

University of Patanjali

BACHELOR OF SCIENCE (HONOURS) YOGA

Syllabus



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विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Dated: 26.04.2022



University of Patanjali

Uttarakhand, Haridwar

Syllabus of BSc Yoga Science (Honours) for 2022-25

Date: 26.04.2022

NAME OF PROGRAM: Bachelor of Science (Honours) Yoga

Preamble

The tradition of Yoga has always been passed on individually from teacher to student through oral teaching and practical demonstration. The formal techniques that are now known as Yoga are, therefore, based on the collective experiences of many individuals over many thousands of years. The particular manner in which the techniques are taught and practiced today depends on the approach passed down in the line of teachers supporting the individual practitioner. Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on establishing harmony between mind, body; thought and action; restraint and fulfilment; harmony between man and nature and a holistic approach to health and wellbeing.

Yoga is not about exercise but to discover the sense of oneness with ourselves, the world and Nature. It is an art and science for healthy living. The word "Yoga" is derived from the Sanskrit root 'yuj' meaning "to join", "to yoke" or "to unite". Therefore, the aim of Yoga is to unite the individual consciousness with the supreme consciousness.

Yoga is a science and art of living; also it is a body of techniques that lead us to consciously connect with ourselves and with life, the experience of Yoga. As Yoga is an art and science, there is no dogma or belief system attached to it. Yoga tells us to do a certain practice and feel their effects following the practice, e.g. if we breath slowly in a relaxed manner we will slow our heart rate; if we focus the mind we will develop mental peace and deep insight.

In addition to this, Yoga is becoming popular day by day and has become a wave which is sweeping across the globe. In this course we introduce Yoga as a science of **Holistic Living** and not merely as Yoga postures. During the course the student is taught the concepts of Yoga for the treatment and prevention of various psychosomatic ailments. This course looks at training the enthusiasts to become Yoga therapist so that they could teach Yoga under the supervision of a doctor for health and healing.

I. Title of the Programme

The programme shall be called "**Bachelor of Science (Honours) Yoga Science**"

II. Aim of the Programme

The aim of the programme is to produce "**Yoga Teachers and Therapists for academic and clinical set ups**".

III. Objectives of the programme

1. To introduce basic knowledge of Yoga and its therapeutical applications with its principles, factors, impacts.
2. To make the people aware of the preventive and therapeutic value of Yoga.
3. To bring peace and harmony in the society at large by introducing the Yogic way of life.
4. To produce therapists of high calibre to make the society free from stress and life style related diseases.
5. To produce Yoga Teachers of high calibre to inculcate the knowledge of yoga and its application among the masses.

IV. Duration

The minimum duration of the programme will be three years (6 semesters) and the maximum duration will be three years.

V. Eligibility

The candidate should have completed 12th Standard with science discipline and atleast 60 % from a recognized board or equivalent.

VI. Scheme of Teaching and Evaluation

Semester- I										
S.No.	Course Code	Course Title	Periods Per Week			Evaluation Scheme				Course Total
			L	T	P	Seasonal			SEE	
						Credit	CT	TA		
1	BSY-CT-101	Foundations of Yoga	3	1	-	4	20	10	70	100
2	BSYCT-102	Hatha Pradipika & its Applications	3	1	-	4	20	10	70	100
3	BSY-CT-103	Human Biology –I	3	1	-	4	20	10	70	100
4	BSY-AECCT-104	Basics of Sanskritam	2	-	-	2	10	5	35	50
5	BSY-DSE-105/ BSY-DSE-106/ BSY-DSE-107/ (Choose Any One)	1. Introduction to AYUSH/ 2. Indian Culture & Traditions/ 3. Yoga Psychology	3	1	-	4	20	10	70	100
6	BSY-CP-108	Yoga Practicum- I	-	-	8	4	20	10	70	100
7	BSY-CP-109	Human Biology Practicum I	-	-	4	2	10	5	35	50
30 Hrs						24	Total			600
Semester- II										
1	BSY-CT-201	Ancient Yogic Texts & its Applications	3	1	-	4	20	10	70	100
2	BSY-CT-202	Gherand Samhita & its Applications	3	1	-	4	20	10	70	100
3	BSY-CT-203	Human Biology -II	3	1	-	4	20	10	70	100
4	BSY-AECCT-204	Envionmental Science.	2	-	-	2	10	5	35	50
5	BSY-DSE-205/ BSY-DSE-206/ BSY-DSE-207/ (Choose Any One)	1. Fundamentals of Ayurveda / 2. Ancient Indian Religion / 3. Yoga for Personality Development	3	1	-	4	20	10	70	100
6	BSY-CP-208	Yoga Practicum- 2	-	-	8	4	20	10	70	100
7	BSY-CP-209	Human Biology Practicum II	-	-	4	2	10	5	35	50
30 Hrs						24	Total			600

B.SC-II Year										
Semester III										
1	BSY-CT-301	Patanjala Yoga Sutra & its Applications	3	1	-	4	20	10	70	100
2	BSY-CT-302	Essence of Bhagwad Geeta for Holistic Living	3	1	-	4	20	10	70	100
3	BS-GE- 303 BS-GE- 304 (Choose Any One)	Introduction to Holistic Health/ Human Values	3	1	-	4	20	10	70	100
4	BSY-DSE-305 BSY-DSE-306 BSY-DSE-307 (Choose Any One)	1.Fundamentals of Naturopathy / 2. History of Yoga / 3. Yoga Therapy for Common Mental Disorder	3	1	-	4	20	10	70	100
5	BSY-SEC--308	Communicative English	2	-	1	2	10	5	35	50
6	BSY-CP-309	Yoga Practicum-3	-	-	8	4	20	10	70	100
7	BSY-FW-310	Field Work to establish Yoga teachings of Yogrishi Sw. Ramdev Ji	-	-	4	2	10	5	35	50
31 Hrs						24	Total			600
Semester-IV										
1	BSY-CT-401	Methods of Teaching Yoga	3	1	-	4	20	10	70	100
2	BSY-CT-402	Fundamentals of Biochemistry/ Biomechanics	3	1	-	4	20	10	70	100
3	BS-GE-403 BS-GE-404 (Choose any 1)	Introduction to Indian Philosophy/ Introduction to Principal Upanishads	3	1	-	4	20	10	70	100
4	BSY-DSE-405 BSY-DSE-406 BSY-DSE-407 (Choose any 1)	1. Fundamentals to Unani, Sidhha & Homeopathy/ 2. History of Vedic Science & Technology / 3. Cognitive Psychology	3	1	-	4	20	10	70	100
5	BSY-SEC--408	Anthropometric Assessments	2	-	1	2	10	5	35	50
6	BSY-CP-409	Yoga Practicum -4	-	-	8	4	20	10	70	100
7	BSY-CP-410	Practicum Biochemistry & Biomechanics.	-	-	4	2	10	5	35	50
31 Hrs						24	Total			600

B.SC-III Year										
Semester-V										
1	BSY-CT-501	Yogopnishad-I	3	1	-	4	20	10	70	100
2	BSY-CT-502	Yoga Therapy with Disease specific Yoga Therapy Modules-I	3	1	-	4	20	10	70	100
3	BSY-CT-503	Research Methodology & Statistics	3	1	-	4	20	10	70	100
4	BS-GE-504 BS-GE-505 (Choose any 1)	1. Fundamentals of Computer Application OR 2. Counselling and its yogic components	3	1	-	4	20	10	70	100
5	BSY-SEC--506	Yajnopathy	1	-	2	2	10	5	35	50
6	BSY-CP-507	Yoga Practicum -5	-	-	8	4	20	10	70	100
7	BSY-CP-508	Case Study/ Exploratory/ Survey	-	-	4	2	10	5	35	50
31 Hrs						24	Total			600
Semester-VI										
1	BSY-CT-601	Yogopnishad-II	3	1	-	4	20	10	70	100
2	BSY-CT-602	Yoga Therapy with Disease specific Yoga Therapy Modules-II	3	1	-	4	20	10	70	100
3	BSY-CT-603	Complementary and Alternative Therapy (CAT)	3	1	-	4	20	10	70	100
4	BS-GE- 604 BS-GE- 605 (Choose any 1)	1. Advance Computer Applications 2. Wellness Tourism	3	1	-	4	20	10	70	100
5	BSY-SEC-606	Study Tour	-	-	-	2	10	5	35	50
6	BSY-CP-607	Yoga Practicum -6	-	-	8	4	20	10	70	100
7	BSY-CP-608	CAT Practicum	-	-	4	2	10	5	35	50
28 Hrs						24	Total			600
Total Credit						144				3600



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Semester-I



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Course Name: FOUNDATIONS OF YOGA
Course Code: BSY-CT-101
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam (SEE): 70 Marks
Internal Assessment: 30Marks

Course Objectives:

The Course entitled 'Foundation of Yoga' has the following objectives:

- Students of the UG course will have an understanding about origin, history and development of Yoga.
- They will have an idea about the insights of different Yoga streams.
- Introduction about Yoga according to various Yogic texts, eminent Yogis.
- Quote references of each practice as per traditional texts.

UNIT-1: GENERAL INTRODUCTION TO YOGA [15HRS.]

Brief about origin of Yoga: Psychological aspects of Yoga, History and Development of Yoga: prior to the Vedic period, Vedic period, Medieval period, modern era; Etymology and Definitions of Yoga, Aims and Objectives of Yoga, Misconceptions about Yoga; Importance of Yoga.

UNIT-2: DIFFERENT STREAMS OF YOGA [15 HRS.]

Jnana Yoga: Meaning of Jnana and Jnana-Yoga, Sadhana-chatushtaya, Means of Jñāna, Bhakti Yoga: Meaning of Bhakti and Bhakti-Yoga, Stages of Bhakti, Types of Bhakti, Means of Bhakti-Yoga; Karma Yoga: Meaning of Karma and Karma-Yoga, Concept of Nishkama Karma, Means of Karma Yoga; Inter-relationship between Bhakti Yoga, Karma-Yoga and Jnana Yoga.

UNIT - 3: BRIEF ABOUT YOGA IN TEXTS [15HRS.]

Brief of Yoga in Vedas and Yoga in Principal Upanishads, Yogic perspective: Bhagavad Gita, Yoga Vasishtha, Narada Bhakti Sutras. Yogic perspective: Puranas with emphasis to Bhagavat Purana; Emphasis to Vedantic approach of Shankaracharya, Ramanujacharya, Madhvacharya and Vallabhacharya.

UNIT-4: INTRODUCTION TO EMINENT YOGIS [15 HRS.]

Introduction to eminent Yogis and their style of Yoga: Hiranyagarbha, Vyasa, Kapilmuni, Bhrtihari, Adishankaracharya, Maharshi Dayanand, Swami Vivekanand, Maharshi Arvind, Swami Kuvlyanand, Swami Shivanand, Yogrishi Swami Ramdev.

TEXT BOOKS

1. Yogrishi Swami Ramdev Ji : Yog ke moolbhut Sidhhant, Divya Prakashan, Haridwar.
2. Acharya Balkrishna: Grihasth Yog Sadhak k Gun, Divya Prakashan, Haridwar, 2017.
3. Singh S P & Yogi Mukesh: Foundations of Yoga, Standered Publication, New Delhi, 2010.
4. Yogendra Purusharthi (Sw. Divyananda Saraswati): Vedo me Yog Vidya, Yogic Sodhsansthan, 1985.
5. Yogrishi Swami Ramdev Ji: Ek Yogi Ek Yodhha, Divya Prakashan, Haridwar, 2015.
6. Sri Vishwanath Mukharji: Bharat ke Mahan Yogi, Vishvavidyalaya Prakashan, 2012.

BOOKS FOR REFERENCE

1. Acharya Balkrishna: Yog Vishwakosh, Divya Prakashan, 2014.
2. Agarwal M M: Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, varanai, 2010.
3. Swami Bhuteshananda: Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
4. Radhakrishnan S: Indian Philosophy, Oxford University, UK (Vol. I & II) II Edition, 2008
5. Max Muller K. M: The six systems of Indian Philosophy, Chukhambha, Sanskrit series, Varanasi, 6th Edition, 2008
6. Paul Brunton: A search in secret India, Riders Books, 2003.

Course Name:	HATHAYOG PRADIPIKA & ITS APPLICATIONS
Course Code:	BSY-CT-102
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE):	70 Marks
Internal Assessment:	30 Marks

Objectives:

By introducing Hathayoga Pradipika shall be able to

- Have an understanding about pre-requisites of Hatha Yoga.
- Have an understanding about the concept of Yoga in Hathpradipika.
- Have an understanding about various chapters of Hathpradipika.
- Quote references of each practice as per traditional texts.

Unit-1 PRE-REQUITES OF HATHA YOGA [20 HRS.]

Concept of Matha, Introduction to nathyogis, concept of hatha, Badhaka Tattva (Obstacles) and Sadhaka Tattva (Facilitatory factors), Yama and Niyam, Pathya and Apathay Ahar, mitahara, hathsiddhi lakshan, concept of Nadi and Nadi-Sodhan, outcomes of Nadishodhana, precautions and contraindication of hathyoga practices.

UNIT - 2: ASANAS AND SHAT KARMAS [15 HRS.]

Asanas; Techniques and Results- Swasthika asana, Gomuka asana, Vira asana, Kurma asana, Kukkuta asana, Uttana Kurma asana, Dhanura asana, Matsya asana, Paschima Tana, Mayura asana, Sava asana, Siddha asana, Padma asana, Simha asana, Bhadra asana

Shatkarma: Dhauti, Basti, Neti, Trataka, Nauti and Kapala Bhati; (Techniques and Results). Pranayama (Kumbhakas); Techniques and Outcomes of Kumbhskas; Surya Bhedan, Ujjayi, Sitkari, Sitali, Bhastrika, Bhramari, Murchha, and Plavini

UNIT - 3: TECHNIQUES AND OUTCOMES OF MUDRA AND BANDHA [15 HRS.]

Mudra and Bandha; Techniques and Results- Maha Mudra, Maha Bandha, Maha Vedha, Khechari, Uddiyana, Moola Bandha and Jalandhara Bandha, Viparita Karani Mudra, Vajroli and Shakti Chalana.

UNIT - 4: TECHNIQUES AND OUTCOMES OF NADANUSHANDHAN AND SAMADHI [10 HRS.]

Samadhi, Nada Anusandhan; Armbha Avstha (beginning Stage), Ghata Avastha (Vessel Stage), Parichya Avstha (Stage of Increase) and Nishpatti Avastha (Stage of Consummation)

TEXT BOOKS

1. G.S Sahaya: HathaYoga Pradeepika of Svatmarama, MDNIY Publication, New Delhi, 2013
2. Sw. Digamber ji & Raghunaath Shastri - Hatha Pradipika, Kaivalyadham SMYM samiti, Lonavala, 2006.

