CS155 - Introduction to Version Control •

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Classroom: Online - Asynchronous
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Office hours: On Canvas

Semester: Fall/Spring

CATALOG DESCRIPTION: Introduction to the central ideas, practices, and day-to-day usage of software version control using Git. Basic client-side usage such as committing, branching, merging, and pull requests will be explored. COREQ: CS153.

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1 Course Learning Outcomes

This course is designed to help you achieve the following learning outcomes:

- 1. Explain the basics of version control
 - (a) Practice adding commits
 - (b) Practice pushing and pulling code
 - (c) Explain how Git works on the client side
- 2. Explore the tooling needed to work with Git
 - (a) Use Codespaces to develop code in the cloud

- (b) Explain the basics of GitHub
- (c) Setup and explore GitHub Copilot
- (d) Create a GitHub Page
- 3. Explain the basics of branching/merging
 - (a) Practice merging code
 - (b) Practice resolving merge conflicts
 - (c) Practice creating branches
 - (d) Practice creating pull requests

2 Course Materials

All course materials are FREELY available online.¹

• Pro Git - https://git-scm.com/book/en/v2

3 Assessments

You will be assessed on your understanding of the course material with the following assessments. Each assessment category is weighted as follows:

Labs 20%

Labs are designed to give you practical experience with the tools and concepts we are learning in class. Each lab is structured as a series of tasks that you will need to complete in order to demonstrate your understanding of the material. Labs are configured with GitHub Actions and will give you immediate feedback on your progress. Labs are graded pass/fail.

Reading Quizzes 20%

Each week you will be assigned a reading from the textbook. Reading quizzes are designed to help you gauge your understanding of the material. Quizzes are graded through Canvas and will give you immediate feedback on your progress.

Retrospectives 20%

Retrospectives serve two purposes, they allow you to reflect on your learning and identify areas for improvement while also connecting to your fellow students. Retrospectives are required to be in the form of a video and will be graded pass/fail. If you don't have a camera, you must contact the instructor to make alternative arrangements.

Final Exam 40%

The final exam will be a comprehensive multiple choice exam that covers all the material in the course. The final exam will be proctored through Canvas and will be open book and open notes.

¹ You do not need to purchase any textbooks or materials for this course. Git and GitHub are free to use for students. If at anytime you are asked to pay for a service please contact your instructor.

Extra Credit 2.5%

Keep an eye out for any typos or errors in the course materials. At the end of the semester, you can submit a list of any errors you found for extra credit. You must submit your list of errors to CANVAS to receive credit, do not email your list to the instructor.

4 Course Schedule

The course schedule is subject to change due to unforeseen circumstances. Any changes will be communicated through Canvas.

Week 1 - Git Introduction

- M1.1 Class Introduction (Wed)
- M1.2 Syllabus Quiz (Wed)
- M1.3 Reading Quiz (Thur)
- M1.4 Version Control Overview (Thur)
- M1.5 Introduction to GitHub (Fri)
- M1.6 GitHub Student Developer Pack (Fri)

Week 2 - Git Basics

- M2.1 Reading Quiz (Wed)
- M2.2 Connect the Dots (Thur)
- M2.3 Code with GitHub Codespaces and Visual Studio Code (Thur)
- M2.4 Code with GitHub Copilot (Fri)
- M2.5 Retrospective (Fri)

Week 3 - Branching and Merging

- M3.1 Reading Quiz (Wed)
- M3.2 Review Pull Requests (Thur)
- M3.3 Create a release based workflow (Thur)
- M3.4 Retrospective (Fri)

Week 4 - GitHub A Deeper look

- M4.1 Reading Quiz (Wed)
- M4.2 Communicate Using Markdown (Thur)
- M4.3 Create a GitHub Page (Thur)
- M4.4 Retrospective (Fri)

$\mathbf{Week}\ \mathbf{5}$ - Final Exam

- M5.1 Final Exam (Fri)
- M5.2 End of Semester Evals (Fri)
- M5.3 Extra Credit (Fri)

5 Course Policies

5.1 Academic Integrity

Academic Excellence is a Shared Value at Boise State, and part of your responsibility in pursuing academic excellence includes avoiding cheating, plagiarism, and any other kind of academic misconduct. If I find a student responsible for academic misconduct in our class, the outcome of their choice to not fully engage in their learning might range from a "revise and resubmit" up to an F (failure) for the course.²

5.2 Artificial Intelligence (AI)

Pandora's box, has been opened and AI is here to stay. You are free to use AI tools to help you learn the material or do your homework if you wish.³ However, you must cite your usage of AI tools in your work. It is plagiarism to claim work that was generated by AI tools as your own, and you will be written up for academic misconduct if you do so.

5.3 Late Work Policy

Due dates for every assignment are provided on Canvas. Unless otherwise stated, assignments are due on those days and no submissions will be accepted past the dates posted on canvas. Exceptions to the late policy will be evaluated on a case by case basis.⁴

5.4 Grading Policy

Final letter grades will be posted in canvas and calculated with the percentages specified below. Final grades will **not be rounded**.

- **A** 94% < 100%
- **A-** 90% < 94%
- $\mathbf{B} + 87\% < 90\%$
- ${f B} = 84\% < 87\%$
- **B-** 80% < 84%
- C+77% < 80%
- C 74% < 77%
- **C-** 70% < 74%
- D+67% < 70%
- **D** 64% < 67%
- **D-** 60% < 64%
- ${f F} = 0 < 60\%$

- For more info, please read The Student Code of Conduct (Policy 2020), Section 7: Academic Misconduct Complaints, Violations, Processes and Sanctions.
- ³ I encourage you to be careful with your AI usage. It is easy to become dependent on it and lose the ability to think critically about the material you are learning. Remember, the goal is to learn the material, not just get a good grade. Make sure you take the time to understand the material before accepting the AI's answer.
- ⁴ The secret code for the syllabus quiz is "green".

5.5 Attendance Policy

I follow the official attendance policy as defined by the university. For in person sections students are expected to attend class. For online sections students are expected to regularly log onto Canvas and participate in the course.

5.6 Extra Credit

Any extra credit given over the semester can not exceed 2.5% of the final grade. So if you have a 90% in the class, and you do all the extra credit your grade will be a 92.5% in the class. Extra credit assignments will be posted on Canvas and will be due at the end of the semester.

5.7 Communication

BroncoMail is the official communication channel through which all university business is conducted. It is expected that you access and read university communications two or three times per week. For more information see the University Policy on Student Email Communications (Policy 2280).⁵

Your instructor will make every effort to return emails within 24hrs Monday through Friday between the hours of 9:00am and 5:00pm (MST). Emails sent on Saturday, Sunday, or outside the defined hours will be returned within 24hrs on the following business day. Emails should be reserved for questions that are not appropriate for a public forum such as grades or other personal issues.

6 University Policies

All students are required to be familiar with the policies posted below. Please review all linked policies below. Violations of university policies can result in the student receiving a failing grade (F) in the course.

- Student Code of Conduct
- Academic Integrity
- Privacy policy
- Incomplete Policy

6.1 Student Support

Boise State cares about you! You can find many kinds of help, including technical, academic, financial, life needs, learning accommodations, data privacy agreements, and much more. These resources have been gathered into one convenient document for you to keep on hand. Almost all the student services on campus are also available to online students.

• Educational access center

⁵ Your instructor will not respond to any emails sent from personal accounts such as Gmail or Yahoo. So please make sure you are not getting a response from your instructor please ensure you are sending emails from your BroncoMail account. As an alternative you can use the Canvas Inbox.

- Support resources
- Academic support services
- Accessing University Support Services