



BGGN 213

Course Summary & GitHub Portfolio

Class 20

Barry Grant

UC San Diego

<http://thegrantlab.org/bggn213>

Today's Menu

- Summary of major learning goals,
- Course discussion and feedback (https://board.net/p/bggn213_w23)
- Course evaluation (**official**)
- Final exam
 - ➔ Test structure, guidelines and rules
 - ➔ Topics and example questions
 - ➔ Exam preparation, discussion and open study
- Polish our GitHub content and publish your own website portfolios

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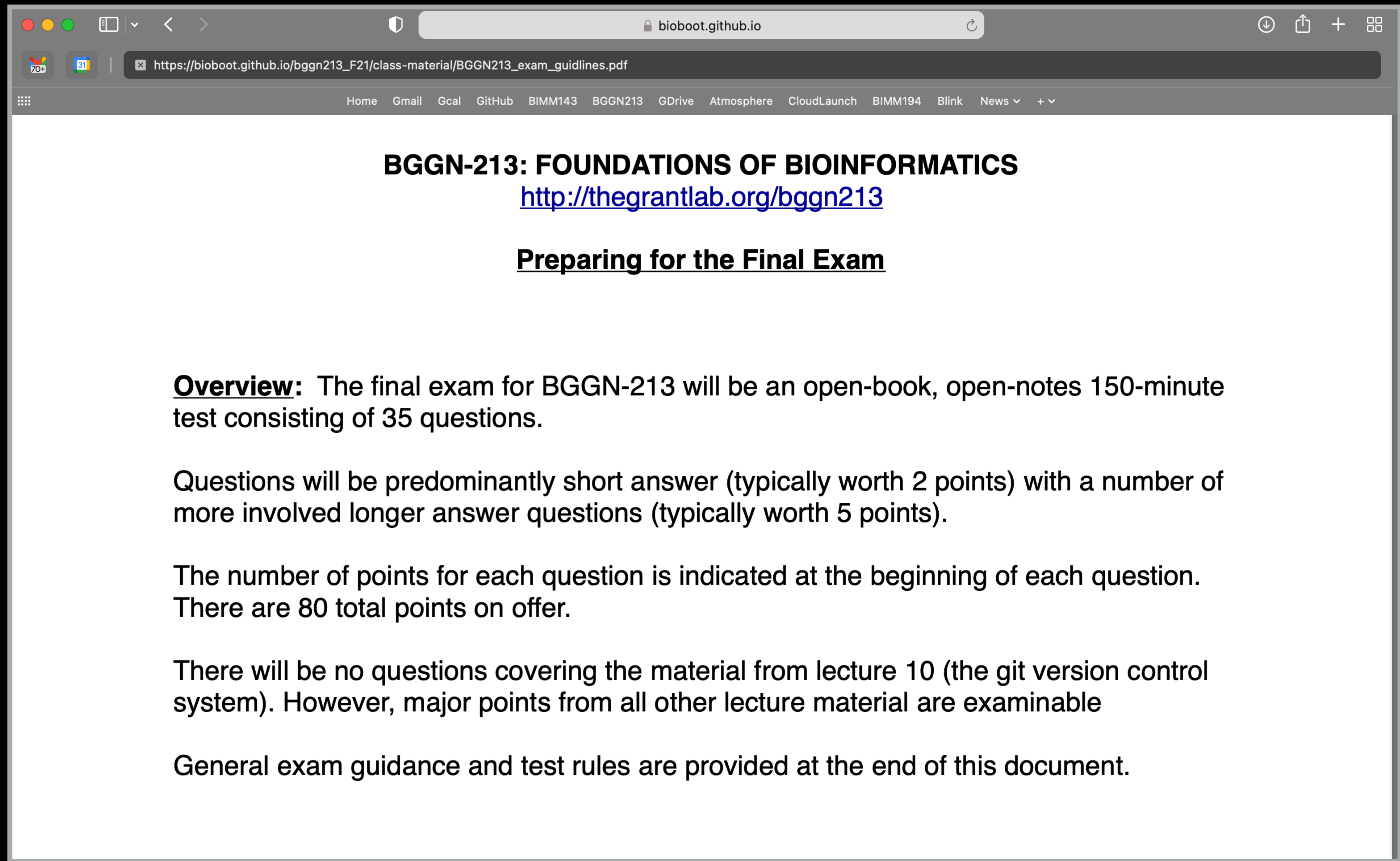


