

International evaluation and accreditation

EVALUATION REPORT

LUNEX UNIVERSITY

Master in Physiotherapy Master in Sport and exercise science

REPORT TRANSMITTED TO THE MINISTRY OF HIGHER EDUCATION AND RESEARCH OF LUXEMBOURG ON 14 JUNE 2019





For the Hcéres¹:

Michel Cosnard, President

On behalf of the experts committee²:

Sonja Denot-Ledunois, President of the committee

In accordance with the decree n°2014-1365, November 14th, 2014,

¹ The president of Hcéres "contresigne les rapports d'évaluation établis par les comités d'experts et signés par leur président." (Article 8, alinéa 5) — "countersigns the assessment reports made by the experts' committees and signed by their president" (article 8, alinea 5).

² The evaluation reports "sont signés par le président du comité". (Article 11, alinéa 2) — "are signed by the president of the committee" (article 11, alinea 2).



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I. PRESENTATION OF THE INSTITUTION

CONTEXT

The International University of Health, Exercise and Sports S.A. (subsequently referred to as LUNEX University or just LUNEX) is requesting to the Ministry of Higher education and Research in Luxembourg, the accreditation of the two following programs: Physiotherapy (Master of Science MsC) and Sport and Exercise Science (Master of Science, MsC). The Ministry has mandated the Hcéres to perform the evaluation phase. This report was transmitted to the Ministry of Higher education and Research in Luxembourg on June, 14th. 2019.

LUNEX University is a private international higher education institution, part of the COGNOS group, specializing in sports, health fitness, prevention and therapy. The institution was accredited by the Minister of Higher Education and Research of the Grand Duchy of Luxembourg in 2014-2015. There is no other educational institution concerning these disciplines in Luxembourg. The first Bachelor classes started in October 2016. The first cohort of bachelor degree in Physiotherapy will graduate in March 2019 and in Exercise & Sport Sciences in September 2019.

OBJECTIVES AND MISSIONS

The aim of the masters in Physiotherapy and Sport and Exercise Science is to provide students with a high level of knowledge, skills, values and behavior that meet European standards in the field and allow students to begin a professional life or to continue to a PhD. One of LUNEX's goals is to develop research and formalize links with foreign universities. LUNEX's application for accreditation is also intended to ensure that LUNEX's bachelor students, whose first cohort is graduating in March 2019, can continue their studies in a corresponding master on site.

II. BRIEF OVERVIEW OF THE PROGRAMMES

University/institution:

LUNEX International University of Health, Exercise and Sports S.A.

- Physiotherapy (Master of Science)
- Sport and Exercise Science (Master of Science).

Year of creation and context:

The conditional accreditation of the Ministry of Higher Education and Research to LUNEX University on June 2, 2015 concerned five diplomas, three bachelors and two masters Physiotherapy and Sports Physiotherapy. These two masters didn't start in 2018, and their accreditation was cancelled.

Site(s) where the program is taught:

The two master programs in Physiotherapy and Sport and Exercise Science are full-time courses stretching over 2 years for a total of 120 ECTS, taught in Differdange (Luxembourg).

Classes are given exclusively in English. Each academic year, there are two periods of student intake one in October and one in April for the bachelor degree in Physiotherapy, and one intake per year in October for the for the bachelor degree in Exercise and Sports Science master programs. The same intake plan holds true for the two Master programmes.

METHODS AND RESULTS OF THE PREVIOUS ACCREDITATION(S)

The previous accreditation was given under two conditions that had to be met by 15 June 2017:

- be able to have the necessary equipment for the implementation of each training program (classrooms, library, catering and student housing),
- develop, apply and make transparent the institution's internal quality assurance system.

Although a dynamic was being undertaken to respect the guidelines given, the Advisory Group, noticed that the conditions were not fulfilled in November 2017, so the Ministry had decided to extend the conditional



accreditation until 30th of April 2018. Based on the Advisory group advice of the 8th of June 2018, Lunex and its three Bachelors were accredited by the Ministry on the 19th of June 2018.

The latest visit report of the Advisory Group dated 26th of April 2018 for the verification of accreditation conditions found:

- improvement in terms of student reception facilities,
- commitment of LUNEX University for the implementation of a quality assurance system in the context of the European Higher Education Area.

HUMAN AND MATERIAL RESOURCES DEDICATED TO THE PROGRAM

The academic staff has adequate experience in the fields in which they teach and a level of qualification allowing them to teach at the master level and beyond. Most of them are employed full time. LUNEX plans to further recruit both administrative and academic staff, if the two proposed master programs are accredited.

LUNEX operates over a single campus building with 2.500 sqm. of space situated in the city of Differdange, Luxembourg. The onsite sports facilities are often used for practical teaching sessions and thus included into the university infrastructure.

STUDENT POPULATION: EVOLUTION AND TYPOLOGY OVER THE LAST 4 YEARS

Currently on the campus of Differdange, students are distributed over 3 years of bachelor's:

- 369 students in Physiotherapy (323 are still students at the end of January 2019),
- 58 in International Sport Management (45 are still students at the end of January 2019),
- 69 in Sport and Exercise Science (53 are still students at the end of January 2019).

Each year there is a foundation semester that helps students prepare for the curriculum (191 have done this foundation semester since 2017).

Since the accreditation of the bachelor programs in 2016, the number of students enrolled has increased each year. The number of those registered in Physiotherapy has doubled in 2018/19. Most of the students come from France and Luxembourg.