BOOKS FOR REFERENCE

1. Gharote, M.M. & others: Therapeutic references in Traditional Yoga Texts, Lonavla, 2010.
2. Gharote ML: Hatharatnavali, the Lonavala Yoha Institute, Lonavala, Pune, IInd Edition, 2009.
3. Swami Kuvalyananda & Shukla, S.A.: Gorakshasatkam, Kaivalyadhama, Lonavla, 2006
4. Gharote M.L. & Pai, G.K. (Edi): Siddhasidhantpaddhati, Kaivalyadhama, Lonavla, 2005.
5. Burley, Mikel: Hatha Yoga, Its Context Theory and Practice, M.L.B.D. Delhi, 2000.
6. Sharma BR: Jotsna (Comentory of HathaYoga Pradeepika) Kaivalyadhama, Lonavala, 2013.
7. Swatmaramaji: Hathapradipika (Jyotsana- tika), Adyar Library, Madras.
8. Bharati, Swami Veda Reddy Venkata: Philosophy of Hatha Yoga (English), Himalayan, Pennsylvania, Hatha Ratnavali.
9. Swami Satyananda Saraswati - Asan, Pranayama, Mudra, Bandha, Yoga publction trust, Munger, 2006.
10. Sw. Muktibodhananda Sarswati - Hatha Yoga Pradipika, Yoga publication trust, Munger, 2000

Course Name: HUMAN BIOLOGY-I
Course Code: BSY-CT-103
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Objectives:

Following the completion of the course, students shall be able:

- To know about the structure of the body
- To know about the necessary functions of the body
- To give brief idea about the diseases related to each system
- To throw light on anatomy so that student can experience the involvement of their body parts while practicing various postures of Yoga.

UNIT-1: INTRODUCTION TO HUMAN BIOLOGY; CELLS AND TISSUES [15HRS]

Cell structure –Plasma membrane and protoplasm; Cell organelles –Mitochondria, Golgi body, Endoplasmic reticulum, Lysosome, Peroxisome, Centrosome, Nucleus-Nuclear membrane, chromosome, nucleolus; **Homeostasis; Tissue;** Structure and function of epithelial tissue (simple and compound); Connective tissue - (proper, skeletal, vascular); Muscular Tissue (Skeletal, involuntary and cardiac); Nervous tissues (Myelinated neuron and Non myelinated neuron).

UNIT-2: DIGESTIVE AND RESPIRATORY SYSTEM [15 HRS]

Carbohydrates; Fats; Proteins; Minerals; Vitamins (fat soluble and water soluble); **Digestive system** -buccal cavity, Pharynx, oesophagus, stomach, large intestine, small intestine, anus, associated glands-liver, pancreas, salivary glands, physiology of digestion and absorption; Malnutrition and undernutrition; **Respiratory system** -nose, nasal cavity, pharynx, trachea, larynx, bronchiole, lungs; Mechanism of breathing (expiration and inspiration); Transportation of respiratory gases (transportation of oxygen and carbon dioxide).

UNIT-3: CARDIOVASCULAR SYSTEM [15 HRS]

Structure and working mechanism of heart; Organisation of systemic and pulmonary circulation; cardiac output and cardiac cycle; Functional anatomy of blood, vessels; Blood pressure and regulation of blood pressure. Composition and function of blood –Plasma, RBC, WBC and Platelet; Blood groups and their importance; Blood clotting;

UNIT-4: MUSCLES- SKELETAL SYSTEM [15 HRS]

Anatomy of the Skeleton: Classification of bones-axial bones and appendicular bones; Types of joint –synovial joints and fibrous joint; Structure of synovial joints ; Types of synovial joints; Types of Muscle in the body (striated, Smooth muscle, Cardiac muscle); Mechanism of muscle contraction.

TEXT BOOKS

1. Gore M. M. (2003). Anatomy and Physiology of Yogic practices. KanchanPrakashan, Lonavla, India
2. Anatomy and Physiology: Yogic Context: Dr Sharadchandra Bhalekar, Kaivalyadhama, Lonavla, Pune.
3. Lan Peate and Muralidharan Nayar – Fundamental of Anatomy and Physiology for nurses

REFERENCE BOOKS:

1. Tortora and Bryan: Anatomy and Physiology
2. Khurana: Anatomy and Physiology
3. Evelyn, C. Pearce- Anatomy and Physiology for Nurses

Course Name:	BASICS OF SANSKRITAM-I
Course Code:	BSY-AECCT-104
Total Credit:	02
Teaching Hours:	30 Hrs (02 Lecture + 00 Tutorial per Week)
Final Exam:	35 Marks
Internal Assesment:	15Marks

Objectives:

Following the completion of this course, students shall be able to

- Read and understand the colloquial words of Sanskrit.
- Communicate and comprehend Sanskrit to the best of their ability.
- Write in Sanskrit and have some idea about grammar.

Unit-1: संस्कृतभाषा परिचय (5)

संस्कृतभाषा परिचय, योगशास्त्र के अध्ययन में संस्कृत का महत्त्व और योग एवं संस्कृत का अन्तःसम्बन्ध, संस्कृतवर्णमाला, स्वर, व्यंजन वर्णज्ञान सहित रोमन लिपि में लेखन एवं पठन, वर्णों के उच्चारणस्थान और प्रयत्न ज्ञान। कारक, विभक्ति, लिङ्ग, वचन, पुरुष, लकार एवं वाक्यांग परिचय। संस्कृत संख्याएं (एक से सौ तक)

Unit-2: शब्दरूप (8)

अजन्त शब्दरूप—राम, बालिका, पुस्तक, मुनि, वारि, नदी, भानु, धेनु, मधु, पितृ, मातृ शब्दों के रूप अर्थज्ञान सहित। सर्वनाम शब्दरूप—अस्मद्, युष्मद्, तद् (तीनों लिंगों में), एतद् (तीनों लिंगों में), किम् (तीनों लिंगों में,) शब्दों के रूप अर्थज्ञान सहित। हलन्तशब्दरूप—भगवत्, नामन्, जगत्, भवत् (तीनों लिंगों में) शब्दों के रूप अर्थज्ञान सहित।

Unit-3: धातुरूप (8)

भू, अस्, पठ्, कृ, लिख्, नम्, दृश्, वद्, गम्, स्था, पा, दा, ज्ञा, कथ्, चिन्त्, श्रु, खाद्, धातुओं के पांच लकारों लट्, लृट्, लङ् लोट्, विधिलिङ्, में रूपज्ञान एवं वाक्य निर्माण अर्थज्ञान सहित।

Unit-4: वाक्यनिर्माण (9)

प्रथमदीक्षा के प्रथम, द्वितीय एवं तृतीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

TEXT BOOKS

- 1 द्विवेदी कपिल देव: प्रारम्भिक रचनानुवाद कौमुदी, विश्वविद्यालय प्रकाशन, वाराणसी 2011
- 2 द्विवेदी कपिल देव: रचनानुवादकौमुदी, विश्वविद्यालय प्रकाशन वाराणसी 2011
- 3 द्विवेदी कपिल देव: प्रौढरचनानुवाद कौमुदी, विश्वविद्यालय प्रकाशन, वाराणसी 2007
- 4 प्रथमदीक्षा, राष्ट्रिय संस्कृत संस्थान, नई दिल्ली

BOOKS FOR REFERENCE

1. Perry E D : A Sanskrit Primer, MLBD, New Delhi, 2004
2. Kala MR : A Higher Sanskrit Grammar for college students, MLBD, New Delhi, 2011
3. महर्षि दयानन्द सरस्वती: वर्णोच्चार शिक्षा, रामलाल कपूर ट्रस्ट, सोनीपत हरियाणा।

Course Name: DISCIPLINE SPECIFIC ELECTIVE-I (Any one stream of the following)

1. INTRODUCTION TO AYUSH OR
2. INDIAN CULTURE AND TRADITION OR
3. YOGA PSYCHOLOGY

INTRODUCTION TO AYUSH

Course Code: BSY-DSE-105 (DSE-01)

Total Credit: 04

Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)

Final Exam: 70 Marks

Internal Assessment: 30Marks

Objectives of Introduction to Ayush:

- Students will acquire knowledge regarding the traditional System of Medicine
- Students will acquire knowledge regarding concepts of health & disease.
- Students will acquire knowledge regarding other supportive Indian systems of medicine

Unit- 1: INTRODUCTION TO BASIC CONCEPTS OF AYURVEDA [25 Hrs.]

The four aspects of life (Soul, Mind, Senses and Body); Panchamahabhutas (the five element theory), Ahara, Vihara and Ausadhi (three pillars of Ayurveda); Concept, role and importance of – Dosha, Dhatu, Mala; Updhatu, Srotas, Indriya, Agni, Prāna, Prakrti (Deha Prakrti, Manasa Prakrti); Role of Dosa, Dhatu and Mala in health and diseases; Concept of Dinacaryā (daily routine), concept of Ritucarya (Seasonal routine), Svasthavāta in Āyurveda; Concept of Trayo Upasthambas.

Unit-2: YOGA & HEALTH AND INTEGRATED APPROACH OF YOGA & NATUROAPTHY [20 Hrs.]

Concept of body, Health and disease; Concept of Yoga Adhi and Vyadhi; Principle of Yoga Therapy in relation to Yoga Vasistha; Practices at Pancha Kosa level Annamaya, Pranamaya, Manomaya, Vijnanamaya and Anandamaya kosa; Principle of Yoga Therapy in relation to Hatha Ratnavali and Gheranda Samhita. Naturopathy- Definition, Meaning, Application, Scope and limitations, History of Naturopathy – Indian and Western

UNIT- 3: INTRODUCTION TO BASIC CONCEPTS OF UNANI, SIDDHA AND HOMEOPATHY [15 HRS.]

History of Unani & Siddha; Concept of Unāné & Siddha; Principles of Unani & Siddha; Introduction to Basic concepts of Homeopathy; History of Homeopathy; Concept of homeopathy; Principles of Homeopathy.

TEXT BOOKS:

1. Acharya Balkrishna: Yog Sidhant Rahasya, Divya Prakashan, Haridwar 2013
2. Dr R Nagarathna: Yoga and Health, SVYASA, Bangalore.

REFERENCE BOOK:

1. Taitriya Upnishad
2. Dr. Rakesh Jindal: Prakritic Ayurvijnana, Pune.
3. Dash, V.B.: Ayurvedic Treatment for Common Diseases Delhi Diary, 1974.
4. Richards Hughes: The Principal and Practice of Homeopathy, B Jain publication, 2008.
5. Introduction to AYUSH; www.slideshare.net/digvijay03/introduction-of-ayush-71028486

INDIAN CULTURE AND TRADITIONS

Course Code:	BSY-DSE-106 (DSE-01)
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam:	70 Marks
Internal Assessment:	30Marks

Objectives of Indian Culture and Traditions:

- Students will acquire knowledge regarding the primitive life and cultural
- Students will acquire knowledge regarding Status of the people of ancient India. They can gather knowledge about the society, culture,
- Students will acquire knowledge regarding Religion and political history of ancient India. They will also acquire the knowledge of changing
- Students will acquire knowledge regarding Socio-cultural scenarios of India.

UNIT-I- INTRODUCTION TO BHARATVARSHA [15 Hrs.]

Understanding of Bharatvarsha, Eternity of synonyms Bharat, Indian concept of time and space. The glory of Indian Literature: Veda, Vedanga, Upanishads, Epics, Jain and Buddhist Literature, Smriti, Puranas Etc.

UNIT II- INDIAN KNOWLEDGE TRADITION, ART AND CULTURE [15 Hrs.]

The glory of Indian Literature: Patanjali Yoga-Sutra, Vedanga, Upanishads, Epics, Jain and Buddhist Literature, Smriti, Puranas. Salient features of Indian Culture: Indian educational system; Gurukul and Bauddh, Evolution of language and Script: Brahmi, Kharoshiti,

UNIT III- DHARMA, PHILOSOPHY AND VASUDHAIVA KUTUMBAKAM [15 Hrs.]

Indian perception of Dharma and Darshan, The concept of Vasudhaiva Kutumbakam: Vishva Bandhutva, Religious and Cultural Harmony, Family, Society, Polity and governance, the concept of Janpada & Gram Swarajya

UNIT IV- ANCIENT INDIAN EDUCATIONAL SYSTEM [15 Hrs.]

Education system, Gurukul education system, Buddhist education system, Centre of Education- Kashi Taxila, Nalanda, Valabhi. Guru-Shishya relationship, curriculum, qualification of the Guru, qualification of the Shishya, rules of admission in Gurukul, women's education, development of writing skills, writing material.

Suggested Readings:

- A.I Basham: The Wonder that was India, Rupa, Delhi 1994
- A.S Altekar, Education in Ancient India, Nand Kishore & Bros, Varanasi 1944
- Balbir Singh Sihag: Kautilya: The true founder of Economics, Vitasta Publishing Pvt. Ltd, Delhi, 2014
- Bhagvadatt: बहद भारत का इतिहास, प्रणव प्रकाशन, नई दिल्ली

Course Name	:	YOGA PSYCHOLOGY
Course Code	:	BSY-DSE-107 (DSE-01)
Total Credit	:	04
Teaching Hours	:	60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE)	:	70 Marks
Internal Assessment	:	30 Marks

Objectives of this course are:

- Students will acquire knowledge regarding basics of Psychology.
- Students will acquire knowledge regarding concepts of health & disease.
- Students will acquire knowledge regarding other supportive Indian systems of medicine

Unit-1 Introduction to Psychology (12 hours)

Psychology - word meaning, definition, nature, scope and utility of Psychology. Goals and branches of Psychology, concept of Psyche in Vedic literature (Ved, Upanishad, Shankhya, Vedant). States of consciousness according to yogic scriptures (Jagrata, svapna, susupti and Turiya). Yogic etiology for somatic, mental, social and spiritual disharmony. Stress: Definition, Physiological and psychological stress; Understanding stress in accordance with scriptures; Stress assessment tools and biomarkers of stress; Stress & disease.

Unit-2 Yogic Insights on Psychological Concepts (12 hours)

Yogic and Psychological concept of Emotion. Causes of Emotions in the mind according to yoga texts, Physiology of Emotion (Psychological concept), Concept of Personality in Yogic and Psychological Context, types of Personality and personality assessment.

Unit-3 Intelligence and Mental Deficiency (12 hours)

Meaning and definitions of intelligence, types of intelligence (Mental, emotional, social and spiritual intelligence), Mental deficiency: meaning and its types, causes of mental deficiency and treatment process to cure mental deficiency through Yoga.

