

Name of the Educational Program: Master's Program in Environmental Management and Policy (EMP)

Qualification to be awarded: Master in Environmental Management

Amount of Program in Credits: 120 ECTS

Language of Instruction: Georgian

Level of Higher Education: Master's Degree

Type of the Educational Program: Academic

Purpose of the Program:

The program goal is to prepare highly qualified specialists in the field of environmental management and policy, who will successfully work in public as well as private and civil sector, on different research, academic or managerial positions, with the focus on environmental management issues.

Environmental Management and Policy master program is oriented for students to

develop professionally and have a successful career in both public and private sectors and international and non-governmental organizations.

The program graduates will be capable to work in the field of environmental management, to plan, implement and monitor the mechanisms of efficient decision-making.

Preconditions for the admission to the program:

- 1. Bachelor's degree;
- 2. Passing national master degree exams, the A test;
- 3. Successful completion of the internal university interviews and testing (3.1. Inspection of documents, 3.2. Interview with the admission commission to check the relevance of the applicant's knowledge and skills, 3.3. English language test (level intermediate-B2) or certificate required TOEFL, IELTS, FCE).

Learning Outcomes/Competences:

Knowledge and understanding:

The Master has a deep and systematic knowledge in Environmental management and policy field, its principles and theories; possesses tools of research, is able to organize and conduct the research. The Master has critical understanding of theories and practices of Environmental Management and Policy and is able to understand complex issues in the field of waste management, air pollution, water, forest and land management; is able to develop solutions to particular problems; knows theories of environmental economics, impact assessment tools.

Applying knowledge:

As a result of acquired knowledge and skills, the Master is able to apply them to practice. The practical assignments provided in the learning process, including working on real projects, developed and strengthened Masters' ability to apply gained knowledge in practice. The Master is able to generate new ideas and independently conduct a research using the latest methods and approaches. The Master is able to act adequately in a new, unpredictable and multidisciplinary environment.

The Master has a capacity to gather primary data, as well as work on secondary data and analyze and present it in an appropriate format in relevant context. Graduate has the deep knowledge of the principles of environmental management gained during the learning process, has competences to assess existing problems and elaborate their effective solutions.

Graduate has developed skills of conducting projects/researches. The Master has an ability to detect and assess the problems in the field of environmental protection, as well as to develop their adequate solutions.

Making judgments:

The Master has an ability to identify and formulate complex problems, select the way of problem solution and justify their own decision. Is able to search information from different sources (even incomplete), process it and make logical conclusions; The Master is equipped with the ability of analyzing on-going events and the existing data; Is able to provide a complex judgment.

The Master has a complex vision of existing problems in the field of environment and an ability to make critical analysis of the information based on the knowledge and experience. The Master knows how to assess implemented work, evaluate its relevance to its goals, to generalize the results and consider the mistakes made in the future planning process.

The graduate acquired abstract thinking ability that gives him/her the competence to analyze received information properly.

Taking into consideration the specifications of the program, the Master is able to analyze scientific researches in the field of environment management and policy, to separate scientifically substantiated position and to make a competent conclusion.

Communication skills:

The Master has the ability to convey conclusions and arguments to the academic and professional society in written and verbal forms, in foreign and native languages, has a capacity to gain new informational and to establish professional communication by considering channel peculiarities.

The educational program format develops Master's skills for efficient team working and online collaboration.

The Master has an ability to deliver research projects in writing, verbally and visually; Is able to receive information related to environmental management and express his/her position in both written and verbal forms of communication.

The Master has an ability to analyze problems and issues raised in the field, considering diverse visions and vindicating his/her own judgment through relevant arguments. Based on the teaching format, the Master obtains the methods of effective communication, timely adaptation to the new environment and adequate response. In addition, the graduate has leadership and team working skills.

The teaching approach provides the Master with effective leadership skills, as well as ability to work in teams productively. The experience gained during the teaching process, gives the Master ability to conduct a dialogue not only with business representatives, but also in interdisciplinary environment.

The Master gains knowledge in information and communication technologies and can use it during formation of problem statement, as well as developing their solution. At the same time, the Master gains leadership and team working skills.

Learning skills:

The Master is able to manage the learning process independently, reveals the ability of understanding the peculiarities of the process and high level of strategic planning.