In addition, 32 Nepalese students (20 are still students at the end of January 2019) have been recruited by an agency following selection procedures that have raised some doubts.

These students arrived after the official start of the academic year, and did not receive anticipated and adapted support, in terms of pedagogy, administrative and student life. The goal of the institution is to extend such student recruitments to Australia, Africa, and China in the coming years, but no modalities of their welcome were presented.

The drop-out rate is globally around 15% and this parameter has to be kept in mind for the future before expanding international (non-EU) student recruitment.

III. ON-SITE VISIT DESCRIPTION

COMPOSITION OF THE EXPERTS PANEL

- Michèle Beaudry, Professor, Université Paris 13
- Sonja Denot-Ledunois, Professor, Université de Versailles
- Maxime De Simone, 5th year student at Troyes University of Technology (UTT) in industrial Engineering
- Pratik Goel, Assistant Professor, IÉSEG School of Management



- Sebastien Leteneur, Physiotherapist, Assistant Professor in biomechanics, Université Polytechnique Hauts-de-France
- Pierre Trudelle, Physiotherapist, CEO Education Center KPTEN formation

ON-SITE VISIT PROGRAMME

The mission was planned from the 11th to the 13th of February 2019 at the LUNEX premises in Differdange, Luxembourg. During the mission, the experts were divided into two groups, each consisting of 2, 3 or 4 members. Each group focused on a specific point in the evaluation process. It met the management team of LUNEX, the mayor of Differdange, various stakeholders, staff (teaching and administrative), and students. During the visit, the experts were accompanied by Solange Pisarz, Head of projects at Hcéres.



IV. EVALUATION

1 - STRATEGY AND GOVERNANCE OF THE HIGHER EDUCATION INSTITUTION

a) The higher education institution bases its activity on the guidelines and strategic objectives that it makes public. It publishes clear, accurate and updated information on its activities, including its academic programs, admission requirements, achieved learning outcomes and qualifications achieved at the end of these programs.

A strategy and action plan is under construction for the years 2020 to 2025. The institution's emphasis on science-based and practice-oriented education (which constitute two of the four axes of the plan) is regularly cited in different communications. Public (web) presentation is however, limited to general information about the structure of the curriculum. We could not find a description of the list of competencies or teaching units on the website of the institution. In addition, on the website, the description of the staff background should be completed.

Furthermore, while there is a plan to increase international student recruitment from different regions (mainly Europe and Asia) and specific international agencies are working on this, we do not know what information is communicated to students and what is written on the documentation supported by these agencies. This year it has led to the misalignment of expectations and some resulting challenges concerning the newly recruited Nepalese students, thereby exposing gaps between what was expected and what was actually proposed to them by LUNEX.

Overall, the panel advises LUNEX to learn from experience and not repeat the same mistakes as witnessed in the case of the recruitment process of non-EU international students.

It would serve LUNEX well to ensure the completeness and coherence of information that is shared both internally (handbook etc.) and externally (web, local agencies etc.) with the various stakeholders. A specific area of improvement in this regard concerns the lack of clarity in the publication of qualifications to be achieved at the end of the programs, along with additional information about the employability of students. The race to increase the international recruitment without any specific adaptation is going to unbalance the quality level of the education.

b) The origin of the financial resources available to the institution is transparent and organized in compliance with the rules of scientific neutrality.

Evidence was provided in the form of financial statements including income statements and balance sheets which clearly outlined in a transparent manner the origin of financial resources (predominantly arising from student fees, particularly those collected from the BSc Physiotherapy program).

Nevertheless, as the last increase in student fees was 25 percent (from 600€/month to 750€/month), it is felt that more transparent information needs to be provided to students concerning any rise in tuition fees.

External audit is done by KPMG Germany and Deloitte Luxembourg, and any differences in financial laws across the two countries are well accounted for by LUNEX. Financial support from COGNOS was especially important at the beginning. The COGNOS group still conducts a monthly control concerning LUNEX's financial income and expenses in order to detect any early difficulties. Fundraising for research activities is managed by an *association sans but lucratif* (ASBL) to allow any grants to research projects.

c) The Institution provides regular academic programs as defined under article 28bis, paragraph 3 of the law. Regarding double or joint diplomas, responsibilities of each institution engaged in the program are clearly stated and organised with a formal and detailed partnership agreement.

The institution provides regular academic programs as defined under the law. These academic programs lead to the award of a bachelor's degree in: Physiotherapy, Sport and Exercise Science, International Sport Management. Currently, LUNEX does not offer any joint diplomas.



d) The recruitment of staff members follows clearly defined procedures

Staff is recruited based on their academic qualifications and experience, and it was evidenced that recruitment follows clearly defined procedures. This is well illustrated by means of a flowchart and supplied in the documentation. "Research Gate" is the main platform used for any job announcements. Such announcements are also posted on the institution's website and social networks.

e) In the Grand Duchy of Luxembourg, the institution employs staff with the necessary scientific and professional qualifications to provide training within the frame of the academic programs offered by the institutions under the provisions of the law (art. 28ter, paragraphs 1-2).

