### APPROVED BY

Order No V-928 of the Minister of Education and Science of the Republic of Lithuania of 27 July 2015

#### DESCRIPTOR OF THE STUDY FIELDS OF PHYSICAL AND HUMAN GEOGRAPHY

## I CHAPTER GENERAL PROVISIONS

1. Descriptor of the Study Fields of Physical and Human Geography (hereinafter referred to as the "Descriptor") shall govern the special requirements applied to the study programmes of the study fields of physical and human geography (hereinafter jointly referred to as the "Geography studies")

2. The Descriptor has been prepared in accordance with the Law on Higher Education and Research of the Republic of Lithuania taking into account Resolution No 535 of the Government of the Republic of Lithuania of 4 May 2010 "On the Approval of the Descriptor of the Lithuanian Qualifications Framework", Order No V-2212 of the Minister of Education and Science of the Republic of Lithuania of 21 November 2011 "On the Approval of the Descriptor of Study Cycles", Order No V-501 of the Minister of Education and Science of the Republic of Lithuania of 9 April 2010 "On the Approval of the Descriptor of General Requirements for Degree-Awarding First Cycle and Integrated Study Programmes", Order No V-826 of the Minister of Education and Science of the Republic of Lithuania of 3 June 2010 "On the Approval of the Descriptor of General Requirements for Master's Study Programmes", Order No V-2463 of the Minister of Education and Science of the Republic of Lithuania of 15 December 2011 "On the Approval of Recommendations for Developing the Descriptor of a Study Field or Study Fields", Order No V-222 of the Minister of Education and Science of the Republic of Lithuania of 19 February 2010 "On the Confirmation of the List of Study Branches Comprising Study Fields", Order No 1749 of the Minister of Education and Science of the Republic of Lithuania of 23 December 2009 "On the Approval of the List of Study Areas and Fields According to Which Studies Are Conducted in Higher Education Institutions As Well As the List of Qualification Degrees", Order No ISAK-1026 of the Minister of Education and Science of the Republic of Lithuania of 15 May 2009 "On the Approval of the Descriptor of Full-Time and Part-Time Studies", Order No V-2538 of the Minister of Education and Science of the Republic of Lithuania of 23 December 2011 "On the Approval of Recommendations for University Teachers' Working Hours Framework" as well as international practice in the field of geography studies, reflected by international and national geographical organisations as well as international geographical higher education network **HERODOT** (http://www.herodot.net/index.html).

3. Descriptor shall be applied to the first and second cycle university studies.

4. This Descriptor aims to:

4.1. Assist higher education institutions in drafting, updating, revising and assessing study programmes;

4.2. Define the profession of geographer, form professional self-awareness, strengthen its scientific basis and improve the public image of the profession;

4.3. Inform students and employers about the knowledge and skills acquired;

4.4. Give guidelines to national and international experts who assess study programmes as well as accrediting bodies.

5. The Descriptor shall be applied to:

5.1. Study field of physical geography and its comprising branches within the physical sciences field group of physical sciences study area;

5.2. Study field of human geography and its comprising branches within the social sciences field group of social sciences study area.

6. Upon completion of the studies of the study field of geography, the higher education qualification shall be acquired:

6.1. After completing the first cycle university studies in the field of physical or human geography (or one or more of their branches), a Bachelor's qualification degree is acquired accordingly in the field of physical geography (or its branch or branches) or human geography (or its branch or branches) by issuing a Bachelor's diploma by the university;

6.2. After completing the second cycle university studies in the field of physical or human geography (or one or more of their branches), a Master's qualification degree is acquired accordingly in the field of physical geography (or its branch or branches) or human geography (or its branch or branches) by issuing a Master's diploma by the university.

7. Studies of the study field of geography may be organised on a full-time and part-time basis.

8. Two-field studies (main study field and minor study field) within the geography study programme are available. Upon completion of such study programme, a double qualification degree of the main study field (branch) and a minor study field (branch) is acquired. Such programs are organised between the fields of study of geography as well as programmes in humanities, biomedical, physical, social and technological fields of study, which provide qualifications that complement one another through acquired competences. The list of minor fields (branches) of study shall be approved in accordance with University's regulations.

9. When studies are organised using different forms of studies, the structure, scope, curriculum and learning outcomes of study programmes of the same qualification degree must not differ.

