Course analysis (course evaluation)

Course code 4FF008	Course title **Advanced Receptor Pharmacology**	Credits **4**
Semester **HT25**	**Period** **251006-251024**	

Course coordinator **Pawel Kozielewicz**	**Examiner** Gunnar Schulte
Teacher in charge of component **Pawel Kozielewicz**	**Other participating teachers** **Terrence Kenakin, Leanne Stokes, Gunnar Schulte, Julia Kinsolving, Lloyd Bridge, Mikael Adner, Jesper Säfholm, Aikaterini Motso, Patrick Bryant, Stefano Gastaldello, Gianluigi Pironti, Sabine Willems, Julien Bous, Ana Teixeira**

Number of registered students during the three week check 34	**Number approved on the last course date** **32**	**Response frequency course valuation survey** 61,76%
Other methods for student influence (in addition to concluding course valuation) Email contact with the course coordinator		
Feedback reporting of the course valuation results to the students		

Note that...

The analysis should (together with a summarising quantitative summary of the students' course valuation) be communicated to the education committee at the department responsible for the course and for programme courses also the programme coordinating committee.

The analysis was communicated to the education committee on the following date: 251210

1. **Description of any conducted changes since the previous course occasion based on the views of former students**

1. The lab sessions were refined to provide more practical time (one half day in a cell lab, one full day in a pharmacology lab), and smaller working groups for improved supervision and more students' participation.

2. The mathematics component remained unchanged from 2024, maintaining its structure and level of complexity.

3. The journal club and presentation component was redesigned to form a continuous "thread", where each group focused on the research of one prominent scientist in the GPCR field.

4. The eight selected scientists represented a gender-balanced set and showcased state-of-the-art research and methods in GPCR pharmacology.

5. Students participated in forming the groups, which fostered engagement and ownership of learning.

6. Online quizzes were newly added as short, formative exercises to help students review key concepts and self-assess their understanding throughout the course.

2. Brief summary of the students' valuations of the course

The overall evaluation of the HT25 course was very positive, with median ratings of 5 or 6 across all survey items (on a 1–6 scale).
Students particularly appreciated the inclusive and respectful classroom atmosphere (median = 6) and the research-informed teaching (median = 6).

Other areas such as organisation, clarity of expectations, active learning, and feedback received median = 5, indicating a consistently high level of satisfaction.

In written comments, students highlighted the GraphPad Prism workshops, laboratory sessions, and the journal club thread as valuable components that connected theory and experimental practice.

Some students expressed confusion about the relevance of high-throughput screening (HTS) requirements mentioned in assignments, since HTS was not explicitly discussed in lectures. This point will be clarified in future course iterations.

Overall, the median satisfaction across all questions was 5.0, showing that the majority of students agreed or strongly agreed with the positive evaluations of the course.

3. The course coordinator's reflections on the implementation and results of the course

Strengths of the course:

1. The journal club thread, linking student groups through the work of different GPCR researchers, successfully created continuity across sessions and demonstrated the breadth of state-of-the-art receptor pharmacology research and methodology.

2. The gender-balanced selection of scientists reflected diversity within the research community and provided exposure to multiple scientific perspectives.

3. The new online quizzes were well received and provided a useful tool for continuous, formative learning.

4. Feedback was provided via written comments on PDF lab reports in Canvas and, after the presentations (for those who wanted it via e-mail directly from examining teachers). Students were also encouraged to request further feedback by email.

5. The combination of lectures, labs, and analytical exercises remained a strong foundation for achieving the intended learning outcomes.

Weaknesses of the course: **Some students mentioned "repetition" across lectures. This is intentional and pedagogically justified, as reinforcement of complex pharmacological principles supports deeper understanding and long-term retention.**

The reference to HTS (high-throughput screening) in assignments will be clarified in future rounds to ensure full alignment between course content and learning tasks.

4. Other views

5. Course coordinator's conclusions and any suggestions for changes

For the next course (HT26), I plan to:

1. Provide even clearer pre-workshop materials and structured templates for GraphPad Prism exercises to strengthen independent data analysis.

2. Allow optional individual submission of selected lab report sections (e.g. discussion).

3. Further develop the journal club "thread" model, maintaining the gender-balanced selection of scientists and continuing to highlight state-of-the-art research and methods.

4. Clarify the HTS reference in assignments and make a new Canvas module with teaching/learning material.

5. Continue and expand the online quizzes as a formative and engaging learning tool.

The HT25 course demonstrated high student satisfaction, strong integration of current research and teaching, and steady progress toward active, inclusive, and research-based learning. The inclusion of state-of-the-art GPCR research, threaded journal clubs, and online quizzes further enhanced the course's pedagogical and scientific quality.

Appendices: