**How many courses do I have to take?**

**TOTAL:** 4 courses out of 2 areas within 3 years

Of these courses, at least 2 have to cover “scientific courses”, one has to cover “Transferable skills / Management courses”, and one is free of choice.

**AREAS:**
- SC – Scientific courses
- TM – Transferable skills / Management courses

*Which courses shall I take?*

This depends on your educational background and your research interests and should be discussed with your Thesis committee.

*How to register?*

Please enrol via Doodle by using the link at the end of each course description on the respective website:

- [http://www.chembiol.uni-konstanz.de/scientific-courses.html](http://www.chembiol.uni-konstanz.de/scientific-courses.html)
- [http://www.chembiol.uni-konstanz.de/transferable-skills.html](http://www.chembiol.uni-konstanz.de/transferable-skills.html)
## Overview

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20 February 2013

Gene Expression and Protein Purification Strategies

Content

This one day course will treat the following topics within two half-day sessions of each lecturer:

- Introduction into recombinant gene expression;
- Diverse expression systems (Bacteria, yeast, Baculo virus);
- Cloning strategies;
- Tagging and affinity purification of recombinant proteins.

Lecturers: Elke Deuerling, Thomas Mayer
Room: M 701
Time: 9.00-17.00 h
Course Area: Scientific course
Participants max.: 24
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
19-20 March 2013

Leadership for Future Leaders

Content

This two day module provides a general insight into actual leadership tools. The theoretical aspects of leadership are combined with case studies. The course helps avoiding typical mistakes in leadership situations and gives an overview on situations, instruments and personal factors to successfully lead co-workers. Discussions with and questions from participants around leadership and their experiences will enhance the course.

Lecturer: Andreas Ploch
Room: F 429
Time: 9.00-17.00 h
Course Area: Management course
Participants max.: 10
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html
Content

This workshop helps to find the personal motivation for the future career and shows different options, so called career paths. The first step is to find “the right company”, the second step is to get “the right job”. Important questions are: What exactly is my motivation? Where are my strengths and weaknesses? What “plan” do I have for my career? In addition, the one day job application training helps from the very first steps of the application process: How do I write a “good” application, a “good” CV? What is important in an interview session? What to do in an assessment-center?

Lecturer: Andreas Ploch
Room: F 429
Time: 9.00-17.00 h
Course Area: Transferable skills
Participants max.: 10
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html

21-22 March 2013

Career Orientation and Application Training
26-27 March 2013

Ethics in Science

Content

Why is ethics important in science? This two day seminar is intended to assist PhD students in developing a better understanding of the essential role of ethical behavior in the practice of scientific research; to provide a set of criteria for assessing ethical dilemmas; to facilitate a room for free discussion on cases of scientific misconduct (fabrication and falsification of data, image manipulation, plagiarism, conflicts of interest, authorship issues, etc.), and to offer an overview of existing guidelines.

Lecturer
Robert Andorno

Room
F 427

Time
9.00-17.00 h

Course Area
Transferable Skills

Participants max.
18

Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
11-12 April 2013

Scientific Presenting

Content

If you would like to learn how to give successful presentations in English, this workshop is for you! A central theme is revising basic techniques of presenting, and strengthening the awareness of how we “come across” to our audience. Practical exercises and peer reviews will help to improve academic language. This lively and dynamic workshop is highly appreciated by PhD students.

Lecturer: Millie Baker
Room: Y 310
Time: 9.00-17.00 h
Course Area: Transferable skills
Participants max.: 10
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html
11-12 July 2013

Practical Screening Data Analysis

Content

We will introduce KNIME, an open source data analytics framework together with extensions that allow to process screening data, such as activity information or cell assay images. The course consists of lectures with extensive hands-on sessions. After successful attendance participants should be able to use KNIME to process and analyse their own data independently.