The Master has the ability to continually refresh the knowledge, to aspire to independent learning and professional development, which largely implies deepening practical and scientific experience.

The Master has an ability to continuously acquire and revise new developments in the field of environment protection; Has an ability to update and extend knowledge independently, based on innovations in the field of environmental management and policy. The graduate is able to use the secondary literature, can apply quantitative and qualitative methods, continue studies on Doctoral Program and conduct academic activities independently.

Values:

The Master has a clearly developed system of values, respects principles of sustainable development and environmental ethics. He/she is able to assess and adequately perceive others' values. The Master is familiar and appreciates universal human values; He/she is able to value and respect differences and cultural diversity. The graduate is conscious of the importance of social responsibility, gender equality and strives to establish them.

The Master possesses skills of ethical decision-making and objective reasoning. In scientific or practical activities, the Master considers social interests and values; his/her acts and defends the human rights and interests.

<u>leaching and learning methods:</u>
Lecture
∑ Team Work
Practical Work
⊠ Seminar
Teaching with electronic resources
E-Learning
Other

Evaluation system for student knowledge:

The learning component of Environmental Management and Policy master program encompasses students' active participation in the teaching process and is based on the principle of continuous assessment of acquired knowledge.

Assessment of acquired knowledge on Environmental Management and Policy master program is organized in accordance with the Order No. 3 by the Minister of Education and Science of Georgia, January 5th, 2007 - "The Rule of Calculation of Higher Education Program Credits".

On Environmental Management and Policy master educational program evaluation of student's learning results in each component of the program must include midterm (Onetime or Multiple) and summative evaluation, which as a result for final assessment (100 Points).

Mid-term and summative evaluations (Evaluation forms) include evaluation component/components, what determine ways to assess student's knowledge and/or ability and/or competence (Written/oral Exam, written/oral quiz, homework, practical/theoretical work, etc.). Assessment component unites homogeneous assessment methods (Test, essay, presentation, discussion, performance of theoretical/practical assignment, teamwork, participation in discussion, etc.). Assessment method/methods are measured by assessment criteria, by which achievement of learning outcomes is being measured.

Each assessment form and component have certain value allocated from the final score (100 Points), what is indicated in each Syllabus and is being communicated to each student in the beginning of the semester.

The evaluation of the achievement of the student's learning results in each component of the program should include mid-term and summative evaluations. Credits shall not be awarded by using only one form of evaluation (mid-term or summative evaluation).

Under the evaluation system there are five types of positive evaluation:

- (A) Excellent –91-100 points of evaluation;
- (B) Very good –81-90 points of evaluation;
- (C) Good 71-80 points of evaluation;
- (D) Satisfactory -61-70 points of evaluation;
- (E) Sufficient -51-60 points of evaluation.

In addition, two types of negative evaluation:

(Fx) Did not pass – 41-50 out of the maximum evaluation, which means that the student needs to work more to pass the examination and he/she shall be given the possibility to retake the examination after the self-study;

(F) Fail – 40 points or less out of the maximum evaluation, which means that the work done by the student is not enough and he/she has to retake the course.

In case of (Fx) evaluation in any component of the educational program, the University must hold an additional examination within not later than 5 days after the announcement of the results of the summative examination. This obligation shall not apply to the dissertation, Master's project/thesis or other scientific project/paper. The points, awarded to the student in the summative evaluation, shall not be added to the evaluation of the student at the additional examination. The evaluation obtained by the student at the additional examination is the summative evaluation and shall be included in the final evaluation of the component of the educational program. In case of taking 0-50 points in the final evaluation, including the evaluation obtained at the additional examination, the student evaluation will be F-0 points.

The calculation of the Grade Point Average (GPA) is part of the system of evaluation of the student's knowledge. The student's Grade Point Average (GPA) is calculated by multiplying the evaluation, obtained by the student in every subject of the educational program, to the credits of that subject. The product of multiplication of the subjects and credits is summed up and divided by the total number of the credits of the taken subjects. The weight of the point in the calculation of the average number is:

A = 4

B = 3, 2

C = 2, 4

D = 1.6

E = 0.8

Field of Employment:

The graduates of EMP Master Program will be able to work in private and public, NGO sectors and international organizations.

Opportunity for continuing education process:

The graduate of EMP master's program is entitled to pursue his/her doctoral studies of environmental field domestically or abroad.