LUNEX currently has at least 15 full-time equivalent employees (n = 24 in 2019) with a professional qualification at least equivalent to the level of education for which the final diploma is awarded and of which the courses are built on recent results of scientific research. Teaching staff are employed in line with the long-term strategy of the institution. They are chosen for their significant years of experience in their fields of application, and have the necessary level of academic qualifications to provide such training under the terms of the law. Currently, more than 50% of the academic staff hold a doctoral/PhD degree.

f) On the territory of the Grand Duchy of Luxembourg the institution has adequate infrastructure for the various academic programs and allowing students to complete the required work to achieve the educational objectives.

A 30-year leasehold contract was agreed with the city of Differdange for the construction of the campus, which resulted in the opening of the current building in November 2016 to receive the first cohort of students. Student work and discussion spaces are available in this modern building, with ample access to sports facilities in close proximity to the institution. The internal library is rather small and not often used by students, but access is available online. However, students have inadequate support from the local librarian for their research article needs while working on their literature reviews for any research projects.

Furthermore, there appears to be a discrepancy between the size of the lecture theatre (n = 120) and the last cohort of BSc Physiotherapy (n = 120 students for 2018/2019, but the number of students was sometimes larger ie 129 students due to students from other cohorts who had failed the respective modules and have therefore to repeat them), meaning that there is a risk that LUNEX recruited more students than the maximum capacity of their lecture theatre. With the increasing size of physiotherapy cohorts in the future, the actual building is highly likely to become overloaded soon, which may have repercussions for both masters.

This is also a critical point for the adequate facilitation of practical skills sessions, research, or exam sessions. There is thus a pressing need for specific indicators to be reported by LUNEX in order to guarantee the right quality ratio (number of students/number of rooms).

Finally, LUNEX has planned to construct a student hotel by September 2019 in the vicinity of the current campus that will offer residential apartments to students, as well as contain additional classrooms and offices. During the site visit, no signs of construction activity could be seen as yet and it was informed to us that the deadline for completion has been pushed to September 2020.

g) The institution regularly collaborates with other institutions on the national and international

Many international academic staff members at LUNEX have maintained ties with their previous institutions, and this facilitates an easy way to develop international partnerships. In this regard, LUNEX currently has mainly research and some teaching collaborations with the University of Stirling, University of Northumbria, and University of Palermo, among other institutions. There is already an important amount of publications where the institution is referenced. However, for it to be sustainable, a real specific strategy needs to be implemented in order to develop international relationships that are aligned with the strategic vision of the institution. LUNEX's relationship with the mayor of the city seems to be efficient, and there is convergence in views for the development of a sportive and healthy city. There is no specific collaboration at the moment with other socioeconomic actors of the Grand Duchy of Luxembourg.

h) The institution actively participates in international exchange programs for students and academic staff.

Students at LUNEX University have the possibility to go on international exchange programs. There is no data about the number of students who have done ERASMUS placement or international exchange programs.



However, this is conditional on several factors and dealt with on a case-by-case basis. The procedures for sending their own students abroad as well as welcoming exchange students on their campus are not well-defined, and the supporting infrastructure for the same is not well-developed. There is no database who can register all placements. There is no specific evaluation analysis to adjust which placements is effective or not for the bachelors or masters programs. Also, the institution does not currently participate in any international exchange programs for its academic staff.

For Physiotherapy, the institution needs to develop partnerships with specialized institutions in relation to the advanced module that they have proposed (neurological, cardio-respiratory, etc.). Usually there is interdependence between the advanced practice modules proposed by the institution and the clinical placements (e.g. Year 2 in the Master of Physiotherapy in Sydney: http://sydney.edu.au/handbooks/health.sci/postgraduate/coursework/physiotherapy master table.shtml). It could be difficult to find enough sites in Luxembourg for these advanced clinical placements. A register of this specialized international clinical placements needs to be developed (there is quite a lot in Europe).

For Sport, the orientation towards research leads to develop specific relationships with international institutions that are using research equipment (e.g. https://masters.vu.nl/en/programmes/human-movement-sciences-research/index.aspx) and work on the same areas of research as LUNEX.

2 - AIMS AND GOALS OF THE TEACHING PROGRAMMES

a) The study program has a structured curriculum that reflects the objectives of the program. It is declined in specific and transversal skills.

LUNEX already offers three bachelor programs in Sport Science, Sport Management, and Physiotherapy on its campus in Differdange. The courses proposed are centered around the disciplines of sport, health, prevention and therapy. The bachelors have already been accredited on June 2, 2015, and officially approved by the Luxembourg Ministry of Higher Education under a ministerial decision.

The accreditation of two master degrees is now requested: Physiotherapy and Sport and Exercise Science. The purpose of the programs is to provide students with the skills they need in the field of their chosen profession. The chosen learning approach is both theoretical and practical in both disciplines, although the ratio is not specified and has to be defined. It would be interesting if LUNEX proposes a mandatory internship at the end of each year with thesis and oral defense. This aspect is duly noted by LUNEX.

Overall the two master programs are structured in the same way, so they are treated conjointly in the analysis.

For both master degrees, the study programs are clearly defined and divided into modules with explicit learning outcomes. Students have access to the module handbooks with all necessary information. However, there is no possible gateway allowing for a potential crossover between the two master programs, especially given the fact that some modules are shared across the two programs.

The content of the Master program in Physiotherapy is developed following the knowledge and skills already acquired in the Bachelor of Physiotherapy and on the basis of European competence standards of the profession of physiotherapist.

The Master of Science in Sport and Exercise Science presents program content for Bachelor's or equivalent students to acquire both academic and professional skills in the fields of sports and health, combined with research activities.