Unit-3 Common Mental Disorders [15 Hrs.]

Causes and Consequences of Conflicts and Frustrations; Common mental disorders; Depressive disorders; anxiety disorders; Serious mental disorders; Mental retardation; Alcohol and drug abuse; Suicide, attempted suicide and suicide prevention.

Unit-5 Yogic counselling and Personality development (12 hours)

Counseling: skills of counseling, code of ethics for lay counselors, building counseling relationship (factors that influence the counseling process), building yogic rapport and efficient communication, acceptance, empathy and solving the problems with yogic wisdom.

TEXTBOOKS

1. Abhedananda: The Yoga Psychology, Ramakrishna Vedanta Math, Calcutta, 1973.
2. Sachdev, I. P. Yoga and Depth Psychology (Motilal Banarsi dass, Delhi, 1978)

REFERENCE BOOKS

1. Taimini, I. K.: Glimpses into the Psychology of Yoga (Adyar: Theosophical Publishing House, 1973).
2. Aatreya, Shanti Parkash: Yoga Manovijnana (Indian Psychology) (International Standard Publication, Varanasi; 1965) Hecker, J.E. & Thorpe, G. L.: Introduction to clinical psychology: Science, Practice ðics. New Delhi: Pearson, 2010.

3. Hilgard, Ernest R., Atkinson, Richard C. & Atkinson, R.L: Introduction to Psychology. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
4. Nagendra, H. R.: New Persecutes in Stress Management. Bangalore: V4ekanada Kendra.
5. Herrman, H., Saxena, S, & Moodie, R: Promoting Mental Health. Switzerland: WHO Press, World Health Organization, 2005.
6. Singh, A. K.: Saral Samanya Manovijnana. Delhi: Motilal Banarasidas Publications, 2007.
7. Taylor, S. E.: Health Psychology (6th ed.). New Delhi: Tata McGraw Hill, 2006.
8. Tilak, B. G.: Srimad Bhagwadgita Rahasya. Poona: Tilak Mandir.
9. Udupa, K. N.: Stress and Its Management by Yoga. Delhi: Motilal Banarasidas, 2007.
10. Vivekananda, Swami: Raja Yoga. Nagpur: Ramakrishna Math.
11. Daniel Goleman & Joel Gurin: Mind body medicine.
12. Deepak Chopra: Healing the heart.
13. Dharam Singh Khalsa: Meditation as medicine.
14. Deepak Chopra: Quantum healing.
15. Estelle Frankel: Sacred therapy.
16. Aggie Casey & Herbert Benson: Mind your heart.
17. Barbara B. Brown: New body, new mind.
18. Sri Ramakrishna Math: Healthy mind, healthy body.
19. Antonio Damasio: The feeling of what happens.
20. Daniel Goleman: Social intelligence Emotional intelligence.
21. The American holistic health association complete guide to alternative medicine; by William Collinge – Paperback.
22. David Frawley: Ayurveda and the mind.
23. John E. Sarno The divided mind: the epidemic of mind body disorders.

Course Name:	YOGA PRACTICUM-I
Course Code:	BSY-CP-108
Total Credit:	04
Teaching Hours:	120 Hrs (08 Practical Hours per Week)
Final Exam:	70 Marks
Internal Assessment:	30Marks

Objectives

Following the completion of this course, students shall be able to

- Understand the principle and practice of various dand baithak of Indian origin
- Understand the principle and practice of Suryanamaskar and different type of Yogasanas.
- Demonstrate each Asana and explain its procedure.
- Quote references of each practice as per traditional texts

UNIT-1: RECITATION OF HYMNS & HASTA MUDRA [10 HRS.]

Recitation of Shanti Mantras; Recitation of Pranava Japa and Soham Japa; Recitation of Hymns from Upanishad & Yoga Texts; Hasta Mudra: Chin, Jnana, Hridaya, Bhairav, Yoni, Pran, Apan, Apanvayu, Shankh, Kamajayi.

UNIT-2: EIGHT BAIETHAK AND TWELVE DAND BY YOGRISHI SWAMI RAMDEV JI [15 HRS]

Ardh baithak, Purna baithak, Rammurti baithak, Pahalwani baithak-I, Pahalwani baithak-II, Hanuman baithak-I, Hanuman baithak-II, Hanuman baithak -III, Simple Dand, Rammurti Dand, Vakshvikasak Dand, Hanuman Dand, Vrishchik Dand-I, Vrishchik Dand-II, Parshvadand, Chakradand, Palatdand, Sherdand, Sarpdand, Mishradand (mixed Dand)

UNIT-3: SHATKARMAS AND BREATHING PRACTICES [15 HRS.]

Neti (Jalneti, Rubber Neti), Dhauti (Jal Dhauti); Kapalbhathi (upto 1000 stroks) and its variations; Trataka (Jatru and Jyoti), Breathing practices: Hands in and out, Hands stretch, Ankle stretch, Rabbit, Dog, Tiger, Straight leg raising breathing; Breath Awareness: Shwas-prashwas samyama; Abdomen, Thoracic & Clavicular Breathing, Abdomen+Thoracic Breathing, Abdomen + Thoracic +Clavicular Breathing; Yogic Breathing: Pause Breathing (Viloma Pranayama), Spinal Passage Breathing (Sushumna Breathing); Practice of Puraka, Rechaka & Kumbhaka (Antar & BahyaKumbhaka).

UNIT-4: YOGASANA (SUPINE LYING POSTURES) AND (PRONE LINE POSTURES) [10 HRS.]

Navasana, Pavanamuktasana, Utthana-padasana, Padavrittasana, Chakrikasana, Chakkichalana, Ardha Halasana, Halasana, Setubandhasana, Sarvangasana, Matsyasana, Chakrasana, Shavasana. Makarasana, Markatasana, Bhujangasana, Sarpasana, Shalabhasana, Dhanurasana, Purnadhanurasana.

UNIT- 5: SURYA NAMASKARA AND BHOJAN MANTRA, PRATAH EVAM RATRI MANTRA [10 HRS.]

Understanding, recitation and memorization.

TEXT BOOKS

1. Acharya Balkrishna: Dainik Yogabhyasakram, Divyayog Prakashan, Haridwar,2015.
2. Yogrishi Swami Randev Ji: Dand-baithak, 2015.
3. Swami Dharendra Bhrahmachari: Yogasana Vijnana, Dhirendra Yoga Publications, New Delhi.
4. Swami Kuvalyananda : Asana Kaivalyadhama, Lonavla

BOOKS FOR REFERENCES

1. Tulsi Naina: A Complete Guide for structural Body Work, Divya Prakashan, Haridwar, 2015.
2. Basavaraddi, I.V. & others: Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
3. Iyengar, B.K.S.: Light on Yoga, Harper Collins Publishers.
4. Swami Satyananda Saraswati: Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger.
5. Tiwari, O.P.: Asana Why and How? Kaivalyadhama, Lonavla.

Course Name: HUMAN BIOLOGY PRACTICUM- I
Course Code: BSY-CP-109
Total Credit: 02
Teaching Hours: 60 Hrs (04 Practical Hours per Week)
Final Exam (SEE): 35 Marks
Internal Assesment: 15Marks

Objectives:

The objectives behind teaching Anatomy and Physiology is to

- Make students familiar with the systems of the body.
- Give a hand on experience about the human body using models, charts and pictures.
- Make students understand the organization of the body with respect to structural components.

Unit-1: Demonstration of Osteology & Myology [15 Hrs.]

Unit-2: Demonstration of Organs and Viscera [15 Hrs.]

Unit-3: Demonstration of Bones, Joints, Anthropometric measurements [15 Hrs.]

Unit-4: Demonstration of Human Skeleton [15 Hrs.]

Semester-II



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Course Name: ANCIENT YOGIC TEXTS & ITS APPLICATIONS
Course Code: BSY-CT-201
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Course Objectives:

The Course entitled **Ancient Yogic Texts & Its Applications** has the following objectives:

- Students will have an introduction to Hatharatnavali.
- Students will have an introduction to Siddha Siddhantapaddhati.
- Students will have an introduction to Vashishtha Samhita.
- Students will have an introduction to Shiv Samhita.

Unit -1: HATHARATNAVALI [15 HRS.]

A General Introduction to Hatha Ratnavali, the nature of yoga elements described in Hatharatnavali: Mantryog, Layayog, Rajyog, Ashtakarma, Chakrikarma, Shatkarma, Gajakarni, Vihitahar, Nishidhahara, Sadhak Acharan, Nine Kumbhaka, Bhujangikaran, Bandha-Mudra, Raj-bindu, Vajroli-Sahjoli-Amroli, Yogasanas, Nadanusandhana, Nishpattibhava, Nadi, Sankhya,

Unit -2: SIDHHA SIDDHANTAPADDHATI [15 HRS.]

A General Introduction to Siddha Siddhanta Paddhati, the nature of yoga elements described in Siddha Siddhant Paddhati: Shiva as the physical body as Bhairava, Srikantha, Sadashiv, Ishwara, Rudra, Vishnu, Brahma. Ten Nadis, Ten Vayu. Nine Chakra, Sixteen Adhara, three Lakshya, Characteristics of Samadhi. Pinda and its form. Soal & Cosmic Soal. Pindadharana, Shakti, Pindasiddhi, Avadhutayogi Lakshana.

Unit -3: VASHISHTHA SAMHITA [15 HRS.]

A General Introduction to Vashishtha Samhita, the nature of yoga elements described in Vashishtha Samhita: Concept of Adhi Vyadhi, Tools of Mukti: Sham, Vichar, Santosh, Satsang. Three Streams of Yoga: Brahma Bhawana, Abhava bhawana, Kewali bhawana, Stages of Jnana: Shubhechha, Vicharana, Tanumansa, Satwapatti, Asansakti, Padarth bhawana, Turyaga.

Unit -4: SHIV SAMHITA [15 HRS.]

A General Introduction to Shiv Samhita, the nature of yoga elements described in Shiv Samhita: Philosophy of Shiv Samhita- Satya, Asatya, Mukti, Marg. Anatomy of Human body-Correlation of organ with components of Universe: Merudanda, Nadi, Chakra, Vayu: Ten types of Vayu, Vayusiddhi, Nadanusandhana, Panchabhuta dharana, Vayu sadhna for Klesh siddhi, Asana Chatusstaya. Ten Mudra, Stages of Sadhaka, Pratikopasana, Meditation (Dhyana): chakra Meditation, Pranadharana, Bijatraya Mantra Sadhana, Importance of Shiv Vidya.

TEXT BOOKS

1. Hatha Ratnavalli: Kaivalyadhama Publication
2. Siddha Siddhant Padhati: KAivalyadhama Publication
3. Vashishtha Samhita: Kaivalyadhama Publication
4. Siv Samhita: Kaivalyadhama Publication

Course Name: GHERAND SAMHITA & ITS APPLICATIONS
Course Code: BS CT-202
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Objectives:

By introducing Gherand Samhita shall be able to

- Have an understanding about pre-requisites of Hatha Yoga.
- Have an understanding about the concept of Yoga in Gherand Samhita.
- Have an understanding about various chapters of Gherand Samhita.
- Quote references of each practice as per Gherand Samhita.

UNIT - 1: TECHNIQUES AND OUTCOMES OF SHATKARMAS AND ASANAS [20 HRS.]

Shat-karmas (Purificatory): By following the shat karmas:- Dhauti (4 types); Antardhauti (internal cleansing), Vatasara (wind purification), Varisara (water purification), Vahnisara (process of fire purification), Bahiskrita, Dantadhauti which involves the purification of Teeth, root of the tongue, Both ears, frontal sinuses, Hridayadhauti (process of heart cleaning) which is done by using sticks, vomiting and cloth, Mulashodhana (process of rectal cleaning), Basti (2 types); Jala or water Basti (A Basti Kriya done in water), Sthala or dry basti (A Basti Kriya of dry nature); Practice of Neti Kriya; Practice of Laukiki, Gazing or Trataka practice which is an eye exercise that cures all eye diseases and induces clairvoyance; Kapalbhathi (3 types), the practice of which removes all phlegm (kapha) related disorders, Vat krama (which involves alternate nostril breathing without force and without retention), Practice of Vyut karma (which involves method of drawing in water through nasal passages and letting it out through the mouth), Practice of Sheet karma (which involves a method of drinking water through the mouth and letting it out through the nasal passage).

Asanas:- Siddhasana-Perfect Pose, Padmasana-Lotus Pose, Bhadrasan-Happy Pose, Muktam-Free Pose, Vajram-Adamant Pose, Swastika-Prosperous Pose, Singham- Lion Pose, Gomukh-Cow's mouth Pose, Vira-Hero Pose, Dhanur-Bow Pose, Mritasan, or Shavasan-Corpse pose, Guptam-Hidden Pose, Matsyam-Fish pose, Matsendra-King of Fish Pose, Goraksha, Paschimottan-Forward Bend Pose, Uttkatam, Sankatam -Dangerous pose, Mayuram-Peacock Pose, Kukkutam, Kurma-Tortoise Pose, Uttana Manduka, Uttan Kurmakam, Vriksha-Tree Pose, Manduka-Frog Pose, Garuda - Eagle Pose, Vrisham - Bull Pose, Shalabh- Locust Pose, Makara - Crocodile Pose, Ushtram-Camel Pose, Bhujangam-Snake Pose and Yoga or Yogasana.

UNIT - 2: TECHNIQUES AND OUTCOMES OF MUDRA AND PANCHADHARAN (FIVE DHARANAS) [15 HRS.]

Mahamudra, Nabho mudra, Uddiyana Bandha, Jalandhar Bandha, Mula Bandha, Maha Bandha, Mahabheda, Khechari Mudra, Viparitkarni, Yoni Mudra, Vajroni Mudra, Shakti chalani, Tadagi (tank) Mudra, Manduki Mudra, Shambhavi Mudra, Ashwini Mudra, Pasini Mudra, Kaki Mudra and Bhujangini Mudra. Parthivi-earthly, Ambhasi-watery, Vayavi-aerial, Agney-fire and Akashi-sky/ethereal

UNIT-3: TECHNIQUES AND RESULTS OF PRATYAHARA AND PRANAYAMA [15 HRS.]

Pratyahara : Shat shatru varnan, atma layatva. **Pranayama:** Sahita Pranayama, Sagarbha Pranayama, Nigarbha Pranayama, Surya bhed Pranayama, Ujjayi Pranayama, Shitali Pranayama, Bhastrika Pranayama, Bhramari Pranayama, Murcha Pranayama, Kevali Pranayama

UNIT - 4: TECHNIQUES AND RESULTS OF DHYAN AND SAMADHI [10 HRS.]