$\underline{Information\ about\ human\ resources\ necessary\ for\ the\ program\ implementation:}$

Sufficient human resources are being involved in the implementation of Environmental Management and Policy master educational program. Courses from the educational program are being led by academic personnel of the University, as well as invited specialists with sufficient experience and competence.

Additional information about human resources is available in Annex N2.

Information about material resources necessary for the program implementation:

The University infrastructure and material-technical resources are fully available for students to reach the learning outcomes included in educational program:

- Academic audits and conference halls equipped with appropriate inventory;
- Library, equipped with computer hardware and informational-communicational technologies;
- Computer classes, computer hardware connected to internet and internal network and adequate computer software in learning/teaching process;
- Different technical equipment et cetera.
- Audio-video equipment, software and hardware support necessary to implement the program.

The educational program is provided with appropriate manual and methodical literature. The University's library provides students with electronic textbooks relevant to the syllabus, educational-methodical and scientific literature, as well as the library's database.

Material resources owned and possessed by the University, ensures the Digital Media and Communication bachelor program to implement its objectives and achieve planned learning outcomes.

Buildings and Structures - Educational bachelor program is carried out in the buildings and structures owned and leased by the university, where sanitary-hygienic and safety norms are highly respected (the buildings are equipped with installed alarms, fire extinguishers, video control system takes place on the perimeter, order is maintained by the custodial servant of the university). The building is in full accordance with the technical requirements established for the institutions, lecturing and practicum auditoriums are equipped with relevant technique and inventory (projector, chairs, desks, boards et cetera).

Library - In the library of the University the relevant printed and electronic fund of the bachelor's educational program is preserved, which is available for the students, invited and academic personnel. In the reading hall, students have the opportunity to use internet and international electronic resources (EBSCO; JSTOR; Cambridge Journals Online; BioOne Complete; e-Duke Journals Scholarly Collection; Edward Elgar Publishing Journals and Development Studies e-books; IMechE Journals; New England Journal of Medicine; Open edition Journals; Royal Society Journals Collection; SAGE Premier). The library of the university has electronic catalogue.

Working Space of Academic Personnel - The working space of academic personnel is equipped with the relevant inventory and technical equipment (chairs, tables, wardrobes, computers with the access to internet, Xerox multifunctional machine).

Information and communication technologies - The University uses information and communication technologies in order to facilitate the implementation and administration of bachelor's educational program in Digital Media and Communication. There is a corresponding software for the bachelor's educational program in Communication, the existing computer hardware meets the contemporary requirements, is connected to the internet and is available for students, academic, invited and administration personnel. Electronic system – lmb.gipa.ge – is used for assessing student's knowledge and to coordinate teaching process. The system provides students with access to assessments, facilitates the control of academic attendance of students and the learning process in general. Through the web-page, which contains information about the educational programs and the learning process, the University provides publicity and accessibility of information.

Head of the Program:

Nana Baramidze

Ietim Gurji str. #7b 0114, Tbilisi, Georgia Phone: (995 32) 2 497545

Cell: (995 595) **599 600 941** E-Mail: **n.baramidze@gipa.ge**

Nana Macharashvili

Ietim Gurji #7b Tbilisi, 0105, Georgia Tel: (995 32) 249 75 00

Mob: (995 593) 48 82 11

E-Mail: nana.macharashvili@gipa.ge

Structure and description of the program:

The program lasts two academic years and the student is granted the Master's degree if 120 credits are accumulated. The total of teaching credits is 55 ECTS, Internship – 10 ECTS, thesis – 30 ECTS. 25 ECTS are accumulated with elective courses.

The student can request individual schedule, but by default, the method is the following: First two semesters the students accumulates between 26 and 34 ECTS, in the third semester 20 ECTS, the fourth semester – 10 ECTS with practical course in policy lab and the master thesis 30 ECTS.