10. When designing study programmes in the field of geography, it is recommended to comply with the following provisions concerning their structure:

10.1. In the first cycle studies about 15-20 per cent of credits must come from major study field subjects, which are intended to provide knowledge and develop better understanding of laws of physical and social development; 50-60 per cent of credits should be acquired from study field subjects aimed to provide knowledge and skills in the fields of spatial spread of physical and social phenomena, its dissemination patterns, reasons behind them and their interoperability; 20-50 per cent of credits should be acquired from subjects aimed at deepening the knowledge of a chosen specialisation as well as development oriented subjects (including cartography, geographic information systems, final thesis, projects and practical training); at least 5 per cent of credits should be acquired from subjects;

10.2. In the second cycle studies at least 50 per cent of credits should come from methodological, problematic or innovative level study field subjects; no more than 25 per cent of credits should come from optional subjects or subjects of a different study field; at least 25 per cent of credits should come from the final thesis (project) and practical training.

11. General enrolment requirements for studies in the field of geography shall be:

11.1. Persons with at least secondary education shall be enrolled in first cycle study programmes of study field of physical/human geography in an enrolment contest, taking into account their learning outcomes, entrance examinations or other criteria established by a higher education institution. Higher education institutions shall establish a list of competitive subjects by the field of study and principles for the award of contest points, the lowest possible entrance grade and other criteria, having received the assessment of student representation, and publish them no later than 2 years preceding the start of the school year;

11.2. It is recommended to enrol persons with higher education qualification for second cycle study programmes, who have completed a study programme in the study field of geography or humanities, biomedical, physical, social or technological study fields for their first cycle studies. Having achieved such learning outcomes during their first cycle studies should ensure students'

readiness to participate in the Master's study programmes in the study field of geography. Therefore, higher education institutions offering Master's study programmes in the study field of geography shall evaluate the nature of their organised study programmes and establish Bachelor's study fields' lists submitted for acceptance either directly or combined with additional attendance of supplementary studies.

12. The granted Bachelor's degree corresponds to the sixth level of the Lithuanian Qualifications Framework and the European Qualifications Framework for Lifelong Learning, whereas Master's degree corresponds to the seventh level of the Lithuanian Qualifications Framework and the European Qualifications Framework for Lifelong Learning

# II CHAPTER CONCEPT AND SCOPE OF THE STUDY FIELDS

13. Geography is a system of sciences, which analyses the Earth's geospheres and their interaction, spatial expression of public activity and physical processes that take place in the contact zone of the Earth's surface (geographic shell), and formation and evolution of morphostructures, geosystems and anthropoecosystems that reflect them.

14. Contemporary geographical knowledge includes:

14.1. Theoretical core of geography covering the methodology of geography, landscape geography that integrates spatial structures, general physical and general human geography reflecting physical/human nature;

14.2. Connecting geospherically differentiated component-sectorial unit of physical and human geographical discipline complexes;

14.3. Humanities, physical, biomedical and social sciences or their parts thereof as elements of periphery of interests of geographical cognition. System of geographical sciences and each geographical discipline has its own theoretical, historical, regional and applied sectors, where research object is interpreted in terms of aspects of interactions, summarising, development, distribution and possible use.

15. The aim of study programmes in the field of geography:

15.1. First cycle studies aim to prepare scientific research, environmental protection and land use planning specialists with a degree in the study field of geography, who are able to understand the patterns of formation, development and spatial differentiations of geospheres, landscape, social and economic systems in Lithuania and the rest of the world, apply analytical methods and information technology, who are familiar with general principles of sustainable development and environmental protection, understand the importance of lifelong learning and are able to continue studying for a Master's degree;

15.2. Second cycle studies aim to prepare specialists with a degree in the study field of geography and provide them with skills necessary for work that includes solving various geography related problems in the fields of research, spatial planning and maintenance, environmental exploitation, environmental protection and economic management and institutional framework, as well as doctoral studies; train professionals to be able to deal with current and new geographical and land use planning modernisation problems.

