

## Applied Geology

| Course Title   | Course Code         | Course Type       | Credit Hour                  |
|--|---------------------|-------------------|------------------------------|
| <b>Semester 1</b>  |                     |                   |                              |
| <u>GEN(NS)</u>   |                     | General           | <u>3</u>                     |
| Functional English   | GENG-101            | General           | <u>3</u>                     |
| Civics and Community Engagement                            | GCCE-101            | General           | <u>2</u>                     |
| Islamic Studies / Ethics (for Non-Muslims)                 | GISL-101 / GETH-101 | General           | <u>2</u>                     |
| Tarjuma-e-Quran  | HQ-001              | Compulsory        | <u>0</u>                     |
| General Geology  | AG-101              | Major             | <u>3</u>                     |
| Paleontology   | AG-102              | Major             | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 16</b> |
| <b>Semester 2</b>  |                     |                   |                              |
| <u>GEN(AH)</u>   |                     | General           | <u>2</u>                     |
| Quantitative Reasoning (I)                                 | GQR-101             | General           | <u>3</u>                     |
| Entrepreneurship   | GENT-101            | General           | <u>2</u>                     |
| Ideology and Constitution of Pakistan                      | GICP-101            | General           | <u>2</u>                     |
| Fieldwork I  | AG-104              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-002              | Compulsory        | <u>1</u>                     |
| Mineralogy I   | AG-103              | Major             | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 16</b> |
| <b>Semester 3</b>  |                     |                   |                              |
| Applications of Information and Communication Technologies | GICT-201            | General           | <u>3</u>                     |
| Expository Writing   | GENG-201            | General           | <u>3</u>                     |
| Field Geology  | AG-203              | Major             | <u>3</u>                     |
| Stratigraphy of Pakistan                                   | AG-202              | Major             | <u>3</u>                     |
| Geomorphology  | AG-201              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-003              | Compulsory        | <u>0</u>                     |
|  |                     |                   | <b>Total Credit Hours 15</b> |
| <b>Semester 4</b>  |                     |                   |                              |
| <u>GEN(SS)</u>   |                     | General           | <u>2</u>                     |
| Quantitative Reasoning (II)                                | GQR-202             | General           | <u>3</u>                     |
| Fieldwork II   | AG-206              | Major             | <u>3</u>                     |
| Structural Geology   | AG-205              | Major             | <u>3</u>                     |
| Igneous & Metamorphic Petrology                            | AG-204              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-004              | Compulsory        | <u>1</u>                     |
|  |                     |                   | <b>Total Credit Hours 15</b> |
| <b>Semester 5</b>  |                     |                   |                              |
| Geophysics   | AG-302              | Interdisciplinary | <u>3</u>                     |
| Chemistry I  | AG-301              | Interdisciplinary | <u>3</u>                     |
| Mining Geology   | AG-305              | Major             | <u>3</u>                     |
| Sequence Stratigraphy                                      | AG-304              | Major             | <u>3</u>                     |
| Sedimentology  | AG-303              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-005              | Compulsory        | <u>0</u>                     |
| Engineering Geology  | AG-306              | Major             | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 18</b> |
| <b>Semester 6</b>  |                     |                   |                              |
| Remote Sensing & GIS                                       | AG-308              | Interdisciplinary | <u>3</u>                     |
| Geochemistry   | AG-307              | Interdisciplinary | <u>3</u>                     |
| Geology & Tectonics of Pakistan                            | AG-311              | Major             | <u>3</u>                     |
| Micropaleontology  | AG-310              | Major             | <u>3</u>                     |
| Mineralogy II  | AG-309              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-006              | Compulsory        | <u>1</u>                     |
| Fieldwork III  | AG-312              | Major             | <u>2</u>                     |
|  |                     |                   | <b>Total Credit Hours 18</b> |
| <b>Semester 7</b>  |                     |                   |                              |
| Fieldwork / Internship                                     |                     | Major             | <u>3</u>                     |
| Economic Geology   | AG-404              | Major             | <u>3</u>                     |
| Petroleum Geology  | AG-403              | Major             | <u>3</u>                     |
| Hydrology  | AG-402              | Major             | <u>3</u>                     |
| Environmental Geology                                      | AG-401              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-007              | Compulsory        | <u>0</u>                     |
| Elective I   | AG-405              | Major             | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 18</b> |
| <b>Semester 8</b>  |                     |                   |                              |
| Capstone Project   |                     | Major             | <u>3</u>                     |
| Elective V   | AG-409              | Major             | <u>3</u>                     |
| Elective IV  | AG-408              | Major             | <u>3</u>                     |
| Elective III   | AG-407              | Major             | <u>3</u>                     |
| Elective II  | AG-406              | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-008              | Compulsory        | <u>1</u>                     |
|  |                     |                   | <b>Total Credit Hours 16</b> |

Signature

