

University School of Biotechnology
Integrated B.Sc.-M.Sc. Ayurveda Biology
Course Structure

Semester -I				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 101	DSC-01	Fundamentals of Sanskrit-I	3
2.	BTAYB 103	DSC-02	Introduction to Ayurveda	3
3.	BTAYB 105	DSC-03	History of Ayurveda	3
4.	BTAYB 107	DSC-04	Introductory Biology	3
5.	BTAYB 109	DSC-05	Introductory Chemistry Lab	2
6.	EN-105	AECC-01	Communicative English	2
7.	BTAYB 111	SEC-01	Application of IT and E-resources in Āyurveda	2
8.	BTAYB 113	SEC-02	Application of IT and E-resources in Āyurveda (lab)	2
9.	BS 101	VAC-01	Human values and Buddhist Ethics	2
10.	BTAYB 115	GE	Introductory Chemistry	3
				Total Credits-25

Semester-II				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 102	DSC-06	Fundamentals of Sanskrit-II	3
2.	BTAYB 104	DSC-07	Preventive and Participatory medicine in Ayurveda	3
3.	BTAYB 106	DSC-08	Charaka Samhitā –Purvard	3
4.	BTAYB 108	DSC-09	Scientific concepts in Ayurveda	3
5.	BTAYB 110	AECC-02	Introductory Physics lab	2
6.	BTAYB 112	SEC-03	Fundamentals of Mathematics and Statistics	2
7.	BTAYB 114	SEC-04	Fundamentals of Mathematics and Statistics lab	2
8.		VAC-02	Environmental Science	2
9.	BTBSC218	VAC-03	Living with stress	3
10.	BTAYB 116	GE	Introductory Physics	3
				Total Credits-26

Semester-III				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 201	DSC-10	Advanced Sanskrit-I	3
2.	BTAYB 203	DSC-11	Human Anatomy and Śarīra Rachanā Vigyan	3
3.	BTAYB 205	DSC-12	Human Physiology and Ayurvedic Kriya Sarir	3
4.	BTAYB 207	DSC-13	Principle and Practices of Aṣṭāṅga Hṛdaya	3
5.	BTAYB 209	SEC-05	Genetics and Molecular Biology for Āyurveda	3
6.	BTAYB 211	SEC-06	Ayurveda Lab I	2
7.	BTAYB 213	AECC-03	Medical Microbiology for Ayurveda	3

8.		GE	Social and emotional well being	3
				Total Credits-23

Semester IV				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 202	DSC-14	Basic and Applied Padārtha Vijñāna	3
2.	BTAYB 204	DSC-15	Ayurveda Rog Nidan evam Vkriti Vigyan	3
3.	BTAYB 206	DSC-16	Suśruta Samhitā ke Adharbhoot Sidhant (Principles and Practices of Sushrut Samhita)	3
4.	BTAYB 208	DSC-17	Fundamentals of Dravyaguṇa vijyana and Ayurvedic Plant Materia Medica	3
7.	BTAYB 210	DSC-18	Advanced Śarīra Kriyā Vijyana	3
8.	BTAYB 212	DSC-19	Ayurveda Lab II	2
9.	BTAYB 214	DSC-20	Basic and Applied Padārtha Vijñāna	3
10.	BTAYB 216	AECC-04	Molecular Dignostics	2
				Total Credits-22

Semester V				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 301	DSC-21	Charaka Samhitā –(Kalp, Viman evam Siddhi)	3
2.	BTAYB 303	DSC-22	Rasa Śāstra and Bhaiṣajya Kalpanā	3
3.	BTAYB 305	DSC-23	Prakṛti Vijñāna	3
4.	BTAYB 307	DSC-24	Pañcamahābhūta Vijñāna	3
5.	BTAYB 309	DSC-25	Ayurinformatics	2
6.	BTAYB 311	DSC-26	Ayurinformatics lab	2
7.	BTAYB 313	SEC-08	Internship	4
				Total Credits-20

Semester VI				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 302	DSC-27	Rasayan and Vajikaran in Ayurveda	3
2.	BTAYB 304	DSC-28	Basics of Yogic Sciences	3
3.	BTAYB 306	DSC-29	Fundamentals of Immunology and Immunotechnology	3
4.	BTAYB 308	DSC-30	Ayurveda Entrepreneurship and IPR	6
5.	BTAYB 310	DSC-31	Fundamentals of Biomolecules and Biochemistry	2
6.	BTAYB 312	DSC-32	Biomolecules and Biochemistry Lab	2
7.	BTAYB 314	DSC-33	Database management	2
8.	BTAYB 316	DSC-34	Seminar	2
				Total Credits-23

Semester VII				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 401	DSC-35	Scientific communication skills and Public Outreach	4
2.	BTAYB 403	DSC-36	Research Methodology	4
3.	BTAYB 405	DSC-37	Personalized Health and Systems Medicine (E1)	4
4.	BTAYB 407	DSC-38	Pañcakarma	4
5.	BTAYB 409	DSC-39	Āyurvedic Chemistry or Medicinal chemistry (E2)	4
6.	BTAYB 411	DSC-40	Term paper presentation	6
				Total Credits-26

Semester-VIII B.Sc. Honors With Research(R)

S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 402	DSC-41	Project II	12
2.	BTAYB 404	DSC-42	Nanotechnology in Āyurveda	4
3.	BTAYB 406	DSC-43	Neurobiology and Āyurveda	4
				Total Credits-20

Semester-VIII B.Sc. Honors

S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 404	DSC-44	Nanotechnology in Āyurveda	4
2.	BTAYB 406	DSC-45	Neurobiology and Āyurveda	4
3.	BTAYB 408	DSC-46	Āyurvedic Pharmacopeia Standards and Formulary	4
4.	BTAYB 410	DSC-47	Āyurveda Product design and development-I	4
5.	BTAYB 412	DSC-48	NPTEL/MOOC/SWAYAM	4
				Total Credits-20

Semester-IX				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 501	DSC-49	Seminar course - Research Project in Āyurveda	4
2.	BTAYB 503	DSC-50	Data Standards and Good Laboratory/Manufacturing Practices in Āyurveda (E1)	4
3.	BTAYB 505	DSC-51	Principles and Methods in Molecular Cell Biology and their Application in Āyurveda (E2)	4
4.	BTAYB 507	DSC-52	Advanced Analytical Methodologies and Instrumentation in Āyurveda Biology (E3)	4
5.	BTAYB 509	DSC-53	Omics in Ayurveda	4
6.	BTAYB 511	DSC-54	Āyurvedic product design and development-II	4
7.	BTAYB 513	DSC-55	Data Standards and Good Laboratory/Manufacturing Practices in Āyurveda	4
	Only one elective to be opted from E1/E2/E3			
				Total Credits-20

Semester-X				
S.No	Course Code	Course Type	Name of the Course	Credits
1.	BTAYB 502	DSC-56	Master's Dissertation/Start-up/Industrial Training in Āyurveda Biology	20
				Total Credits-20