The recommended scheme of credits accumulation for EMP Master Program:

I semester	II semester	III semester	IV semester
· 26 ECTS	• 24 ECTS and 10 optional ECTS	• 5 ECTS • 15 ECTS	• 10 ECTS in the policy lab • 30 Master thesis

Course Distribution of Environmental Management and Policy Master Program

					ECTS				hours		
No.					ear	II Year		11'S	al		
	Code	Condition	Madala/Cabiant		Sem	ester	ster		vidu ng h		
Nº	Code	Condition	Module/Subject		II	III	IV	Credit hours	Individual working hours		
			Component								
			Mandatory courses	26	24	5					
1.	ENR 011609	No	Environmental Challenges	5/125				30	95		
2.	PLF011605	No	Basics of Public law	5/125				30	95		
3.	ENR 011607	PLF011605	International Environmental Law	5/125				30	95		
4.	ENR 110203	No	Efficient communication in Environmental protection (PR, Public speaking, leadership)					39	111		
5.	ENR 011616	No	Environmental Economics					30	95		
6.	ENR 011611	ENR 011609 ENR 110203	Environmental management tools		5/125			30	95		
7.	HE060101	No	Research methods and academic writing		7/175			48	127		
8.	ENR011615	ENR 011609 ENR 011611	Environmental policy		5/125			30	95		
9.	ENR011613	ENR 011609 ENR 011611 ENR011615	Impact assessment tools		7/175			48	127		
10	PPS 011603	PLF011605 ENR 011616	Project Management and budgeting in Environment			5/125		30	95		
				10	15						
1.	ENR 011618	No	Conservation and management of biodiversity		4/100			24	76		

	Total					20			
	Per year					60 60			
	Seminar					20	40		
1.		90 ECTS	Master thesis				30/75 0		
						30			
1.		80 ECTS	Policy lab (internship)				10/25 0	60	190
			Practical component				10		
11	ENR 110203	No	Sustainable energy policy			5/125		30	95
10	ENR011622	No	GIS and special planning in environmental filed			5/125		30	95
9.	ENR 011619	No	Principles of water resources management			5/125		30	95
8.	ENR 011620	No	Climate change and its aspects			5/125		30	95
7.	PP-A-004	No	Political lobbyism and advocacy		6/150			36	114
6.	PP-II-004	No	Ethics in public service		5/125			30	95
5.	ENR 011627	No	Air pollution management		3/75			21	54
4.	ENR011610	No	Conflicts and environment		5/125			30	95
3.	ENR 011625	No	Forest and land management		4/100			18	76
2.	ENR 011624	No	Waste management		3/75			21	54

Head of the Program - Resume (CURRICULUM VITAE)

Name, Surname	Nana Baramic	Nana Baramidze						
Title	Professor	Professor						
Workplace	GIPA	GIPA						
Contact Information	Phone:	599600941	e-Mail:	n.baramidze@gipa.ge				
Thesis Defended and Areas of academic/scientific research	In 2014-15 Nana Baramidze has served as the Dean of the School of Government (GIPA). For several year, she has been working in various international organizations; she was Adviser to the Minister of Environment in strategic planning. Nana Baramidze has double degree in international relations and environmental management id university of Wyoming (USA. Nana Baramidze is professor of GIPA from 2015.							
Publications								

Head of the Program - Resume (CURRICULUM VITAE)

Name, Surname	Nana Macharashvili					
Title	Proffesor					
Workplace	Georgian Institute of Public Affairs					
Contact Information	Phone: 593488211 e-Mail: nana.macharashvili@gipa.ge					
Thesis Defended and Areas of academic/scientific research	International Reconcilation Strategies and Analysis of Georgian Case (Tbilisi State University 2017). Public policy and administration; foundations for gaining success in public service reform; framework for the public service reform NPM to Public Administration; civic engagement in the public policy making and policy advocacy strategies.					
Publications	 Véronique Dudouet, Alia Ashaq, Ekaterine Basilaia and Nani Macharashvili, From Policy to Action: Assessing the European Union's Approach to Inclusive Mediation and Dialogue Support in Georgia and Yemen. Peacebuilding Special Issue (in proceeding) Lia Tsuladze, Nana Macharashvili & Ketevan Pachulia (2017), SOS Tbilisi, Problems of Post-Communism DOI: 10.1080/10758216.2017.1308228 Macharashvili, N., Basilaia, E, Tangiashvili, N. (2015) Policy Advocacy Success in Georgia: The Role and Limitations of NGOs in Influencing Public Policy, Tbilisi (manuscript on Georgian and English Languages). file:///C:/Users/User/Downloads/Macharashvili 2015 Policy%20Advocacy%20Success%20in%20Georgia eng.pdf N.Macharashvili, N.Vasadze, (2013) Book review for Ricketts, A. (2012) The Activists' Handbook: A Step-by-Step Guide to Participative Democracy, Zed BooksL London, NY, in Community Development Journal (2013) 48 (4): 648-651. Macharashvili N. (2011) Windows of Opportunity for governmental and non-governmental organization partnership in Georgia. Annual Publication. Center of Training and Consultancy. 2010 Macharashvili N. (2010) Public Sector Reforming in Georgia: Consumer oriented models VS citizen engagement. Annual Publication. Center of Training and Consultancy. 2009. Macharashvili N. (ed.). (2009) Textbook Materials in Public Policy and Policymaking. Institute of Political Science. Macharashvili N (2008), The Prospects for The New Public Management Model in contemporary Georgia. Tbilisi: Georgian Political Science. 					

