointing to any Apache Airavata Jiras that you created or commented on. See https://issues.apache.org/jira/browse/airavata/?selectedTab=com.atlassian.jira.jira-projects-plugin:issues-panel

- Really good projects will result in Jiras.
  - Jira entries are actionable.

- Don't create Jiras until encouraged to do this on the developer list
  - "You are on to something"

- Not every submission will have this section.

Blog Section 6: Airavata Pull Requests

- URLs pointing to any pull requests that you made to Apache Airavata's Git repo.

- Not every project submission will have this section.

- But really successful submissions will.
  - This may span multiple assignments.

- If you have a pull request, you have been "invited" to submit a solution to the Airavata code base.

- Associate pull requests with Jira entries.