

Guidelines to the curriculum of the ZIBI Graduate School Berlin

Introduction

We understand that the mission of the ZIBI Graduate School Berlin is to develop students into creative, responsible and self-confident young researchers. Therefore, we are offering a variety of courses from which the students choose according to their needs and interests, which serves their scientific project and the development as scientists. Thus, we tailor the curriculum to the needs of each individual student.

The offered courses may vary from year to year. The coordination office is always open to new suggestions. The official language is English. Our system of credit points is aligned with the standards of the European Credit Transfer System (ECTS).

Overview

The curriculum includes five parts:

1. Lectures and seminars (10 CP);
2. Practical courses (4 CP);
3. Soft skills training (4 CP);
4. Scientific communication (4 CP) and
5. Meetings (8 CP).

The curriculum includes mandatory and elective modules. All together the doctoral students have to collect 30 credit points in the different areas during the three-year period. It is recommended to collect 12 CP during the first year, 10 CP during the second year and 8 CP during the last year.

1. Lectures and seminars (10 CP)	2. Practical courses (4 CP)	3. Soft skills training (4 CP)	4. Scientific communication (4 CP)	5. Meetings (8 CP)	30 CP
First year 12 CP					
4 CP mandatory „The Art of Reading a Paper“ – 8 times = 1 CP „Scientific Thinking“ – 8 times = 1 CP Own presentation – 1 time = 1 CP Berlin Life Science Colloquium – 15 times = 1 CP elective Lecture Series „Infection Biology“ Lecture Series „Immunology“ Others	2 CP elective Recommended for the first year: „Statistics for the Life Sciences“ – 2 CP for other courses see offers at the web page	2 CP mandatory Workshop „Science-Ethics-Politics“ – 0,5 CP elective See offers at the web page and offers of the Humboldt Graduate School	1 CP Examples: Lab tour during the Assessment Center – 0,5 CP Invite Guest Speaker – 1 CP	3 CP mandatory Project Outline (after 3-4 month) – 1 CP Thesis Committee Meeting (after 10-12 month) – 1 CP ZIBI Graduate School Retreat – 1 CP	
Second year 10 CP					
3 CP mandatory „Scientific Thinking“ – 8 times = 1 CP Own presentation – 1 time = 1 CP Berlin Life Science Colloquium – 15 times = 1 CP	2 CP elective see offers at the web page	1 CP mandatory Workshop „Science-Ethics-Politics“ – 0,5 CP elective See offers at the web page and offers of the Humboldt Graduate School	2 CP Examples: Lab tour during the Assessment Center – 0,5 CP Organize Hot Topic Seminar – 1-2 CP Invite Guest Speaker – 1 CP	2 CP mandatory ZIBI Graduate School Retreat – 1 CP Poster or talk at an International Conference or Meeting – 1 CP	
Third year 8 CP					
3 CP mandatory „Scientific Thinking“ – 8 times = 1 CP Own presentation – 1 time = 1 CP Berlin Life Science Colloquium – 15 times = 1 CP	0 CP	1 CP mandatory Workshop „Science-Ethics-Politics“ – 0,5 CP elective See offers at the web page and offers of the Humboldt Graduate School	1 CP Examples: Organize retreat – 1-2 CP Organize Hot Topic Seminar – 1-2 CP Invite Guest Speaker – 1 CP Teaching in a course – 1-2 CP	3 CP mandatory Thesis Committee Meeting (after 24 - 30 month) – 1 CP ZIBI Graduate School Retreat – 1 CP Poster or talk at an International Conference or Meeting – 1 CP	

1. Lectures and seminars (10 CP)

1. 1. “The Art of Reading a Paper” (1 CP)

Once a month a paper based seminar takes place which we named “The Art of Reading a Paper” taught by faculty members. The doctoral students have to prepare at least two different publications in comparison to each other. This seminar is designed not only to discuss current hot topics in science but also to explain and discuss the “Do and Don’ts” of scientific writing and publishing.

The seminar is designed for students of the first year. It takes place 10 times throughout an academic year. The participation in 8 of the 10 seminars is mandatory.

1. 2. Scientific Thinking (6 CP)

Once a month all doctoral students of the program meet to a seminar which we named “Scientific Thinking”. Two to three doctoral students present their project to the group (“Own presentation”). They have about 20 min to explain the background, the advances they made and the outlook. After the presentation there is time for discussion. The presenting student learns to lead a discussion, to react to questions and sometimes to defend the project. The audience learns to actively listen and think along the presentation and to formulate questions and ask them in front of the audience.

The seminar “Scientific Thinking” takes place 10 times throughout an academic year. The participation in 8 of the 10 seminars per year is mandatory. Each student has to present at least once per year. Besides the seminar “Scientific Thinking” students may also present their project at the annual retreat.

1. 3. Berlin Life Science Colloquium (3 CP)

The “Berlin Life Science Colloquium” is a joint venture of the IMPRS-IDI, the GRK1121, the MPIIB as well as the ZIBI. It is the forum to listen to internationally renowned scientist. The colloquium is an important part of our curriculum and students are highly encouraged to visit it regularly as well as organize it and to invite guest speakers.

