MSc Biochemistry
## Exemplary curriculum

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Vorlesungsverzeichnis für das Wintersemester 2020/2021

Bitte beachten Sie, dass unser Veranstaltungsangebot kontinuierlich aktualisiert und veröffentlicht wird, um den aktuellen Bedingungen Rechnung zu tragen.


Anmeldung zu Modulen und Lehrveranstaltungen

Details zur Anmeldung über Campus Integration finden Sie hier.
Den vollständigen Akademischen Terminplan der Freien Universität finden Sie hier.
VORLESUNGSVERZEICHNIS

Fachbereiche
- Allgemeine Berufsvorbereitung
- Biologie, Chemie, Pharmazie
- Dahlem School of Education (Zentrum für Lehrerbildung)
- Erziehungswissenschaft und Psychologie
- Geowissenschaften
- Geschichts- und Kulturwissenschaften
- Mathematik und Informatik
- Philosophie und Geisteswissenschaften
- Physik
- Politik- und Sozialwissenschaften
- Rechtswissenschaft
- Veterinärmedizin
- Wirtschaftswissenschaft

zentralen Website veröffentlicht. Bitte ...
Lesen Sie weiter

Die Angaben zur Platzzahlbeschränkung an den einzelnen Lehrveranstaltungen (LVe) sind aus technischen Gründen teils irrelevant. Es muss davon ausgegangen werden, dass alle Seminare, Praktika, Übungen und teils auch Vorlesungen in der ...
Lesen Sie weiter

Lieber Erstsemester Studierenden in den Bachelor Studiengängen am 26. Oktober starten die Orientierungs-Tage. Wir haben am 21. Oktober eine Mail an alle zu dem Zeitpunkt erfolgreich immatrikulierten Studierenden geschickt. Falls ...
Lesen Sie weiter
<table>
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<tr>
<th>Titel</th>
<th>Datum</th>
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<tr>
<td>Biochemie</td>
<td>Zuletzt geändert am 13. August 2021</td>
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<tr>
<td>Orientierungseinheit Bachelorstudiengang Biochemie</td>
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<td>Zusätzliche Infoveranstaltung für den Masterstudiengang Biochemie</td>
<td>Zuletzt geändert am 21. Oktober 2021</td>
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**Vorgabe der Praktikumsplätze ("Tombola")**

Die Tombola wird am Freitag, den 30. Oktober um 9 Uhr als WebEx Meeting stattfinden. Eine Mail mit dem Einladungskoordinat wurde nun versandt.

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<tr>
<td>Allgemeine Informationen und Einführungsveranstaltungen</td>
<td>210601</td>
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<tr>
<td>Bachelorstudiengang Biochemie (Mono)</td>
<td>210605</td>
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<td>Lehrveranstaltungen für andere Studiengänge</td>
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<td>Colloquium und wissenschaftliches Arbeiten</td>
<td>210681</td>
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<td>Weitere Veranstaltungen</td>
<td>210691</td>
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Course descriptions online

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**Basic Module:** Introduction to Advanced Biochemistry

**University/Department/Institute:** Freie Universität Berlin/Department of Biology, Chemistry, Pharmacy/Institute of Chemistry and Biochemistry

**Module supervisors:** Lecturers of the module

**Entrance Requirements:** none

**Goals of Qualification:** Students have acquired the latest, structured knowledge of the research fields of structural biochemistry, molecular biology and molecular biomedicine. They are able to assess research facilities and to determine their future field of specialization.

**Contents:** Current developments in the research fields of structural biochemistry, molecular cell biology and molecular medicine

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<th>Hours of attendance (semester periods per week)</th>
<th>Forms of active participation</th>
<th>Work effort (hours)</th>
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<tr>
<td>Lecture</td>
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<td>-</td>
<td>Presence (L) 45</td>
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<td>Pre-, post-preparation (L) 90</td>
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<tr>
<td>Seminar</td>
<td>1</td>
<td>Oral Presentation, Discussions</td>
<td>Presence (S) 15</td>
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<td>Pre-, post-preparation (S) 60</td>
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<td>Exam preparation and examination 90</td>
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**Language offer of lecture**

- German and/or English

**Compulsory regular attendance**

- Yes

**Work effort (total)**

- 300 hours 10 CP

**Length of module**

- one semester

**Lecture is offered**

- every semester

**Applicability**

- Master study program Biochemistry

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- **Studienordnung:**
  https://www.fu-berlin.de/studium/studienangebot/master/biochemie
Winter semester 2020/21

• No contact lectures during the lecture time (->online)

• Method Modules, Research Projects are possible. Please attend the Tombola on Friday!