Dhyan: Sthula Dhyan, Jyoti Dhyan, Sukshama Dhyan. **Samadhi:** Dhyana yog Samadhi, Nadyog Samadhi, Rasananda Samadhi, Layasiddhi Samadhi, Bhakti yog Samadhi , Manmurcha Samadhi

TEXT BOOKS

1. Gherand Samhita: Kaivalyadhama
2. Gherand Samhita: SVYASA, Bengaluru

Course Name: HUMAN BIOLOGY-II
Course Code: BSCT-203
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Objectives:

Following the completion of the course, students shall be able:

- To know about the structure of the body
- To know about the necessary functions of the body
- To throw light on anatomy so that student can experience the involvement of their body parts while practicing various postures of Yoga.

UNIT -1: NERVOUS SYSTEM & SPECIAL SENSES [15HOURS]

Structure and function of human brain.-Fore brain, mid brain, hind brain, Structure and function of spinal cord, Cranial nerve and spinal nerve, Autonomic nervous system- Sympathetic and para sympathetic nervous system, Reflex action, Mechanism of nerve conduction, Synapse and synaptic transmission, Structure and function of eye, ear,nose,tongue and skin.

UNIT -2: ENDOCRINE SYSTEM [10HOURS]

Structure and function of important of endocrine gland (Pituitary, Adrenal, Thyroid, Parathyroid, Pancreas, Gonads), Function of GI tract hormones, Mechanism of hormone actions.

UNIT -3: REPRODUCTIVE & EXCRETORY SYSTEM SYSTEM [20 HRS]

Male reproductive system of human.-Testis, penis, epididymis, prostate gland; Female reproductive system of human-ovary, uterus, vagina, cervix, fallopian tube; Menstrual cycle Gametogenesis-Spermatogenesis and oogenesis; Fertilization; Implantation and embryonic development; Pregnancy; Excretory system of human-Kidney, ureter, urinary bladder, urethra; Mechanism of urine formation-Ultrafiltration, selective reabsorption, tubular secretion; Role of kidney in osmo-regulation.

UNIT -4: LYMPHATIC SYSTEM & IMMUNE SYSTEM [15HRS]

Lymphoid organ-Bone marrow, Thymus, spleen ,Lymph node, Composition and function of lymph, Immunity, Types of immunity-Innate immunity and acquired immunity, Antigen and antibody, Hypersensitivity, Autoimmunity.

TEXT BOOKS

1. Gore M. M. (2003). Anatomy and Physiology of Yogic practices. KanchanPrakashan, Lonavla, India
2. Anatomy and Physiology: Yogic Context: Dr Sharadchandra Bhalekar, Kaivalyadhama, Lonavla, Pune.
3. Lan Peate and Muralidharan Nayar – Fundamental of Anatomy and Physiology for nurses

REFERENCE BOOKS:

1. Tortora and Bryan: Anatomy and Physiology
2. Khurana: Anatomy and Physiology
3. Evelyn, C. Pearce- Anatomy and Physiology for Nurses

Course Name: ENVIRONMENTAL STUDIES
Course Code: BSY-AECCT--204 (AECCT-02)
Total Credit: 02
Teaching Hours: 30 Hrs (02 Lecture + 00 Tutorials per Week)
Final Exam (SEE): 35 Marks
Internal Assessment: 15 Marks

Objectives:

Following the completion of these course students shall be able to

1. Know about environment and ecosystem.
2. Know renewable and non-renewable resources.
3. Know about Biodiversities, Conservation and Pollution.

UNIT- 1: INTRODUCTION TO ENVIRONMENTAL STUDIES AND ECOSYSTEM [8 HRS.]

Introduction to environmental studies and ecosystem; multidisciplinary nature of environmental studies: scope and importance. Ecosystem and its functions, aquatic ecosystem, environmental components of ecosystem, conservation of natural resources, food chains, food web.

UNIT-2: NATURAL RESOURCES: RENEWABLE & NON-RENEWABLE [7 HRS.]

Resources: Renewable & Non-Renewable Biodiversity, Values of Biodiversity, Natural Resources (Renewable & Non-Renewable Resources), Pollution -Air pollution, Soil pollution, Smog their causes and impacts.

UNIT-3: BIODIVERSITY & CONSERVATION [8 HRS.]

Biodiversity levels of biological biodiversity, Environment segments, Biosphere, Lithosphere, Hydrosphere, Atmosphere, Pollutants, Degradable and Non-degradable pollutants, conservation-mineral Resources, oxygen depletion.

UNIT 4: ENVIRONMENTAL POLLUTION [7 HRS.]

Environmental pollution, types, causes, effects and controls, Prevention & Control of Pollution, Environment Protection Act, Wild life Protection Act.

TEXT BOOKS:

1. Erach Bharucha: Text Book for Environment Studies, UGC & Bhartiya Vidyapeetha Institute of Environmental education and research, Pune.

REFERENCE BOOKS:

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner. b)
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,

Course Name: **DISCIPLINE SPECIFIC ELECTIVE-II (Stream chosen)**

1. **FUNDAMENTALS OF AYURVEDA/**
2. **ANCIENT INDIAN RELIGION /**
3. **YOGA FOR PERSONALITY DEVELOPMENT**

Course Name: **FUNDAMENTALS OF AYURVEDA**

Course Code: **BSDSE-205**

Total Credit: **04**

Teaching Hours: **60 Hrs (03 Lecture + 01 Tutorial per Week)**

Final Exam: **70 Marks**

Internal Assessment: **30 Marks**

Objectives

Following the completion of the course, students shall be able to

- Understand fundamentals of Ayurveda
- Know fundamentals of healthy living
- Know lifestyle regimens according to nature.
- Know medicinal cleansing processes.

Unit-1: GENERAL INTRODUCTION TO AYURVEDA [20 Hrs.]

General introduction to Ayurveda; Definition, aim of Ayurveda, its origin, history and propagation; Basic introduction to main Ayurvedic texts like Charaka Samhita, Sushruta Samhita and Concept of Health according to Ayurveda and its utility in health promotion and prevention.

Unit -2 FUNDAMENTALS OF AYURVEDA [20 Hrs]

Basic principles of Ayurveda– Tridosha, Saptadhatu, Trimala, Pancha Mahabhuta, Prakruti & Manas; Concept of Agni, Srotas and Ama, Concept of Dharniya and Adharniya Vega in Ayurveda; Introduction to Dravya, Guna, Karma, Virya, Vipaka and Prabhava. Factors for Health and Disease, Ayurvedic system of Examination and Diagnosis. Types of Disease, Four Pillars of Treatment, Treatment Principles of Body and Mind. Characteristics of Vaidya and Shishya.

Unit-3: SWASTHAVRITTA, DINACHARYA, RITUCHARYA, RATRICHARYA, SADVRITTA & AACHAAR RASAYANA [20 HRS.]

Concept and importance of Swasthavrita, Dinacharya: Brahmuhurt, Sauch Vidhi, Achman, Dantdhawan, Jigwanirlekhan, Anjana, Nasya, Ritunukul Vastradharan, Abyang, Vyayam, Mardan, Ubtan, snan, Bhojan vidhi. Ritucharya; Kala Lakshan, Maatradi Lakshan, Aadan kaal, Visargkaal, Ritusandhi, Hemant ritucharya, Shishir ritucharya, Vasant ritucharya, Greeshma ritucharya, Varsha ritucharya, Sharad ritucharya Concept of Sadvrita: and Aachaar Rasayana; Concept of Dharniya & Adharniya Veda and their complications. Characteristics of Ahar, Nidra Brahmacharya and their Importance.

Unit-4: AHARA AND PANCHKARMA [20 Hrs.]

Concept of Upasthambha; Concept of Ahara, Ahara pachana, Pathya & Apathya in Ayurveda; Concept of Ojas in Ayurveda; Role of Ayurvedic diet in health and prevention. Introduction to Panchkarma as Shodhan Chikitsa with its three domain Poorvakarma (Snehan & Svedan), Pradhan karma (Vaman, Virechan, Vasti, Nasya, Raktamokshan) and Paschat karma (Pachan, Rasayan and Vazikaran).

TEXT BOOKS

1. Acharya Balkrishna: Ayurveda Sidhant Rahasya, Patanjali Yogpeetha Trust.
2. Acharya Balkrishna: Siddhasaar Samgrah, Divya Prakashan, Haridwar
3. Dr. Ravi dutta Tripathi Dr. Brahmanand Tripathi : Ashtanga Samgraha, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition of 2003
4. Dr. Shailja Srivastava, Dr Jairam Yadav,: Ashtangasamgrah, Chaukhambha Orientalia, Vrananasi Reedition 2016.

REFERENCE BOOK

1. Acharya Balkrishna: Ayurveda Mahodadhi: Divya Prakashan, Haridwar, 2015
2. Dr. Priyavrata Sharma : Charak samhita, Chaukhambha Orientalia, Varanasi, Edition of 2008.

Course Name; ANCIANT INDIAN RELIGION
Course Code: BSY-DSE--206
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE) 70 Marks
Internal Assesment: 30 Marks

Objectives:

Following the completion of this course, students shall be able to:

- Understand basic ideas and features of ancient Indian religions as manifested through Vedas, Buddhism and Jainism and Puranas.
- Understand the primitive religious beliefs, the Vedic pantheon and sacrifices.
- Basic features of the Sraman traditions which include within its fold Buddhism and Jainism.
- Various cults like Vaisnavism, Śaivism and Śāktism have played a prominent role in popularizing the basic tenets of Purānic religion.

Unit I: Vedic Religion (16 Hrs.)

Indus Religion: Worship of Mother Goddess, Early form of worship of Yogi Shiva, Origin of Nature worship, Early Vedic Religion: Introduction of Rig-Veda, Rigvedic diety- Indra, Varun, Agni, Rit, Mother Goddess etc, Development Nature worship, Later Vedic Religion: Introduction of Samved, yajurved and Atharvaved, Emergence of religious rituals, The nature and characteristics of the gods of the later Vedic period: Vishnu, Shiva, Prajapati and Mother Goddess.

Unit II : Jainism (16 Hrs.)

Introduction of Jain Tirthankar: Rishabhdev, Parshwanath and Mahaveer. Various Teachings of Jainism: Teachings of Mahavira: Pancha Mahavrat and Triratn, Svetambara and Digambara, Anekantavada and Syadvada.

Unit III: Buddhism (10 Hrs.)

Life and teachings of Gautama Buddha: Four noble truths, Octagonal Path, Pratitya Samutpad, Buddhist Councils, Hinayana and Mahayana. Various Dimensions in development of Buddhism.

Unit IV : Puranic Religions (18 Lect.)

Shaivism: Bhakti Tradition of Shavism: Pashupat Tradition, Kapalik Tradition, Kalmukh Tradition, Bhakti Tradition
Vaishnavism: Panchratr, Bhagavat, Krishna and doctrine of embodiment: Bhagavan Vishnu ke das Avatar, and
Shaktism: Trideviyan- Historical sources of Lakshmi, Durga and Saraswati.

Recommended Readings:

1. Agrawala, V.S., Prachina Bharatiya Lokadharmā (Hindi and English), Varanasi, 1964.
2. Banerjee, J.N., Development of Hindu Iconography, New Delhi, 1985.
3. Barth, A., The Religions of India, Varanasi, 1985. 19
4. Bevakara, S.K. and R.D. Ranade, History of Indian Philosophy, Vol. II, Poona, 1927.
5. Bhandarkar, R.G., Vaishnavism, Saivism and Minor Religious Systems (Also in Hindi), Varanasi, 1965.
Bhattacharya, N.N., History of Sakta Religion, New Delhi, 1974
6. Chaturvedi, P., Vaishnava Dharma, Varanasi, 1977.
7. Hiriyanna, M..H., Outlines of Indian Philosophy, London, 1932.
8. Jaiswal, Suvira, Origin and Development of Vaisnavism (also in Hindi), Delhi, 1996 (IInd ed.).
9. Keith, A.B., The Religion and Philosophy of Veda and Upanisads (also in Hindi), Cambridge, 1925
10. Upadhyaya, B. Bharatiya Darshana, Varanasi, 1971.
11. Bapat, P.V. (ed.), 2500 Years of Buddhism (Also in Hindi), New Delhi, 1987.
12. Jain, Hiralal, Bharatiya Samskriti me Jaina Dharma ka Yogadana (Hindi). Bhopal, 1962.
13. Jaini, J.L., An outline of Jainism, Cambridge, 1916.
14. Jain, Jyoti Prasad, Religion and Culture of the Jains, Delhi, 1995.
15. Majumdar, R.C. and A. D. Pusalker (eds.), The History and Culture of the Indian People, Vols. I –V (relevant chapters), Bombay, 1951-1957.

Course Name	:	YOGA FOR PERSONALITY DEVELOPMENT
Course Code	:	BSY-DSE- 207(DSE-02)
Total Credit	:	04
Teaching Hours	:	60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE)	:	70 Marks
Internal Assessment	:	30 Marks

Objectives

Following the completion of the course, students shall be able to

- Yogic practices are found effective for development of all dimensions of personality.
- It helps to increase strength, endurance and flexibility, regulates all the systems of the body

UNIT-I Introduction to Personality Development [15 Hrs.]

The concept of personality - Dimensions of personality – Theories of Freud & Erickson-Significance of personality development. The concept of success and failure: What is success? - Hurdles in achieving success - Overcoming hurdles - Factors responsible for success – What is failure - Causes of failure. SWOT analysis; Concept of Personality in Yogic Texts, Personality development in Yogic Perspective.

UNIT-II Attitude & Motivation [15 Hrs.]

Attitude - Concept - Significance - Factors affecting attitudes - Positive attitude – Advantages –Negative attitude-Disadvantages - Ways to develop positive attitude - Differences between personalities having positive and negative attitude, Developing positive attitude through Yoga. Concept of motivation - Significance – Internal and external motives - Importance of self- motivation- Factors leading to de-motivation, Yogic wisdom as a source of motivation.

UNIT-III Self-esteem [15 Hrs.]

Term self-esteem - Symptoms - Advantages - Do's and Don'ts to develop positive self-esteem – Low self-esteem-Symptoms - Personality having low self-esteem - Positive and negative self-esteem. Interpersonal Relationships – Defining the difference between aggressive, submissive and assertive behaviours – Lateral thinking, Role of Yoga in developing positive self esteem.

UNIT-IV Other Aspects of Personality Development & Employability Quotient [15 Hrs.]

