How many courses do I have to take?

**TOTAL:** 4 courses out of 2 areas within 3 years
Of these courses, at least two have to cover “scientific courses”.

**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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Timeline

1.-2.2. Scientific Presenting
3.2. Academic Networking
8.-9.2. Project Management I
14.-15.2. Advanced Bioimaging

23.-24.2. Bioconjugation Chemistry
6.-7.3. Project Management II
8.3. Mouse Genetics

25.-26.7. Practical Screening Data Analysis
30.7.-1.8. Bioimaging
22.-23.8. Intercultural Communication
29.-30.8. Ethics in Science

February
March
April
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| 19.-20.3. | Drug Discovery & Development |
| 21.-22.3. | Leadership for Future Leaders |
| 23.3.     | Job Application Training |
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1-2 February 2012

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
V 1002

Course Area
Transferable skills

Participants max.
10

Contact
Heike Brandstädter

Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
3 February 2012

Academic Networking

Content

Whether at conferences, job interviews, departmental events or simply during everyday life at university, being able to socialize and network in English are increasingly useful skills! They can help you form future work partnerships, be accepted into specific academic communities, and even be instrumental in obtaining the job you want. This one day seminar will provide the opportunity for young academics to develop an awareness of their “academic identity”, whilst practicing the skills and language of English small talk and networking.

Lecturer

Millie Baker

Room

V 837, Y 310

Course Area

Transferable skills

Participants max.

10

Contact

Heike Brandstädter

Registration

http://www.chembiol.uni-konstanz.de/transferable-skills.html
Project Management for Industry (GPM Certificate)

Content

Beside the excellent knowledge in scientific work, project management is an additional competence for PhD students. In companies with a developed project culture, knowledge of project management methods is essential. This project management training makes PhD students familiar with professional project management in research. It demonstrates how to run a scientific project in industry or a research institution, and shows the initial steps how to become project manager and project leader. After all, the training offers the possibility to get a certificate executed by the GPM (member of the International Project Management Association IPMA).

Lecturer         Karen Dittmann
Room             Y 310 + V 837
Course Area      Management course
Participants max. 12
Contact          Heike Brandstädter
Registration     http://www.chembiol.uni-konstanz.de/transferable-skills.html
14-15 February 2012

Advanced Bioimaging

Content

This two day course will introduce the following topics by lectures, demonstrations, and practical microscope sessions employing diverse biological samples:

- Non-linear microscopy, fluorescence correlation spectroscopy (FCS)
- Fluorescence resonance energy transfer (FRET)
- Fluorescence lifetime imaging (FLIM)
- Fluorescence recovery after photobleaching (FRAP)

Lecturer: Christof Hauck, Andreas Zumbusch
Room: X 4319, Laborhaus IV, Jacob-Burckhardt-Str. 31
Course Area: Scientific course
Participants max.: 9
Contact: Andreas Zumbusch
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
23-24 February 2012

Bioconjugation Chemistry

Content

This two day course will give an overview on current bioconjugation techniques by lectures as well as talks from invited guests. The following topics will be covered:

- Synthesis and site-specific modification of biomolecules (nucleic acids, peptides/proteins, carbohydrates)
- Immobilization strategies
- Bioorthogonal ligation reactions
- Metabolic labeling

Lecturer: Andreas Marx, Valentin Wittmann
Room: L 914
Course Area: Scientific course
Participants max.: 15
Contact: Valentin Wittmann
Registration: [http://www.chembiol.uni-konstanz.de/scientific-courses.html](http://www.chembiol.uni-konstanz.de/scientific-courses.html)
8 March 2012

The Power of Cutting Edge Mouse Genetics

Content

In this course the latest developments in the field of mouse genetics will be taught. The principles and theory of generating transgenic mice, knock out mice, or kick in mice will be covered, and practical examples from ongoing studies will be presented by internal and external experts. Both constitutive and inducible approaches will be introduced and the power of mouse genetics for monitoring gene expression and visualizing rare population of cells in mice will be outlined.

Lecturer

Thomas Brunner, Jörg Fehling, Klaus-Peter Knobeloch

Room

M 631

Course Area

Scientific course

Participants max.

15

Contact

Marcus Groettrup

Registration

http://www.chembiol.uni-konstanz.de/scientific-courses.html
19-20 March 2012

Drug Discovery and Development in the Pharmaceutical Industry

Content

The discovery and development of novel medicines is a highly complex, cost intensive and failure-prone industry branch. In a two days course participants will obtain an introduction and insight into all parts of drug development – from implementation of a therapeutic vision until launch and post-marketing commitments of a new drug life cycle. Lectures will be given by Nycomed experts in particular fields of expertise accompanied by hands-on exercises/group works.