Today's Menu

- Summary of major learning goals,
- Course discussion and feedback (https://board.net/p/bggn213_w23)
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- Project troubleshooting
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https://bioboot.github.io/bggn213_F22/class-material/BGGN213_exam_guidelines.pdf



BGGN-213: FOUNDATIONS OF BIOINFORMATICS

<http://thegrantlab.org/bggn213>

Preparing for the Final Exam

Overview: The final exam for BGGN-213 will be an open-book, open-notes 150-minute test consisting of 35 questions.

Questions will be predominantly short answer (typically worth 2 points) with a number of more involved longer answer questions (typically worth 5 points).

The number of points for each question is indicated at the beginning of each question. There are 80 total points on offer.

There will be no questions covering the material from lecture 10 (the git version control system). However, major points from all other lecture material are examinable

General exam guidance and test rules are provided at the end of this document.

- Q1.** Did you enjoy this course? (Rank in relation to others you have experienced at UCSD)?
- Q2.** Should this course be offered again?
- Q3.** If so what changes would you recommend for this course? (e.g. more/less DataCamp & Projects)
- Q4.** Was the course effectively organized (lecture and lab material online vs handout or TritonEd site)?
- Q5.** What advice would you give to another student who is considering taking this course?
- Q6.** Considering both the limitations and possibilities of the subject matter and the course, how would you rate the overall effectiveness of this course and instructor?
- Q7.** Do you agree or disagree - The course developed my abilities and skills for the subject?
- Q8.** On average, how many hours per week have you spent on this course, including attending classes, doing homework's and assignments?
- Q9.** Any other comments you would like to share?

EtherPad Version: https://board.net/p/bgggn213_w23

Form Version: <https://tinyurl.com/bgggn213-summary>

Thank you very much!

Announcement!

Bonus:

Bioinformatics & Genomics in Industry

Live Stream Video

Enjoy a set of short open ended guest lectures from leading genomic scientists at **Illumina Inc.**, **Synthetic Genomics Inc.**, and the **La Jolla Institute for Allergy and Immunology**. Feel free to contact these scientists for networking and to have your questions about industry careers in Bioinformatics and Genomics answered.

Bonus:


GitHub Spit & Polish

bioboot.github.io/bimm143-1/

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bioboot/bimm143_serina_f18: Serina's Fall 2018 class repository fork Serina's BIMM 143 Class Repository | Serina's Bioinformatics Class (BIMM143,... Bioinformatics Class BIMM-143 | Introduction to Bioinformatics (BIMM143)

Introduction to Bioinformatics



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This project is maintained by [bioboot](#)