In both programs, teaching is done through lectures, seminars, practical studies, and personal work. In both cases, diplomas are obtained after undergoing a mix of written, oral, and practical exams, thereby allowing an evaluation of acquired knowledge and professional skills.

b) The academic program is defined in line with European standards and the Bologna process. It is defined in terms of ECTS credits and designed based on student centred learning and in particular in support of the student's success, active participation in the studies and the development of skills, knowledge and know-how.

As indicated in the documents provided by LUNEX, it is clear that the programs follow the European standards and the Bologna process. The requirements for graduation are defined in terms of ECTS credits, and each module corresponds to a certain number of ECTS corresponding to 30 ECTS for one semester, 60 ECTS for one year, and 120 ECTS for the two years of Masters.



Learning is student-centered. Students have good interactions with teachers: proximity in and out of the classrooms, open-door policy, and quick answers to problems. Teachers and students communicate in real time via the tablet they received at the time of registration. Students at LUNEX evolve in a stimulating atmosphere, and receive the support of teachers and staff throughout their education concerning all aspects (academic, professional and personal).

c) The academic program is divided into modules each of which is assigned a certain number of ECTS credits. The objectives and the learning outcomes of each module are clearly defined.

The module handbooks indicate that the programs are divided into modules:

- 9 modules in the Master of Sport and Exercise Science
- -10 modules in the Master of Physiotherapy

As seen in most master programs in the field, a specific number of ECTS is assigned to each module depending on the total workload (taught content and self-study hours).

The teaching for most of the modules are scheduled by "block" during a specific period of time. This way of teaching seems to have an impact on the presence of students during the course and their level of interest, knowing that the assessments take place when the module is over. The assessment takes place at the end of the module or via two exams when the "block" is spread over a long period.

The goals of the programs, as well as the content and learning outcomes for every module, correspond to what is described at most of the other institutions for master degree courses.

The modules handbooks clearly describe the module contents, goals and learning outcomes, and the assessment methods.

No handouts could be examined to evaluate the level and quality of the education provided by the institution because the master programs are not yet active.

d) The workload is appropriate and distributed in a balanced way between the semesters.

For the Master in Physiotherapy, the diploma authorizes a training based on the professional standards of knowledge and skills specified by the World Confederation for Physical Therapy. To the best of our knowledge, LUNEX is the only European institution in physiotherapy, with some other in Belgium, which delivers a complete MSc for entry level physiotherapists. Such a study level is above the standards for the practice of physiotherapy in Europe. In Belgium, the fifth year is oriented towards specialization in some fields of physiotherapy.

The workload for the Master program seems to be balanced; each year contains two main physiotherapy knowledge modules. Regarding placement and research, which are two important modules in terms of workload, the first year is mainly dedicated to the clinical placement and the second year is entirely consecrated to the MSc research project. The course of the program is in accordance with European standards.

For the Master in Sport and Exercise Science, the student workload does not seem balanced. Indeed, the workload is important only in the first year of the proposed Master. A different distribution of the contents of the modules could allow an internship at the end of M1. This additional experience in a professional context or a research laboratory could allow students to refine their professional project and acquire a new skill.

LUNEX proposed a "Post-graduate Certificate in Physiotherapy Studies (PG Cert)" in a way to propose an exit after 4 years of study (240 ECTS). This certificate could not be recognized by European countries because students have to finish the entry-level requirements in the country where they are studying (Mentry level for Physiotherapy with 300 ECTS in Luxembourg).

e) The relationship between theoretical and practical courses is in line with the program objectives. Based on the objectives of the programme, internships are planned.

Normally, clinical placements have to be preceded by advanced practical courses. At a master level, it will be more efficient to have specialized courses (musculoskeletal, neurological, cardiorespiratory, etc.) before clinical placements, as it is done in some other countries. (e.g. http://sydney.edu.au/handbooks/health-sci/postgraduate/coursework/physiotherapy-master-table.shtml), so that students could perform their skills more efficiently and securely on the patients during these placements.



Regarding the MSc Physiotherapy program, the knowledge is structured differently between the two years of study. The first year focuses on the development of students' professional knowledge and competencies, whereas the second year focuses mainly on the MSc research project and leads to improved practical knowledge and clinical reasoning. The expert panel notes that LUNEX allows students to discontinue their master degree after successful completion of the first year and, if it is the case, deliver a Post-graduate Certificate in Physiotherapy Studies to them.

The theoretical knowledge is mainly based on self-study processes, but the taught content accounts for 310h for the first year and 161h to 181h (depending on the option chosen for module 10) for the second year. The balance between theoretical knowledge and practice is unclear; there is no information about the rate of practical teaching for each module. However, clinical placements account for a total of 650h in the first year of study, giving the students a great opportunity to improve their clinical practice.

The purpose of the programs seems to be at once theoretical, practical and pragmatic.

Regarding the Physiotherapy study program, the balance between theory and practice is not specified. The attendance is 360h in the first year and 85h in the second year. The second year of the Masters is focused on the internship and research project. However, the duration of the internship is not specified.

The Master program in Sport and Exercise Science is a traditional program with classroom courses, hands-on courses, and personal assignments. The first year of the Master is very theoretical and should thus be lightened in burden so as to allow a trainee to specify his professional project.

For both master degrees, the objective of the internship must be clearly defined and treated in a scientific manner, whether it is a professional job or research project.

