

COURSE STRUCTURE

M.Sc. Course in Zoology (DODL) (Four Semester course)

(With effect from the session 2021–2022)

[CHOICE BASED CREDIT SYSTEM]

CHOICE BASED CREDIT SYSTEM (CBCS)

Department of Zoology (DODL) University of Kalyani

Effective from 2021-2022 Session

Semester wise Details of M.Sc. (Zoology)

SEMESTER-I

| Course Name | Paper | Points | Credit | |
|---|--|--------|--------|--|
| Theory (Core) | | | | |
| ZCORT-101 | Non-Chordate Biology and Insect Organization | 75 | 6 | |
| ZCORT-102 | Parasitology, Ecology, Environment and Wildlife Biology | 75 | 6 | |
| ZCORT-103 | Developmental Biology and Cytogenetics | 75 | 6 | |
| ZCORT-104 | Animal Physiology, Biochemistry and Metabolic Processes | 75 | 6 | |
| Theory (Ability Enhancement compulsory course) | | | | |
| ZAECCT-101 | Basic principles of methods used in animal biology | 25 | 2 | |
| Practical (Core) | | | | |
| ZCORL-101 | Non-Chordate Biology and Insect Organization | 25 | 2 | |
| ZCORL-102 | Parasitology, Ecology, Environment and Wildlife Biology | 25 | 2 | |
| ZCORL-103 | Developmental Biology and Cytogenetics | 25 | 2 | |
| ZCORL-104 | Animal Physiology and Biochemistry and Metabolic Processes | 25 | 2 | |
| Library/Field Work/ Class Test | | | | |
| Total points & Credits in Semester I | | 425 | 34 | |

SEMESTER-II

| Course Name | Paper | Points | Credit | |
|----------------------|--|--------|--------|--|
| Theory (Core) | | | | |
| ZCORT-205 | Chordate Biology, Biosystematics and Taxonomy | 75 | 6 | |
| ZCORT-206 | Advanced Parasitology, Vector Biology and Fish Biology | 75 | 6 | |

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|---------------------------------------|---|-----|----|--|
| ZCORT-207 | Immunobiology, Human Genetics & Biostatistics | 75 | 6 | |
| Theory (Generic Elective) | | | | |
| ZGECT-201 | Applied Zoology (For students other than Department of Zoology) | 50 | 4 | |
| Practical (Core) | | | | |
| ZCORL-205 | Chordate Biology, Biosystematics and Taxonomy | 25 | 2 | |
| ZCORL-206 | Advanced Parasitology, Vector Biology and Fish Biology | 25 | 2 | |
| ZCORL-207 | Immunobiology, Human Genetics & Biostatistics | 25 | 2 | |
| Library/Field Work/Class Test | | | | |
| Total points & Credits in Semester-II | | 350 | 28 | |

SEMESTER-III

| Course Name | Paper | Points | Credit | |
|--|---|--------|--------|--|
| Theory (Core) | | | | |
| ZCORT-309 | Arthropod of Economic Importance, Concept of Biodiversity and Evolution | 75 | 6 | |
| ZCORT-310 | Environmental Toxicology and Endocrinology | 75 | 6 | |
| Theory (Discipline Specific Elective - Minor) (any two) | | | | |
| ZDSE(MN)T-303 | Human Molecular Genetics | 25 | 2 | |
| ZDSE(MN)T-306 | Reproductive Biotechnology | 25 | 2 | |
| Theory (Discipline Specific Elective - Major) (any one) | | | | |
| ZDSE(MJ)T-301 | Cytogenetics & Mol. Biology, Cell & Dev. Biology | 50 | 4 | |
| ZDSE(MJ)T-302 | Cytogenetics & Mol. Biology, Cell & Dev. Biology | 50 | 4 | |

| Theory (Skill Enhancement Course) | | | | |
|---|---|-----|----|--|
| ZSECT-301 | Industrial/Economic Zoology | 25 | 2 | |
| Practical (Core) | | | | |
| ZCRL-309 | Arthropod of Economic Importance, Concept of Biodiversity and Evolution | 25 | 2 | |
| ZCRL-310 | Environmental Toxicology and Endocrinology | 25 | 2 | |
| Practical (Discipline Specific Elective - Major) | | | | |
| ZDSE(MJ)L-301 | Discipline Specific Elective - Major (Lab) | 50 | 4 | |
| Total points & Credits in Semester III | | 425 | 34 | |

SEMESTER-IV

| Course Name | Paper | Points | Credit | |
|--|---|---------------|---------------|--|
| Theory (Core) | | | | |
| ZCORT-411 | Animal Behaviour and Microbiology | 75 | 6 | |
| ZCORT-412 | Molecular Biology, Biotechnology, Tools and Technique | 75 | 6 | |
| Theory (Discipline Specific Elective - Minor) (any two) | | | | |
| ZDSE(MN)T-409 | Medical Embryology | 25 | 2 | |
| ZDSE(MN)T-412 | Parasites and Diseases | 25 | 2 | |
| Theory (Discipline Specific Elective - Major) (any one) | | | | |
| ZDSE(MJ)T-403 | Cytogenetics & Mol. Biology, Cell & Dev. Biology | 50 | 4 | |
| ZDSE(MJ)T-404 | Cytogenetics & Mol. Biology, Cell & Dev. Biology | 50 | 4 | |
| Practical (Core) | | | | |
| ZCRL-411 | Animal Behaviour and Microbiology | 25 | 2 | |

| | | | | |
|---|---|-----|----|--|
| ZCRL-412 | Molecular Biology, Biotechnology, Tools and Technique | 25 | 2 | |
| Practical (Discipline Specific Elective - Major) | | | | |
| ZDSE(MJ)L-402 | Discipline Specific Elective - Major (Lab) | 50 | 4 | |
| Project/ Dissertation | | | | |
| ZDSEP-402 | Project/ Review work/ Dissertation | 100 | 8 | |
| Total points & Credits in Semester IV | | 500 | 40 | |

Abbreviations used in the syllabus:

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| ZCORT | – | Zoology Core Course Theory |
| ZCRL | – | Zoology Core Course Lab |
| ZAECCT | – | Zoology Ability Enhancement Compulsory Course Theory |
| ZGECT | – | Zoology Generic Elective Course Theory |
| ZDSE(MN)T | – | Zoology Discipline Specific Elective (Minor) Theory |
| ZDSE(MJ)T | – | Zoology Discipline Specific Elective (Major) Theory |
| ZDSE(MJ)L | – | Zoology Discipline Specific Elective (Major) Lab |
| ZDSEP | – | Zoology Discipline Specific Project |