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| <i>R. Abbasov</i> | Subject (code, title, credits) | GEOG 530 Anthropogenic Changes in Physical Landscapes 4KU / 8ECTS credits 15 Weeks, 30 hours | | |
| | Department | Geography and Environment | | |
| | Level | Master program | | |
| | Term | 2021, Spring | | |
| | Instructor | Shahnaz Amanova | | |
| | E-mail 1: | shahnaz.amanova@khazar.org | | |
| | Phone: | +99470 265 95 68 | | |
| | Classroom/hours | 11 Mehseti str. (Neftchilar campus), Old Building, | | |
| | Office hours | | | |
| Prerequisites | | | | |
| Language | English | | | |
| Compulsory/Elective | Compulsory | | | |
| Required textbooks and course materials | <p>1. Andrew S. Goudie. The human impact on the natural environment. 2013, 410 p. https://tuannguyenweb.files.wordpress.com/2017/04/andrew-s-goudie-the-human-impact-on-the-natural-environment-past-present-and-future-wiley-blackwell-2013.pdf</p> <p>2. Online resources</p> <p>3. Lecture materials of the Instructor.</p> | | | |
| Course outline | The course introduces the student to basic principles of geomorphology and related geological environment. The modules of this course will help the student to have better understanding towards processes operating in the interior of the earth and also on the earth surface. | | | |
| Course objectives | <p>The main purpose of the subject is to provide master students with basic knowledge and skills about the anthropogenic changes in physical landscapes. Course objectives:</p> <ol style="list-style-type: none"> 1. To gain vital knowledge about anthropogenic changes in hydrosphere, to analyze their consequences 2. To gain vital knowledge about anthropogenic changes in atmosphere, to analyze their consequences 3. To gain vital knowledge about anthropogenic changes in biosphere, to analyze their consequences 4. To gain vital knowledge about anthropogenic changes in cryosphere, to analyze their consequences 5. To gain vital knowledge about anthropogenic changes in geosphere, to analyze their consequences | | | |
| Learning outcomes | <p>At the end of this course, in accordance with the objectives, master students should possess the following skills and knowledge:</p> <ol style="list-style-type: none"> 1. anthropogenic changes in hydrosphere and their consequences 2. anthropogenic changes in atmosphere and their consequences 3. anthropogenic changes in biosphere and their consequences 4. anthropogenic changes in cryosphere and their consequences 5. anthropogenic changes in geosphere and their consequences | | | |
| Evaluation | Methods | Date/deadlines | Percentage (%) | |
| | Midterm Exam | In April (includes topics taught in February and March) | 30 | |
| | Activity | Active student participation | 5 | |
| | Attendance | Students' class attendance | 5 | |
| | Project | Presentation (Research topic will be assigned after the midterm exam) | 10 | |
| | Quizzes | Verbal | 10 | |
| | Final Exam | In June (includes topics taught in April and May) | 40 | |
| | Total | | 100 | |
| Policy | <p>Attendance and participation: 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>Preparation for class 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</p> | | | |

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| | <p>questions.</p> <p>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>Withdrawal (pass/fail)</p> <p>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>Quizzes</p> <p>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>Project 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 (shahnaz.amanova@khazar.org).</p> <p>Cheating/plagiarism</p> <p>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>Professional behavior guidelines</p> <p>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> |
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Tentative Schedule