Body language - Problem-solving - Conflict and Stress Management - Decision-making skills -Leadership and qualities of a successful leader – Character building -Team-work – Time management -Work ethics –Good manners and etiquette, Role of yoga in improving all these qualities. Resume building- The art of participating in Group Discussion – Facing the Personal (HR & Technical), Interview -Frequently Asked Questions - Psychometric Analysis - Mock Interview Sessions.

Text Books:

1. Hurlock, E.B (2006). Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill.
2. Stephen P. Robbins and Timothy A. Judge(2014), Organizational Behavior 16th Edition: Prentice Hall.

Reference Books:

1. Andrews, Sudhir. How to Succeed at Interviews. 21st (rep.) New Delhi.Tata McGraw-Hill 1988.
2. Heller, Robert.Effective leadership. Essential Manager series. Dk Publishing, 2002
3. Hindle, Tim. Reducing Stress. Essential Manager series. Dk Publishing, 2003
4. Lucas, Stephen. Art of Public Speaking. New Delhi. Tata - Mc-Graw Hill. 2001
5. Mile, D.J Power of positive thinking. Delhi. Rohan Book Company, (2004).
6. Pravesh Kumar. All about Self- Motivation. New Delhi. Goodwill Publishing House. 2005.
7. Smith, B . Body Language. Delhi: Rohan Book Company. 2004

Course Name: YOGA PRACTICUM-2
Course Code: BSY-CP--208
Total Credit: 04
Teaching Hours: 120 Hrs (08 Practical Hours per Week)
Final Exam: 70 Marks
Internal Assesment: 30Marks

Objectives:

Following the completion of the course, students shall be able to

- Understand the concept and principles of Sukshma and Sthula vyayama.
- Practice Yogic sthul and sukshma vyayam skillfully.
- Explain and demonstrate Yogic sthul and sukshma vyayam skillfully.
- Recite Ishwarstutuprarthna.

UNIT-1: YOGIC SUKSMA VYAYAMA [15 HRS.]

Uccharana-sthala tatha Vishudha-chakra-shuddhi (for throat and voice); Prarthana (Prayer) Buddhi-tatha-dhriti shakti-vikasaka (for developing will power); Smarana shaktivikasaka (for improving the memory); Medha shakti-vikasaka (for improving the intellect and memory); Netra shakti-vikasaka (for the eyes); Kapola shakti-varadhaka (for the cheeks); Karna shakti-varadhaka (for the ears); Griva shakti-vikasaka (for the Neck) (i), (ii) and (iii), Skandha-tatha-bahu-mula shakti-vikasaka (for the shoulders), Bhuja-bandha shakti-vikasaka, Kohini shakti-vikasaka, Bhuja-valli shakti-vikasaka, Purna-bhuja shaktivikasaka (for the arms), Mani-bandha shakti-vikasaka, Kara-prstha shakti-vikasaka, Karatala shakti-vikasaka, Anguli-mula shakti-vikasaka (for the fingers), Anguli- shakti-vikasaka (for the fingers), Vaksa-sthala shakti-vikasaka (for the chest) (1), Vaksa-sthala shaktivikasaka (for the chest) (2), Udara shakti-vikasaka (for the abdomen) (i) to (x); Kati shaktivikasaka (for the waist) (i) to (v), Muladhara-chakra-suddhi (for the rectum), Upastha tatha-svadhithana-chakra-suddhi (for the genital organs), Kundalini shakti-vikasaka (for the kundalini), Jangha shakti-vikasaka (for the thighs) (i) & (ii), Jangha shakti-vikasaka (for the thighs) (ii) , Janu shakti-vikasaka (for the knees), Pindali shakti-vikasaka (for the calves), Pada-mula shakti-vikasaka, Gulpha-pada-pristha-pada-tala-shakti-vikasaka (for the ankles and the feet), Padanguli shakti-vikasaka (for the toes).

UNIT-2 YOGIC STHULA VYAYAMA [10 HRS.]

12 steps of Yogic Jogging; and a series of 12 Yogic Postures: Manduk Asana- Variations 1 & 2, Shashakasana, Bakasana, Gomukh Asana, Makarasana- Variations 1& 2, Bhujanga Asana- Variations 1, 2 & 3, Shalbhasana- Variations 1, 2 & 3, Markatasana- Variations 1, 2 & 3, Pawanmuktasana- Variations 1, 2 & 3, Ardha Halasana, Padvritta Asana- Variations 1 & 2 and Dwichakrikasana- Variations 1 & 2; as recommended by Swami Ramdev. Rekha-gati (Walking in a Straight line), Hrid-gati (Injanadaur – the Locomotive Exercise), Utkurdana (Jumping Exercise), Urdhva-gati (Upward Movement), Sarvanga-pusti (Developing the Entire body).

UNIT-3: SHATKARMA [10 HRS.]

Dhauti (Jala, Danda), Neti (Jala, Sutra), Kapalbhati (Vatkram, Vyutkram) Nauli (Madhyama, Vama, Dakshina), Trataka

UNIT-4: PRANAYAMA [10 HRS.]

Nadi Shodhana (Technique 1: Same Nostril Breathing), Nadi Shodhana (Technique 2: Alternate Nostril Breathing), Nadi Shodhana (Technique 3: Alternate Nostril Breathing + Antar kumbhak); Nadi Shodhana (Puraka + Antar Kumbhak + Rechaka + Bahya Kumbhak) (1:4:2:2); Bhramari Pranayama.

Pranayama: Bhastrika, Kapalbhati, Bahya, Ujjyai, Anulomvilom, Bhramari, Udgeeth and Pranav as recommended by Swami Ramdev

UNIT-5: DHYANATMAK ASANAS AND OTHER PRACTICES LEADING TO MEDITATION [15 HRS.]

Sukhasan, Siddhasan, Simhasan, Bhadrasan, Swastikasan, Gaurakshasan, Vajrasan, Pranav and Soham Japa; Yoga Nidra (1,2,3); Antarmauna; Ajapa Dharana (Stage 1, 2, 3); Mind Sound Reasonance Technique[MSRT] .

TEXT BOOKS

1. Swami Ramdev ji: Vaidik Nitya Karma Vidhi, Divya Prakashan, Haridwar, 2010.
2. Swami Dharendra Bhramhachari: Yogic Sukshma Vyayama, Dharendra Yoga Publications, New Delhi, 1980
3. Swami Dharendra Bhramhachari: Yogasana Vijnana, Dharendra Yoga Publications, New Delhi, 1966.

BOOKS FOR REFERENCES

1. Swami Kuvalyananda: Asana, Kaivalyadhama, Lonavla, 1993
2. Swami Satyananda Saraswati: Asana, Pranayama, Bandha, Mudra, Bihar School of Yoga, Munger, 2006
3. Basavaraddi, I.V. & others: YOGASANA: A Comprehensive description about Yogasana, MDNIY, New Delhi.

Course Name: HUMAN BIOLOGY PRACTICUM-II
Course Code: BSY-CP--209
Total Credit: 02
Teaching Hours: 60 Hrs (04 Practical Hours per Week)
Final Exam: 35 Marks
Internal Assesment: 15Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand the principles and procedure of every experiment.
- Demonstrate an experiment with the interpretation of the results.
- Explain the procedure of each step of an experiment skillfully.

UNIT-1: HEMATOLOGY [15 HRS.]

Method of Collection of Blood, Haemoglobinometry; Total White Blood Cell Count, Differential WBC count; E.S.R., Bleeding Time, Clotting Time; Blood Groups; Pulse.

UNIT-2: PHYSIOLOGICAL EXAMINATION [15 HRS.]

Determination of Arterial Blood Pressure in Humans; Effect of posture, exercise and cold stress on blood pressure; Stethography, Spirometry; BMI Calculation; Reflexes, Recording of Body Temperature.

UNIT-3: ENDOCHRONOLOGY [15 HRS.]

Endocrine glands, their secretions and measurements.

UNIT-4: CONTINUOUS EVALUATION BY THE TEACHERS [15 HRS.]

TEXT BOOK

1. Parvati Mahapatra : Practical physiology, Jaypee publishers, 2nd edition, 2004



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Semester-III



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Course Name:	PATANJALA YOGA SUTRA & ITS APPLICATIONS
Course Code:	BSY-CT--301
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam:	70 Marks
Internal Assessment:	30Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand various modification of mind and the means of inhibiting them.
- Have an understanding about the essence of Samadhi and Sadhana Pada.
- Understand the essence of Vibhuti and Kaivalya pada.
- Quote references of each practice as per traditional texts.

UNIT - 1: PATANJALI YOGA SUTRA [15 HRS.]

Brief Introduction to Maharshi Patanjali and Patanjala Yoga Sutra (P.Y.S.), Concept of Chitta; Concept of Citta Bhoomis (Kshipta, Mood, Vikshipta, Ekagra, Nirudha); Concept of Citta-Vrittis and their classification, Citta-Vritti Nirodhopaya (Abhyasa and Vairagya); Concept of Ishwar and Ishwar Pranidhana, Qualities of Ishwar, Citta-Vikshepas (Antarayas), Concept of Citta-prasadanam, Relevance of Citta-prasadanam in Yoga Sadhana.

UNIT - 2: SAMADHIPADA [15 HRS.]

Types of Samadhi (Samprajnatah and Asamprajnatah Samadhi); Types of Samprajnatah Samadhi (Vitarka, Vichara, Anand and Ashmita); Concept of Samapatti and kinds of Samapatti (Savitraka and Nirvitraka, Savichara and Nirvichara); Types of Asamprajnatah Samadhi (Bhavapratyaya and Upayapratyaya).

UNIT-3: SADHANAPADA [15 HRS.]

Concept of Kriya Yoga of Patanjali, theory of Kleshes (Avidya, Ashmita, Raga, Dewesh, Abhinevesh); Concept of Dukhavada (Heya, Heya Hetu, Hana, Hanopaya) Drishya Nirupam (Prakriti), Drashta Nirupana (Purusha), Prakriti Purusha Samyog; Brief Introduction to Ashtanga Yoga; Concept of Asana and Pranayama and their Siddhis; Concept of Pratyahara and its Siddhis.

UNIT - 4: VIBHUTIPADA & KAIVALYAPADA [15 HRS.]

Introduction, role and application of Dharana, Dhyana and Samadhi, Samyama and its Siddhis; Three types of Chitta Parinamah; Five Types of Siddhis and Jatyantar Parinamh; Concept of Nirman Chitta and four types of Karmas; Concept of Vasana and concept of Bahya Padartha (external element) and its abilities, Vivek Jnana Nirupanam, Kaivalya Nirvachana.

TEXT BOOKS

1. Yogrishi Swami Ramdev Ji: Patanjala Yog Darshan, Divyayog Prakashan, Haridwar 2008.
2. Swami Digambara Ji and others: Glossary of the Samkhakarika, Kaivalyadhama, Lonavala, 2012.
3. BKS Iyengar: Introduction of Patanjali Yogasutra-s: MDNIY, New Delhi, 2011.

BOOKS FOR REFERENCE

1. Vyasbhasya
2. Bhojvritti
3. V.V. Sovani: A critical study of the Sankhya System, Chukhambha Sanskrit Pratisthan, New Delhi, 2005
4. Swami Virupaksananda: Samkhyakarika of Isvarakrisna (with tattva Kamudia of Vachapati Mishra), Sri Ram Krishana Matha Madras, 1995
5. Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004, Vol I & II.

Course Name: ESSENCE OF BHAGAVAD GITA FOR HOLISTIC LIVING
Course Code: BS- CT 302
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE): 70 Marks
Internal Assessment: 30Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand the significance of Bhagavad gita and its essence.
- Understand the concept of Atman, Paramatman, Sthitaprajna.
- Have a deep understanding between the qualities of a Karma and Bhakti yogi.
- Understand the concept of Ahara its role in healthy living.
- Quote references of each practice as per traditional texts

UNIT – 1: SIGNIFICANCE OF BHAGAVADGITA AS SYNTHESIS OF YOGA [15 HRS.]

Introduction to Bhagavadgita, Importance of Bhagwadgita; Bhagavadgita: a synthesis of Yoga; Definitions of Yoga in Bhagavadgita and their relevance; Bhagavadgita's relevance in Yoga Sadhana; Bhagavadgita and its universal significance.

UNIT-2: CONCEPT OF ATMAN, PARAMATMAN AND CHARACTERISTIC OF STHITA PRAJNA IN BHAGAVDGITA [15 HRS.]

Concept of Samkhya Yoga/Jnana Yoga in Bhagavadgita (Chapter. 2,3,4,5,6,13) ; Concept of Sthita Prajna, Concept of Atman (chapter 2); Concept of Paramatman (Parmeshwar or Purushottam) their characteristic in Bhagavadgita (Chapter 4,8,10,11,13,15); Concept and nature of Prakriti, origin of the world as described in Bhagavadgita (Chapter 9,13,14).

UNIT-3: KARMA YOGA, BHAKTI YOGA AND DHYANA YOG IN BHAGAVADGITA [20 HRS.]

Concept of karma Yoga in Bhagavadgita (Chapter 2-6); concept of Yajna and its nature, concept of Yatharth Karma and Nishkama Karma (Chapter 3, 4) Concept of Bhakti in Bhagvadgita, concept of Shraddha and its relevance as described in Bhagavad Gita (chapter 7, 8, 9, 11, 12), Importance of Bhakti (Chapter 11 Verse 52-55), Types of Bhakti (chapter 7, 12), Charecterstics of Bhakt (chapter 12 verse 13-20). Dhyana Yoga together with devotion as described in Bhagavadgita and Nature of Dhyana in Bhagavadgita (chapter 6) ; concept of cosmic form of God (chapter 11).

UNIT – 5: CONCEPT OF DIET AND PERSONALITY IN BHAGVADGITA. [10 HRS.]

Concept and classification of Ahara as described in Bhagavadgita (Chapter 6); Ahara and its role in Adhyatma Sadhana; Concept of Triguna in the context of Bhagavadgita (Chapter 14); Types of personality in Bhagvadgita (Chapter 17); Concept of Dev-Asur Sampda (Chapter 16).

TEXT BOOKS

1. Srimadbhagwadgita- Gitamritam: Yogrishi Swami Ramdev Ji, Divya Prakashan, Haridwar, 2015
2. Swami Gambhiranand ; Bhagvatgita with the commentary of Sankaracharya, Advita Ashrama, Kolkata, 2003

BOOKS FOR REFERENCE

1. Swami Shrikantananda; Gita Darshana, Indian Institute of Human Excellence Hyderabad
2. Lokmanya Gangadhar Tilak: Gita Rahasya
3. Swami Raghvendrananda; Universal message of the Bhagvatgita, Advita Ashrama, Kolkata, 2000
4. Swami Gambhiranand ; Bhagavadgita (with Gudharth Dipika) Sri Ramkrishna Matha Madras
5. Swami Ramsukhadas; Srimad Bhagavadgita (Sadhaka Sanjivani) Gita Press Gorakhpur Swami Ranganathananda ; Bagavadgita, Advaita Ashrama Sub- Dept-5 Deli Entally Road Kolkata.

