## American University in Central Asia

## CHECKLIST

Student's Name
Major: Applied Geology
Profile:

ID \# $\qquad$
Year of Admission 2021
Year of Declaration $\qquad$

| Course Name | $\begin{gathered} \text { Course } \\ \# \end{gathered}$ | $\begin{array}{c\|} \hline \text { Course } \\ \text { ID } \end{array}$ | Credits | Prerequisite | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GENERAL EDUCATION COURSES |  |  |  |  |  |
| English Composition I |  |  | 6 |  |  |
| English Composition II |  |  | 6 |  |  |
| FYS I |  |  | 4 |  |  |
| FYS II |  |  | 4 |  |  |
| Introduction to Philosophy I (part of FYS) |  |  | 2 |  |  |
| Introduction to Philosophy I (part of FYS) |  |  | 2 |  |  |
| Kyrgyz Language and Literature I* |  |  | 4 |  |  |
| Kyrgyz Language and Literature II* |  |  | 4 |  |  |
| Russian Language I |  |  | 2 |  |  |
| Russian Language II |  |  | 2 |  |  |
| History of Kyrgyzstan* (to be completed during sophomore year |  |  | 4 |  |  |
| Geography of Kyrgyzstan* (to be completed during sophomore year |  |  | 2 |  |  |
| Manas Studies |  |  | 2 |  |  |
| Mathematics (6 credits may overlap with major requirements)** |  |  | 12 |  |  |
| Natural Sciences <br> (ecology/geography/geophysics/history and philosophy of science/ concept of modern sciences) SYS*** |  |  | 6 |  |  |
| Arts/SYS*** |  |  | 12 |  |  |
| Humanities/ SYS*** |  |  | 12 |  |  |
| Social Sciences/ SYS*** |  |  | 12 |  |  |
| Sports |  | $\begin{aligned} & \hline 400 \\ & \text { hour } \end{aligned}$ | 0 |  |  |
| Sum-98 Credits |  |  |  |  |  |

* All students are required to take a state examination on these courses in their 2nd year. It is highly recommended to complete them by the end of 4th semester.
** Students from EMSD (in LAS), AMI and SFW should not take General Education Mathematics courses. They fulfill their requirements in this area as part of their program requirements.
Students of the Anthropology department are required to take additional 3 credits in Computer Science.
First year students in ANTH, ES, ICP, JMC, LAS, PSY, SOC, TCMA and GEO departments who hope to transfer to BA should enroll in Introduction to Contemporary Mathematics I; in order to be eligible to transfer, they must receive a final grade of B+ or higher. For students who take this course and transfer successfully, this is the only required Gen Ed mathematics course. If not (and assuming they pass Introduction to Contemporary Mathematics I), they need to take one of the other General Education Mathematics courses to fulfill their requirements at some point during their academic career.
First year students in ANTH, ES, ICP, JMC, LAS, PSY, SOC, TCMA and GEO departments who hope to transfer to ECO, AMI or SFW departments should enroll in "Linear Algebra and Geometry for ECO/SFW/AMI" course. Only students who got passing grades for this course will be considered for transfer.
Students in PSY, SOC and JMC departments should take Introduction to Probability and Statistics during their freshman or sophomore year. In their junior year they will take a more advanced quantitative methods course that covers their second Mathematics requirement.
Students from ANTH, ES, ICP, GEO, TCMA and LAS departments who do not intend to transfer to BA, ECO, AMI or SFW should take two General Education Mathematics courses to fulfill their requirements in Mathematics over their four years at AUCA.
*** Students of PSY and SOC departments have to cover only 3 credits of Natural Science.

1. Students of the AMI department have to take 6 credits of Physics in order to fulfill this requirement.
2. All students in their 2nd year must take one Second Year Seminar. This seminar substitutes for one required 6 -credit course in either Humanities, Social Sciences, Arts or Natural Science.
3. Only 6 credits of foreign languages can be counted for Humanities requirements. However, you must take two semesters for the language courses to count towards graduation.