16. The main aims of study programmes of the study field of geography shall be:

16.1. In first cycle studies it is aimed to:

16.1.1. Cultivate specialists in the study fields and branches of geography, who will have acquired the necessary amount of knowledge and motivation to work in accordance with their qualifications, and continue their education or training further;

16.1.2. Provide students with an opportunity to acquire integrated competence in the field of geography;

16.1.3. To provide the knowledge and skills necessary for shaping environmental science and environmental protection oriented thinking paradigm;

16.1.4. Develop a critical approach and a sense of civil liability for the Earth and for one's own country;

16.1.5. Encourage students' interest in current interdisciplinary academic issues.

16.2. In second cycle studies it is aimed to:

16.2.1. Expand and deepen students' general competence in the field of geography;

16.2.2. Provide knowledge and skills needed for different geographic and land use planning related problems;

16.2.3. Build students' capacity for scholarly work;

16.2.4. Develop constructive systematic thinking, forward-looking approach, design skills and a sense of civic responsibility;

16.2.5. Together with social partners prepare globally-minded professionals who are able to successfully integrate into the European and world community.

17. Learning outcomes in the study fields of geography are directed towards student competences developed by university; Difficulty level of programme objectives within the study fields of geography corresponds with qualification requirements of the Lithuanian Qualifications Framework and the European Qualifications Framework. Learning outcomes in the study fields of geography are focused on the acquisition of newest knowledge in the areas of work and study, which requires critical understanding of theories and principles, cognitive and practical skills, professional skills and ability to apply innovative approach at work. They are necessary when solving complex, predictable and unpredictable geography related issues in professional work and study fields.

# III CHAPTER GENERAL AND SPECIAL LEARNING OUTCOMES

18. Any study programme in the study field of geography, its content and implementation must ensure that each graduate accumulates enough knowledge to be able to know and understand different geographic phenomena, can apply their knowledge in practical and professional activities and is able to work not only within geography-related fields.

19. After completing the first cycle (Bachelor's) studies of the study field of geography, the following learning outcomes, basic knowledge and skills should be achieved:

19.1. Knowledge and its application:

19.1.1. Fundamental knowledge of physical (study field of physical geography) and social (study field of human geography) phenomena and their qualitative and quantitative expression;

19.1.2. Must possess knowledge in the field of geography, i.e. be familiar with definitions of geographical concepts, phenomena and processes, have knowledge about physical and anthropogenic patterns of geospheres' evolution and their interaction, interaction between the above phenomena, orientation and intensity of these processes as well as formal inventory knowledge about geographical objects;

19.1.3. Has knowledge in the field of humanities, which is necessary to implement the objectives of profession in the study field of geography, to shape a scientific philosophical outlook and develop self-expression;

19.1.4. Has knowledge of geographical research methods, geographic information systems (GIS), cartography, mathematical and other geographic information acquisition, its analysis and interpretation methodology;

19.1.5. Has knowledge about spatial integration and differentiation patterns of physical and social phenomena, interrelationship between the geographical environment and landscape elements, dynamic processes and cycles on-going within the geographical environment, in various geosystems (physical geography field) or social systems (human geography field) of different spatial scale and their influence on humanity (human economic activity);

19.1.6. Is familiar with changes happening in nature (physical geography field) and society (human geography field) and their interaction in space and time, the extent of critical changes and their forecast;

19.1.7. Has expertise in the process of monitoring of geographical spheres, their research, modelling and forecast creation techniques;

19.1.8. Applies knowledge consistently when critically analysing emerging differences in physical (physical geography field) or human (human geography field) environment by using theories, raising hypotheses, formulating explanations, emphasizing the strengths and weaknesses of different concepts;

19.1.9. Applies knowledge when identifying and analysing new research problems relating to relevant study fields, planning their solution strategies and combines elements of theory and practice when realising pragmatic insights.

19.2. Skills needed to carry out research:

19.2.1. Ability to plan research and experiments, formulate research problems, select research methodology and equipment and carry out research safely;

19.2.2. Ability to apply the latest geographical research methods, general principles of physical (physical geography field) and human (human geography field) sciences, analyse processes happening in geospheres (physical geography field) or anthroposphere (human geography field) on a local, regional and global levels;

19.2.3. Ability to monitor and measure quantitative and qualitative aspects of physical (physical geography field) or human phenomena (human geography field), independently carry out monitoring in nature observations, document information and present research reports.