Course Name: GENERIC ELECTIVE
INTRODUCTION TO HOLISTIC HEALTH/ Human Values
INTRODUCTION TO HOLISTIC HEALTH

Course Code: BS-GE--303

Total Credit: 04

Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorials per Week)

Final Exam: 70 Marks

Internal Assessment: 30Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand the concept of health and disease.
- Have understanding about holistic concepts of health and healing.
- Conceptual understanding of Yajna and Yajnopathy and Marma Therapy.
- Quote references of each practice as per traditional texts

UNIT - 1: CONCEPT OF BODY, HEALTH AND DISEASE [20 HRS.]

Definition & Importance of Health According to WHO; Dimensions of Health: Physical, Mental, Social and Spiritual; Yogic concept of Body from Taittiriya Upanishad, Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi according Yoga Vasistha and remedial measures; Holistic health care through Yoga. Concepts of Trigunas, Pancha-mahabhutas, Panchaprana and their role in Health and Healing; Concept of Panchakoshas & Shat-chakra and their role in Health and Healing.

UNIT - 2: CAUSES OF ILL HEALTH & REMEDIAL MEASURES AS PER YOGA TEXTS [20 HRS.]

Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva; Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Sublimation of Chitta Shuddhi (Dharana, Dhyana and Samadhi).

UNIT - 3: INTRODUCTION TO MARMA THERAPY [20 HRS]

Fundamentals & History of Marma Therapy; Prerequisites of marma Therapy; References of marma points in Susrut Samhita; Classification and description of Marma points; Technique of activation of Marma points; Corelation of marma through yogic activities like Asana, Pranayama and Shatchakra. Marma Therapy in Facial Paralysis, Cervical Spondylosis, Frozen Shoulder, Brachial Neuralgia, Sciatica, Hemiplegia, Paraplegia, Cerebral Palasy.

TEXT BOOK

1. Prof. Ramharsh Singh: Swasthvritta
1. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
2. Hatha Ratnavali: Tirumala Tirupathi Devasthanana, Andhra Pradesh.
3. Marma Chikitsavijnana: Prof. Sunil Kumar Joshi, Mrityunjaya Mission, Aadi Arts, Haridwar.

REFERENCE BOOKS:

1. Dr R Nagarathna and Dr H R Nagendra: Yoga and Health, Swami Vivekananda Yoga Prakashana, 2002
1. Swasthvritta evam Susrutsamhita.

Course Name: GENERIC ELECTIVE
Human Values
Course Code: BS-GE--304
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Objectives

Following the completion of the course, students shall be able to

- Understand the concept of harmony in human being, family and society.
- Understand the concept of human values. • Have an understanding about our social responsibility.

UNIT-1: CONCEPT OF VALUES [10 HRS.]

Value- Meaning, definition, Types, Need, Importance, Relevance in present era, Basis of Values, Global Values.

UNIT -2: VALUES IN INDIAN CONTEXT [20 HRS.]

Values in Vedas, Upanishads, Ramayana, Mahabharata, Manuscript, Philosophical Texts- Yoga, Vedanta, Buddhism Jainism , Values in Indian constitution

UNIT -3: VALUES IN WESTERN CONTEXT [10 HRS.]

European values, American Values, Values in Greek Philosophy- Socrates, Plato & Aristotle, Value & in Christianity, Values in Post-Renaissance Period, Global values in Modern era-Justice, Freedom, Equality etc.

UNIT -4: YOGA, VALUES & HUMAN RELATIONSHIP [20 HRS.]

Yogic life style as value based life style, Role of Yoga in developing the value oriented personality and ethics, Values and ethics in Family, Yogic concept of human relationship- Maitri, Karuna, Mudita, Upeksha, Harmony in society through Yoga, Yoga as a Global value- a remedy for all global problems



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Course Name: DISCIPLINE SPECIFIC ELECTIVE-III
1. FUNDAMENTALS OF NATUROPATHY/
2. HISTORY OF YOGA/
3. YOGA THERAPY FOR COMMON MENTAL DISORDER

Course Name: FUNDAMENTALS OF NATUROPATHY
Course Code: BSY-DSE—305 (DSE-03)
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam: 70 Marks
Internal Assessment: 30 Marks

Objectives

Following the completion of the course, students shall be able to

- Understand fundamentals of Naturopathy
- Know fundamentals of healthy living
- Know lifestyle regimens according to naturecure.

Unit-1: INTRODUCTION TO NATUROPATHY [10 Hrs.]

General introduction to Naturopathy; Naturopathy – its definition, meaning, scope and limitations; History of Naturopathy – Indian and Western; Comparative study of the Naturopathy with other systems of Medicine; Catechism of Nature cure

Unit-2: PRINCIPLES AND CONCEPTS OF NATUROPATHY [10 Hrs.]

Composition of the human body according to Naturopathy, Laws of Nature: Pancha- Mahabhootas, Shareera Dharmas – Ahara, Nidra, Bhaya, Maithuna; Fundamental principles of Naturopathy; Natural rejuvenation and vitality, how to acquire natural immunity; importance of Physical & Mental Hygiene and prevention of diseases;

Unit-3: NATUROPATHY THERAPY-I [20 Hrs.]

Hydrotherapy : Introduction, definition, scope, history, principles; role of hydrotherapy in prevention of diseases; **Upavasa (Fasting)**: Introduction, definition, scope, history, principles and types; its role in disease prevention, health promotion; concept of de-toxification; **Diet**: Introduction, definition, scope, types and its principles; role of Naturopathy diet in disease prevention and , health promotion; **Massage**: Introduction, definition, scope, history, its principles and manipulative techniques; Different types of Massages and their role in in disease prevention, and health promotion.

Unit-4: NATUROPATHY THERAPY-II[20 Hrs.]

Accupressure: Introduction, definition, scope, history, principles; role of Accupressure. **Reflexology**: Introduction, definition, scope, history, principles; role of Reflexology. **Magnetotherapy**: Introduction, definition, scope, history, principles; role of Magnetotherapy. **Aromatherapy**: Introduction, definition, scope, history, principles; role of Aromatherapy. **Chromotherapy**: Introduction, definition, scope, history, principles; role of Chromotherapy

TEXT BOOKS

1. S. D. Dwivedi : Naturopathy for perfect health, Kalpaz Publication Delhi, 2002
2. Pravesh Handa : Naturopathy and Yoga, Kalpaz Publication Delhi, 2006
3. S.J.Singh. : My Nature Cure or Practical Naturopathy

REFERENCE BOOKS

1. R.K.Garde : Ayurvedic for Health and Long life Harry Benjamin. : Everybody's Guide to Nature Cure.
2. M.K.Gandhi. : My Nature Cure
3. Dr Jitendra Arya; Nature Cure, Pune.
4. M.K.Gandhi : The story of my experiment with truth

Course Name: HISTORY OF YOGA
Course Code: BSDSE-306
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam: 70 Marks
Internal Assessment: 30 Marks

Objectives

Following the completion of the course, students shall be able to

- Understand fundamentals of Ayurveda
- Know fundamentals of healthy living
- Know lifestyle regimens according to nature.
- Know medicinal cleansing processes.

UNIT I- Origin and Development of Yoga in Early Ancient India [15 Hrs.]

Indus-Valley Civilization: Archaeological sources of Yoga, Vedic Age: Development of yoga in Rigved; Brief Survey of Later Vedic Period; Samved, Yajurved and Atharved.

UNIT II- Development of Yoga in Ancient India [15 Hrs.]

Saint Patanjali: Period, place, subjects, objectives & importance. Yoga in Buddhism: Period, place, subjects, objectives & importance, Yoga in Jainism: Period, place, subjects, objectives & importance, Post Mauryan Period: Yoga in Satwahan & Kushana. Development of Yoga in Gupta Period.

UNIT III- Development of Yoga in Medieval India [15 Hrs.]

Sant Yogi; Shankaracharya, Ramanujachary. Hath Yogi: Gorakhnath, Chauranginath, Swatmaram, Gherand, and Shrinivasbhatt. Bhakti yogi: Tulsidas, Guru Nanak Dev, Kabir das and Mirabai

UNIT IV- Yoga in Modern India (1857 to 2021 A.D.) [15 Hrs.]

New era of Yoga, Yogacharya- Ramakrishna Paramhansh, Swami Vivekananda, Swami Ramtirth, T. Krishnamacharya, Swami Rama, Swami Kuvalyananda, Swami Ramdev .

Suggested Readings:

- A.I Basham: The Wonder that was India, Rupa, Delhi 1994
- A.S Altekar, Education in Ancient India, Nand Kishore & Bros, Varanasi 1944
- Bhagvadatt: बृहद भारत का इतिहास, प्रणव प्रकाशन, नई दिल्ली
- Dharampal: The Beautiful Tree, Other India press, Delhi 1995
- Faith Robertson Elliott: Gender Family and Society, St. Martin press, New York,1996
- G. Arrhenius: Evolution for space
- Govind Chandra Pandey: वैदिक संस्कृति, लोक भारती प्रकाशन, दिल्ली



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

**Course Name : YOGA THERAPY FOR COMMON
MENTALDISORDER**

Course Code : BSY-DSE-307 (DSE-03)
Total Credit : 04
Teaching Hours : 60 Hrs (02 Lecture + 00 Tutorial per Week)
Final Exam (SEE) : 70 Marks
Internal Assessment : 30 Marks

Objectives:

The paper aims at providing an overview about the concept of abnormality and the clinical picture and dynamics of various psychological disorders. This will sensitize the students to information on psychopathology and dispel myths regarding it.

Unit-I Understanding Abnormality [15 Hrs.]

Definition and criteria of abnormality, classification (latest edition of DSM & ICD), Clinical Assessment, Diathesis Stress Model.

Unit-II Clinical States & Yogic Management [15 Hrs.]

Anxiety disorders – Phobias, Obsessive Compulsive Disorder, Generalized Anxiety Disorder (Clinical Picture and Dynamics of anxiety disorders). Conversion Disorder (Clinical Picture and Dynamics). Dissociative Identity Disorder (Clinical Picture and Dynamics).

Unit-III Developmental Disorders (Clinical Picture and Dynamics) & Yogic Management [15 Hrs.]

Mental Retardation, Autism, ADHD, and Learning Disabilities.

Unit-IV Substance Related Disorders and Eating Disorders & Yogic Management [15 Hrs.]

Substance-Related Disorder: Alcohol abuse and Drug abuse (clinical picture and causes). Eating disorder: Anorexia Nervosa and Bulimia Nervosa.

Reference:

1. Barlow D.H. and Durand V.M. (2005). *Abnormal Psychology: An Integrated Approach* (4th Ed.). Wadsworth: New York.
2. Bennett, P. (2006). *Abnormal and Clinical Psychology: An introductory textbook*. New York: Open University Press.
3. Brewer, K. (2001). *Clinical Psychology*. Oxford: Heinemann Educational Publishers.
4. Carson, R.C., Butcher, J.N., Mineka, S. & Hooley, J.M. (2008). *Abnormal Psychology*. New Delhi: Pearson.
5. Kearney, C. A. & Trull, T. J. (2012). *Abnormal Psychology and Life: A dimensional approach*. New Delhi: Cengage learning.

6. Kring, A.M., Johnson, S. L., Davison G.C. & Neale J.M. (2010). *Abnormal Psychology* (11th Ed.). NY: John Wiley.

COURSE NAME: COMMUNICATIVE ENGLISH
Course Code: BSY-SEC-- 308 (SEC- 01)
Total Credit: 02
Teaching Hours: 30 Hrs (01 Lecture + 02 Practical Classes per Week)
Final Exam: 35 Marks
Internal Assessment: 15Marks

Objectives:

Unit 1- Improve pronunciation and Use English Grammar worksheets and exercises to improve grammatical knowledge for competitive exams

Unit 2- Enhance reading, understanding and writing abilities in English

Unit 3 -Develop the ability to read, understand and improve English vocabulary

Unit 4 - Demonstrate conversational skills, Asking Questions

Method of Teaching & Assessment- Videos, Audio clippings, discussion, written and oral exercises

Unit-1: -Syllables (stress in simple words), Rhythm, Intonation,
& Revision of Basic Grammar

- Tenses
- Prepositions
- Articles
- Conjunctions
- Modals
- Direct and indirect Speech

Unit-2: Reading & Writing

- Vocabulary- Homophones, Homonyms
- Analytical Skills
- Editing Skills- Error Correction
- Article Writing
- Reading Comprehension

Unit-3: Listening –

Audio books

- Podcasts
- Speeches of various renowned Yoga Masters
- Ted Talks

Unit-4: - Spoken English

- Accents and dialects
- Extempore
- Oral Report,
- Debates and GDs
- Public Speaking Skills
- Leadership
- Team Work

Text books:

English Grammar in Use, 4th Edition, Cambridge by Raymond Murphy

Suggested Sources:

COURSE NAME: YOGA PRACTICUM - 3
Course code: BSY-CP-309
Total Credit: 04
Teaching Hours: 120 Hrs (08 Practical Hours per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Objectives

Following the completion of this course, students shall be able to

- Understand the principle and practice of each practice.
- Demonstrate each practice skillfully.
- Explain the procedure, precaution, benefits and limitations of each practice.
- Quote references of each practice as per traditional texts

UNIT-1: SHATKARMAS & BANDHA [20 HRS.]

Vastra Dhauti, Sutra Neti, Nauli Chalana, Agnisara. Jivha Bandha, Jalandhara Bandha, Uddiyana Bandha, Mula Bandha, Maha Bandha, Tri Bandha.

UNIT-2: YOGASANA (SITTING POSTURES) & [STANDING POSTURES] [40 HRS.]

Dandasana, Swastikasana, Padmasana, Vajrasana, Supta Vajrasana, Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana, Janusirasana, Paschimottanasana, Bhramacharyasana, Mandukasana, Utthana Mandukasana, Vakrasana, Ardha Matsyendrasana, Marichayasana, Simhasana.

