



LUND
UNIVERSITY

Master's Programme in Biomedicine

PROGRAMME QUALITY CLOSURE AND QUALITY PLAN 2023

Summary of programme quality closure

Results – focus on strengths and weaknesses

1. TBL is used in all courses at the programme and was overall appreciated. Concerns included varying difficulty of iRATs and varying quality of TBL applications.
2. Students have different levels of prior knowledge in different subject areas. Course material was sometimes not at the right level of knowledge and detail. The heterogeneous backgrounds were also seen as positive in teamwork.
3. Feedback from teachers is appreciated, especially if given in writing.
4. Assessment criteria for some assignments need improvement, especially for master theses.
5. The bioinformatics module in semester 1 was not well structured and the bioinformatics exercise in semester 2 was perceived as too easy.
6. Response rates at course evaluations were low and varied between 31% to 56%, with mean and median 44%.

Possible explanations

1. TBL is still new to some teachers and designing good iRATs, TBL applications and study guides is challenging.
2. The programme is international and the students have different educational and cultural backgrounds. The electives have an even more mixed student cohort, since other students also can take these courses.
3. Feedback given only orally is missing for students who are absent. Written feedback and scoring in Ortrac is also possible to go back to and use for visualizing progression.
4. The assessment criteria used for master theses were not aligned with the new course syllabi.
5. No alignment between the modules have been performed.
6. Course evaluations are sent out after the course ends and are optional. Students from other faculties taking the elective courses might be less engaged in course development.

Suggestions of measures and further development

1. A TBL workshop with Larry Michaelsen was held for teachers in September 2023, with the following topics: Getting beyond covering content: a key to preparing students for future professions, Designing group work that really works, and Improving your TBL applications. This will be followed-up in teacher meetings during 2023/2024.
2. We want the programme to be attractive and relevant to students with different backgrounds. The advantages of having different knowledge and views can be highlighted, and teachers can provide extra material for students who need to read up on a specific subject.
3. Feedback should, when possible, be given in Ortrac in a way that makes it possible for students to track their performance and progression.
4. The assessment criteria for master thesis courses have been updated fall 2023 to include specific criteria for G and VG.
5. A new course manager assignment has been created, with responsibility for integrating bioinformatics with experimental models and methods in semester 1. Alignment with semester 2 should be done.
6. Course managers are asked to inform students on changes done based on previous course evaluations, this could increase student's incentive to answer course evaluations.

The programme in figures

Number of students that applied to the programme 2022:	273
Number of students that applied to the programme 2022 with prio 1:	103
Number of students that applied to the programme 2023:	319
Number of students that applied to the programme 2023 with prio 1:	121
Number of new programme students accepted 2022:	44
Number of new programme students accepted 2023:	44
Number of new programme students that were registered 2022:	32
Number of new programme students that were registered 2023:	30
Funding agreement targets 2022 (MKr)	21.3*
Result accounted for 2022 – (HST+HPR)	24.7*
Number of full-time equivalent students 2022 (HST):	50
Number of annual performance equivalent 2022 (HPR):	49
Number of degrees awarded 2022:	26
Budget for 2022:	18.4*
Economic result 2022:	-0.5*
Budget for 2023:	20.3*
Number of teachers involved (>2h):	

**Both Bachelor and Master programmes.*

Representatives in committees

Programme director: Maria Swanberg

Programme steering committee:

Karin Stenkula, Mattias Collin, Thomas Hellmark, Viktoria Willenfelt Lumpkins, Sara Holmgren, Susanne Destow, Lene-Marlen Wessel (student)

International committee:

Mattias Collin, Maria Swanberg

Examination committee:

Harry Björkbacka, Magnus Hillman (2022), Oonagh Shannon (until October 2022), Marianne Jansson (from spring 2023), João Duarte (from spring 2023), Josefin Malmberg (student), Lene-Marlen Wessel (student)

Student welfare committee:

