Block course organization:
Methods in Cellular Biochemistry

Refresh Teaching
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Block courses at D-BIOL

• What do D-BIOL block courses look like?
  • Courses of 3.5 weeks, 3.5 days a week, for 3rd year bachelor students
  • Practicals in small groups on a selected topic
  • Seminars and literature discussions in addition

• Goals:
  • Students gain first insights into research topics and working methods
  • Students learn to design, carry out and assess experiments
  • More course-specific goals: e.g. focus on methodologies in our block course, etc.
  • ‘get to know each other’
Block courses at D-BIOL

• Block courses can have many different themes
  • Focusing on a topic: e.g. Molecular Mechanisms of Cell Dynamics, Membrane Biology, Causes and Consequences of Unstable Genomes
  • Focusing on methods: NMR spectroscopy, RNA biology, Methods in Cellular Biochemistry

• Setting for the block course can be quite different:
  • small groups in many labs
  • more classroom-like
Block course basics: practical work and lectures

- Main focus: practical work
  - Groups of ~3 students
  - ~2 supervisors

- Lectures to teach the background of the block course
  - Given by professors, PostDocs, senior PhDs, etc.

### Methods in Cellular Biochemistry Schedule

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<th>Tuesday</th>
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<tr>
<td>8.45-10.30 am Lecture</td>
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<td>1.00 pm onwards Lab work</td>
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Additional elements of the block course

- Presenting scientific concepts and data
- ‘Chalk talks’: informal presentation allowing students to present their own projects

Journal club:
- Each group presents a paper
- Or one paper for the whole course

Montellese et al, eLife (2020)
Additional elements of the block course

• Presenting scientific concepts and data
• ‘Chalk talks’: informal presentation allowing students to present their own projects

• Journal club:
  • Each group presents a paper
  • Or one paper for the whole course

• Workshop on structural biology
  • Part I: presentation of structural biology tools
  • Part II: application of tools to the respective projects
Evaluation of the students

- 50% based on practical work
- Based on lab supervisors / PIs

- 50% based on final presentation
- Poster session
- Presentations
- Students get time and are supervised during presentation preparation
Challenges of organizing the block course

• Communication
  • Start early enough: lecturers, professors of the labs involved, lab supervisors
  • Closer to the course: students, institute staff/members

• Heterogeneity in the course:
  • Student background, motivation, etc
  • Different labs involved (style of research, supervision, etc)

• Dependence on lab supervisors and lecturers

• Did we achieve the goals of the block course? Feedback is crucial
Thank you very much for listening!