| № | Date/Day | Topics | Readings |
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| 1 | | What is physical landscape? Exploring Earth's physical landscape. Earth spheres. | <ol style="list-style-type: none"> 1. https://ares.jsc.nasa.gov/interaction/eeab/pdfs/soe/spheresofearth_studentguidev3.pdf 2. https://www.worldscientific.com/doi/pdf/10.1142/9789813148437_0001 3. https://www.petalschools.com/cms/lib/MS01000823/Centricity/Domain/360/Chapter%202.pdf 4. Lecture materials of the Instructor. |
| 2 | | Human Impacts on vegetation. Vegetation Change: Introduction Fires: Natural and Anthropogenic. Some Effects of Fire on Vegetation. The Role of Grazing. The Human Role in the Creation and Maintenance of Savanna. The Spread of Desert Vegetation on Desert Margins. Air Pollution and Its Effects on Plants. Forest Decline | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 26-70 2. Lecture materials of the Instructor. |
| 3 | | Human Impacts on Biodiversity | <ol style="list-style-type: none"> 1. https://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_6/b_fdi_45-46/010007950.pdf 2. Lecture materials of the Instructor. |
| 4 | | Human Impacts on animals. domestication of animals. Dispersal and Invasions of Animals. Human Influence on the Expansion of Animal Populations. Causes of Animal Contractions and Decline: Pollution. Habitat Change and Animal Decline. Other Causes of Animal Decline | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 70-103 2. Lecture materials of the Instructor. |
| 5 | | Human Impacts on soil. Salinity: Natural Sources.(1) Human Agency and Increased Salinity. Irrigation Salinity. Dryland Salinity. Coastal Zone Salinity. Consequences of Salinity. Reclamation of Saltaffected Lands. Lateritization. Soil Carbon. Soil Structure Alteration. Soil Drainage and its Impact. Soil Fertilization | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 103-120 2. https://www.ck12.org/book/ck-12-earth-science-concepts-for-high-school/section/17.0/ 3. Lecture materials of the Instructor. |

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| 6 | | Human Impacts on soil. Salinity: Natural Sources.(2) Fires and Soil Quality. Soil Erosion: General Considerations. The Causes of Soil Erosion. Soil Erosion Associated with Grazing. Irrigation and Erosion. Replacement of Grassland by Shrubland in Drylands. Soil Erosion Produced by Fire. Soil Erosion Associated with Construction and Urbanization. Soil Conservation | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 120-134 2. https://www.ck12.org/book/ck-12-earth-science-concepts-for-high-school/section/17.0/ 3. Lecture materials of the Instructor. |
| 7 | | Human Impacts on waters water pollution. Eutrophication. Thermal Pollution. Inter-basin Water Transfers and the Death of the Aral Sea. Groundwater Depletion and Groundwater Rise | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 134-168 2. Lecture materials of the Instructor. |
| 8 | | Human Impacts on GEOMORPHOLOGY | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 169-213 2. Lecture materials of the Instructor. |
| 9 | | Human Impacts on climate and the atmosphere. Anthropogenic Climate Change: The Role of Aerosols. The Gulf War Oil Fires. Anthropogenic Climate Change: The Role of Land Cover Changes. The Enhanced Greenhouse Effect and Global Warming. Urban Climates. Urban Air Pollution. Ozone Depletion and Ozone Pollution. Acid Deposition | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 213-249 2. Lecture materials of the Instructor. |
| 10 | | Ozone depletion | <ol style="list-style-type: none"> 1. https://courses.seas.harvard.edu/climate/eli/Courses/EPS281r/Sources/Ozone-hole/1-Ozone-depletion-Wikipedia.pdf 2. https://www.who.int/globalchange/publications/climatechangeec/hap8.pdf?ua=1 3. https://19january2017snapshot.epa.gov/sites/production/files/documents/ozone_depletion.pdf 4. Lecture materials of the Instructor. |
| 11 | | Human Impacts on coastal environments | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 266-284 2. Lecture materials of the Instructor. |
| 12 | | Human Impacts on cryosphere | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 297-312 2. Lecture materials of the Instructor. |
| 13 | | Human Impacts on drylands | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 312-325 2. Lecture materials of the Instructor. |
| 14 | | Global warming and other pressures | <ol style="list-style-type: none"> 1. Andrew S. Goudie. The human impact on the natural environment. 2013, p. 337-338 2. Lecture materials of the Instructor. |
| 15 | | Anthropogenic changes in physical landscapes of Azerbaijan | <ol style="list-style-type: none"> 1. Lecture materials of the Instructor. |

*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.*