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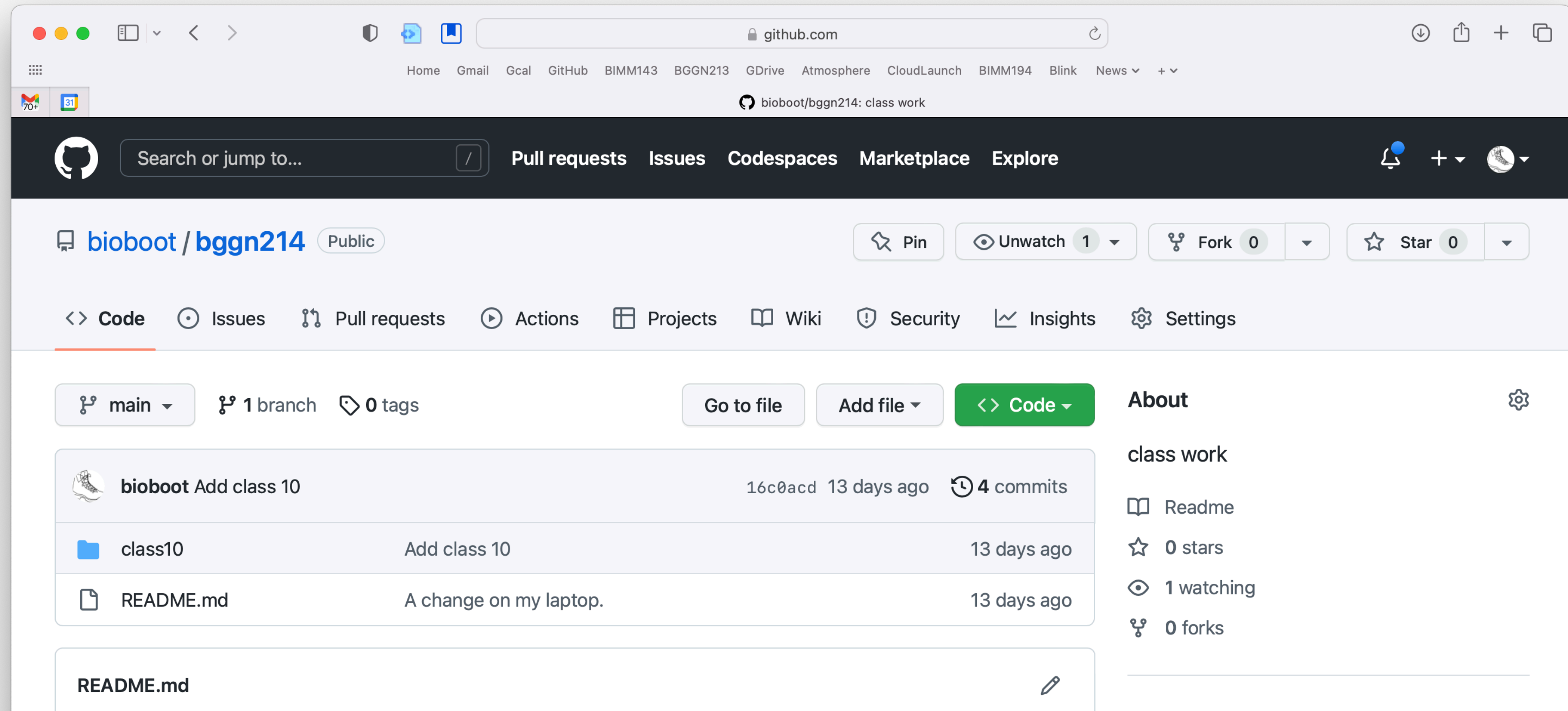
Class 14 - [Transcriptomics and RNA-Seq Analysis](#)

In your web browser navigate to your GitHub class repository < <https://github.com/> >

Side-note:

To find the link to your GitHub repository from RStudio, open one of your past class projects and in the terminal type:

```
git remote -v
```



Or for a given GitHub tracked file click **GIT** icon and **"VIEW on GITHUB"**

The screenshot shows the RStudio interface with a file named "lecture18part2example.Rmd" open. The Git icon in the top toolbar is highlighted with a red box. A context menu is open over the file, with the "View 'lecture18part2example.Rmd' on GitHub" option highlighted by a red box. A red arrow points from the text "VIEW on GITHUB" in the top instruction to this menu option. The background shows R Markdown code and a console window displaying sequence alignment output.

```
70  ````{r}
71  ## Output a FASTA file for further analysis
72  write.fasta(seqs=store.seqs, ids=store.names, file="aln.fa")
73  ````
74
75
76
77  ## Sidenote: Input sequence setup
78
79  For reference only, here we use the UniProt KRas oncogene sequence
  (http://www.uniprot.org/uniprot/P01116) as an example input and make 4
  sub-sequences of length 14, 15, 16, and 17.

53:1  Chunk 6  R Markdown
```

```
~/Desktop/courses/bgg213_W19/bgg213_github/class18/
R213V "Y" "L" "D" "D" "R" "N" "T" "F" "V" "H" "S" "V" "V"
D259V "I" "L" "T" "I" "I" "T" "L" "E" "V" "_" "_" "_" "_"
      [,14] [,15] [,16] [,17]
D41L  "S" "P" "D" "D"
R65W  "A" "P" "P" "V"
R213V "V" "P" "Y" "E"
D259V "_" "_" "_" "_"
>
```