Tadasana, Vrikshasana, Urdhva-Hastottanasana, Kati Chakrasana; Ardha Chakrasana, Paada Hastasana; Trikonasana, Parshva Konasana; Veerabhadrasana

Unit-3: PRANAYAMA (WITH ANTAR & BAHYA KUMBHAKA) & MEDITATION [20 HRS]

Surya-bheda Ujjayi Pranayama, Sheetal Pranayama, Shitkari Pranayama, Bhastrika Pranayama. Bhramari Pranayama, Murchha Pranayama, Plavni Pranayama and Chandra-bheda Pranayama, Ajapa Dharana (Stage 4,5,6), Yoga Nidra (4,5), Practices leading to Breath Meditation, Practices leading to Om Meditation, Practices leading to Vipassana Meditation, Practices leading to Preksha Meditation.

TEXT BOOKS

1. Yogrishi Swami Ramdev Ji: Pranayama Rahasya, Divya Prakashan, Haridwar, 2009
2. Yogrishi Swami Ramdev Ji: Vedic Nityakarma Vidhi, Divya Prakashan, Haridwar, 2010
3. Basavaraddi, I.V. & others: SHATKARMA: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
4. Swami Dharendra Bhramhachari: Yogasana Vijnana, Dharendra Yoga Publications, New Delhi, 1966.
5. Swami Kuvalyananda: Asana, Kaivalyadhama, Lonavla, 1983

BOOKS FOR REFERENCE

1. Swami Kuvalyananda: Pranayama, Kaivalyadhama, Lonavla, 2005
2. Nagendra, H.R : The art and Science of Pranayama, Swami Vivekananda Yoga Prakashan, 2005, Bangoore.
3. Lajpat, Dr. R.: Discovering Human Potential Energy, Abhinav Rai Publication, Gurgaon, 1996.
4. Basavaraddi I. V. & Others : Teachers Manual for School Teachers, MDNIY, New Delhi, 2010
5. Yajynopathy: Brahmvarchas, Sri Vedmata Gayatri Trust, Shantikunj, Haridwar.
6. Yajna se hoga sunahra kal: Dr Rochna Bharti, Srirang Prakashan, Nashik.
7. Yajnotherapy: Sandip Arya, Vijaikumar Govindram Hasanand, 4408 nai sadak, New Delhi.
8. Marma Chikitsavijnana: Prof. Sunil Kumar Joshi, Mrityunjaya Mission, Aadi Arts, Haridwar.

COURSE NAME: FIELD WORK
Course code: BS-FW310
Total Credit: 04
Teaching Hours: 60 Hrs (04 Practical Hours per Week)
Final Exam: (SEE)-35 Marks
Internal Assesment: 15 Marks

Objectives:

During this period students shall get an opportunity of teaching Yoga modules of **Swami Ramdev Ji** to masses weekly for four hours. The academic institution where the student is undergoing his/her training takes the responsibility of organizing the classes in the near by villages/ institutions/ hospitals/ schools/ colleges etc..



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पतंजलि विश्वविद्यालय, हरिद्वार

Semester-IV



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Course Name: METHODS OF TEACHING YOGA
Course Code: BSY-CT-401
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE): 70 Marks
Internal Assessment: 30Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand the principles and practices of teaching methods of Yoga.
- Have an indepth understanding about session and lesson planning and class room arrangements.
- Have an idea about the different tools used in Yoga teaching.

Unit 1: Fundamentals of Education and Methods of Teaching Yoga (15Hours)

Education- Meaning, Definitions, Concepts, Aims & Objectives; Teaching and Learning: Concepts and Relationship between the two; Principles of Teaching, Levels and Phases of Teaching, Principles of Learning, Levels of Learning, Yogic levels of learning- Vidyarthi, Shishya, Mumukshu, Qualities of a Yoga teacher; Meaning and scope of Teaching methods and factors influencing them; Sources of Teaching methods

Unit 2: Basics of Yoga Class Management (10 hours)

Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group); Techniques of Individualized Teaching, Techniques of group teaching; Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class etc; Class room problems: Types and Solutions.

Unit 3: Lesson Planning & Time Table in Yoga (10 hours)

Essentials of Lesson Planning: concept, need & importance; Lesson planning of teaching Yoga (Shatkriya, Asana, Mudra, Pranayama & Meditation); Models of Lesson Plan in Yoga; Timetable : Concept, Need, Types, Principles of Time table construction; Time Table for Yoga teaching

Unit 4: Educational Technology in Yoga Teaching & Teaching Practice (15 hours)

Educational Technology : Concept, Meaning, Aims, Objectives, Importance and Types of Educational technology; Use of Educational Technology in Yoga; Teaching Methods & Practice of Yama, Niyama, Shatkarma, Asana, Mudra- Bandha, Pranayama & Dhyana.

TEXT BOOKS

1. Yogrishi Swami Ramdev; Yoga Manual for parents and Yoga Teachers, Divya Prakashan, Haridwar, 2010
2. Dr. Gharote M L & Dr S K Ganguly: Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007

BOOKS FOR REFERENCE

1. Dr. Shri Krishna : Notes on basic principles & methods of teaching as applied to Yogic practices and a ready reckoner of Yogic practices, Kaivalyadhama, Lonavala, 2009
2. Dr. Raj Kumar : Principles & methods of Teaching, Printo graphics, Delhi,
3. Saket Raman Tiwari & others : Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007

COURSE NAME: FUNDAMENTALS OF BIOCHEMISTRY AND BIOMECHANICS
Course Code: BSY-CT-402
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE) 70 Marks
Internal Assessment 30 Marks

Objectives:

- To understand the biomolecules and their role in our body.
- To have an understanding about the protein, carbohydrate, lipid metabolism.
- To understanding basics of kinesiology and Biomechanics.

UNIT - 1: INTRODUCTION TO BIO-CHEMISTRY [15 HRS]

Introduction to Bio-Chemistry; chief intracellular components; Introduction to chemical receptors/co-receptors, cell to cell communication, channels & transportation; Definition and classification of Vitamins and their Clinical importance; Basics of Molecular mechanism of O₂ transport and storage, Bio-chemical structure of immunoglobulins their functions and classification. Fundamentals of Bio-Energetics: Biological Oxidation, General concept of oxidation, feature of cellular Oxidations-respiratory chain oxidative phosphorylations,

UNIT - 2: METABOLISM OF CARBOHYDRATES [15 HRS]

Carbohydrates: Definition, classification and general functions; Lipids: definition, classifications and general functions; Proteins: definition, classification, functions and Biomedical Importance, Plasma Proteins and functions; Definition, classification of Enzymes and their functions; Basics of Carbohydrate and Lipid Metabolism; Introduction to hormones and their action; Introduction to common metabolic disorders in relation to Hepatobiliary and Kidney.

UNIT - 3: INTRODUCTION TO KINESIOLOGY AND THE PRINCIPLES OF BIOMECHANICS IN YOGA [15 HRS]

Meaning and Definition of Kinesiology; Basic Biomechanical terms - velocity; acceleration; angular velocity; angular acceleration; Mass; Pressure; Gravity; Friction; Work; Power; Energy; Torque; Bio mechanics; Description of movement of the human body [Kinematics and Kinetics]. Kinetics - the forces producing motion e.g. muscles, gravity; Kinematics - the description of motion e.g. type, location, direction; planes of movement; type of displacement (movement); relevance and importance of kinesiology and biomechanics for Yoga. Qualitative analysis in Asanas movements, joint forces and muscular moment in Asanas, Energy work and muscular power during an movement in Asanas.

UNIT - 4: FUNDAMENTAL OF BASIC TECHNIQUES [15 HRS]

Fundamental concepts of following terms - Axes and Planes; Center of Gravity, Equilibrium, line of Gravity; Fundamental movements at various joints; Fundamental concepts of the following terms - Angle of Pull, All or None Law, Reciprocal Innervations and inhibition; Stretch and postural reflex during the practice of Yoga posture; Force - meaning, definition, types, and its application to various Yoga Postures; Lever - meaning, definition, types and its application of human body; Newton's Laws of Motion - Meaning, definition and its application to Yoga activities.

TEXT BOOKS

- 1 Knudson, D Fundamentals of biochemicals. New York, NY: Springer, 2007
- 2 Hay, J.G. and Reid, J.G.: Anatomy, mechanics and human motion. Engewood Cliffs, N.J.: prentice Hall Inc. 1988.
- 3 Arvind S Yadav: Comprehensive practical and viva in Bio-chemistry, Jaypee Publishers Ltd, Delhi, 2004.

BOOKS FOR REFERENCE

1. Patel: Yoga and Rehabilitation, JayPee Brothers, Medical Publication, 2008.
2. Yoga Biomechanics by Jules Mitchel, Handaspring publication, US 2018
3. McGinnis, P.: Biomechanics of sport and exercise. Champaign, IL: Human Kinetics, 2013
4. Willium, E Prentice, Michael I Voight: Technique of musculoskeletal rehabilitation, Mc graw hill education, 2001.

Course Name: GENERAL ELECTIVE-02
INTRODUCTION TO INDIAN PHILOSOPHY AND VEDIC CULTURE
INTRODUCTION TO UPNISHADS

Course Name: INTRODUCTION TO INDIAN PHILOSOPHY AND VEDIC CULTURE
Course Code: BSY-CT- 403
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Objective:

After studying this Course student can able to understand

- Various Indian philosophies.
- Shaddarshanas
- Various features of traditional Indian culture

UNIT 1. INTRODUCTION TO INDIAN PHILOSOPHY [10 HRS]

Meaning and definition of Philosophy, Importance of philosophy in life, special features and importance of philosophy, various systems of philosophy- Vaidic & Avaidic drashan, three domains of philosophy- Jnana mimamsa (praman mimamsa- epistemology), Tatva mimamsa (metaphysics), Niti mimamsa (Achaar mimamsa-ethical theory).

UNIT 2. INTRODUCTION TO SHADDARSHAN [20 HRS]

General introduction, Metaphysical & ethical principals of Vaidik Philosophies (Nyaya, Vaisheshik, Samkhya, Yoga, Mimamsa and Vedant).

UNIT 3. INTRODUCTION TO JAIN, BUDHHA AND CHARVAK PHILOSOPHY [10 HRS]

General introduction, Metaphysical & ethical principals of non vaidik Philosophies (Jain, budhha, charvak).

UNIT 4. INTRODUCTION TO CULTURE [10 HRS]

Meaning and definition of culture, introduction to Indian scriptures i.e. Vedas, Upnishad, Ramayana, Mahabharata, Gita.

UNIT 5. FEATURES OF INDIAN CULTURE [10 HRS]

Purusharth chatustaya, Ashram Vyavastha, Varna vyavastha, Karma sidhhant, Shodash sanskaar, Panchmahayajna, Rinatraya, Sahastitva, Vishvabandhutva.

TEXT BOOKS

Bhartiya Darshan	:	Acharya Baldev
Sarvadarshan Samgrah	:	Madhvacharya
Vaidic Sahiya evam darshan	:	Dr. Kapildev Shastri
Dharma Darshan Sanskriti	:	Dr. Roopkishore Shastri

REFERENCE BOOKS:

A critical Study of Indian Philosophy	:	Dr. R.P. Sharma
Bhartiya Darshan	:	Dr. Sarvapalli Radhakrishnan
Darshan pravesh	:	Yogrishi Swami Ramdev, Divya prakashan, Haridwar
Bhartiya Sanskriti ka itihaas	:	Dr. Satyaketu vidyalankaar.

Course Name:	INTRODUCTION TO PRINCIPAL UPANISHADS
Course Code:	BS-GE--404
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE)	70 Marks
Internal Assessment:	30 Marks

Course Objectives:

Following the completion of this course, student will be able to

- Have an idea about the major principal Upanishads
- Understand the essence of each Upanishad and how to put them into practice.
- Understand each Upanishad and the role of it in our day to day life.
- Quote references of each practice as per traditional texts

UNIT-1: INTRODUCTION OF UPANISHAD & ESSENCE OF ISHA & KENOPANISHAD [15 HRS.]

An Introduction to Upanishadic Philosophies; Antiquity of Upanishads; **Ishavasyopanishad:** JnanaNishtha (Ish.1), Karma Nishtha (Ish.2), All compassion Brahman (Ish.5), Nature of Sage (Ish.6, 7), Prayer of dying Man (Ish.15); **Kenopanishad:** The inscrutable being (Kena-I.2, 3 ,4,6) (Kena II.2,3), Greatness of self Knowledge (KenII.5).

UNIT-2: ESSENCE OF KATHO & PRASHNAPANISHAD [15 HRS.]

Kathopanishad: Futility of earthly pleasure (Katha I.i.26, 27); Glory of wisdom of self (Katha I.ii.1, 5, 6, 7, 12); Atman is immortal (Katha I.ii.18); Conditions of knowing that (Katha I.ii.23,24); The Razor's edge of Jnana (Katha I.iii.14, 15); Sense knowledge is nothing (Katha II.i.1, 2); The indivisible Brahman (Katha II.i.10, 11) (Katha II.ii.2,9,11)The supreme state; Prashnapanishad: Sun, the life of creatures, The all inclusiveness of Brahman, The state of becoming the soul.

UNIT-3: ESSENCE OF MUNDAKA, MANDUKYA AND TAITRIYA [15 HRS.]

Mundaka: The greatness of Brahmagyana, The worthlessness of Selfish-karma, Tapas and Gurubhakti, The origin of creation, Brahman the target of, meditation, Know thyself, Everything is Brahman, Purity extolled, Force of Desire, State of moksha; Mandukyopanishad: All this is Brahman, The fourth state of being, Taitriya: Shikshavalli Brahmavalli (Concept of Panch Kosha)

UNIT- 4: ESSENCE OF AITAREYA, CHANDOGYA & BRIHADARANYAKA [15 HRS.]

Aitareya: Everything is only that Atman, All this is Brahman only; Chandogya: The meditation on udgithaomkara, Sandilyavidya, Mystic declarations, The sacrifice of the knower, The paradox of creation, The necessity for a guru, The supreme instruction, Need for understanding, Bhmagyana, The seer's health and purity, Desires should be renounced, Know the Atman; Brihadaranyakam: A prayer of the devotee, The self is the dearest, the self is the absolute, The death of the jnana, How to know the secret Atman, The ocean of the absolute, Words are useless, The atman and its knower, The infinite Brahman, Ethics.

TEXT BOOKS

1. Yogrishi Ramdev: Upnishad Sandesh, Divya prakashan, 2018.
2. Dr. Satyavrit Sidhantalankar: Ekadashopnishad

REFERENCE BOOKS

1. Ishadinopnishad: Geeta Press Gorakhpur.
2. Kalyan Upnishad Ank: Geeta Press Gorakhpur

Course Name: DISCIPLINE SPECIFIC ELECTIVE-IV
1. FUNDAMENTALS OF UNANI, SIDHHA & HOMEOPATHY/
2. HISTORY OF VEDIC SCIENCE & TECHNOLOGY/
3. COGNITIVE PSYCHOLOGY

Course Name : FUNDAMENTALS OF UNANI, SIDHHA & HOMEOPATHY
Course Code: BSY-DSE- 405
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Course Objectives:

Following the completion of this course, student will be able to

- Have an idea about fundamentals of unani system of medicine
- Have an idea about fundamentals of Siddha System of Medicine
- Have an idea about fundamentals of Homeopathy

UNIT I: Fundamentals of Unani System of Medicine [20 hrs.]