Lecturers  Michael Berthold a.o.
Room       Z 613
Time       9.30-17.00 h
Course Area Scientific course
Participants max. 12
Registration  http://www.chembiol.uni-konstanz.de/scientific-courses.html
22-25 July 2013

**Combinatorial and High Throughput Technologies**

**Content**

Introduction into the different aspects relevant for High Throughput Screening, i.e.:

- Combinatorial chemistry and technology;
- Challenges and pitfalls of cell-based and protein-based screens;
- Compound handling;
- Data analyses and data handling.

**Lecturers**
Thomas U. Mayer, Guests from industry

**Room**
Y 310

**Time**
Mo, Wed 9.00-17.30 h | Tue, Thu 9.00-16.00 h

**Course Area**
Scientific course

**Participants max.**
16

**Registration**
http://www.chembiol.uni-konstanz.de/transferable-skills.html
29-31 July 2013

Bioimaging

Content

This three day course will cover the following themes by lectures, demonstrations, and hands-on.

- Fluorescence imaging and deconvolution;
- Laser Scan Confocal Microscopy (point scanning and spinning-disk);
- Total-Internal-Reflection (TIRF) Microscopy.

Lecturers Elisa May, Daniela Hermann
Room L 914, L 933a
Time 9.00-18.00 h
Course Area Scientific course
Participants max. 9
Registration http://www.chembiol.uni-konstanz.de/scientific-courses.html
1-2 August 2013

**Intercultural Communication**

**Content**

This two day practice- and applications-oriented workshop is designed to enable doctoral students to develop key skills in accurately identifying and dealing with typical scenarios in cross-cultural academic work interaction. Drawing on authentic complex case studies, it provides a balance of conceptual frame-working and structure to create step-by-step diagnostic tools to define culture-appropriate strategies. The workshop is highly recommended for both German and international PhD students.

**Lecturer**  
Alexia Petersen

**Room**  
Y 310

**Time**  
9.00-18.00 h

**Course Area**  
Transferable skills

**Participants max.**  
14

**Registration**  
http://www.chembiol.uni-konstanz.de/transferable-skills.html
30 September - 1 October 2013

Information Literacy

Content

How to perform research in literature databases? What to consider when formulating the query? How to improve literature research and what options are offered by the library of the University of Konstanz? This course will teach the fundamental concepts and skills.

Lecturer       Monika May
Room           J 213
Time           9.00-12.30 h
Course Area    Scientific course
Participants max. 12
Registration   http://www.chembiol.uni-konstanz.de/transferable-skills.html
Keywords

This three day course comprises morning lectures and hands-on experiences in the afternoon, hereby treating the following topics:

- General intro (proteomics workflow, mass spectrometers, ESI-/MALDI-ionisation, mass analyzers);
- ESI-MS and MALDI-MS practice;
- Sample preparation - theory and practice;
- LC-MS and fragmentation techniques - theory and practice;
- Special applications (SILAC, ICAT, protein quantification).

Lecturer: Andreas Marquardt
Room: B 602
Time: 9.00-17.00 h
Course Area: Scientific course
Participants max.: 14
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
15-18 October 2013

Determination of Macromolecular Structures

Content

This course will provide theoretical and practical information on structure determination of biomacromolecules by NMR spectroscopy and X-ray crystallography. The sessions will cover the following topics:

- **NMR spectroscopy:** the resonance phenomenon, chemical shift, scalar and dipolar coupling, principles of resonance assignment, overview on biomolecular NMR spectroscopy.
- **X-ray crystallography:** diffraction theory, structure solution methods, how to judge structural information.

**Lecturers** Kay Diederichs, Heiko Möller, Wolfram Welte

**Room** L 601, L 1201

**Time** 9.00-18.00 h

**Course Area** Scientific course

**Participants max.** 15

**Registration** [http://www.chembiol.uni-konstanz.de/scientific-courses.html](http://www.chembiol.uni-konstanz.de/scientific-courses.html)
Contact

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