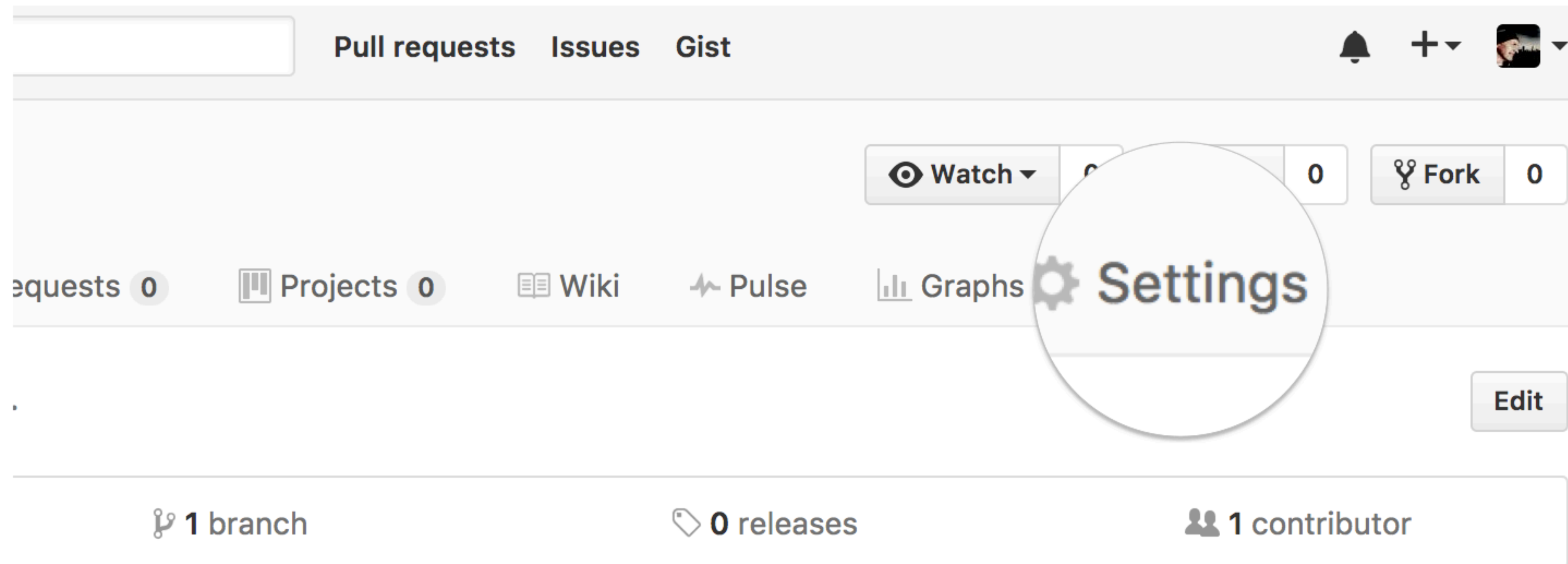
Files: class18.Rproj, aln.fa, lecture18_part2_exa..., subsequences.fa, kras-sequences.fa, lecture18_part2_exa..., seqs.fasta

1

Repository Settings

Head over to your **GitHub** class repository (where you are “pushing” all your class work)

Click on the **Settings** tab.



Theme chooser

Scroll down to the **GitHub Pages** section. ~~Press **Choose a theme.**~~
And set the **Source** to "main branch"

General

GitHub Pages

Access

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Collaborators

Moderation options

Code and automation

Branches

Tags

Actions

Webhooks

Environments

Codespaces

Pages

Security

Build and deployment

Source

Deploy from a branch

Branch

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. [Learn more.](#)