19.3. Special skills:

19.3.1. Ability to analyse scientific publications, use databases, lab equipment, experimental systems and other information sources;

19.3.2. Ability to process, evaluate, analyse and interpret data, and summarise information on a specific subject;

19.3.3. Ability to understand theoretical principles, which serve as the basis for newly developed research methodology and technologies;

19.3.4. Ability to holistically assess decisions while balancing the costs, benefits, safety, quality, reliability and impact on the environment;

19.3.5. Understanding of new and significant scientific works as well as directions of development in different fields of science;

19.3.6. Ability to carry out expertise on territorial processes, plan, regulate and manage socioeconomic (human geography field) and nature management (physical geography field) activities;

19.3.7. Ability to create maps representing spatial distribution of events and processes and collect, structure and analyse geo-referenced data using GIS technology, mathematical and statistical techniques;

19.3.8. Ability to organise, coordinate and carry out project design work.

19.4. Social skills:

19.4.1. Ability to responsibly evaluate social, cultural, economic and political indicators and changes of social life as well as interaction between nature and society;

19.4.2. Ability to evaluate decisions from an ethical, legal, social, economic and security point of view;

19.4.3. Ability to work and adapt in changing (dynamic) or new situations; teamwork skills;

19.4.4. Ability to present practical results of their work to the public and organise successful realisation of these results in a market economy.

19.5. Personal abilities:

19.5.1. Ability to formulate arguments, present research findings and conclusions to different audiences both orally and in writing;

19.5.2. Ability to find information from primary and secondary sources, including search for operational information; ability to systematise and structure information;

19.5.3. Ability to employ legal acts and other documents, and rely on them in practice;

19.5.4. Ability to assess mathematical and statistical analysis, data accuracy, information summaries and its visual presentation;

19.5.5. Information technology use skills: ability to use information networks and databases, and develop computerised graphical documentation;

19.5.6. Time management and organisational skills, written communication skills as well as skills allowing them to verbally present and defend scientific works;

19.5.7. Has independent learning skills needed to ensure continuous professional development;

19.5.8. Ability to communicate and convey knowledge of the subject and terminology in correct Lithuanian language both orally and in writing, as well as the ability to converse on the subject related topics in at least one foreign language.

20. After completing the second-cycle (Master's) studies the following learning outcomes should be achieved: in-depth knowledge and skills in the chosen branch of geography or extended competence in adjacent fields:

20.1. Knowledge and its application:

20.1.1. Is familiar with cognitive paradigms of landscape and geosystems, and features of dynamic processes and their cycles happening in modern geographical environment;

20.1.2. Is aware of characteristics of physical (physical geography field) or human (human geography field) phenomena and landscape spatial differentiation process, especially in Lithuania, the Baltic region and Europe as well as their influence on the development of society;

20.1.3. Is aware of physical (physical geography field) or human (human geography field) mutual links between the geographical environment and landscape elements, and the problems they cause;

20.1.4. Is aware of the latest theories and paradigms in specialised systematic physical (physical geography field) and human (human geography field) branches of geography;

20.1.5. Is familiar with methods used to predict changes in nature (physical geography field) or society (human geography field) and their interaction in space and time, and the use and application of such methods when solving practical problems;

20.1.6. Has a common understanding of land management, environmental design, management and environmental protection processes;

20.1.7. Is familiar with geographical information systems' (hereinafter the "GIS") cartographical, mathematical and other geographic information acquisition, analysis and interpretation methodologies;

20.1.8. Ability to apply geographic knowledge when carrying out expertise of physical (physical geography field) or human (human geography field) processes, regulating environmental exploitation (physical geography field) or socio-economic activities (human geography field), managing and planning.

20.2. Skills needed to carry out research:

20.2.1. Ability to analyse territorial phenomena on the basis of one or more theoretical approaches while combining theory and practice, comprehensively use various geographic analysis methods, GIS, mathematical models, statistical methods and analytical work skills;

20.2.2. Ability to plan, organise and conduct applied territory research, prepare corresponding reports and present them to the public.

