BHARATHIDASAN UNIVERSITY



TIRUCHIRAPPALLI - 620 024.

B.Sc. ZOOLOGY

CHOICE BASED CREDIT SYSTEM -

LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (CBCS - LOCF)

(Applicable to the candidates admitted from the academic year 2022-23 onwards)

(Naan Mudhalvan scheme has been implemented from 2nd to 4th semester for the 2023-2024 Batch)

| ü | Part | Course Title of the Course | Title of the Course | Ins. | Credit | Exam | Ma | rks | Total |
|------|------|--------------------------------|-----------------------------|------|--------|------|------|-------|-------|
| Sem. | | | Hrs | Cre | Hours | Int. | Ext. | TOTAL | |
| | Ι | Language Course – I | | 6 | 3 | 3 | 25 | 75 | 100 |
| | | Tamil \$ / Other Languages + # | | Ů | | - | | | |
| | II | English Course - I | | 6 | 3 | 3 | 25 | 75 | 100 |
| | III | Core Course – I (CC) | Invertebrata | 5 | 5 | 3 | 25 | 75 | 100 |
| Ι | | Core Practical – I (CP) | Invertebrata | 4 | 4 | 3 | 40 | 60 | 100 |
| | | First Allied Course – I (AC) | | 4 | 4 | 3 | 25 | 75 | 100 |
| | | First Allied Practical (AP) | | 3 | - | - | - | - | - |
| | IV | Value Education | | 2 | 2 | 3 | 25 | 75 | 100 |
| | | ТОТА | 30 | 21 | - | - | - | 600 | |
| | Ι | Language Course - II | | 6 | 3 | 3 | 25 | 75 | 100 |
| | | Tamil \$ / Other Languages + # | | 0 | 5 | 5 | 23 | 15 | 100 |
| | II | English Course - II | | 4 | 3 | 3 | 25 | 75 | 100 |
| | III | Core Course – II (CC) | Chordata | 5 | 5 | 3 | 25 | 75 | 100 |
| | | Core Practical – II (CP) | Chordata | 4 | 4 | 3 | 40 | 60 | 100 |
| | | First Allied Practical (AP) | | 3 | 2 | 3 | 40 | 60 | 100 |
| II | | First Allied Course – II (AC) | | 4 | 4 | 3 | 25 | 75 | 100 |
| | | Add on Course – I ## | Professional English – I | 6* | 4 | 3 | 25 | 75 | 100 |
| | IV | Environmental Studies | | 2 | 2 | 3 | 25 | 75 | 100 |
| | VI | | Language Proficiency for | | | | | | |
| | | Naan Mudhalvan Scheme | Employability - Overview of | 2 | 2 | 3 | 25 | 75 | 100 |
| | | (NMS) @@ | English Language | _ | _ | | | | 100 |
| | | | Communication | 20 | 20 | | | | 000 |
| | | ТОТА | 30 | 29 | - | - | - | 900 | |

