

Assessment of Bachelor programme at Vytautas Magnus University and the Master programmes in Microbiology and Neurobiology at Vilnius University

The assessment of the Bachelor programme at Vytautas Magnus University (VMU) and the Master programmes in Microbiology and Neurobiology at Vilnius University (VU) were done according to the self-assessment reports and results from the site visits to the universities. The assessment was accomplished by the following group of experts: Assistant deputy director general and senior scientist Dr. Trine Johansen Meza, Professor Dr. Aleksandar Jovanovic, Professor Dr. Laima Ivanovienė, Associated professor Dr. Tonis Karki and student representative Tadas Juknius. The site visit to VMU was done the September 17th 2013, while the site visits to VU were done on September 18th and 19th 2013.

The **Bachelor programme in Biology at VMU** was found to be a good biology programme with a good scope, and the expert panel think that the concept of blocks of subject are positive. The facilities offered to the students are good, and the programme has teaching staff that is adequate for giving the programme, and the student-centered learning offered and the use of modern teaching equipment is positive. There are, however shortcomings when it concerns the learning outcomes formulated at the programme level, and the institution has to rewrite these and assure that they are aligned with the subject specific learning outcomes. The following recommendations have been given to the university for improving the programme:

1. To compose intended learning outcomes to the requirements of the Lithuanian qualification framework (LTQF) and the European qualification framework (EQF).
2. To compose descriptions of study subjects adequate to new intended learning outcomes;
3. Although the majority of VMU students have good skills in English, they also need to have teaching material in their national language. This would be helpful for achievement of learning outcomes for those who are not so advanced in English. As VMU possess well developed system of e-learning, teaching material can be published in different formats.
4. Vytautas Magnus University possesses a system of internal quality assurance. The system needs more attention of the Biology programme committee in order to improve internal management of the programme. The study programme committee (SPC) has to identify criteria for evaluation of internal assessment of study quality. Full action plan about activities of SPC has to be developed. Decisions of the SPC should be implemented in study process management.

The **Master programme in Neurobiology at VU** is a well designed, research-based and flexible programme that follows the Bologna regulations. The learning outcomes of the programme are well designed and appropriate for the master level. The university should however rewrite the learning outcomes on the subject level and they should be harmonized with the study programme learning outcomes. The teaching staff are sufficient for teaching of the programme and the teachers are active researchers. The facilities of study programme are adequate. The expert panel has given some recommendations to further improvement of the programme:

1. There is double credit system given to the research projects and the Master thesis; in this way, the same achievements have been given credits two times during the Master Studies. The Master Thesis Project should be given an overall score of 50 or 60 ECTS credits and that score should include all the parts necessary to complete it. The research projects, which are actually part of the Master Theses, should not be separately credited;
2. Significant students' achievements in publishing research results are to be evaluated and incorporated in the assessment scheme;

3. The Discussion part of the Master thesis is to be expanded. It is important because in that part, the analytical skills, synthesis of data, putting the research results in the contents of wider scientific scope are shown;
4. The courses of ethics must be compulsory for all the students on the Master Study Programme;
5. Learning outcomes on the level of the courses should be harmonized and diversified in order to match the Study Programme learning outcomes;
6. Learning methodology should be even more tightly linked to the individual learning outcomes. Every learning outcome should have adequate and specific methods of learning;
7. The assessment methods should be more specifically linked to the learning outcomes so the learning outcomes could be objectively measurable. There may be possibilities for the better integration of the studies. The students indicated the courses with larger (mixed) groups from the different study programmes as the good examples;
8. It is advisable that the institution and teachers offer their materials and assignments online, creating blended (hybrid) courses. This methodology would enable students to be in permanent contact with their mentors, the employed students, people with disabilities and health problems, foreign students to access the materials more easily, and etc. Also, by this approach the learning, assessment and assignment methodology could be further diversified;
9. The number of books and copies of the existing books in the library should be increased;
10. The number of practical and laboratory work classes during the Master studies should be increased;
11. The Career Center should be more active in Career Counseling and mediate between the University and the social partners according to structured procedure;
12. The additional funding options for the study programme are to be considered in order to maintain high quality. The Department should make efforts in increasing the incoming mobility.

The Master programme in Microbiology at VU is a well-designed and research-based programme. However the expert team found that programme is not flexible enough, and the university should consider the introduction elective courses. The learning outcomes of the programme level are appropriate for the master level, but should be rewritten to be true learning outcomes. The teaching staff are sufficient for teaching of the programme and the teachers are active researchers. The facilities of study programme are adequate. The expert panel has given some recommendations to further improvement of the programme:

1. Scope of the programme is wider than microbiology in its classical sense, so the possibility of the change of the name 'Microbiology' should be considered;
2. The structure of the curriculum consists of the compulsory subjects only, there are no elective courses and therefore the entire curriculum is designed as very strict and inflexible. The curriculum should be more flexible, follow the Bologna concepts with elective courses subjects;
3. Programme's learning outcomes have been done in too descriptive way and should be rewritten;
4. Intended outcomes at subject level must relate to the programme's outcomes. Learning outcomes on all of the courses should be harmonized with the study programme's learning outcomes;
5. Assessment methods should be more specific and correspond to teaching and learning methodology and learning outcomes, so the learning outcomes could be objectively measurable;
6. The University career centre should be more active, and include the database and survey of the graduates and alumni;
7. The structure of the Master thesis and the evaluation system with repeated number of credits given should be considered. The discussion part of the students' Master theses should be more analytical and must be expanded;
8. The number of textbooks and copies of the existing books in the local library should be increased.