20.3. Special skills:

20.3.1. Ability to identify advantages and disadvantages of theories, interpretations and political environmental protection concepts;

20.3.2. Ability to consistently and critically evaluate differences emerging in the world of humanity and its living environment;

20.3.3. Sound orientation towards environmental protection (physical geography field) or social-economic field (human geography field) and land management;

20.3.4. Ability to think systematically, integrate ideas, make hypotheses, form concepts and research tasks, and critically analyse data and projects;

20.3.5. Ability to land using planning, landscape formation and protective measures;

20.3.6. Ability to perform mapping through the use of modern technology and use cartographic, analytical statistical methods and GIS technology in research;

20.3.7. Ability to apply numerical mathematical models when evaluating physical (physical geography field) or social processes (human geography field).

20.4. Social skills:

20.4.1. Ability to combine independent and group work; organisational skills;

20.4.2. Has the essential career planning skills and knows how to communicate in the national and international sphere;

20.4.3. Has an active civil position.

20.5. Personal abilities:

20.5.1. Has perspective and logical thinking, and the ability to formalise and model;

20.5.2. Ability to assess qualitative and quantitative information and perform evaluations, when there is information missing or it appears controversial;

20.5.3. Ability to analyse and critically evaluate legislation and other documents;

20.5.4. Ability to analyse problems, formulate conclusions and rational arguments, make decisions, write investigation reports and prepare scientific articles;

20.5.5. Is responsible, creative, innovative, enthusiastic, disciplined and motivated;

20.5.6. Ability to study in order to grow professionally;

20.5.7. Ability to use correct Lithuanian language orally and in writing in professional activities.

## IV CHAPTER TEACHING, LEARNING AND ASSESSMENT

21. Teaching should be based on continuous integration of latest developments in the study process. Implementation of programmes in the field of geography is based on competent and qualified university teachers, who seek to teach their students how to learn and organise their knowledge, are capable of improving teaching and learning contents and choosing the appropriate student-centred teaching and achievement assessment methods, develop new, more effective training methods and encourage the desire for lifelong learning.

22. Teaching (learning) must be based on fundamental knowledge of geography and the content of latest achievements in the field of geography science. Teaching methods should expand the understanding of conceptual geography fundamentals, be adequate when it comes to possible rendering of current academic achievements in the field of geography, facilitate conditions in which the aims of a study programme will be able to achieve the necessary knowledge and skills as well as enhance professional competence.

23. Teaching methods should be consistent with the lifelong learning (continuous learning) concept, which requires the encouragement of development of the lifelong learning concept over the course of studies, so that as a part of their studies students should be trained and encouraged to acquire learning skills. Didactic system must orient the study process towards the development of students' ability to learn based on current knowledge in the field of geography.

24. Teaching and studying (learning) must be based on clear goals formulated by teachers and formed by students, complying with programme aims and learning outcomes. Teaching methods must be effective, differ from one another and be applied through the effective use of existing capabilities and facilities. Learning must be oriented towards the systematisation of knowledge, its spatial understanding as well as understanding and modelling of territorial systems and their mutual interaction.

25. The choice of study methods (teaching and learning) must ensure the opportunity to achieve learning outcomes. General and special study methods can be applied: active (problem

analysis and decision making classes, teaching and professional practice, preparing reports and presentations, discussions, project work, research and other methods oriented towards active and independent learning for students), interactive (subject's electronic training courses, conferences, using virtual environment, web pages providing training materials and products of video lectures), passive (lectures, workshops, seminars and other methods considered to be a part of traditional learning concept), as well as cartographic analysis, thematic and topographic mapping, GIS application and field testing methods. The same methods may be applied in different cycle studies, but the content and degree of complexity of given tasks should vary, as well as students' selfsufficiency rate and other.

26. Higher education institution, by setting the assessment procedure, has the right to allow teachers to choose assessment methods. Learning outcomes of a subject studied by a student are evaluated according to a ten-point grading system. Geography studies' student achievement evaluation system should allow monitoring progress when working towards the expected results, notice deviations at the right time, enable continuous feedback and create preconditions for correction. Evaluation criteria describe the achieved mandatory learning outcomes, which enable teachers awarding students with an appropriate grade. Assessment procedure, assessment system and assessment criteria should be based on the principles of validity, reliability, clarity, usefulness and impartiality.