## REQUIRED CORE COURSES

| Intro to Geo-chemistry (AGEO-110) |  |  | 6 | Fall |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Intro to Mineralogy and Petrology (AGEO- <br> 101) |  |  | 6 | Fall |  |
| Intro to Structural Geology and Tectonics <br> (AGEO-120) |  |  | 6 | Fall |  |
| Intro to Environmental Management and <br> Accounting (AGEO-100) |  |  | 6 | Fall |  |
| GIS Application in Earth Sciences <br> (AGEO/NTR-300) |  |  | 6 | Fall |  |
| Introduction to R: Software for Statistical <br> Computing (COM/ENV-205)) |  |  | 6 | Spring |  |
| Intro to Metrology and Environmental <br> Management System (AGEO-200) |  |  | 6 | Spring |  |
| General Geology (AGEO/NTR-111) |  |  | 6 | Spring |  |
| Environmental Geology and Mining Safety <br> (AGEO -204) |  |  | 3 | Fall |  |
| Hydrogeology and Integrated Water Resource <br> Management (AGEO-300) |  |  | 3 | Spring |  |
| Exploration Techniques and Geotechnics <br> (AGEO-301) |  |  | 6 | Spring |  |
| Mineral Deposits Geology and Surface <br> Excavation (AGEO-302) |  |  | 6 | Fall |  |


| Drilling Technology (AGEO-401) |  |  | 6 | Spring |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Research Methods (AGEO-305) |  |  | 6 | Spring |  |
| Senior Thesis Seminar (AGEO-400) |  |  | 6 | Fall |  |
| Internship1/ Field Work (AGEO -205) |  |  | 3 | Spring |  |
| Internship2/ Field Work (AGEO -303) |  |  | 3 | Summer (Fall) |  |
| Sum - 90 Credits |  |  |  |  |  |
| Elective courses |  |  | 6 | Fall |  |
| History of Geomorphology and Quaternary <br> Geology (AGEO -206) |  |  | 6 | Spring |  |
| Geodynamics and Geotectonic (AGEO- <br> 304) |  | 6 | Spring |  |  |
| Intro to Stratigraphy and Paleontology <br> (AGEO- |  |  | 6 | Fall |  |
| Advanced Mineral Analysis and Mineral <br> Processing (AGP-206) |  |  | 6 | Spring |  |
| Resource and Environmental Economics <br> (ECO-203.1) |  |  | $\mathbf{2 4 6}$ |  |  |
| Sum - 30 Credits |  |  |  |  | Sum of Credits: |

