

# **M.Sc. Biomedizin-Modul: Proteinbiochemie und Bioinformatik**

**7-17 March**

**<http://cbdm.uni-mainz.de/mb22/>**

**9:00 to 17:00:**

13:00 to 14:00 break

## **Day 1 / 7 March**

Fundamentals of programming in Molecular Biomedicine  
(Python)

## **Day 2 / 8 March**

Sequence Homology  
Multiple sequence alignment  
Phylogeny

## **Day 3-4 / 9-10 March**

Protein structure, domains  
Homology modelling  
Repeats, Disorder  
Proteomics

## **Day 5 / 11 March**

Protein interaction networks  
*Seminars Friday afternoon*

## **Day 6 / 14 March**

Biostatistics / Statistical genetics

## **Day 7 / 15 March**

RNAseq

*Seminars Wednesday afternoon*

## **Days 8-9 / 16-17 March**

Programming and data analysis with R

## **Evaluation:**

(i) Take home exam **1 April Friday / 10am to 11am**  
8 questions scoring 43 points.

(ii) Test Python programming (Today!)  
7 points.

(iii) Seminar (10' present + 5' questions) adds (up to 5 extra) points.

25 points to pass.

Exam questions in German & English - answers can be written in English or in German (but not both!)

*2<sup>nd</sup> exam +4 weeks later (after May 1st)*  
*Time and date to be agreed*

## **Organizational:**



Please log in with your full name so we know who you are 😊

Please keep on mute and video off

Use the chat to communicate

Use the shared notes

If you have a question say so in the chat or change your status to "raise hand".

If the teacher does not notice then use your audio.

We should make short breaks every hour.

Be polite! :-)