27. When assessing learning outcomes of a student, the following types of evaluation can be applied: cumulative (learning outcomes are evaluated with the help of interim tests), collegial (students are examined by a competent commission comprising geography professionals including academics, professional practitioners and representatives of social partners) as well as diagnostic (carried out in order to determine student's achievements and progress made at the end of a studied topic or part of a course). Evaluation methods, among others, may include a written or oral examination, individual or group based oral interview, testing, cognitive (ideas and concepts) maps, case studies, practical training report and its defence, final thesis and its defence.

28. At the beginning of semester teacher informs students about the learning outcomes' evaluation procedure, pointing out a comprehensive program of the subject, its aims, expected learning outcomes, learning outcomes' assessment framework, which is specific for the subject (the influence of intermediate tests on the final grade, learning outcomes that will lead to having to repeat the course of a subject, whether it is possible to reseat a test, etc.), and the evaluation criteria.

29. Students must receive appropriate feedback on the work they carried out in good time. Evaluation of carried out work and learning outcomes must be accompanied by constructive comments based on clear evaluation criteria. Students should be given the opportunity to discuss many aspects of their studies, including their final evaluation, with their evaluator. Meaningful feedback must be maintained constantly while both learning outcomes evaluation process and prerequisites for teaching and studying should be continuously improved.

30. Evaluation of learning outcomes must orient study process towards the development of students' ability to learn relying on current knowledge in the field of geography.

#### **V CHAPTER**

## **REQUIREMENTS FOR THE IMPLEMENTATION OF STUDY PROGRAMMES**

31. Study programme may be implemented by qualified and competent lecturers carrying out fundamental research or experimental development research, who are familiar with graduates' future job conditions and are able to help students prepare themselves for their future professional or academic activities in the field of geography.

32. Lecturers' general competence is assessed based on the following criteria: academic level of education, variety of acquired education, practical scientific research project experience, teaching experience, ability to communicate in correct Lithuanian language orally and in writing as well as ability to communicate in languages most widely used in geographical community, readiness and initiative to develop more effective teaching methods, fruitful and productive scientific research and

project development activities reflected in publications, implemented projects, participation in scientific conferences and scientific associations, personal interest in students' needs and provision of continuous academic assistance. Teachers must be able to properly advise students in the areas of study and career planning, and be familiar with assessment procedures and accreditation criteria applied to study programmes in the field of geography.

33. Lecturers' competency is assessed in accordance with the criteria set by a relevant higher education institution.

34. Competent teachers, who are widely recognised practitioners in their field of study and hold at least a Master's degree or an equivalent higher education qualification, may be invited to teach applied subjects.

35. Final thesis Evaluation Commission (hereinafter the "Commission") should consist of competent geographical scientists. The Head of the Commission must be an active scientist holding a doctoral degree in science, who is familiar with professional work specifics facing future graduates and works in another higher education, science, business or manufacturing institution.

36. Questions regarding subject curriculum should be addressed to subject teachers and independent assignment, final thesis, project and professional practice supervisors, who shall consult students according to study plans or students' individual needs.

37. Consultations on questions regarding the organisation of studies and choice of a study model shall be provided by vice-deans of faculties or institute directors. University career centres organise and coordinate students' career planning activities and organise individual and group consultations.

38. Successful implementation of the study programme shall require the following material base:

38.1. Auditoriums shall meet hygiene and safety requirements; they shall be equipped with modern audio and video equipment, as well as demonstration tools;

38.2. Laboratory equipment and apparatus must be sufficient to allow students to learn applying modern research methods; each student must perform tasks using the equipment necessary to realise programme strands within the study field of geography (hydrological, meteorological, geodetic and mapping devices, soil science equipment, computers and subject relevant learning programmes, computer models, GIS equipment, etc.), training practice related inventory and facilities, learn how to use research equipment when analysing the results obtained; while they study and carry out scientific and project work, students are given the opportunity to use university labs and other educational facilities according to their study plan or individual needs, subject to prior agreement with Faculty (Institute) administration;

38.3. When organising instructional practice, it is advisable to have stationary practice facilities fitted with necessary material equipment or a mobile instructional practice organisation system; to enrich geographers' academic preparation, it is advisable to organise a complex instructional practice outside of Lithuania, which would help them to get to know geographic diversity of the environment of other countries and provide the opportunity to learn the differences between geographical regions;

38.4. The number of textbooks for each subject, educational books or lecture summary notes kept in a library should meet students' needs; libraries must be equipped with a sufficient number of computers and appropriate computer software and information equipment (literary directories, search engines, Internet connection interface for searching larger library databases, access to full-text scientific publications, databases and other sources of information at the disposal of universities);

38.5. The number of used computers must comply with the programme requirements; all computers must be equipped with standard text and the required graphic software packages, have Internet connection as well as modern educational programs.

