

Reviews in Computational Biology

1. Introduction



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Today

Course introduction

Review writing

About me

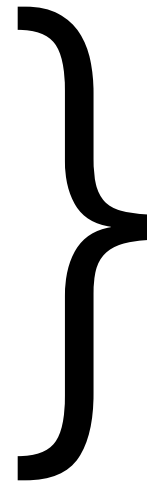
- Diploma in Biology
- PhD in Computer Science
- Now: Senior Postdoc in group of Prof. Gonnet
- Relevant experience:
 - ~20 research articles
 - ~35 peer-reviews for 10 journals
 - 8 funding proposals
 - Guest editor of *Briefings in Bioinformatics*

Course in a Nutshell

Assimilate

Write

Evaluate



Reviews

Why assimilate?

- Discover and learn new topics
- Identify relevant research questions
- Build upon existing work

Why write?

- Introduce proposals, research plans, theses, papers...
- Improve your writing skills
- Think/understand through writing

Why peer-review?

- Be a good citizen
- Stay at forefront of research
- Sharpen your critical thinking skills
- Impress the editor

Learning Outcomes

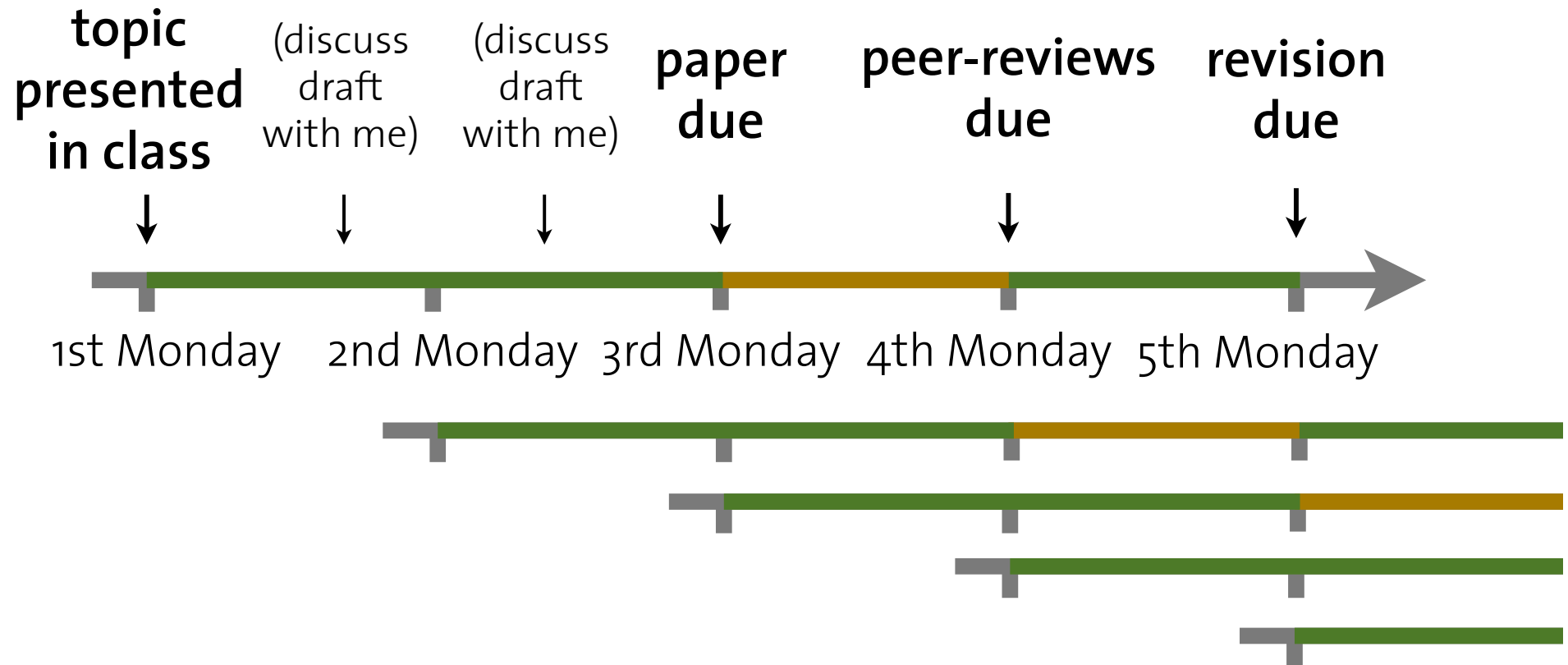
- Recognize current computational biology topics
- Identify relevant papers from citations and DBs
- Organize and summarize relevant work in a clear, coherent, succinct review
- Provide critical and constructive peer-reviews
- Improve your work from peer-reviews

Organization

- **Lecture on Mondays (10-12)**
 - 75% literature review on a special topic
 - 25% on writing, feedback, meta
 - *Presence mandatory for credits!*
- **Personal consultation on Thursdays (9-12)**
 - Get preliminary feedback on your draft
 - Ask questions, give suggestions, etc..

Assignments

Write 1 review and 2 peer-reviews



Manuscript Format

- Prepare your review in LATEX format using the course template.
- Submit initially PDF only
- Revised version with all sources, images, PDF and a cover letter answering all critiques raised by referees.

Course Grade & Credits

- Presence on Mondays
- Review (50% of grade)
- Two peer-reviews (each 25% of grade)

Guest Speakers

Dr. Maria Anisimova

Phylogenetics

Prof. Homayoun Bagheri

Evolution/Ecology

Dr. Matthieu Foll

Population genetics

Dr. Manuel Gil

Phylogenetics

Prof. Shigehiro Kuraku

Evolution/Zoology

Dr. Lars Malmström

Proteomics

Dr. Tatiana Marquez Lago

Systems Biology

Dr. Christoph Schmid

Epigenetics