For the Master degree in Physiotherapy, only one internship is planned in M1, while for the Master degree in Sport and Exercise Science, a single internship is planned in M2. Searching for an internship is the responsibility of the student. The description of the content of the programme is not accessible in the documents, but as confirmed during the site visit, the quality of the teachers assures us of a high level of education. LUNEX participates in the ERASMUS + mobility program for students and staff. This program will provide students with financial support to support their exchanges in other European countries.

f) Within the frame of the academic program leading to the Bachelor's degree, with the exception of alternating courses, a compulsory training period with a university or a higher education institution abroad is included in the program which is subject to the validation of studies followed outside the home institution.

Concerning the clinical placement as part of the Master in Physiotherapy, the institution strongly encourages internships outside Luxembourg through its many clinical partners around Luxembourg especially in France. Nevertheless, to the best of our knowledge, an international internship is not mandatory for master students.

The same applies to the Master in Sport and Exercise Science, where students are encouraged to find internships outside Luxembourg, although it is not mandatory to go abroad.

3- ADMISSION, RECOGNITION AND CERTIFICATION

a) The conditions of admission to the study program are clearly defined and published. The admission criteria provide for the possibility of a validation of the professional experience.

For both Masters, conditions of admission to the study program are clearly defined in LUNEX's "Request for Accreditation" document and, if accredited, will be published on the website and in degree-related marketing and informational material.

The Master program in Physiotherapy is the complement of the bachelor degree. It specializes students into the main domains of physiotherapy: musculoskeletal, pediatric, cardio-respiratory, and neuro-physiotherapy. The conditions of access to this Master program are well-identified. The candidate has to justify:

- Minimum 3-year (6 semesters) Bachelor's degree (or equivalent) in Physiotherapy
- Minimum 950h of clinical placement
- Minimal C1 English level or successfully pass the LUNEX English language test.



Concerning the Master program in Sport and Exercise Science, the admission is open to any European applicant with a Bachelor's degree (or equivalent) and non-European applicants with an equivalent degree:

- Sport Science or Physiotherapy
- Kinesiology
- Human Movement Science
- Physical Education.

Applicants have to provide evidence of their English language skills (B2 minimum) or pass the LUNEX University English language test.

For both MSc programs, in contrary to the BSc programs, there is no foundation semester provided for students who fail the English test. The recruitment will have to be very fine-tuned and should there be any concern with the recruited students, specific tutoring should be provided to such students.

Moreover, hosting international students from different continents represents a real development opportunity for LUNEX. Nevertheless, more attention should be given to the integration of non-European students, paying attention to the potential cultural shock and integration difficulties faced by these students. The recruitment process should consider these aspects so as not to duplicate the mistakes made in the past, especially for Nepalese students.

Where applicable, prior MSc-level learning and professional experience will be accredited through a formalized Accreditation of Prior Learning (APL) process. Head of each department will assess the candidate's dossier and particularly, check equivalences of diplomas through the "Anabin" website. The "Anabin" database contains information on the evaluation of foreign diplomas as well as universities. After the on-site interviews, it appears that the admission process shall consider the diploma and its related number of ECTS. An evaluation procedure is to be considered, inspired by the 'Application Day' in the Bachelor's degree. For foreign students, a videoconference meeting should be used for this evaluation.

b) The evaluation methods are defined according to the training purposes.

For both programs, there are two main evaluation periods according to the type of course planning: the first one occurs at the end of a "block teaching" of several weeks of the same course, and the second one is planned during January and June. For both the periods, several evaluation methods allow students to mobilize their knowledge accordingly with the objectives of their future job, and to facilitate and shape their intellectual and professional ability and development. Depending on the module's number of ECTS, there are one or two evaluations. The threshold is 5 ECTS. In case of exam fail, a second session (organized per semester) will allow the student to retake the exam. In case of another failure after the second session, the student will have to redo all the corresponding modules.

For the Master in Physiotherapy, the assessment strategies will include written assignments, written exams, presentations, personal and professional development portfolios, practical exams, peer assessment and collaborative approaches, assessment of clinical placements and, at the end of the second year, the master thesis.

For the Master in Sport and Exercise Science, most modules assess learning with a combination of assessment methods namely, written examinations, written coursework, oral presentations and practical assessments. The MSc thesis oral evaluation will assess the research project, whereas a mock job application will complete the evaluation of the internship.

Such evaluations for the two MSc programs are in line with the training purposes, mainly built to provide students with all the competences necessary to enter a dynamic and international professional environment. The various types of evaluation are also adapted to the different type of courses.

c) The evaluation methods applied in the different modules are clearly communicated to the students.

For both programs, each assessment method will be checked by the Program Leader and verified and approved by the Exam Board. The Exam Board will be comprised of two faculty representatives from each of the two master programs. Students will have detailed information on how a module is assessed through the module outline. They will receive the module outline generally two weeks before the beginning of a module. To complete this information, the module coordinator will introduce the module assessment during the introductory lecture of each module. All assessment methods are clearly presented and justified in the "Request for accreditation" document. All the exams are presented in English. Currently, there is no note clearing system but LUNEX University is considering to apply such a system in the future in order to be consistent with the Luxembourgish law regarding the University of Luxembourg.



d) The diplomas and degrees awarded by the institution of higher education provide information on the qualifications acquired. They are accompanied by a diploma supplement that describes the knowledge and skills acquired by the holder.