Lecturer
Mathias Schmidt et al. (Nycomed)

Room
Nycomed, Byk-Gulden-Str. 2

Course Area
Scientific course

Participants max.
40

Contact
Mathias Schmidt (Nycomed)

Registration
http://www.chembiol.uni-konstanz.de/scientific-courses.html
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 Y 310
Course Area Management course
Participants max. 10
Contact Heike Brandstädtter
Registration http://www.chembiol.uni-konstanz.de/transferable-skills.html
23 March 2012

Job Application Training

Content

How do I write a winning application? What is important in an interview session? What to do in an assessment centre? These questions are in the focus of this training. The one day job application training helps from the very first steps of an application to the right behaviour in an assessment-centre. Practical exercises out of an assessment-centre are also included as well as time for personal questions of the participants.

Lecturer Andreas Ploch
Room M 630
Course Area Transferable skills
Participants max. 10
Contact Heike Brandstädter
Registration http://www.chembiol.uni-konstanz.de/transferable-skills.html
26 March 2012

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

Lecturer Elke Deuerling, Thomas Mayer
Room L 601
Course Area Scientific course
Participants max. no restriction
Contact Thomas Mayer
Registration http://www.chembiol.uni-konstanz.de/scientific-courses.html
25-26 July 2012

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.

Lecturer Michael Berthold, Martin Horn, Thorsten Meinl
Room Z 613
Course Area Scientific course
Participants max. 15
Contact Michael Berthold
Registration http://www.chembiol.uni-konstanz.de/scientific-courses.htm
30 July-1 August 2012

Bioimaging

Content

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

- Theory and practice of fluorescence and confocal microscopy
- Spinning-disk and total internal reflection microscopy

Lecturer Elisa May, Daniela Hermann
Room L 914, L 933
Course Area Scientific course
Participants max. 9
Contact Elisa May
Registration http://www.chembiol.uni-konstanz.de/scientific-courses.html
**22-23 August 2012**

**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 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  
**Course Area**   Transferable skills  
**Participants max.** 10  
**Contact**       Heike Brandstädtér  
**Registration**  [http://www.chembiol.uni-konstanz.de/transferable-skills.html](http://www.chembiol.uni-konstanz.de/transferable-skills.html)
29-30 August 2012

Ethics in Science

Content

Why is ethics important in science? This two day seminar is intended to assist doctoral 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
Roberto Andorno
Room
Y 310
Course Area
Transferable Skills
Participants max.
12
Contact
Heike Brandstädtter
Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
Content

You are working on your PhD project. The results are highly interesting for your colleagues and peers. But have you ever thought of making them the base for your own company and become an entrepreneur? If you are interested in learning how to put such an idea into reality, this course is for you. It provides concrete help and advice on plans to establish spin-off companies and in settling the conditions for financing. Moreover, case studies of successful spin-off companies will be presented. The course combines a one day workshop with the one day conference “Uni meets Pharma 2012”. Therefore the appointment of the date will be announced in due course.

Lecturer
Members of BioLAGO

Room
Technologiezentrum Konstanz, Blarerstraße 56

Course Area
Management course

Participants max.
15

Contact
Heike Brandstädtter

Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
1 October 2012

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	Y 310
Course Area	Scientific course
Participants max.	12
Contact	Monika May
Registration	http://www.chembiol.uni-konstanz.de/scientific-courses.html
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
Course Area: Scientific course
Participants max.: 10
Contact: Andreas Marquardt
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
This course will provide theoretical and practical information on structure determination of biomacro-molecules 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

Lecturer: Kay Diederichs, Heiko Möller, Wolfram Welte
Room: L 601, L 1201
Course Area: Scientific course
Participants max.: 15
Contact: Diederichs, Möller, Welte
Registration: [http://www.chembiol.uni-konstanz.de/scientific-courses.html](http://www.chembiol.uni-konstanz.de/scientific-courses.html)
Extramural Funding in Science

Content

To attract funding for the own position or the realization of project ideas is a major basis for success in science. How can I finance my ideas and myself in science by extramural funding? How do I find the right funding program for project support or for a fellowship inland or abroad? How do I write a success promising proposal?

Major subjects are:

- Funding & research institutions and their funding programs
- Writing a success promising proposal/fellowship
- Submission & evaluation of proposals/fellowships

Lecturer: Wilma Simoleit
Room: Y 310
Course Area: Management course
Participants max.: 10
Contact: Heike Brandstädter
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html
Contact

Konstanz Research School Chemical Biology (KoRS-CB)
Dr. Heike Brandstädter
L 904, phone 07531-88-2237

Renée Rummel | Office
Emilia Huss, Diana Oser | Student assistants
L 952, phone 07531-88-2142

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