

Final Project: Deliverables

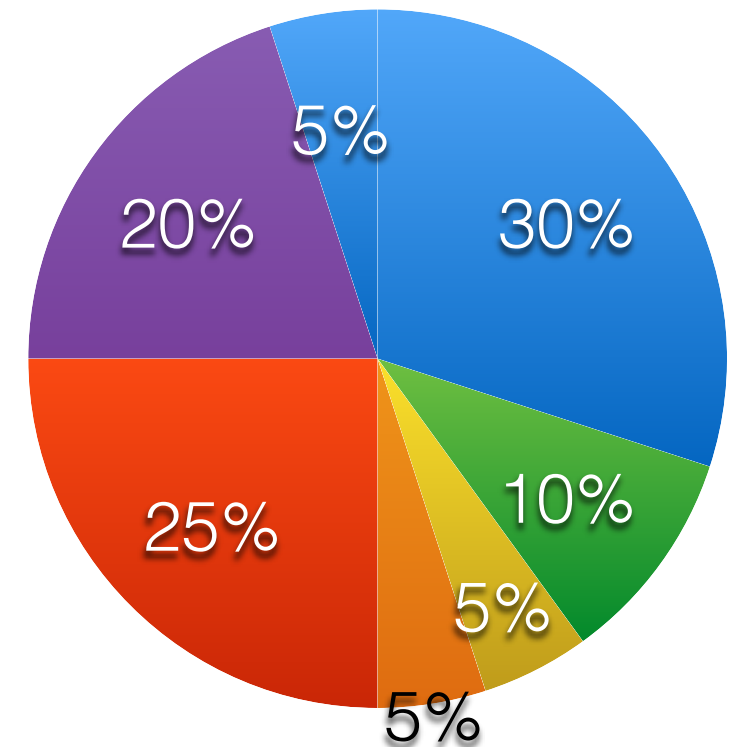
PHY432 Computational Methods in Physics (2024)

Requirements

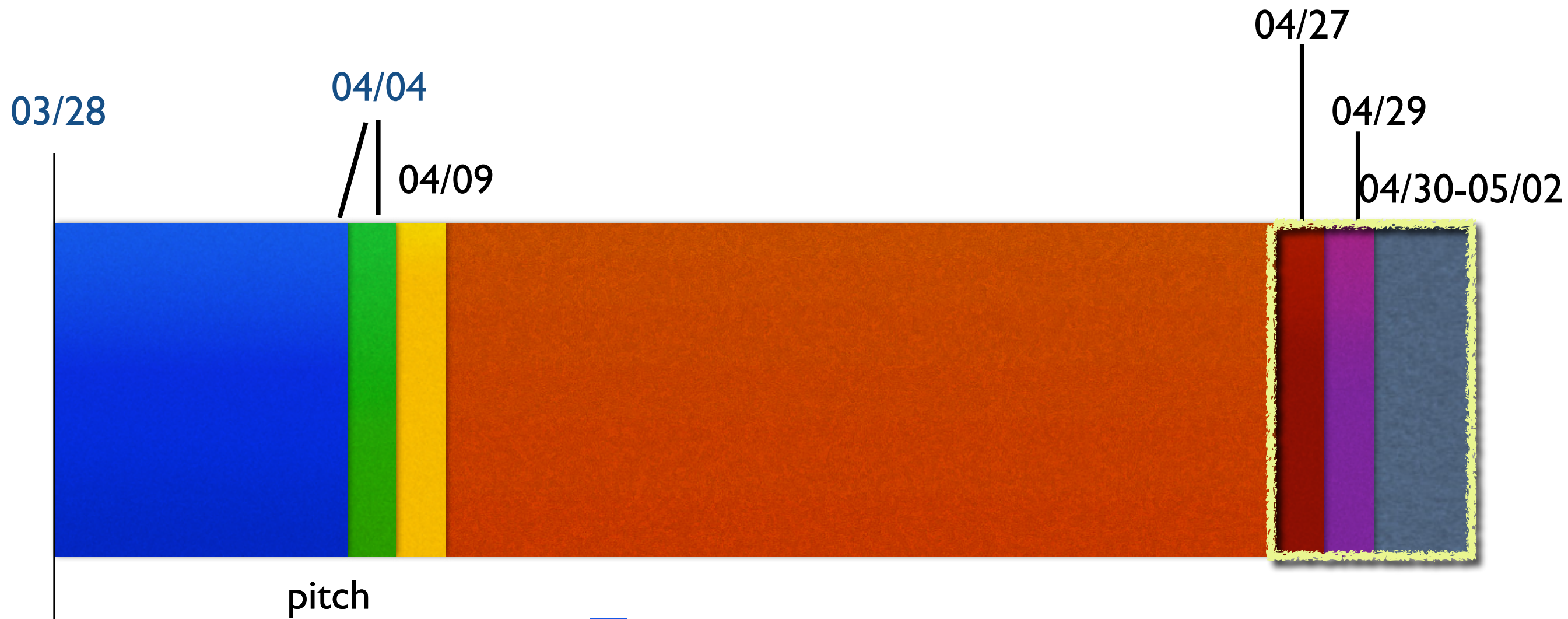
- team (2 or 3 students)
- GitHub repository
- keep “lab notebook” on wiki page
- final video presentation
 - abstract as PDF
 - description of contributions (PDF)
 - video (slides + narration): mp4
 - individual Q&A (Zoom)