- 9. Macharashvili N (2007), National Reconciliation as the toll for Peace building and Reaching National Consensus in the Post conflict Society, Tbilisi: Institute of Political Science.
- 10. Macharashvili, (2007), Georgia Following International Experience of National Reconciliation by Rejecting the Retributive Model? The *CA&CC Press® AB / Central Asia & Central Caucasus Press AB /* , THE Caucasus & Globalization, Journal of Social, Political and Economic Studies, Vol. 1 (4).
- 11. Macharashvili N., (2007), Political Forum: 15 years of Independence. *Politics and Society*, Caucasus institute for Pease, Democracy and Development, Tbilisi.. http://www.cipdd.org/files/7 284 473910 Politfor.pdf
- 12. Macharashvili N., (2006) Policy Analysis, Textbook for Advanced Master Course in Policy Analysis, Center for Social Science. Tbilisi.
- 13. Macharashvili N., (2005), "International Experience of National Reconciliation: Which Model Will Georgia Choose?", *Tselitsdeuli Year-Book of the Institute of Political Sciences of Academy of Georgia.*
- 14. Macharashvili N., (2004), "Spanish Experience of National Reconciliation Process". Politica, Vol..5-6.
- 15. Macharashvili N., (2001), "International Experience of National Reconciliation Process and Georgia". Political Technologies, Vol.1.
- 16. Macharashvili N., (2000), "Human Rights Defending in Georgia", Book chapter, POLITOLOGIA. Course Material Collection. Tbilisi.
- 17. Macharashvili N., (1998), Compromise as the phenomena of Political Culture, Collection of Students' research papers dedicated to the cultural history and theory issues, Tbilisi.

Information about human resources

N⁰	Name, Surname	Status	Course
1.	Mariam Sekhniashvili	Associated professor	Research methods and academic writing
2.	Ana Gorgodze	Assistant	Efficient communication tools in Environmental Management
3.	Keti Gomelauri	Adjunct Lecturer	Project management and budgeting in Environmental field
4.	Ketevan Gujaraidze	Adjunct Lecturer	 Environment assessment tools Environmental management tools Environment and conflicts
5.	Tamar Gugushvili	Adjunct Lecturer	Environmental policy
6.	Malkhaz Adeishvili	Adjunct Lecturer	Environmental Economics
7.	Irakli Shavguidze	Adjunct Lecturer	Conservation and management of biodiversity
8.	Kakha Artsivadze	Professor	 Conservation and management of biodiversity Fundamental challenges of Environment protection
9.	Eliso Barnov	Adjunct Lecturer	Water resources management
10.	Irakli Kobulia	Adjunct Lecturer	Water resources management
11.	Khatuna Gigauri	Associated professor	Climate Change
12.	Murman Margvelashvili	Adjunct Lecturer	Sustainable energy policy
13.	Nika Arevadze	Adjunct Lecturer	GIS and special planning in environmental filed

14.	Alverd Chankseliani	Adjunct Lecturer	Waste Management
15.	Noe Megrelishvili	Adjunct Lecturer	Air pollution management
16.	Erich Mies	Adjunct Lecturer	Forest and land management
17.	Ia Papiashvili	Adjunct Lecturer	Efficient communication tools in Environmental Management
18.	Tina Khidasheli	Professor	Efficient communication tools in Environmental Management
19.	Naia Zavrishvili	Assistant	Ethics in public service
20.	Tamar Koberidze	Adjunct Lecturer	Political lobbyism and advocacy
21.	David Jandieri	Professor	Administrative Law
22.	Merab Barbakadze	Adjunct Lecturer	International Environmental Law