## VI CHAPTER DESCRIPTOR OF LEVELS OF ACHIEVED LEARNING OUTCOMES

39. Study outcomes achieved by students of the study field of geography are divided into three achievement levels: excellent, standard and threshold.

40. First study cycle (Bachelor's) knowledge and abilities' achievement levels:

40.1. Excellent achievement level:

40.1.1. Graduate shows excellent learning outcomes of the study cycle, which are consistent with broader knowledge, abilities to carry out research and demonstrate special skills, applies them by initiating geographical tasks, formulating and solving them independently, and has also acquired excellent social and personal abilities corresponding to learning outcomes of the study cycle;

40.1.2. Graduate can work independently in an administrative position that requires the acquired professional knowledge and skills, or having acquired a teacher's qualification, works as a geography teacher, where appropriate, subject to consultations from experienced professionals;

40.1.3. Graduate is advised to continue their studies at the Master's level; graduate, having started (continued) their professional career, can become an excellent practitioner.

40.2. Standard achievement level:

40.2.1. Graduate shows good learning outcomes of the study cycle corresponding to the required level of knowledge, abilities to carry out research and demonstrate special skills, applies them by formulating and solving geographical tasks independently, and has also acquired good social and personal abilities corresponding to learning outcomes of the study cycle;

40.2.2. Graduate can work in an administrative position that requires the independently acquired professional knowledge and skills, or having acquired a teacher's qualification, work as a geography teacher subject to consultations from experienced professionals;

40.2.3. Graduate is advised to continue their studies at the Master's level or start (continue) their professional career.

40.3. Threshold achievement level:

40.3.1. Graduate shows basic learning outcomes of the study cycle corresponding to the required level of knowledge, abilities to carry out research and demonstrate special skills, applies them when solving geographical tasks, and has also acquired basic social and personal abilities corresponding to learning outcomes of the study cycle;

40.3.2. Graduate can work in a technical or administrative position that requires some of the acquired professional knowledge and skills, or having acquired a teacher's qualification, work as a geography teacher subject to management from experienced professionals;

40.3.3. Graduate is advised to start (continue) their professional career.

41. Second study cycle (Master's) knowledge and abilities achievement levels:

41.1. Excellent achievement level:

41.1.1. Graduate shows excellent learning outcomes of the study cycle corresponding to and surpassing the required level of knowledge, abilities to carry out research and demonstrate special skills, applies them by identifying problems, formulating and solving geographical and land management tasks that require research, and has also acquired excellent social and personal abilities corresponding to learning outcomes of the study cycle;

41.1.2. Graduate can work independently in an expert or scientific position that requires the acquired professional knowledge and skills, when necessary, subject to consultations from experienced professionals;

41.1.3. Graduate is advised to continue their studies at the doctoral level; graduate, having started (continued) their professional career, can become an excellent practitioner.

41.2. Standard achievement level:

41.2.1. Graduate shows good learning outcomes of the study cycle corresponding to the required level of knowledge, abilities to carry out research and demonstrate special skills, applies them by identifying problems, formulating and solving geographical and land management tasks

that require research, and has also acquired good social and personal abilities corresponding to learning outcomes of the study cycle;

41.2.2. Graduate can work independently in an expert or scientific position that requires the acquired professional knowledge and skills subject to consultations from experienced professionals;

41.2.3. Graduate is advised to continue their studies at the doctoral level or start (continue) their professional career.

41.3. Threshold achievement level:

41.3.1. Graduate shows basic learning outcomes of the study cycle corresponding to the required level of knowledge, abilities to carry out research and demonstrate special skills, applies them when solving geographical and land management tasks, and has also acquired basic social and personal abilities corresponding to learning outcomes of the study cycle;

41.3.2. Graduate can work independently in an expert or administrative position that requires the acquired professional knowledge and skills, subject to management from experienced professionals;

41.3.3. Graduate is advised to start (continue) their professional career.