Bodil Sjögreen, Nicholas Leigh (from Oct-22), Susanne Destow, Sara Holmgren, Oonagh Shannon (until Oct-22)

Other working groups or committees:

Appendixes

1. List of courses
2. Quality plan 2023



**FACULTY OF
MEDICINE**

Programme Quality Closure 2022/2023

Master's Programme in Biomedicine

3. Course quality evaluations

Appendix 1. List of courses

Course code	Course name	Credits (ECTS)	Semester*	# of students	# passed the course	Course closure available
BIMM01	Experimental design and scientific communication	15	Sem 1	32	32	yes
BIMM02	Biomedical methods and experimental animal models	15	Sem 1	32	32	yes
BIMM24	Stem Cell Biology and Regenerative Medicine	7,5	Sem 2	19	17	yes
BIMM22	Molecular and Experimental Neurobiology	7,5	Sem 2	19	19	yes
BIMM23	Metabolic diseases	7,5	Sem 2	24	24	yes
BIMM21	Tumour Biology	7,5	Sem 2	29	27	yes
BIMM03	Innovation and Entrepreneurship	7,5	Sem 3	27	27	yes
BIMM04	Drug Development and Clinical Trials	7,5	Sem 3	11	11	yes
BIMM82	Research Project in Drug Development**	45	Sem 4	11	11	yes
BIMM05	Research Project Management	7,5	Sem 3	16	16	yes
BIMM81	Research Project in Academia**	45	Sem 4	16	16	yes
VMFN51?	Internship	15	FS	1	0	no
			Sem 1			no
			Sem 1			no
			Sem 1			no
			Sem 1			no
			Sem 1			no
	** Semester 3 & 4		Sem 1			no

* FS: Free standing

Valid for the academic year 23/24

Overall quality criteria	Quality objectives	Activities	Planned to start	Planned to end	Responsible	Status / Follow up	Actions/feedback:
<i>Refers to "Policy för kvalitetssäkring och kvalitetsutveckling av utbildning vid Lunds universitet"</i>		<i>Planned activities to reach the objectives</i>				<i>Annually</i>	<i>What does the program do with the results and how are these disseminated to relevant stakeholders?</i>
The actual study results correspond to learning and programme syllabus outcomes.	To have a complete mapping and blue printing of the programme to obtain alignment and transparency	1) Curriculum mapping: connect competences and learning outcomes to the programme syllabus in Ortrac (QPS) 2) Blueprinting: connect learning activities, assignments and assessments to course learning outcomes 3) Engagement of the PNM examination committee in course development.	Ongoing	1) Curriculum mapping was completed in 2022, and will be continuously updated for new learning activities, outcomes and courses. 2) Blueprinting is to be done whenever a new course syllabus, learning activity or assessment criteria are implemented. 3) Review of existing courses planned to be completed 2025. New courses/activities consequently.	Course managers, examiners and programme directors	Followed-up in conjunction with course quality closures and programme quality closure and with data from Ortrac. .	1) Teachers and programme directors can monitor mapping and blueprinting across courses within the program. When alignment needs improvement, this is discussed with representatives from the involved courses. 2) Students can individually follow their learning and results through the blueprinting in Ortrac. 3) Feedback from the examination committee on eg assessment criteria is formative for teachers and will improve current and future material.
The programme has the students' learning in focus.	To have student-centered learning throughout the programme in order to promote life-long learning and student responsibility for their own development.	Implementation and development of Team Based Learning (TBL) in collaboration with the TBLC. Flipped classroom strategies. Classroom activities focuses on	Ongoing	Ongoing	Course managers, programme directors and student representatives	In course evaluations, quality closures and by analyses of data in Ortrac.	Emphasize and prioritize student-centered learning activities in budgets and schedules as well as in workshops for teachers and course managers. Communication with student representatives.