For the Master in Physiotherapy, the diploma authorizes a training based on the professional standards of knowledge and skills specified by the World Confederation for Physical Therapy. To the best of our knowledge, LUNEX is the only European Institution in Physiotherapy, with some other in Belgium, which delivers a complete MSc for entry level physiotherapists. Such a study level is above the standards for the practice of physiotherapy in Europe. In Belgium, the fifth year is oriented towards specialization in some fields of physiotherapy.

LUNEX has proposed a "Post-graduate Certificate in Physiotherapy Studies (PG Cert)" in a way to propose an exit to students after four years of study (240 ECTS). This certificate could not be recognized by European countries because students have to be fully qualified in the original country they are studying in¹ (master entry level for physiotherapy with 300 ECTS in Luxembourg).

4 - TEACHING PROGRAMME MANAGEMENT

a) The academic program has sufficient resources in terms of academic staff, financial and material resources etc. to cover its specific needs and achieve its objectives. Such resources are available for the entire duration of the academic program.

The new building will provide additional room capacity for teaching and for student life. Besides classrooms, the school provides facilities for students to practice physiotherapy. The availability of work rooms and the quality of student life should not be degraded during the temporary phase of evolution of the flow of students and the construction of the new building.

For the Master in Physiotherapy, one teacher manages 4 of the 10 modules (64 ECTS) and teaches for 15 per cent of the program. LUNEX is in the process of hiring two full-time faculty members: one Associate Professor and one Assistant Professor. It also plans to hire additional lecturers and staff for clinical placement support. Also, LUNEX plans to hire two visiting lecturers, for less than 20 hours in total.

For the Master in Sport and Exercise Science, two teachers manage 4 of the 9 modules (70 ECTS) and teach for 25 per cent of the program. LUNEX is in the process of hiring two full-time faculty members: one Associate Professor and one Lecturer. They also plan to hire another part-time teacher. Also, LUNEX plans to hire four visiting lecturers. They would manage a total of 24 ECTS, which is around 20 per cent of the program.

In both cases, more than half of the programs are managed by only one or two teachers. LUNEX must ensure that this predominance has no negative consequence on the plurality and stability of program management and teaching.

Also and besides the issue of the consistency of recruitment, specific attention should be given to ensure program coordination. The Teaching and Learning council (TLC) already has to deal with many issues and subjects. The diversification of programs at LUNEX should be accompanied by appropriate coordination effort and structuration.

Concerning the available resources, LUNEX students have access to online resources and they receive a subscription for the National Library of Luxembourg, giving them access to its online and physical resources. Additional human resources will be necessary with the two new Master programs. For this reason, LUNEX has developed a plan to hire new teachers and has already started to grow the team.

b) Courses are provided by competent staff on the teaching and pedagogical level, capable of linking subject matters to professional practice in the relevant field and current research. Teaching is based on student centred learning, promoting active participation by the students.

LUNEX wants to differentiate itself with excellence in teaching. The teaching team is composed of a small number of highly qualified teachers in their fields. This ensures an agility in teaching and learning that empowers students to be proactive. Most of LUNEX's teachers are also researchers. They ensure that study programs are linked with the current state of research, and they also organize research-based activities for

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¹ European directive 2013/55/UE



students. The study programs also include the participation of international specialists in their respective fields, who are invited from other universities.

For the Master in Physiotherapy, less lectures and small study groups as well as group learning tasks will help students become proactive in the learning process.

For the Master in Sport and Exercise Science, the teaching strategy is more traditional, but LUNEX intends to implement blended learning.

It is clear that LUNEX is eager to foster students' active participation and develop a student-centric teaching and learning approach. However, the evolution of student flows should not deteriorate the proximity between students and teachers, especially regarding the active learning strategy chosen by LUNEX.

c) The proportion between permanent academic staff and external speakers is adapted to the objectives of the academic program.

For the Master in Physiotherapy, the proportion of visiting lecturers is less important as they are invited only in the fields where LUNEX's own teaching team does not have the necessary subject expertise.

For the Master in Sport and Exercise Science, LUNEX plans to frequently invite external speakers from foreign universities. Some of them have already been identified. As mentioned in the request for accreditation, agreements have been secured with four of them and they have already contributed to the development and design of the modules.

These contributions are managed by the module coordinators and program leaders. Depending on the learning outcomes of the modules, LUNEX should also ensure the participation of sufficient professional practitioners, especially in the Master of Physiotherapy program.

d) Continuing education programs are provided to academic staff.

Thematic meetings are informally organized every month between academic staff. However, LUNEX has not yet developed specific professional training programs for them.

e) Adequate supervision and comprehensive information for students are provided. Students are offered tutoring or mentoring programs.

The proximity between students and teachers ensures frequent and comprehensive information and communication. LUNEX also organizes feedback sessions for students to give their opinion about the courses and the program. However, these interactions need to be formalized with assurance of a follow-up. Special attention should be given to the communication to students about how their feedback was taken into account and translated into actions. This could be achieved with a strengthening of roles and responsibilities of students' representatives. It would be interesting to let them work together with teachers and staff in the operationalization of the continuous improvement processes. By doing so, LUNEX could empower students to take an active role in the institutional development. If needed, specific training about the missions of students' representative could be organized.

Teachers are available to answer students' questions and help them in their studies. The school plans to implement a "guidance tutorial" system to provide adequate support to students with regards to their professional and personal development. However, on the academics side, coaching and mentoring by established tutors - whether teachers or students - do not seem formally structured yet.