main / (root) Save

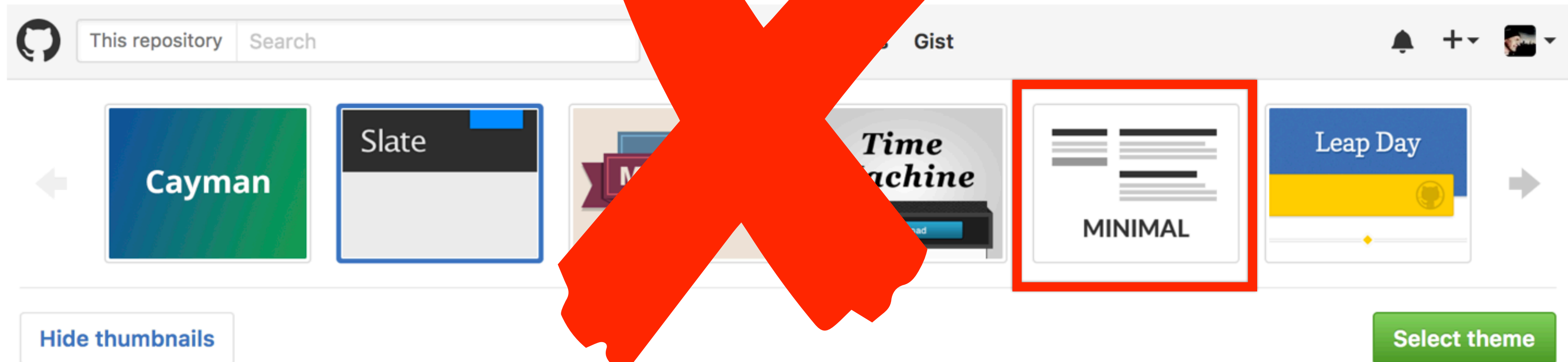
Publish privately to people with read access to this repository

Try risk-free for 30 days using a GitHub Enterprise organization, or [learn more about changing the visibility of your GitHub Pages site.](#)

Pick a theme

Choose one of the themes from the carousel at the top.

When you're done, click **Select theme** on the right.



The screenshot shows the GitHub theme selection interface. At the top, there is a search bar with the text "This repository" and "Search". Below the search bar, there is a carousel of theme cards. The cards are: "Cayman" (blue and green), "Slate" (dark blue and grey), "Time Machine" (grey and black), "MINIMAL" (white and grey), and "Leap Day" (blue and yellow). The "MINIMAL" theme card is highlighted with a red border. A large red "X" is drawn over the "MINIMAL" theme card. Below the carousel, there is a "Hide thumbnails" button on the left and a "Select theme" button on the right.

Slate theme

Slate is a theme for GitHub Pages.

[View on GitHub](#)



Side-note:

Scroll down again to the **GitHub Pages** section to find the link to your new website.
Open this link in a **New Tab** of your browser:

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is ready to be published at https://bioboot.github.io/bimm143_serina_f18/.

Source

Your GitHub Pages site is currently being built from the master branch. [Learn more.](#)

master branch ▾

Save

Theme Chooser

Select a theme to publish your site with a Jekyll theme. [Learn more.](#)

Your site is currently using the Minimal theme.

Change theme

Edit content

Back on the repository main page use the [GitHub](#) online editor to add content.
In particular, add links to each classes .MD file

The screenshot shows the GitHub repository editor interface for the file `README.md` in the repository `jldec / new-pages-site`. The repository has 0 Watchers, 0 Stars, and 0 Forks. The editor is currently in the "Edit file" mode, with a "Preview changes" tab also visible. The code in the editor is as follows:

```
1 ## Welcome to GitHub Pages
2
3 You can use the [editor on GitHub](https://github.com/jldec/new-pages-site/edit/master/README.md) to maintain and preview the content
  for your website in Markdown files.
4
5 Whenever you commit to this repository, GitHub Pages will run [Jekyll](https://jekyllrb.com/) to rebuild the pages in your site, from
  the content in your Markdown files.
6
7 ### Markdown
8
9 Markdown is a lightweight and easy-to-use syntax for styling your writing. It includes conventions for
10
11 ```markdown
12 Syntax highlighted code block
13
14 # Header 1
```

Commit

Enter a commit comment and click on **Commit changes** below the editor.

```
35   ### Support or Contact
```

```
36
```

```
37   Having trouble with Pages? Check out our \[documentation\]\(https://help.github.com/categories/gi  
38    \(https://github.com/contact\) and we'll help you sort it out.
```

```
38
```



