

	<b>Subject (code, title, credits)</b>	<b>GEOG 640 Environmental problems of Azerbaijan 8 ECTS</b>		
	<b>Department</b>	Geography and Environment		
	<b>Level</b>	Master program		
	<b>Term</b>	2021/2022, Fall		
	<b>Instructor</b>	Shahnaz Amanova		
	<b>E-mail 1:</b>	<a href="mailto:shahnaz.amanova@khazar.org">shahnaz.amanova@khazar.org</a>		
	<b>Phone:</b>	+99470 265 95 68		
	<b>Classroom/hours</b>	11 Mehseti str. (Neftchilar campus), Old Building,		
	<b>Office hours</b>			
<b>Prerequisites</b>				
<b>Language</b>	English			
<b>Compulsory/Elective</b>	Compulsory			
<b>Required textbooks and course materials</b>	<ol style="list-style-type: none"> <li>1. The State Statistic Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> <li>2. Rae Aliyev. Agriculture in Azerbaijan and its Development Prospects. JOJSciences. Vol 1(5), 2018</li> <li>3. Yolchiyeva F. Ecological problems of water resources in Azerbaijan and their impact on human health. Central Asian Journal of Environmental Science and Technology Innovation, 2020, 2, p 71-76</li> <li>4. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, 880 p.</li> <li>5. Mammadova Sh. Ecogeographical problems of air pollution in the big cities of Azerbaijan. Bulletin of Science and Practice. T. 6. №2. 2020. <a href="https://doi.org/10.33619/2414-2948/51">https://doi.org/10.33619/2414-2948/51</a></li> <li>6. MINISTRY OF ECOLOGY AND NATURAL RESOURCES. OF AZERBAIJAN REPUBLIC NATIONAL CASPIAN ACTION PLAN OF AZERBAIJAN REPUBLIC. DEVELOPED WITH THE ASSISTANCE OF THE CASPIAN ENVIRONMENT PROGRAM. BAKU 2002,</li> <li>7. A. Dolkhanov, L. Dadashova, A. Garayev. Foundation of sustainable management of forests of the Azerbaijan Republic. Baku, 2012, 138 p.</li> <li>8. M. Khalilov. Anthropogenic Transformation of the Forest Ecosystems of Azerbaijan. International Caucasian Forestry Symposium. Turkey, 2013, pp 43-47</li> <li>9. G.Sh.Mammadov, A.C Hashimov. Ecological assesment of salted soils. Baku, 2005</li> <li>10. H.K.Dave, S.Holloway. Urban geography. 1<sup>st</sup> Ed.n. Pearson Education, 2009</li> <li>11. Z. Eminov. Population of Azerbaijan. Baku, 2005, 560 p.</li> <li>12. Biodiversity analysis update for Azerbaijan, Reports, 2000, 2010, 2017, 2020</li> </ol> <p><i>Note: Lectures of all topics will be provided by the instructor</i></p>			
<b>Course outline</b>	The course introduces students to basic principles of human impacts on environment in Azerbaijan Republic. Human beings affect the ozone layer depletion more than natural impacts. The modules of this course will help the student to have better understanding human role on the pollution of soil, water, air, etc.			
<b>Course objectives</b>	<p>The main objective of the subject is to provide students with fundamental knowledge about the environmental problems in Azerbaijan. Course objectives:</p> <ul style="list-style-type: none"> <li>- To gain and apply knowledge and skills of the basics of environmental problems in Azerbaijan</li> <li>- To gain and apply knowledge of the human impacts on environment</li> <li>- To gain and apply knowledge of the results of the Covid 19 on environment</li> <li>- To gain and apply knowledge of the environmental problems in Karabakh</li> </ul>			
<b>Learning outcomes</b>	<p>At the end of this course, in accordance with the objectives, master students should possess the following skills and knowledge:</p> <ul style="list-style-type: none"> <li>- Knowledge of the basics of environmental problems in Azerbaijan</li> <li>- Knowledge of the human impacts on environment</li> <li>- Knowledge of the results of the Covid 19 on environment</li> <li>- Knowledge of the environmental problems in Karabakh</li> </ul>			
<b>Evaluation</b>	<b>Methods</b>	<b>Date/deadlines</b>	<b>Percentage (%)</b>	
	<b>Midterm Exam</b>	November	30	
	<b>Activity</b>	all the classes of the semester	5	
	<b>Attendance</b>	all the classes of the semester	5	
	<b>Project</b>	November	10	