It should be noted that LUNEX has to make additional efforts toward international students, firstly during their arrival in Luxembourg and then all along their studies. As mentioned earlier regarding the recruitment process and considering that the school intends to develop its international strategy, it is important that LUNEX proposes adequate supervision and comprehensive information to foreign students.



5 - RESEARCH

a) The higher education institution performs, in the relevant areas, basic oriented research activities or applied research activities as defined in article 1 of the law of 3 December 2014 on the organisation of public research centers. These research activities will lead to publications in the institution's name in international scientific and peer-reviewed journals.

For now, most research-active faculty members have a research activity outside LUNEX. These activities cover the fields of Physiotherapy and Exercise and Sport Science. There is awareness of the need to conduct research activities at LUNEX in the future. The documents provided and the on-site visit indicate the desire to establish partnerships with other European and foreign universities, but overall, only few collaborations are yet formalized (University of Northumbria (UK), the Centre Hospitalier de Luxembourg and the Luxembourg Institute of Health). It seems to be work in progress. Most of these members have research activities in the universities and laboratories with which they used to collaborate before joining LUNEX. These research endeavors are accompanied by publications in international peer-reviewed journals. On such publications, the authors indicate their affiliation to LUNEX.

During the visit, it was learnt that LUNEX has undertaken to finance a research laboratory accessible to the faculty and students of Physiotherapy and of Sport and Exercise Science as well as PhD students, as soon as the two master programs are accredited.

b) The institution incorporates the results of its research in the education it is providing.

In order to establish a specific research activity, LUNEX has set up a Research Council consisting of all the department heads. This council is not only responsible for deliberating an in-house research strategy, but also encouraging partnerships in Luxembourg and outside.

Scientific research is mainly taken into account for the purpose of teaching and developing curriculum in certain modules.

6 - INTERNAL QUALITY ASSURANCE

a) The higher education institution ensures to collect, analyse and use relevant information for the effective management and the continuous improvement of its academic programs and research activities.

From the documentation provided and in discussion, it was clear that LUNEX has processes in place for the collection of information in order to improve its academic programs. These include meetings with faculty members, module evaluation questionnaire, and the module moderation form. However, there isn't sufficient evidence to conclude that this data is analyzed and actioned in a systematic manner in order to impact greatly on the current academic programs. Currently there are no mechanisms in place for the monitoring and continuous improvement of the organisation's research activities. LUNEX plans to use an external audit (as a development council) soon to improve quality.

b) The higher education institution has an internal and external quality assurance system that it makes public and that forms an integral part of its strategic management. The internal and external measures for the quality assurance of the institution are in compliance with the standards and guidelines for quality assurance in the European Higher Education Area (ESG).

In this area, LUNEX places heavy emphasis on the systems and procedures of the COGNOS Group, and is certified according to the DIN EN ISO 9001:2015 and DIN EN ISO 29990:2010 standards applicable from February 2018 for a period of three years. The development of their own quality improvement and management plan would serve LUNEX well, and clearly articulating their own policy would be to their advantage. Regarding external measures, the organisation mainly relies on the periodic review by the Luxembourg Ministry of Higher Education and Research.



c) The academic programs are regularly subject to an internal review to ensure they reflect the latest results of research and teaching in the relevant field, that they fulfil the targeted objectives and meet the continuously changing needs of students and society.

The professional and research expertise of its current teaching staff ensures that LUNEX's academic programs are geared to meet the needs of society and mainly the profession. Given its recruitment strategy for teaching staff, LUNEX ensures to stay in touch with the most recent research; the majority of the teachers being active researchers.

In addition, the Master Physiotherapy program has been developed on the basis of professional competences guidelines from the World Confederation of Physical Therapy (WCPT) (WCPT 2011), Australia/New Zealand and Canada, being leaders in physiotherapy practice and education. In this context, the Teaching and learning council ensures the relevance of the program regarding the students' and external partners' needs. However, it is not clear and evidence was not obtained to show how the "latest results" of research and teaching in the relevant field are being implemented in order to ensure the fulfilment of targeted objectives on a regular basis.

d) Responsibilities, competencies and the decision-making process within the higher education institution are clearly and transparently defined.

The Constitution of the organisation outlines its decision-making process, and also defines the roles and responsibilities of different bodies, including the Senate and the various councils. This document, however, contained some confusing terminology, such as 'Executive committee' that is no longer used in practice by the organisation; although this point was well clarified to the panel during the visit. There was found to be ample opportunity to obtain information regarding these bodies and their processes and competencies. From the documentation and meetings, it was ascertained that the exam procedures and the responsibilities of the Examination Office have been clearly and transparently defined. However, there is still a need to formalize some key organisational decision-making processes

For instance, LUNEX needs to clearly specify responsibilities in relation to quality management, and define the rules and procedures for tenure and promotion of current faculty members.

e) Academic staff and students have sufficient means to make known their position and to participate in the decision-making process.

The level of attrition has to be followed and the reasons why students decide to stop their study need to be recorded and analyzed. The level of attrition is between 10 % to 20% in the bachelor level and drop out rate is more important and increasing for international students (Nepalese students). This last situation has to be explored efficiently because it shows that Lunex didn't manage the requirement, cultural discrepancies, and integration of international students efficiently. It affects the reputation of the institution and its capacity to manage international students (non-EU). This situation seems to be under-estimated by Lunex.

