# **IN-BIOSx000 Documentation**

Release 2.0

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# CHAPTER 1

### IN-BIOS5000 and IN-BIOS9000

Note: for previous course editions (INF-BIO9121 and INF-BIO5121), check out this website.

## 1.1 Lecture slides

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

# 1.2 Teaching materials

List of further suggested papers, can be found here.

# 1.3 Information on compute

Link to Procedure

### 1.4 Home exam

Link to home exam

# 1.5 Introduction

This is the webpage for the fall 2020 edition of the credited courses IN-BIOS5000 (master level) and IN-BIOS9000 (Ph.D. level) offered by the Department of Informatics and the Department of Biosciences at the University of Oslo (UiO) and funded by NORBIS.

This course consists of two weeks, of lectures and practicals, and a final take-home exam with oral presentation and questioning.

### 1.6 Schedule

Course days are usually from 9:15 to 17:00, with lectures and hands-on exercises.

#### **Room location:**

#### **Room location:**

All activities will be carried out on Zoom. Zoom info will be distributed by email.

#### **Exam location:**

Exam: Oral presentation of home exam and questioning on Nov 26 and 27 by Zoom. Zoom info will be distributed by email.

# 1.7 Requirements

- We recommend that participants should have a basic understanding of molecular biology as provided by an introductory course in bioinformatics, molecular biology, or genetics.
- No formal background in computer science is required, however, students must have a basic understanding of the unix shell. Students should take an introductory unix course beforehand if they do not have these skills.

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

All students must have 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
- 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.

# 1.9 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.

### 1.10 Exam

The exam for this course will be an *individual* home exam combined with an oral presentation of the home exam and questioning on Zoom on 26/27 November. Exact time 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 in the week after the lectures.

### 1.10.1 Written exams from previous years

- 2018
- 2016 (exam only)
- 2015 (with information on how the grading was done)
- 2014 (exam only)

### 1.11 Contact information

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

### 1.12 Teachers

- Arvind Sundaram (AS, Bioinformatician, Norwegian Sequencing Centre, Oslo University Hospital)
- Ave Tooming-Klunderud (AT, CEES, Faculty of Mathematics and Natural Sciences, University of Oslo)
- Daniel Vodak (DV, Oslo University Hospital)
- Gregor Gilfillan (GG, Researcher, Norwegian Sequencing Centre, Oslo University Hospital)
- Ivar Grytten (IG, Research Group for Biomedical Informatics, Dept. of Informatics, University of Oslo)
- Karin Lagesen (KL, Section for Epidemiology, Norwegian Veterinary Institute)
- Milena Pavlovic (MP, Dept. of Informatics, University of Oslo)
- Ragna Breines (RB, Coordinator, NORBIS)
- Sigve Nakken (SN, Post.Doc., Oslo University Hospital)
- Thomas Haverkamp (THa, Section for Epidemiology, Norwegian Veterinary Institute)
- Timothy Hughes (THu, Researcher, NORMENT, Oslo University Hospital)
- Torbjørn Rognes (TR, Research Group for Biomedical Informatics, Dept. of Informatics, University of Oslo)
- Trine B. Rounge (TBR, Researcher, Kreftregisteret)

1.10. Exam 3