| | | Language Course – III | | | | | | | |
|-----|---------|--|--|----------------------------|---|----------------------------|----------------------------------|----------------------------|---------------------------------|
| | Ι | Tamil \$ / Other Languages + # | | 6 | 3 | 3 | 25 | 75 | 100 |
| | II | English Course - III | | 6 | 3 | 3 | 25 | 75 | 100 |
| | 11 | Core Course – III (CC) | Cell and Molecular Biology | 5 | 5 | 3 | 25 | 75 | 100 |
| | III | Core Practical - III (CP) | Cell and Molecular Biology | 4 | 4 | 3 | 40 | 60 | 100 |
| | | Second Allied Course – I (AC) | Cell and Wolecular Biology | 4 | 4 | 3 | 25 | 75 | 100 |
| | | Second Allied Practical (AP) | | 3 | - | 3 | 23 | 75 | 100 |
| | | Add on Course – II ## | Drofoggional English U | 5 6* | | 3 | - | - | - |
| | | Non-Major Elective I (a) - Those | Professional English - II | 0. | 4 | 3 | 25 | 75 | 100 |
| | | who choose Tamil in Part I can choose a non-major elective | | | | | | | |
| III | | course offered by other departments. | | | | | 25 | | 100 |
| | | Those who do not choose | | | | | | | |
| | IV | Tamil in Part I must choose either | Public Health and Hygiene | 2 | 2 | 3 | | 75 | |
| | | a) Basic Tamil if Tamil | | | | | | | |
| | | language was not studied in school level or | | | | | | | |
| | | b) Special Tamil if Tamil | | | | | | | |
| | | language was studied upto | | | | | | | |
| | | 10^{th} & 12^{th} std. | | | | | | | |
| | VI | Naan Mudhalvan Scheme | Digital Skills for | | _ | _ | | | |
| | | (NMS) @@ | Employability – Microsoft | - | 2 | 3 | 25 | 75 | 100 |
| | | | | | | | | | |
| - | | | Digital Skills | 30 | 27 | | _ | _ | 800 |
| | | ΤΟΤΑ | | 30 | 27 | _ | - | - | 800 |
| | Ι | TOTA Language Course –IV | | 30 6 | 27 3 | - 3 | - 25 | - 75 | 800 100 |
| | I II | TOTA Language Course –IV Tamil \$ / Other Languages + # | | | | - 3 3 | - 25 25 | - 75 75 | |
| | | TOTA Language Course –IV | L | 6 | 3 | | | | 100 |
| | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV | | 6 6 | 3 | 3 | 25 | 75 | 100 100 |
| | | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) | L Microbiology | 6 6 5 | 3 3 5 | 33 | 25 25 | 75 75 | 100 100 100 |
| | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) | L Microbiology | 6 6 5 4 | 3 3 5 4 | 3 3 3 | 25 25 40 | 75 75 60 | 100 100 100 100 |
| | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) | L Microbiology | 6 6 5 4 3 | 3 3 5 4 2 | 3 3 3 3 | 25 25 40 40 | 75 75 60 60 | 100 100 100 100 100 |
| | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major | L Microbiology | 6 6 5 4 3 | 3 3 5 4 2 | 3 3 3 3 | 25 25 40 40 | 75 75 60 60 | 100 100 100 100 100 |
| | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other | L Microbiology | 6 6 5 4 3 | 3 3 5 4 2 | 3 3 3 3 | 25 25 40 40 | 75 75 60 60 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. | L Microbiology | 6 6 5 4 3 | 3 3 5 4 2 | 3 3 3 3 | 25 25 40 40 | 75 75 60 60 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose | L Microbiology Microbiology | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose | L Microbiology | 6 6 5 4 3 | 3 3 5 4 2 | 3 3 3 3 | 25 25 40 40 | 75 75 60 60 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose | L Microbiology Microbiology | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in | L Microbiology Microbiology | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or | L Microbiology Microbiology | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil | L Microbiology Microbiology | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied upto 10 th & 12 th std. | L Microbiology Microbiology Economic Zoology | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied upto 10 th & 12 th std. Naan Mudhalvan Scheme | L Microbiology Microbiology Economic Zoology Healthcare & Data | 6 6 5 4 3 4 | 3 3 5 4 2 4 2 2 2 | 3 3 3 3 3 3 | 25 25 40 25 25 25 | 75 75 60 75 75 | 100 100 100 100 100 |
| IV | II | TOTA Language Course –IV Tamil \$ / Other Languages + # English Course – IV Core Course - IV (CC) Core Practical - IV (CP) Second Allied Practical (AP) Second Allied Course – II (AC) Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied upto 10 th & 12 th std. | L Microbiology Microbiology Economic Zoology Healthcare & Data Management | 6 6 5 4 3 4 | 3 3 5 4 2 4 | 3 3 3 3 3 | 25 25 40 40 25 | 75 75 60 60 75 | 100 100 100 100 100 |