	<b>Quiz</b>	October/December 5+5	10
	<b>Final Exam</b>	January	40
	<b>Total</b>		100
<b>Policy</b>	<p><b>Attendance and participation:</b> The master students are required to attend all classes as part of their studies and those having legitimate reasons for absence (illness, family bereavement etc.) are required to inform the instructor. Generally, four (4) unauthorized absence marks will lead to the master students' expulsion from the course. If a student is late to the class for more than ten (10) minutes, s/he is NOT allowed to enter and disturb the class. However, in such case the master student is able to enter the second double hours without delaying. The attendance and participation will account for 10% of the total course grade, which depends on master students' good class attendance and active participation in class discussions.</p> <p><b>Preparation for class</b> The structure of this course makes your individual study and preparation outside the class extremely important. The lecture material will focus on the major points introduced in the text. Reading the assigned chapters and having some familiarity with them before class will greatly assist your understanding of the lecture. After the lecture, you should study your notes and work relevant problems from the end of the chapter and sample exam questions. Throughout the semester we will also have a large number of review sessions. These review sessions will take place during the regularly scheduled class periods.</p> <p><b>Withdrawal (pass/fail)</b> In case of failure, a master student will be referred or required to repeat the course the following term or year. For referral, he/she will be required to take examination scheduled by instructor.</p> <p><b>Quiz</b> There will be two quizzes. Quizzes will constitute 10 percent of the final grade. Make up quizzes will not be given except in the case of dire emergency. Master students are required to turn in answers to assignments at the beginning of the classes at which they are due. Late assignments will not be accepted.</p> <p><b>Project</b> is an individual task given to each student and is estimated with a maximum of 10 points (10% of the total course grade). Project will be sent to the instructor's email address (<a href="mailto:shahnaz.amanova@khazar.org">shahnaz.amanova@khazar.org</a>).</p> <p><i>Guidelines</i></p> <ul style="list-style-type: none"> <li>- Each student has to prepare one project</li> <li>- Projects must be written at least 5 pages with Times New Roman font</li> <li>- Font size 14 kegel</li> <li>- Student has to use the latest references (from the last 5-10 years)</li> </ul> <p><b>Cheating/plagiarism</b> Cheating or other plagiarism during the Quizzes, Mid-term and Final Examination will lead to paper cancellation. In this case, the student will automatically get zero (0), without any considerations.</p> <p><b>Professional behavior guidelines</b> The master students shall behave in the way to create favorable academic and professional environment during the class hours. Unauthorized discussions and unethical behavior are strictly prohibited. Classroom behavior that seriously interferes with either (a) the instructor's ability to conduct the class or (b) the ability of other master students to benefit from the course program will not be tolerated. When a master student's behavior in a class is as seriously disruptive as to compel immediate action, the instructor has the authority to remove a master student from the class on an interim basis, pending an informal hearing on the behavior.</p>		
<b>Tentative Schedule</b>			
<b>No</b>	<b>Date/Day</b>	<b>Topics</b>	<b>Readings</b>
1		<b>Introduction. Law of the Azerbaijan Republic about environmental protection</b>	1. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, pp. 5-58 2. Law of the Azerbaijan Republic about environmental protection, 1999, June 8 <a href="http://www.cis-legislation.com/document.fwx?rgn=2679">www.cis-legislation.com/document.fwx?rgn=2679</a>
2		<b>Air pollution</b>	1. Mustafaev I. Yuzbashov E. Air pollution in oil industry of Azerbaijan. Transactions on Ecology and the Environment, 2001, vol. 46, pp 713-718 2. The State Statistcal Committee of the Republic of

			Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a>
3		<b>Soil Pollution</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environment. Baku 2005, pp. 212-216</li> <li>2. G.Sh.Mammadov, A.C Hashimov. Ecological assesment of salted soils. Baku, 2005</li> <li>3. Rae Aliyev. Agriculture in Azerbaijan and its Development Prospects. JOJSciences. Vol 1(5), 2018</li> <li>4. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
4		<b>Soil degradation. Soil erosion</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environment. Baku 2005, pp. 232-239</li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
5		<b>Water Pollution</b>	<ol style="list-style-type: none"> <li>1. Yolchiyeva F. Ecological problems of water resources in Azerbaijan and their impact on human health. Central Asian Journal of Environmental Science and Technology Innovation, 2020, 2, p 71-76</li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
6		<b>Deforestation</b>	<ol style="list-style-type: none"> <li>1. Dolkhanov, L. Dadashova, A. Garayev. Foundation of sustainable managment of forests of the Azerbaijan Republic. Baku, 2012, 138 p.</li> <li>2. Mahmud Khalilov. Anthropogenic Transformation of the Forest Ecosystems of Azerbaijan. International Caucasian Forestry Symposium. Turkey, 2013, pp 43-47</li> <li>3. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
7		<b>Overpopulation</b>	<ol style="list-style-type: none"> <li>1. H.K.Dave, S.Holloway. Urban geography. 1<sup>st</sup> Ed.n. Pearson Education, 2009</li> <li>2. Z. Eminov. Population of Azerbaijan. Baku, 2005, pp. 450-480</li> <li>3. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
<b>Midterm</b>			
8		<b>Desertification</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, (pp. 231-232)</li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
9		<b>Climate changes</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, (pp. 137-142, 144-146)</li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>

10		<b>Ozone layer depletion</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, (pp. 129-132)</li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
11		<b>Environmental problems of Karabakh</b>	<ol style="list-style-type: none"> <li>1. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> <li>2. Online resources</li> </ol>
12		<b>Public health issues. Interaction between Covid 19 and environment</b>	<ol style="list-style-type: none"> <li>1. <a href="http://www.koronavirusinfo.az">www.koronavirusinfo.az</a></li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>
13		<b>Biodiversity Loss</b>	<ol style="list-style-type: none"> <li>1. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> <li>2. Biodiversity assesment for Azerbaijan. USAID Washington E&amp;E Bureau, Environment &amp; and Natural Resources Division, Washington, 2000, February</li> <li>3. Integrated Biodiversity Management, South Caucasus. Report, 2017, 24 p.</li> <li>4. Biodiversity analysis update for Azerbaijan, final report, volume I,2010, January,USAID</li> <li>5. Biodiversity analysis update for Azerbaijan, final report, 2020, January,USAID</li> </ol>
14		<b>Ecological problems of Caspian Sea</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, (pp. 189-198)</li> <li>2. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> <li>3. MINISTRY OF ECOLOGY AND NATURAL RESOURCES. OF AZERBAIJAN REPUBLICNATIONAL CASPIAN ACTION PLAN OF AZERBAIJAN REPUBLIC. DEVELOPED WITH THE ASSISTANCE OF THE CASPIAN ENVIRONMENT PROGRAM. BAKU 2002</li> </ol>
15		<b>Waste disposal</b>	<ol style="list-style-type: none"> <li>1. G.Sh.Mammadov. Ecology and protection of environmenti. Baku 2005, (pp. 143-144)</li> <li>2. Waste and Chemicals in Azerbaijan. Swiss Federal Office for Environment (FOEN), Zoi Environment Network, 2013</li> <li>3. The State Statisticl Committee of the Republic of Azerbaijan. Environmental Protection. <a href="http://www.stat.gov.az/source/environment/?lang=en">www.stat.gov.az/source/environment/?lang=en</a></li> </ol>

*Additional readings and assignments will be provided by the instructor for this course.  
If necessary, some minor modifications may be made to this syllabus by the Instructor.*