		<i>interaction between students. Continuous assessment in QPS to visualize students' development. The mapping of activities and assessments to programme syllabus outcomes allows for analyses of performance at both an individual level and for cohorts.</i>					
The education is based on scientific basis and best practice.	<i>To use evidence-based learning methods to create the best possible conditions for learning.</i>	<ul style="list-style-type: none"> - Education of teachers at MedCUL - Increase engagement of ETPs from the faculty's pedagogic academy. - Invite teachers that have done pedagogic projects within the programme to share the results with the programme management and other relevant course managers/teachers. 	Ongoing	Ongoing	Programme directors.	<i>In course course- and programme quality closures.</i>	<ul style="list-style-type: none"> - Map and support teachers' pedagogic development. - Communicate with other Swedish programmes in Biomedicine through national meetings, and with international partner universities (eg U21). - Teachers and programme management to keep up-to-date on evidence-based teaching methods and course design, eg through workshops and feedback from the examination committee and ETPs.
Teaching staff have suitable education in subject-specific, pedagogic and didactic competences	<i>To have teachers at the programme that have a keen interest in teaching, relevant pedagogic training and proven subject</i>	<ul style="list-style-type: none"> - Education of teachers at MedCUL - Follow-up on course coordinators' and examiners' pedagogic development. 	Ongoing	Ongoing	Programme directors, course managers and teachers.	<i>Course quality closures.</i>	<ul style="list-style-type: none"> - Discuss with respective teacher and make a development plan if improvement is needed. - Provide collegial support within the programme.

	<i>expertise.</i>	<i>- Appointments as course managers and examiners are announced in open competition and evaluated in a structured way, with emphasis on pedagogic education, experience with active learning methods and subject expertise.</i>					<i>- Discuss teacher competencies and development with vice heads of departments (GAP).</i>
Teacher capacity is sufficient.	<i>To have a good recruitment base of teachers, course managers, examiners and programme directors with appropriate experience, education and long-term employment contracts to cover the programme's needs.</i>	<i>- To emphasize the programme's needs of teachers employed in the teacher category (senior lecturers, professors) to the Faculty management and respective board (Tjänste-AU). - To give appropriate compensation for teaching- and management assignments within the programme to be competitive compared to other assignments.</i>	Ongoing	Ongoing	<i>Programme directors, chairman of the board of master education (PNM), vice heads of departments (GAP), vice dean at the Faculty of Medicine</i>	<i>Quality dialogue and the faculty's employment dialogue (Tjänstedialog).</i>	<i>- Promote and highlight the need for senior lecturer-/ professorships in under-represented areas and highlight the consequences of lack of faculty-financed teacher positions on the overall teaching and programme quality and continuity.</i>
The education is relevant for the students based on the societal needs.	<i>To offer students relevant and authentic training in skills and applications that are required for their future profession.</i>	<i>-Authentic cases and examples from both life science industry and academic environments are implemented in applications and portfolio assessments.</i>	Ongoing	Ongoing	<i>Programme directors</i>	<i>- In course and programme quality closures. - Follow-up on alumni careers.</i>	<i>- Communication with national and international stakeholders, including universities, authorities and general public. - Interaction with life science industry through student internships, at national fora</i>

		<ul style="list-style-type: none"> - Representatives from areas outside academia are included in the teaching. - Interaction with partners such as Venture Labs to increase students' interest and knowledge in entrepreneurship. 					and at the local, student-organized career fair.
The students have influence over planning, execution and follow up of the education.	To have a good dialogue with, and involvement of, students to engage them in their current and future education. To improve the programme from a student perspective.	<ul style="list-style-type: none"> - Student representatives elected through BUR/MF are involved in relevant environments, such as board committees, working groups, programme workshops, the programme management group meetings and course evaluations. - Meetings are held in English when needed. 	Ongoing	Ongoing	Programme directors, course managers, student course representatives and the student educational association (BUR/MF).	<ul style="list-style-type: none"> - Followed-up at bi-weekly programme management meetings and bi-annually programme workshops. - In course evaluations and quality closures. 	Bidirectional communication between students and programme management to ensure understanding and needs from both students and teachers.
The learning and study environment are suitable and accessible for all students including well functional support activities.	To offer learning activities and environments that support participation and learning for all students at the programme.	<ul style="list-style-type: none"> - Information and workshops held by the academic support center, student welfare committee and study counselor. - Individual study plans when applicable. - Student surveys to map what works 	Ongoing	Ongoing	Programme director, student welfare committee and study counselor.	Continuously.	<ul style="list-style-type: none"> - Follow-up through the study counselor, student welfare committee and programme directors. - The outcome from surveys is communicated with teachers and course managers.

