

Loyola College (Autonomous)

Chennai 600034

B. Sc. Advanced Zoology and Biotechnology

Restructured CBCS curriculum with effective from June, 2016

| Code | Title of the Paper | Code | Title of the paper | OLD/ NEW | % Change | Restructured CBCS curriculum with effective from June, 2016 Description |
|--------------------|-------------------------|---------|-------------------------|-------------|----------|---|
| | 2003 -2004 | | 2012-13 | | | 2016-17 |
| SEMESTER I | | | | | | |
| ZO 1500 | Invertebrata | AZ 1506 | Invertebrata | OLD | 30 | Major portion retained as such with revision of Unit IV and V and updating Reference Books, Text Books and web resources. |
| ZO 1501 | Invertebrata Lab course | AZ 1507 | Invertebrata lab course | OLD | 30 | Major portion retained as such with revision of Unit IV and V and updating Reference Books, Text Books and web resources. |
| | | AZ 1508 | Economic Entomology | NEW | 100 | New paper focuses on sustainable environment and livelihood. |
| SEMESTER II | | | | | | |
| ZO 2500 | Chordata | AZ 2504 | Chordata | OLD | 40 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 2501 | Chordata Lab Course | AZ 2505 | Chordata lab course | OLD | 40 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |

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| | | AZ 2506 | Basic Biotechnology | NEW | 100 | New paper focusing on basics of biotechnology and applications of biotechnology in Agriculture, Food Processing and Health care. |
| | | AZ 2104 | Animal diversity | NEW | 100 | New paper covers basics of animal taxonomy, classification and diversity with details on systematic position and habitat specific diversity. |
| | | AZ 2105 | Animal diversity Lab course | NEW | 100 | New paper detailing structural organization of type study from all animal phyla. |
| SEMESTER III | | | | | | |
| ZO 3500 | Physiology | AZ 3508 | Animal Physiology and Biochemistry | OLD | 30 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 3501 | Physiology Lab Course | AZ 3509 | Animal Physiology & Biochemistry Lab course | OLD | 30 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 3020 | Computer Science for Zoology | AZ 3510 | Developmental Biology | NEW | 100 | New paper focuses on embryological features of animals providing details on organogenesis and development of adaptive features. |
| | | AZ 3301 | Clinical Techniques | NEW | 100 | New paper focuses on tools and techniques for clinical diagnosis detailing diseases spread through vectors their prognosis, diagnosis and treatment. |
| | | AZ 3200 | Agricultural Entomology | NEW | 100 | New paper providing details on pest causing insects of pulses, seeds, stored grains etc., with a detailed account on their control measures. |
| | | AZ 3201 | Agricultural Entomology Lab course | NEW | 100 | New paper provides hands on experience on collection and preservation of insects that pose serious threat to |

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| | | | | | | agriculture. |
| SEMESTER IV | | | | | | |
| ZO 4501 | Environmental Biology | AZ 4506 | Environmental Biology | OLD | 30 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 4502 | Environmental Biology Lab Course | AZ 4507 | Environmental Biology Lab Course | OLD | 30 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 4500 | Embryology and Evolution | AZ 4505 | Organic Evolution | OLD | 50 | Major portion retained as such deleting embryology part and change of title and corresponding revision of all units and updating Reference Books, Text Books and web resources. |
| | | AZ 4301 | Human Health and Hygiene | NEW | 100 | New paper providing in depth information on human health and hygiene emphasizing the importance of prevention and control. |
| | | AZ 4200 | Bioinformatics | NEW | 100 | New paper offered to statistics students covering the extensive applications of computers in collecting, storing and retrieving biological data. |
| | | AZ 4201 | Bioinformatics Lab course | NEW | 100 | New paper offered to statistics students provides hands on experience on tools and techniques available to explore the applications of computers in biology. |
| SEMESTER V | | | | | | |
| ZO 5500 | Cell Biology | AZ 5516 | Cell and Molecular Biology | OLD | 50 | Major portion retained as such deleting few chapters and change of title and corresponding revision of all units and updating Reference Books, Text Books and web resources. |

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| ZO 5501 | Genetics | AZ 5520 | Genetic Engineering | OLD | 50 | Major portion retained as such deleting few chapters and change of title and corresponding revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 5502 | Biotechnology | AZ 5519 | Animal Biotechnology | OLD | 50 | Major portion retained as such deleting few chapters and change of title and corresponding revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 5401 | Immunology | AZ 5517 | Immunology | OLD | 40 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 5400 | Reproductive Physiology | AZ 5518 | Principles of Genetics | NEW | 100 | New paper provides basic understanding on the principles of genetics and genetic traits. |
| | | AZ 5403 | Medical Laboratory Techniques | NEW | 100 | New paper covers techniques available and widely used to test and understand the symptoms and expressions of human illness. |
| ZO 5503 | Cytogenetics and Biotechnology Lab course | AZ 5521 | Molecular Biology, Genetics & Biotechnology Lab course | OLD | 50 | Major portion retained as such deleting few chapters and adding content on Genetics and change of title and corresponding revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 5504 | Economic Entomology | AZ 5402 | Instrumentation and chemical Techniques | NEW | 100 | New paper covering the working principle and methodology of major analytical instruments. |
| ZO 5505 | Economic Entomology Lab Course | | | OLD | | Removed and new papers introduced in its place |
| SEMESTER VI | | | | | | |

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| ZO 6600 | Environment Management and Ecological methods | AZ 6603 | Environmental Biotechnology | OLD | 50 | Major portion retained as such deleting few chapters on ecological methods and title changed, new units included for Biotechnology and corresponding revision of all units and updating Reference Books, Text Books and web resources. |
| ZO 6601 | Wildlife Management and Biodiversity | AZ 6604 | Bioinformatics | NEW | 100 | New paper covering the extensive applications of computers in collecting, storing and retrieving biological data |
| ZO 6602 | Ecological methods Lab course | AZ 6605 | Facets of Bioethics | NEW | 100 | New paper focuses on the ethical implications of modern science. |
| ZO 6650 | Poultry and Dairy Science | AZ 6651 | Poultry and Dairy Science | OLD | 40 | Major portion retained as such with revision of all units and updating Reference Books, Text Books and web resources. |