• We will offer now:
  o Advanced BC parts 1 & 2
  o Method Modules are planned but we have to be flexible and react to current situation at the scheduled time
  o Contact PIs directly for Research Projects
  o Grant Writing Module
  o Specialized lectures/seminars (electives)
  o Friday Biochemistry Colloquia/Lise Meitner Colloquia
Typical setup of lectures

• Commented PDFs, voiced-over PPTs or videos in advance in Blackboard

• Video conference at the scheduled time (regular lecture/seminar or Q/A)

• Expect variations for each specific course

• Each organizer will contact participants (Blackboard) with more specific instructions
Active participation and exams

• Active participation requirements will be communicated by each course organizer

• May differ for each course and for different parts of a Module

• Exams: Prospective dates (Course Catalog) and/or formats may change depending on the developments
### Basics

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- Part 1 online: Fridays, 15:00 – 17:00
- Part 2 online: Mondays, 15:00 – 17:00
- Exams are scheduled 2 weeks apart
- You could take both parts but they cover a lot of ground!
• Advanced Biochemistry is **one course with two parts**.

• Both parts are mandatory (but it is not mandatory that you take both parts this semester).

• It will be graded based on results in two partial exams combined.
### Methods

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- Some MMs are scheduled (→ Tombola)
- In some MMs it is possible to only attend the seminar part
- You can combine 2 such seminars to a 5-LP course (electives)
- Contact PIs for 'individual MM' – 3 week lab rotation can count as a MM, for example in combination with a Research project
Methods

• Methods subject areas:

1. Structural Biochemistry
2. Molecular Biology
3. Molecular Biomedicine

• Requirements:

• Three MMs
• Two MMs from two different areas
• Third MM from third area or a related field ("affine area")
• Contact the PI of the lab where you would like to perform a research project
• 9 weeks of lab work + 3 weeks of preparation (pre and post)
• Graded based on a presentation with Q+A
• You have to write a report
Research

- Research subject areas:
  1. Structural Biochemistry
  2. Molecular Biology
  3. Molecular Biomedicine

- Requirements:
  
  - Three 15-LP graded RPs
  - Two of these from two different areas
  - Third MM from third area or a related field ("affine area")
Literature Search, Research Design & Grant Writing (216881 a/b)

- Can replace one 15-LP Research Project
- Two parts (5 LP and 10 LP)
- Your performance during the first part decides whether you can continue with the second part
Literature Search, Research Design & Grant Writing
(216881 a/b)

Identifying a relevant research problem
(critical literature search)

Developing it into a PhD thesis project
(framing specific questions, feasibility)

Describing it coherently in words
(an exercise in scientific writing)

216881a (5 LP)
All in BlackBoard
Lectures / individual meetings with your mentor
Summary of your project

216881b (10 LP)
Write a research proposal
Peer review one proposal
Electives

- Free electives: Virtually any course offered by a University
- You can choose biochemical courses for both types of electives
- **Combined seminars** of 2 Methods Modules (“Specific aspects ...“)
- **Special lectures/seminars** offered by FUB Biochemistry (Course Catalog)

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- **Friday Biochemistry Colloquia/Lise Meitner Colloquia** (12:30 – 13:30)
- As video conferences
- Participation in 15 colloquia counts as a 2.5-LP course
- Documentation of participation will be communicated by organizers
Electives

- It is possible to import 15 CPs from BSc Biochemistry as electives:
  - Bioinformatik
  - Biostatistik
  - Evolution
  - Bioethik
  - Berufsorientierung
  - Only offered in German!
Before investing in a course elsewhere, make sure we will accept this course as an equivalent to one of our core courses or as an elective (email with detailed info on the course and suggested equivalent to the Prüfungsbüro).
Registering for courses

• Individually through Campus Management
• Plan judiciously what you can manage
• Avoid “hoarding“ of courses
Possible schedules

• Advanced BC parts 1 and 2
  MM and RP* (30 LPs)

• Advanced BC part 1 or 2
  Literature Search and Research Design
  MM or RP in lecture-fee time* (25-35 LPs)

• Advanced BC part 1 or 2
  2 MM seminars
  Specialized lecture/seminar
  MM or RP in lecture-fee time* (20-30 LPs)

* if possible
Questions?

- Via email to a faculty member
- Via email to Examination Office
- Via email to FSI
- Via email to Fiona Douglas (Studienberatung)
- Only ask one at a time and allow some days of response time!
Many thanks to …

- FSI (consider joining!)
- Charlotte Biese, Nasrin Bollmor, Fiona Douglas, Marius Göbel, Shelly Harel, Leon Obendorf, Justus Wollburg
- Susanne Jäger (Sekretariat Biochemie)
- Christiane Müller (Studienbüro)
- Thorsten Grospietsch (Studium und Lehre)