

BS Biostatistics

| Course Title | Course Code | Course Type | Credit Hour |
|--|---------------------|-------------------|------------------------------|
| Semester 1 | | | |
| <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> |
| Biostatistics I - Statistical Theory | BSTA-101 | Major | <u>3</u> |
| Introduction to Biology | BSTA-102 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-001 | Compulsory | <u>0</u> |
| | | | Total Credit Hours 16 |
| Semester 2 | | | |
| <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> |
| Calculus | SMTH-101 | Major | <u>3</u> |
| Biostatistics II - Probability Theory | BSTA-103 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-002 | Compulsory | <u>1</u> |
| | | | Total Credit Hours 16 |
| Semester 3 | | | |
| Applications of Information and Communication Technologies | GICT-201 | General | <u>3</u> |
| Expository Writing | GENG-201 | General | <u>3</u> |
| Linear Algebra | SMTH-102 | Major | <u>3</u> |
| Epidemiology | BSTA-202 | Major | <u>3</u> |
| Biostatistics III - Decision Making | BSTA-201 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-003 | Compulsory | <u>0</u> |
| | | | Total Credit Hours 15 |
| Semester 4 | | | |
| <u>GEN(SS)</u> | | General | <u>2</u> |
| Quantitative Reasoning (II) | GQR-202 | General | <u>3</u> |
| Demography and Official Statistics | BSTA-205 | Major | <u>3</u> |
| Statistical Computing | BSTA-204 | Major | <u>3</u> |
| Categorical Data Analysis | BSTA-203 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-004 | Compulsory | <u>1</u> |
| | | | Total Credit Hours 15 |
| Semester 5 | | | |
| Interdisciplinary | | Interdisciplinary | <u>3</u> |
| Interdisciplinary | | Interdisciplinary | <u>3</u> |
| Programming with R | STAT-203 | Major | <u>3</u> |
| Design and Analysis of Experiments | BSTA-302 | Major | <u>3</u> |
| Design and Analysis of Medical Studies | BSTA-301 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-005 | Compulsory | <u>0</u> |
| | | | Total Credit Hours 15 |
| Semester 6 | | | |
| Interdisciplinary | | Interdisciplinary | <u>3</u> |
| Interdisciplinary | | Interdisciplinary | <u>3</u> |
| Hospital and Healthcare Management | BSTA-304 | Major | <u>3</u> |
| Survival Analysis and Modeling | BSTA-303 | Major | <u>3</u> |
| Multivariate Analysis | STAT-305 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-006 | Compulsory | <u>1</u> |
| | | | Total Credit Hours 16 |
| Semester 7 | | | |
| Fieldwork | BSTA-401 | Major | <u>3</u> |
| Elective-I | | Major | <u>3</u> |
| Qualitative Research Methods | BSTA-404 | Major | <u>3</u> |
| Bioinformatics | BSTA-403 | Major | <u>3</u> |
| Infectious Diseases and Modeling | BSTA-402 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-007 | Compulsory | <u>0</u> |
| Elective-II | | Major | <u>3</u> |
| | | | Total Credit Hours 18 |
| Semester 8 | | | |
| Capstone Project | BSTA-405 | Major | <u>3</u> |
| Elective-III | BSTA- | Major | <u>3</u> |
| Machine Learning | CSTA-304 | Major | <u>3</u> |
| Time Series Analysis | CSTA-202 | Major | <u>3</u> |
| Health Insurance and Health Laws | BSTA-406 | Major | <u>3</u> |
| Tarjuma-e-Quran | HQ-008 | Compulsory | <u>1</u> |
| Elective-IV | BSTA- | Major | <u>3</u> |
| | | | Total Credit Hours 19 |

Signature