		<i>well and what needs improvement regarding learning activities and environments.</i>					
There is a continuous follow up and development of the programme	<i>To offer a competitive programme of highest international standards.</i>	<i>Programme development and quality work.</i>	<i>Ongoing</i>	<i>Ongoing</i>	<i>Programme management, student educational organisation (BUR/MF) and teachers.</i>	<i>Programme closure and quality assessment.</i>	<ul style="list-style-type: none"> - Communication with student organizations and other Biomedicine programmes at a national level. - Information to prospective students (fairs, online etc).
Internationalization and international perspectives are promoted in the programme	<i>Internationalization of the program is reflected in the student cohort, engagement of international teachers and a global perspective of Biomedicine.</i>	<ul style="list-style-type: none"> - International admission of students. - Student and teacher mobility. - Applications are designed with a global health perspective. - International engagement can be highlighted by a certificate of international merits (CIM) attached to the diploma. - Global perspectives are emphasized in information to prospective students. - As suggested by the quality evaluation 2020, internationalisation is mapped in Ortrac under Core-values. 	<i>Ongoing</i>	<i>Ongoing</i>	<i>Programme directors, international committee and international coordinator.</i>	<i>- Balance in student exchange with partner universities followed-up annually.</i>	<ul style="list-style-type: none"> - Highlight the different perspectives and experiences that international students and teachers contribute with. - Open CIM seminars to promote student exchange and international engagement.

		<i>- SDGs are reflected in course syllabi and mapped in Ortrac.</i>					
Gender equality and equal treatment are integrated in the programme	<i>All students and teachers are treated equally and with respect.</i>	<i>- Through training and assessing group communication from start of the programme. - Zero tolerance for harassment or other unequal treatment. - Emphasize a professional behavior in course syllabi and highlight the importance of equality and diversity in teams and in learning activities. These should be mapped in QPS in order to follow progression.</i>	<i>Ongoing</i>	<i>Ongoing</i>	<i>Programme directors, course managers, teachers, study counselor, students.</i>	<i>- Course evaluations, questionnaires (eg Studentbarometern), psychosocial safety inspection.</i>	<i>Student meetings and teacher meetings.</i>
Relevant perspectives in sustainable development is promoted	<i>The programme contributes to sustainable development of academia, working life, education, health and environment.</i>	<i>- The sustainability goals are considered in the educational and course curricula and tagged in QPS. - Programme representatives took part in the U21 meeting August 2023 with the focus Climate and Global Health. - Plans for learning activity on Global Challenges,</i>	<i>Ongoing</i>	<i>Ongoing</i>	<i>Programme directors and course managers.</i>	<i>Course quality closures and Ortrac (QPS) tags.</i>	<i>- Workshop discussions with teachers and students. - Collaboration with University och Birmingham for Global Challenges course/module.</i>

Adequate administrative support for students, teachers, course managers and programme management.	<i>The administrative support facilitates students' learning, and allows teachers to focus on education rather than administration.</i>	<i>Discussion with administrative management to convey the programme's needs in terms of services and continuity.</i>	<i>Ongoing</i>	<i>Ongoing</i>	<i>Programme directors and programme administrators.</i>	<i>Regularly at programme management meetings and in dialogue with students and teachers.</i>	<i>Discussed at the programme board (PNM) and in quality dialogue.</i>