The colloquium takes place once a week (except during the summer and Christmas break), about 45 times. The current schedule can be accessed via www.berlinlifescience.de. The participation in at least 15 seminars per year is mandatory.

1. 4. Other lectures and seminars

The ZIBI announces on its website (www.zibi-berlin.de) all lectures and seminars related to infection biology and immunology at the Berlin universities. Our students are free to decide to participate in lectures and seminars. We recommend two lecture series: “Infection Biology” organized by Prof. Richard Lucius during the winter term, “Immunology” organized by Prof. Andreas Thiel during the summer term. Both lecture series are conducted by faculty and research group leaders from different institutions and show that way the broad array of research conducted in the Berlin area. Other lectures are e.g.:

- Molecular Parasitology
- Molecular Virology
- Gene Dys-Regulation in Cancer
- Clinic Club – Bedside Knowledge for Bench People

2. Practical courses (4 CP)

Practical courses are aimed to introduce students to new techniques. They are offered by our faculty or members of the research labs for 3 to 6 students, for 3 days usually once a year. Students may also attend practical courses provided by external institutions such as EMBO, EMBL, the Wellcome Trust or by companies such as Becton-Dickinson.

Students are highly encouraged to spend some time at an international partner institute (1 month = 1 CP).

Please contact the coordination office regarding travel grants.

Practical courses will be organized and announced per semester by the coordination office. As a rule of thumb one course-day is 0,5 CP. Each student should collect 4 CP. It is highly recommended to participate in practical courses during the first two years.

Practical courses offered are e.g.:

- Statistics for the Life Sciences
- Advanced Flow Cytometry
- Expression profiling using microarray and quantitative real-time PCR analysis
- Murine Transgenesis
- Purification and Characterization of Proteins Involved in Bacterial Pathogenesis

3. Soft skills training (4 CP)

Our Graduate School is member of the Humboldt Graduate School (HGS) which offers a wide variety of “soft skill” courses such as time management, disputation training, work life balance and others (<http://humboldt-graduate-school.de>). In addition, the coordination office organizes and announces specific trainings. As a rule of thumb one course-day is 0,5 CP.

Once a year the workshop “Science-Ethics-Politics” takes place. The workshop was designed as a tribute to the growing public and political interest in science. The participation is mandatory and counts for 0,5 CP.

Altogether each student should collect 4 CP.

4. Scientific communication (4 CP)

Our students are an active part of the scientific community, e.g. by inviting guest speakers, organizing meetings and colloquia, communicating their research in grant applications and to the public. Advanced students are encouraged to conduct lectures and courses themselves. Special events for “scientific communication” which are organized by the students are lab tours, Hot topic seminars and our annual retreat.

Each student should collect 4 CP.

Please contact the coordination office with your ideas!

5. Meetings (8 CP)

5. 1. Project Outline and Thesis Committee Meetings (3 CP)

Each student has a thesis committee which advises the PhD research project and supervises the personal development of the student. The thesis committee consists out of three members. The first member is the direct supervisor of the student. The second member should be from outside the research group of the student. The third member can be a Postdoc.

Within the first 3-4 month each student writes a short project outline (3-5 pages). This project outline should be sent to the members of the thesis committee and the coordination office. The project outline is awarded with 1 CP.

At the end of the first year the student organizes the first Thesis Committee Meeting. It is a prerequisite for the extension of the contract for the following years. The second meeting should be after the second year. Each meeting is awarded with 1 CP.

Two weeks before the thesis committee meeting the student submits a short report which includes (max. 5 pages):

- 1) a brief introduction to the project (0,5 page)
- 2) progress report of the research work including any problem that might have occurred (2 pages)
- 3) outlook (1 page)

The coordination office will then inform the student and the committee about the course work of the candidate. During the meeting the student gives a 20 min presentation covering all issues included in the report followed by a discussion on perspectives. After the meeting the student summarizes the discussion on one page. The report and the minutes should be sent to the committee members and the coordinator.

5. 2. ZIBI Graduate School Retreat (3 CP)

Each year a retreat for all students and faculty members of our program is organized. Students present their work and discuss it with other students and faculty members. The participation is mandatory and is awarded with 1 CP each year.

5. 3. International Conferences and Meeting (2 CP)

Each student is encouraged to attend an international meeting at least twice to present a poster / talk. For travel grants please contact the coordination office.

Cancellation of courses

It is the responsibility of the students to plan their schedule to be able to participate in the courses they have registered for. However, if a cancellation is needed, the cancellation should be done at least two weeks before the course begins, a reason is not required. If the cancellation is notified later the student must submit a valid justification (e.g. a sickness certificate in case of illness or a letter of apology signed by the supervisor if urgent lab work prevented the student from participation). If a student does not appear at three courses without informing the coordination office in advance, he or she will receive a written warning and the spokesperson and the thesis committee including the supervisor will be informed.

The ZIBI Graduate School Berlin is a joined program of

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