| | | Core Course -V (CC) | Developmental Biology | 5 | 5 | 3 | 25 | 75 | 100 |
|----|-------------|---------------------------|--|---|-----|----|-----|-----|------|
| | | Core Course – VI (CC) | Genetics and Evolution | 5 | 5 | 3 | 25 | 75 | 100 |
| | | Core Course – VII (CC) | Immunology | 5 | 5 | 3 | 25 | 75 | 100 |
| | III | | Developmental Biology, | | | | 4.0 | | 100 |
| | | Core Practical -V (CP) | Genetics and Evolution & | 4 | 4 | 3 | 40 | 60 | 100 |
| 17 | | Major Based Elective – I | Immunology | | | | | | |
| V | | | 1. Aquatic Biology | 5 | 4 | 2 | 25 | 75 | 100 |
| | IV | (Any one) | 2. Biodiversity and Conservation | 5 | 4 | 3 | 25 | 75 | 100 |
| | | Skill Based Elective I | Aquarium fish keeping | 4 | 2 | 3 | 25 | 75 | 100 |
| | 1 V | Soft Skills Development | | 2 | 2 | 3 | 25 | 75 | 100 |
| | TOTAL | | | | 27 | 5 | 25 | - | 700 |
| | | Core Course - VIII (CC) | 30 6 | 5 | - 3 | 25 | 75 | 100 | |
| | | | Animal Physiology | - | | - | | | |
| | III | Core Course - IX (CC) | Biotechnology | 6 | 5 | 3 | 25 | 75 | 100 |
| | | Core Practical – VI (CP) | Animal Physiology and Biotechnology | 4 | 4 | 3 | 40 | 60 | 100 |
| | | Major Based Elective – II | 1. Environmental Biology | | | | | | |
| VI | | (Any one) | 2. Applied Entomology | 5 | 4 | 3 | 25 | 75 | 100 |
| | | Project* | | 4 | 3 | - | 20 | 80 | 100 |
| | IV | Skill Based Elective II | Medical Diagnostics | 4 | 2 | 3 | 25 | 75 | 100 |
| | V | Gender Studies | | 1 | 1 | 3 | 25 | 75 | 100 |
| | v | Extension Activities ** | | - | 1 | - | - | - | - |
| | | TOTAL | | | 25 | - | - | - | 700 |
| | GRAND TOTAL | | | | | - | - | - | 4500 |

List of Allied Courses

First Allied Course

Second Allied Course

Botany

Chemistry

- \$ For those who studied Tamil upto $10^{\text{th}} + 2$ (Regular Stream).
- + Syllabus for other Languages should be on par with Tamil at degree level.
- # Those who studied Tamil upto 10th +2 but opt for other languages in degree level under Part- I should study special Tamil in Part – IV.
- ## The Professional English Four Streams Course is offered in the 2nd and 3rd Semester (only for 2022-2023 Batch) in all UG Courses. It will be taught apart from the Existing hours of teaching / additional hours of teaching (1 hour /day) as a 4 credit paper as an add on course on par with Major Paper and completion of the paper is must to continue his / her studies further. (As per G.O. No. 76, Higher Education (K2) Department dated: 18.07.2020).
- * The Extra 6 hrs / cycle as per the G.O. 76/2020 will be utilized for the Add on Professional English Course.
- @ NCC Course is one of the Choices in Non-Major Elective Course. Only the NCC cadets are eligible to choose this course. However, NCC Course is not a Compulsory Course for the NCC Cadets.

** Extension Activities shall be outside instruction hours.

@@ Naan Mudhalvan Scheme.

| S1. No. | Part | Types of the Courses | No. of Courses | No. of Credits | Marks |
|------------|------|--|-------------------|-------------------|-------|
| 1. | Ι | Language Courses | 4 | 12 | 400 |
| 2. | II | English Courses | 4 | 12 | 400 |
| 3. | | Core Courses | 9 | 45 | 900 |
| 4. | | Core Practical | 6 | 24 | 600 |
| 5. | | Allied Courses I & II | 4 | 16 | 400 |
| 6. | III | Allied Practical | 2 | 4 | 200 |
| 7. | | Major Based Elective Courses | 2 | 8 | 200 |
| 8. | | Add on Courses | 2 | 8 | 200 |
| 9. | | Project | 1 | 3 | 100 |
| 10. | | Non-Major Elective Courses (Practical) | 2 | 4 | 200 |
| 11. | | Skill Based Elective Courses | 2 | 4 | 200 |
| 12. | IV | Soft Skills Development | 1 | 2 | 100 |
| 13. | | Value Education | 1 | 2 | 100 |
| 14. | | Environmental Studies | 1 | 2 | 100 |
| 15. | v | Gender Studies | 1 | 1 | 100 |
| 16. | v | Extension Activities | 1 | 1 | |
| 17. | VI | Naan Mudhalvan Scheme | 3 | 6 | 300 |
| | | Total | 46 | 154 | 4500 |

SUMMARY OF CURRICULUM STRUCTURE OF UG PROGRAMMES