Grading

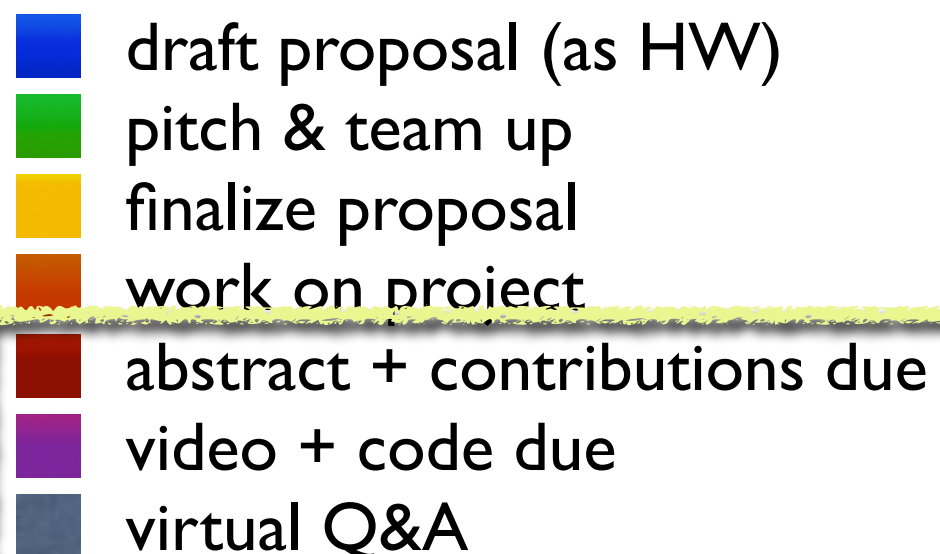
- individual proposal (HW) (5%)
- code, achieves objectives (30%)
- teamwork (contributions, commits, evidence of communication) (10%)
- keep “lab notebook” on wiki page (5%)
- final video **presentation**
 - abstract (5%)
 - video (25%)
 - individual Q&A (20%)



Deliverables



- abstract
- video/slides
- Q&A
- code



Deliverables

1. submit abstract
2. create video presentation (slides, code demo)
3. Virtual Final Symposium (videos will be shared with all groups)
4. individual Q&A via Zoom

Abstract

- 1 abstract per team
- include title, authors, text
- maximum 200 words
- use the template in docs/
`abstract_TEMPLATE.txt` and git mv it to
`abstract/abstract.txt`
- due **4/27/2024** 11:59pm (submit through repo)

Abstract

- What was the **problem to be solved**? Background and **why is it interesting**? What are the major hurdles? What was **your goal**?
- **How** did you approach the problem, what **methods** did you use (keep high level, don't list code or function names)?
- **What** are the **results** and what do they **mean**? Was the goal achieved?
- Conclusions/future work (1 sentence)

Abstract

- How to get the code?
 - “Code is available at <GitHub URL>”
- Optional: License your code (see <http://choosealicense.com/>):
 - “under the <LICENSE>.”

Contributions

- summarize individual team members' contributions in file `abstract/CONTRIBUTIONS.txt`
- edit the `abstract/CONTRIBUTIONS.txt` file that's already in the repo
- submit with your code

Presentation

- create **slides** as if you were to give a talk
- **record** a presentation
 - use **Zoom** + record locally (screen share desktop, start presentation & record)
 - or e.g., **ScreenPal** <https://screenpal.com/> (free version can record, 30-day trial also has a video editor)
- create video in **mp4** format
- **share with me** via Google Drive or Dropbox (I need the file, not a YouTube video link)

Presentation

- maximum 12 minutes length
- minimum 9 minutes
- all team members should contribute
 - making slides
 - narrating (I want to hear the voice of each team member)
- I like seeing your faces but *adding face video is optional.*

Presentation:

Required Slides

- **title slide** with
 - names of authors
 - name of team
 - repository url
- **acknowledgement** slide at the end for any help (except me or TA) – *if* you had outside help

Presentation:

Recommended Structure

1. **Title** (required)
2. **Background (WHY?)**: problem, equations to be solved, motivation
3. **Methods (HOW?)**: algorithms, parameters, code snippets, flow diagrams, object diagrams, libraries used, ...
4. **Results (WHAT?)**: focus on graphs, images, tables, movies: show data (only little text to annotate data)

Presentation:

Recommended Structure

- 5. Conclusions:** Summarize the work, what is the take home message? Did you fulfill your objectives?
- 6. (Acknowledgements)** – see requirements

Individual Q&A

- Zoom meeting with team
- individual discussion with each team member
 - max. 10 minutes
 - questions about presentation and project
- To be scheduled for *finals week*
- link for sign-up Google Sheet on Canvas