GED Required and Applied Geology Courses,
2021 Suggested Order of Study

| Semesters | Semesters |
| :---: | :---: |
| Fall Semester 1 <br> 1. (FYS I -4, English composition-6 ( $\mathbf{1 0} \mathbf{~ c r}$.) <br> 2. Intro to Philosophy I (part of FYS) (2 cr.) <br> 3. Concept of Modern Sciences ( 6 cr .) <br> 4. General Chemistry (EMSD 101) ( 6 cr .) <br> 5. Intro to Environmental Management and Accounting (AGEO-100) ( 6 cr .) <br> 6. Sport - (0 cr.) | Spring Semester 2 <br> 1. (FYS II-4, English composition-6) ( $\mathbf{1 0} \mathbf{~ c r}$.) <br> 2. Intro to Philosophy I (part of FYS) (2 cr.) <br> 3. Intro to Contemporary Mathematics 1 (MAT-130) ( 6 cr.) <br> 4. Environmental Geochemistry (AGEO-110) ( 6 cr.) <br> 5. General Geology (AGEO/NTR-111) ( 6 cr.) <br> (Substitutes Natural Science/SYS (6 cr.)) <br> 6. Sport - (0 cr.) <br> 30 cr. |
| Fall Semester 3 <br> 1. Humanities/SYS (6 cr.) <br> 2. Kyrgyz Language and Literature I (4 cr.) <br> 3. Manas Studies (2cr.) <br> 4. Intro to Mineralogy and Petrology (AGEO-101) ( 6 cr ) <br> 5. Structural Geology and Tectonics (AGEO -120) ( 6 cr.) <br> 6. Intro to Probability and Statistics ( 6 cr.) <br> 7. Sport - (0 cr.) <br> 30 cr. | Spring Semester 4 <br> 1. Social Sciences/SYS ( 6 cr.) <br> 2. History Kyrgyzstan (4 cr.) <br> 3. Geography of Kyrgyzstan (2 cr.) <br> 4. Kyrgyz Language and Literature II ( 4 cr .) <br> 5. Introduction to R: Software for Statistical Computing (COM/ENV-205)) ( 6 cr.) <br> 6. Internship 1/ Field Work (AGP-205) (Summer) (3 cr.) <br> 7. Sport - ( 0 cr .) <br> 31 cr . |
| Fall Semester 5 <br> 1. Russian Language I (2 cr.) <br> 2. GIS Applications in Earth Sciences (AGEO -203) ( 6 cr .) <br> 3. Environmental Geology and Mining Safety (AGEO 204) (3cr.)* <br> 4. Internship $2 /$ Field Work (AGEO-303) (3 cr.) <br> 5. Elective ( $\mathbf{1 6} \mathrm{cr}$.) | Spring Semester 6 <br> 1. Russian Language II (2 cr.) <br> 2. Research Methods ** (AGEO-305) ( 6 cr.) <br> 3. Intro to Metrology and Environmental Management System (AGEO-200) * ( 6 cr.) <br> 4. Exploration Techniques and Geotechnics (AGEO-301) ** (6 cr.) <br> 5. Intro to R Programming (COM-212) cross listed Soft. Eng.) ( 6 cr .)*** <br> 6. Elective ( 6 cr .) <br> 32 cr. |
| Fall Semester 7 <br> 1. Senior Thesis Seminar (AGEO-400) (6 cr.) <br> 2. Mineral Deposits Geology and Surface Excavation Design (AGEO-302)** (6 cr.) <br> 3. Elective ( $\mathbf{1 6} \mathbf{~ c r}$ ) <br> 4. Outside of a student's major (2 cr.) | Spring Semester 8 <br> 1. Drilling Technology (AGEO-401) ( 6 cr .)** <br> 2. Hydrogeology and Integrated Water <br> Resource Management (AGEO-300) (3 cr.) <br> 3. Outside of a student's major ( $\mathbf{2 2} \mathbf{~ c r}$.) |

*(AGEO-100) prerequisite
** (AGEO-101) or (AGEO-120) prerequisite, as well as (AGEO/NTR-111) an acceptable alternative to (AGEO-101) or (AGP-120)
*** Intro to Probability and Statistics course is a prerequisite.

## Policy on AUCA Academic Orientation program

The AUCA Academic Orientation program is the major part of the Freshman orientation. It is a two-week intensive introduction to the liberal arts education with a specific focus on writing.

All entering students must enroll and receive a credit for Academic Orientation program. Credits earned for the orientation program are in addition to 240 credits required for graduation. Students will receive either a "Pass" or "Fail" grade based on their attendance and performance during the Academic Orientation program. Satisfactory completion of the Academic Orientation program is required in order to be eligible to enroll in First Year Seminar: English Language for Liberal Arts and English Composition courses in the first semester at AUCA.* The Academic Orientation program is also part of Bard College requirements and students who do not meet this requirement do not qualify for Bard College diploma/certificate.

* Students who are not able to complete the program due to extenuating circumstances or who failed the program are given the option to enroll in the Academic Orientation program again the following year. The FYS program director will review on a case-by-case basis

