# INF-BIOx121 Documentation

*Release 1.0*

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# Contents

Note: for previous course editions, check out this website.

CHAPTER 1

# Lecutre slides

Lecture slides This page is updated after each lecture/Module.

CHAPTER 2

# Home exam

Link to home exam.

CHAPTER 3

# Link to VM

https://desktop.uio.no/

CHAPTER 4

# Introduction

This is the webpage for the fall 2017 edition of the credited courses **INF-BIO5121** (master level) and **INF-BIO9121** (Ph.D. level) offered by the Department of Informatics and the Department of Biosciences at the University of Oslo (UiO). Students taking the course for credit should register through UiO StudentWeb. Non UiO students are welcome and should check this website.

The High Throughput Sequencing technologies and bioinformatics analysis course consists of five weeks, three days each week, of lectures and practicals, and a final take-home exam, plus a written exam on the course material and the reading material.

CHAPTER 5

# Schedule

Course days are usually from 9:00 to 16:00 (teachers may stay longer if requested), some lectures, mostly hands-on exercises. All materials for lectures and practicals will be linked from the schedule below.

The schedule will appear here early in August and will link to the webpages with the material taught (these links are added as the course progresses).

**Room locations:**

**Room locations:**

Ole-Johan Dahls hus location: Google maps

- Caml: room 3438 Informatics building (Ole-Johan Dahls hus)
- Java: room 2423 Informatics building (Ole-Johan Dahls hus)
- Python: room 2269 Informatics building (Ole-Johan Dahls hus)
- Postscript: room 2458 Informatics building (Ole-Johan Dahls hus)
- Prolog: room 2465 Informatics building (Ole-Johan Dahls hus)
- Shell: room 1456 Informatics building (Ole-Johan Dahls hus)

Sep 6 (KBH-3203): Kristine Bonnevies hus Seminarrom 3203 location: Google maps

**Exam location:**

Written exam will take place at Silurveien 2 and NOT at IFI.

CHAPTER 6

# Requirements

- No prior background in bioinformatics or computer science is required, however, we expect students to have a basic understanding of the unix shell. For this, we organise an **introductory unix course** about a week before the course starts - details will be provided upon acceptance. Participants who are familiar with the shell can ask to be exempt for this course day.
- All participants should have a basic understanding of molecular biology, at least roughly corresponding to 5-10 university study points in molecular biology, biochemistry, or similar. *If you are uncertain if your biology background is strong enough, please contact the course coordinators (see contact details below) at least three weeks before the start of the course.*

CHAPTER 7

# Computers/laptops, internet access, and UiO user account

All students must bring a laptop with either a Windows (Windows 7 or more recent), Unix/Linux, or OS X (i.e. an Apple computer) operating system.

- The computer should not be more than 2-3 years old
- It should be possible to connect the computer to the UiO wireless network
- You must have modern internet browser installed (Chrome, Firefox, Safari, ...)
- You must have a valid UiO user account and must be able to log onto a computer on the UiO network
  - If you are unsure if you have a UiO user account and a valid password, you should try to log in using kiosk.uio.no as described here. If you are unable to log in, try the hints you find here.
  - Instructions (in Norwegian) about how to find your user name and get a new password can be found here.
- We advise to bring an external mouse, and do not rely on touchpad/trackpad only

If you are struggling with anything of the above, in particular if you have forgotten your UiO user name/password or you do not have one, you must contact the course coordinator (see contact details on this page) as soon as possible, and at least one week before the start of the course.

# CHAPTER 8

## Curriculum and suggested reading

The curriculum consists of a set of scientific articles. The exam will contain questions on the material presented in these papers on the material covered during the course. Specific details of the curriculum, and a list of further suggested papers, can be found here.

CHAPTER 9

# Exam

The exam for this course will be:

- a written exam on the course and curriculum, time and place to be announced
- an *individual*, home exam combined with an oral examination of the home exam time, and place to be announced. Students will present their work to two-three teachers, followed by some questioning (20-30 minutes in total). This home exam will be handed out to all participants during the last course day.

**NOTE** Both exams have to be passed to earn 10 study credits.

**NOTE** 80% attendance is required to take the final exam.

## 9.1 Written exams from previous years

- 2016 (exam only)
- 2015 (with information on how the grading was done)
- 2014 (exam only)

CHAPTER 10

# Contact information

- Arvind Sundaram (Course coordinator) - e-mail: arvind.sundaram - at -medisin.uio.no
- Course administration/registration - e-mail: studieinfo@ifi.uio.no

CHAPTER 11

# Teachers

- Arvind Sundaram (AS, Bioinformatician, Norwegian Sequencing Centre, Oslo University Hospital)
- Timothy Hughes (TH, Researcher, NORMENT , Oslo Univ. Hospital)
- Boris Simovski (BS, Research Group for Biomedical Informatics, Dept. of Informatics, University of Oslo)
- Karin Lagesen (KL, Norwegian Veterinary Institute and Dept. of Informatics, University of Oslo)
- Gregor Gilfillan (GG, Researcher, Norwegian Sequencing Centre, Oslo University Hospital)
- Ave Tooming-Klunderud (AT, CEES, Faculty of Mathematics and Natural Sciences, University of Oslo)