Through the organisational structure outlined and the regular meetings of the Senate and the Teaching and learning council that were attested to, satisfaction can be that academic staff have sufficient and regular means by which to make their position known. Staff members have the possibility to contact the Heads of departments directly or convey their feedback through the module coordinators and program leaders. While the scope of involvement of student representatives in the Senate and the resulting possibility to influence decision-making is clearly outlined in the Constitution, how students actually influence decision making seems ambiguous. Specifically in this regard, the panel expresses doubts pertaining to the role, familiarity and participation of student representatives, based on evidence gathered during the site visit.

f) The defined institution has a person or a committee dealing with issues relating to equal opportunities policy.

The responsibility to deal with issues relating to equal opportunities policy is presently being fulfilled in the same role as that pertaining to student services, examinations, and quality management (as an interim solution). Although it was somewhat reassuring to learn that the organisation has appointed an Equal Opportunities Officer, a clear and well-defined equal opportunities policy does not exist. The organisation's current framework of multi-stage recruitment procedure, involving representatives of different departments, ensures an independent assessment of candidates.



V. CONCLUSION

STRONG POINTS:

- Positioning in a dynamic environment favorable to the development of the structure
- Experience of COGNOS in education, as an umbrella body providing financial support and tools
- International level of teaching and a reality of multicultural character
- Originality of training in the national offer
- Responsiveness of the teaching and academic teams to students needs and concern; high spirited team committed to shaping the quality of the institution together
- Operational management adequate tools dedicated to data collection
- Coherent presentation of the two masters in terms of the structure, clarity and learning goals
- In Physiotherapy, the program is based on the recommendations of international reputed bodies in the field (WCPT, Australia, New Zealand and Canada)
- Many sports equipment made available to students

WEAK POINTS:

- Lack of a plan of action intended to anticipate a rapid development of the structure
- Risk of misadaptation linked to the identified gap between the announced educational objectives and the fixed commercial orientations
- Insufficient human resources to meet the ambitious objectives that have been set
- Delay in improving student living conditions on campus (accommodation and catering)
- Lack of clarity regarding the procedures for representation and student participation in boards
- Lack of quality approach and analysis, lack of coherent oriented approach with data analysis
- Imbalance between the first and second year of training related to a diploma architecture that does not meet the standard criteria of master (in terms of workload, internship, or written work for example)

RECOMMENDATIONS TO THE INSTITUTION

- Reinforce self-empowerment, autonomy and identity as a higher education institution
- Define a robust time-bound action plan: to develop according to the strategy and in compliance with the milestones announced
- Strengthen the synergy between academic content and professional scenarios
- Control growth in relation to the management and academic ratio
- Display an accessible campus living reality in accordance with student growth, and ensure the conditions for success for every single student
- Define a clear international strategy adapted to LUNEX's needs and vision, with formalized and long-lasting agreements: to collaborate with international partner institutions, to define a strong and sustainable international research strategy, to coordinate the different visions among international academic staff, and in terms of support to foreign students (especially non-EU students) and their integration into the student community
- Optimize and formalize processes: in terms of governance, human resources, student follow-up, and in terms of data collection and analysis (dashboard with specific indicators of the quality management system to analyze data and take into account the results)



- Strengthen and synchronize internal and external communication to better build relationships with various stakeholders

CONCLUSION OF THE EXPERTS PANEL:

Reporting on the similarities in the functioning of the two Masters, the panel of experts would suggest to the Ministry of Higher Education and Research to propose a conditional accreditation, for both Masters, paying particular attention to the following:

- Implementation by LUNEX of an action plan linked to its development strategy with precise chronology,
- Controlling the growth in relation with the management and academic ratio, but also with the infrastructure
- Delivering well-balanced training programs (in terms of workload and importance of training and professional situations)
- Strengthening analysis and quality approach in the institution.



VI. COMMENTS OF THE INSTITUTION

[LU:NEX]

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Differdange, 21 May 2019

Subject: Hcéres Evaluation Report

Dear members of the expert committee,

LUNEX University is a young international university with the vision to be a leading university for sport and health in Europe. In this context, "international" means expanding knowledge frontiers by means of additional education and development of the personality of our students through social and cultural diversity which, accordingly, will support each student's lifelong learning. The interaction with people from different countries and continents promotes new languages and increases the cultural adaptability of everyone at the university. Classes are enriched with different perspectives on topics and theories when holding discussions and debates. As currently the LUNEX University academic staff and students originate from over 10 different countries, the latter is enhanced. Thus, the international character gives the university a unique feature in Europe. The global internationalisation of the university is therefore a decisive strategic aspect of LUNEX University.

The University aims to develop skilled graduates through high quality academic programmes to answer the needs of the sport and health industry and lead innovative research that is relevant to human health, human performance and the social, economic and cultural needs of the society. Currently, the following core research areas are being developed: (1) Sport & Brain, (2) Musculoskeletal Injury Prevention and Rehabilitation, (3) Sports Performance Analysis & Training, (4) Doping Prevention in Young Athletes and (5) Innovation and Digital Transformation in Sport. LUNEX University aims to integrate these research areas into the existing research landscape in Luxembourg and beyond. Moreover, these research areas are partly crosslinked thus, providing a comprehensive research agenda with regards to health and performance improvements as well as the social, economic and cultural needs of society, consequently strengthening the national and international relationships within and of Luxembourg.

Yours sincerely,

Dr. Holger Korte

Prof. Dr. Andreas Mierau Academic Director

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