Commit changes

Add content to new pages site|

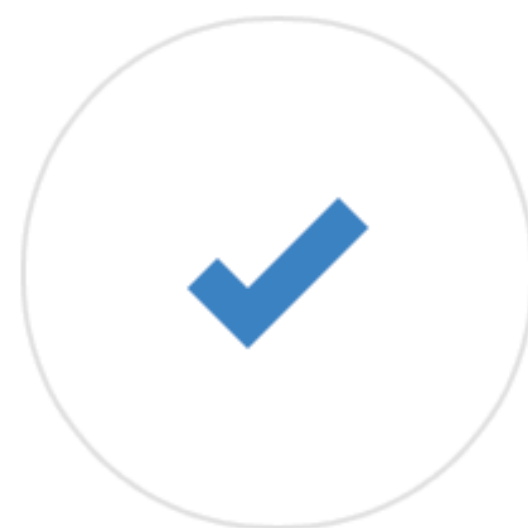
Add an optional extended description...

Commit directly to the `master` branch.

6

...and you're done!

Fire up a browser and go to **<http://username.github.io/repository>**.




bioboot.github.io/bimm143-1/

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Here I: **(1)** forked Serina's Repo, **(2)** Chose the "minimal" theme, **(3)** Edited `_config.yml` (adding logo and title)

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bioboot / bimm143_serina_f18

forked from serinahuang/bimm143

Unwatch 1

Star 0

Fork 1

Code

Pull requests 0

Projects 0

Wiki

Insights

Settings

Branch: master

bimm143_serina_f18 / _config.yml

Find file

Copy path

bioboot Update _config.yml

3b72493 just now

1 contributor

4 lines (3 sloc) | 151 Bytes

Raw

Blame

History



```
1 theme: jekyll-theme-minimal
2 logo: https://bioboot.github.io/bimm143_F18/assets/img/logo.png
3 title: Serina's Bioinformatics Class (BIMM143, Fall 2018)
```


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bioboot / tmp_test

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

tmp_test / README.md or cancel

Edit file Preview changes Spaces 2 Soft wrap

```
1 # BIMM143 Classwork
2
3 This is a store of my class-work for [BIMM143 Winter 2019](https://bioboot.github.io/bimm143_W19/) at UC San Diego.
4
5 ## Content
6 - Class05: [R fundamentals](https://github.com/bioboot/tmp_test/blob/master/class05/class05.md)
7 - Class06: [R graphics]()
8 - Class07: R Functions
9 - Class08: R packages from CRAN, Bioconductor and GitHub
10 - Class09: Introduction to machine learning
11 - Class10: Some thing else
12 - Class11: (Structural Bioinformatics)(https://github.com/bioboot/tmp_test/blob/master/class11/class11.md)
13 - Class12: etc. etc.
14
```


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Thank you very much!

Please do fill out your CAPs evaluation ([Link!](#)) if you get a change.
It is important to the courses we offer in the future and how we teach them!

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Post to GradeScope your [GitHub Pages](#) portfolio [URL](#) to GradeScope!

Going Further With DataCamp

https://bioboot.github.io/bimm143_F19/class-material/datacamp_extras.pdf

The screenshot shows a web browser window with the URL www.datacamp.com/tracks/custom-bioinformatics-extension. The page features a dark blue header with a search bar, navigation links (Learn, Practice, Projects, Pricing, My Classes), and a user profile with 3,050 XP. The main content area is titled 'CUSTOM TRACK Bioinformatics Extension' and includes a description: 'Barry's suggested DataCamp courses for delving deeper into R, Git, the Shell, data visualization, and Bioinformatics data analysis generally. Please do reach out if you encounter problems. Happy DataCamping!' and an 'Enroll' button. A graphic of a DNA double helix with binary code is also present. At the bottom, a progress bar shows 'R Language | Shell | Git | Spreadsheets | 111 hours | 26 Courses'.

Enroll

R Language | Shell | Git | Spreadsheets | 111 hours | 26 Courses



Introduction to Shell for Data Science

The Unix command line helps users combine existing programs in new ways, automate repetitive tasks, and run programs ...

INSTRUCTORS



Greg Wilson
Co-founder of Software Carpentry



Jonathan Cornelissen

Announcement!

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