Hikmat, Tareef-wo-taqseem, Mauzu, aur Gharz-o-Ghaiyath (Philosophy, its Definition and kinds, aims and objectives). Jism, Jism-e-Taba'I, Jism-e-Taleemi, Heula, Surat, Jasmiah-o-Surat-e-Nuwia ki tareef (Body, Physical body, Educational Body, Matter, Shape, Definition of Body Shape and Species Shape). Makan, Hayyaz, aur Shakl ki tareef (Definition of Space, locus and Shape). Harkat wa Sukoon ki tareef gharz-o-ghayat, aqşam-o-sharayath. (Movement and Rest, their definitions, aims and objects, kinds and conditions). Zamānah ki tareef-wo-tauzee. (Definition of Time and its Explanation). Anāsir ki tareef, Aqşam, Kaifiyyāth-wo-Mizaj Ijmāli Bayan (Definition of Elements, kinds, conditions and temperament (with brief description). Kaun-wa-Fasād, Murakkabate Tāmmah, Jamadāt, Nabatāt-wo-Nafse Nabati, Nafse Haiwani, Nafse Natiqa aur iski matehath kām karne wāli quwwatein, Murakkabat-eNāqisa ki tareef mae imsāl. (Anabolism and Catabolism, Complete compounds, Minerals, Plants and Botanical Reason, Animal Reason, Human Reason and faculties working under them, Definition of incomplete compounds along with examples).

UNIT II: Fundamentals of Siddha System of Medicine [20 hrs.]

Introduction, origin & Development of Siddha. Three primordial, eternal entities and their siddha anthic theories (Pathi, Paasu, Paasam), their definition, description and classification. Types of Deekal (Initiation towards the highest goal of Life). Ten types epistemology in Siddha. Five element theory (Lymbootha Kolgal). Ninety Six Fundamental Principles of Siddha. Three Humoural Theory (Uyir Thaathukkal), Seven Pphysical Constituents (Udal Kattukkal), Five basic properties of Drugs. Attanga Yogam (Ashtanga Yoga), Attamaa Sithigal, Thirukkural (Marunthu Athikaram), Rasavaatham (Alchemy), Muppu, Kaayakalpam (Elixir Science).

UNIT III: Fundamentals of Homeopathy [20 hrs.]

Introduction, origin & Development in Homeopathy. Concepts of Homeopathy: Causation, Susceptibility, Second Prescription, Aggravation of Disease. Principles of Homeopathy: Key, Crucial & Supporting Principles. Present Status of Homeopathy: Regulatory System, Education & Research in Homeopathy. Therapies & Treatment in Homeopathy: Tongue Diagnosis, Principles of Prescription, Classification of Disease, Classification of Symptoms, Constitution & Constitutional approaches, Alcohol Dependence & Homeopathic Management.

Course Name:	HISTORY OF VEDIC SCIENCE & TECHNOLOGY
Course Code:	BSY-DSE- 406
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam (SEE)	70 Marks
Internal Assessment:	30 Marks

Course Objectives:

Following the completion of this course, student will be able to

- Have an idea about Science and Technology in Ancient India.
- Have an idea about Architecture & Astrology in Ancient India.
- Have an idea about Astronomy & Mathematics in Ancient India.
- Have an idea about Political Science & Economics.

UNIT I- Science and Technology in Ancient India [15 hrs.]

Science and Technology in Vedas: Evolution of Universe, Origin of Life, Origin & development of Human Being (Sanskara & Purusharth), Evolution of Society & its management (Varnashram Vyavastha). Evolution of family & its Management (Hierarchy of Relations, Patriarchy, Matriarchy their Pons & Cones). Trading in Indus Valley & Gangatic Plane. **Script:** Origin, development, concept & principles of Script; Brahmi & Kharoshthi

UNIT II- Tools, Architecture & Astrology in Ancient India [15 hrs.]

Tools: Origin & Development of Pottery, Origin & development of Agricultural tools, Origin & development of Armors & Archery, Origin & Development of transportations. Origin & development of Medical & Pharmaceutical tools. **Three dimensional Vedic Technology-** Mantrik, Tantrik and Yantrik. **Architecture:** The nature of architecture and architecture in Vedic Vangmaya, **Astrology:** Jyotish Shastra; Antiquity of Astrology and Skandhpanch of Jyotish- Hora, Siddhant, samhita, Prashn and Shakun.

UNIT III- Astronomy & Mathematics in Ancient India [15 hrs.]

Origin & development of Astronomy. Components of Astronomy, Relationship of Indian dietities with Astronomy. Calculation of time in Vedic Vangmaya: Samvatsar, Vikram Samvat, Shak Samvat. Origin & development of Indian numeral system, Vedic Mathematics. Role of Aryabhatt, Varahamihir, Bhashkaracharya in development of Vedic & modern Mathematics.

UNIT IV- Political Science & Economics [15 hrs.]

Origin & development of Political Science; Origin of State and its governance, Role & responsibilities of State & their Rulers in relation to Vedas, Epics (Ramayana & Mahabharata), Buddha Literature, Kautilya & Manusmriti. Origin & Development of Economics in relation to Agriculture, Trade, Mathematics.

Suggested Readings:

- Govind Chandra Pandey : भारतीय संस्कृति, हिन्दी ग्रंथ अकादमी, भोपाल, 2008
- Govind Chandra Pandey: वैदिक संस्कृति, लोक भारती प्रकाशन, दिल्ली
- Kapil Dev Dwivedi: वेदों में विज्ञान, विश्वभारती अनुसंधान परिषद, 2014
- Narendra Mohan: भारतीय संस्कृति, प्रभात प्रकाश, दिल्ली, 2011
- Radha Kumud Mookerji: Indian Shipping, Pub. South Asia Books, 1999
- Rajbali Pandey: भारतीय पुरालिपि, लोक भारती प्रकाशन, प्रयागराज, 1998
- Satish Chand Mittal: भारतीय संस्कृति के चार अध्याय, अखिल भारतीय इतिहास संकलन योजना, दिल्ली, 2018
- Shri Arvind: भारतीय संस्कृति के आधार, अदिति कार्यालय, अरविन्द आश्रम, पोजिचेरी
- Thomas Maurice: Indian Antiquities, Pub. T. Maurice, 1806, London
- Vasudev Sharan Aggarwal: पाणिनीकालीन भारतवर्ष, पृथ्वी प्रकाशन, वाराणसी
- Will Durant: The Story of civilization, five communication, US, Jan. 1993(11 Vol)
- Zekuthial Ginshurg: New light on our Numerals.
- R.K Mookherjee: The Fundamental Unity of India

Course Name	:	COGNITIVE PSYCHOLOGY
Course Code	:	BSY-DSE-407 (DSE-04)
Total Credit	:	04
Teaching Hours	:	60 Hrs (03 Lecture + 01 Tutorial per Week)
Final Exam (SEE)	:	70 Marks

Course Objective:

1. Recognize the underlying rules of psycholinguistics in the creation, comprehension, and perception of language and speech. D
2. Distinguish between various theoretical approaches and paradigms for a holistic and nuanced understanding of each cognitive process.
3. Apply their learning of sensation, perception, and memory in information processing as contextualized to different cultures.
4. Identify suitable scientific methodologies for the investigation of various cognitive processes (e.g., memory, perception, attention etc.).
5. Evaluate the role of cognitive processes in determining the quality of daily decision making (such as eyewitness testimony, detection of stimuli, etc.).
6. Design different effective techniques to enhance the language comprehension.

Unit-I Introduction to Cognitive Psychology [15 Hrs.]

Cognitive Psychology: Nature and Domains, Methods of Cognitive Neuroscience, Historical Antecedents, Paradigms of Cognitive Psychology, Application: NLP.

Unit-II Attention and Perception [15 Hrs.]

Selective Attention: Filter Theories Signal Detection Theory: Characteristics of receiver and decision making, Perception: Bottom Up and Top-Down Theories, Cultural Influence on Perception, Application: Extra Sensory Perception.

Unit-III Memory [15 Hrs.]

Sensory Memory - Nature and Types, Short Term Memory: Codes and Capacity, Working Memory Long Term Memory - Types, Autobiographical Memories, Eyewitness Testimony and Memory Distortions Application: Neuroplasticity.

Unit-IV Language [15 Hrs.]

Perspective of Language: Modular, Whorfian Hypothesis Speech Perception: Theories & Affecting Factors, Universal Grammar, Factors Affecting Comprehension, Application: Bilingualism.

References:

1. Kaplan, S. & Kaplan, R. (1982). Cognition and Environment. N. Y.: Praeger Publishers.
2. Kellogg, R. T. (2007). Fundamentals of Cognitive Psychology. N. D.: Sage Publications.
3. Matlin, M. (1994). Cognition. Bangalore: Harcourt Brace Pub.
4. Messer, D. & Miller, S. (1999). Exploring Developmental Psychology. London: Arnold.
5. Reed S. K. (1998). Cognition: Theory and Application (3rd ed.). California: Brooks / Cole Pub. Company.
6. Reed, S. K. (1988). Cognition: Theory and Applications (3rd ed.). California: Brooks Cole Pub. Co.
7. Solso, R. L. (2004). Cognitive Psychology (6th ed.). Delhi: Pearson Education.
8. Sternberg, R. J. (2007). Cognitive Psychology. Australia: Thomson Wadsworth

Course Name: ANTHROPOMETRIC ASSESSMENTS
Course Code: BSY-SEC- 408
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lecture + 01 Tutorials per Week)
Final Exam: 70 Marks
Internal Assessment: 30Marks

Course Objectives:

Following the completion of this course, student will be able to

- Have an idea about Anthropometry Measurements
- Have an idea about Physiological parameters and clinical examination
- Have an idea about Measurement and Recording
- Have an idea about Understating of Physiology and Application of Asanas.

UNIT 1: Anthropometry measurements [15 HRS.]

Weight, stature, eye height, Body Mass Index, Body Surface Area, Shoulder height, elbow height, head circumference, neck circumference, mid upper arm circumference, chest circumference, waist circumference, hip circumference, waist hip ratio, Measurement of fat percentage. Introduction of GAIT Analysis.

UNIT 2: Physiological parameters and clinical examination [15 HRS.]

Heart rate, pulse rate and respiratory rate, Blood Counts, and their clinical examinations. Urine examinations, Faecal examinations. Kidney Function Test, Liver Function Test and other physiological parameters.

UNIT 3: Measurement and Recording [15 HRS.]

Effect of Yogasana (Prone, Supine, Sitting, Standing positions), Suryanamaskar, Pranayama and Meditation on human body. Spirometry, knowledge of Reflexes, Measurement of strength of muscle. Measurement of flexibility. Recording of ECG, EEG & GSR.

UNIT 4: Understating of Physiology and Application of Asana [15 HRS.]

Understanding of muscles physiology with the help of model/chart and its practical applications in Asana. Knowledge of COG, LOG, BOS in Asanas (in Sitting, standing, lying, balancing asanas), Knowledge of Biomechanics of Yogic postures. Analysis/assessment of functions of Joints and muscles in relation to Asanas.

REFERENCE BOOKS:

1. Dr. Kanika Jain, Dr Ajiy Kumar Wahane: Standardization of Praman for practice use in Anthropometric Fitness.
2. Charles Roberts: A manual of Anthropometry.
3. S.P. Singh, Promil Mehta: Human Body Measurements: concepts & applications.
4. Anjali Thakare: Test, Measurement & Evaluation in Physical Education.

Course Name:	YOGA PRACTICUM-4
Course Code:	BSY-CP- 409
Total Credit:	04
Teaching Hours:	120 Hrs (08 Sessions per Week)
Final Exam (SEE)	70 Marks
Internal Assesment:	30 Marks

Objectives:

Following the completion of the course, students shall be able to

- Sketch lesson plan for Yoga teaching
- Systematic arrangement of Yoga teaching
- Teach Yoga in the given class.

Students will be required to prepare, present and submit at least 10 lesson plans on Yogic activities on prescribed format including 01 lesson plan on Mantra Chanting/Yajna.

UNIT 1: SHATKARMAS [15 HRS]

Gajkarni, Vasti, Naulichalana,

UNIT-2: ASANAS [25 HRS]

Karnapeedasana, Kapotasana, Rajkapotasana, Bakasana, Kukkutasana, Garbhasana, Marjariasana, Matsyendrasana, Sirsasana, Padangushthasana, Hastapadangushthasana, Garudasana, Vatayanasana, Natrajasana, Mayurasana, Ekpada Kandarasana, Dwipadakandarasana.

UNIT-3: MUDRAS [10 HRS]

Yoga Mudra, Maha Mudra, Shanmukhi Mudra, Shambhavi Mudra, Kaki Mudra, Tadagi Mudra, Vipareet Karni Mudra, Simha Mudra, Nasagra Mudra, Bhuchari Mudra, Ashwini Mudra, Mahavedha Mudra.

UNIT-4: PRACTICE LEADING TO MEDITATION [10 HRS]

Pranava and Soham Japa, Antar mouna, Dharana, Pracice of Dhyana, Breath Meditation, Om Meditation Vipassana Meditation , Preksha Meditation.

Unit-5: PREPARATION & APPLICATION OF 10 LESSON PLAN [20 HRS.]

Students have to prepare 10 lesson plans on prescribed format of various Yoga practices allotted by the couse coordinator. Each student has to present lesson plans to be evaluated by Yoga Teachers/Instructors/ Assistant Professors.

Students have to teach the prepared lesson plan in previous semester Yoga Practicle classes under supervision of Yoga Teachers/Instructors.

TEXT BOOKS

1. Yogrishi Swami Ramdev; Yoga Manual for parents and Yoga Teachers, Divya Prakashan, Haridwar, 2010
2. Dr. Gharote M L & Dr S K Ganguly: Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007
3. Swami Rama: Science of Breath, A Practical Guide, The Himalayan International Institute, Pennselvenia, 1998.
4. Swami Niranjananand Saraswati: Prana, Pranayama & Pranvidya, Yoga Publications Trust, Munger, Bihar, 2005.

REFERENCE BOOKS

1. Science Studies Pranayam, Patanjali Research Foundation, Haridwar 2011
2. Iyengar, B.K.S.: Light on Yoga, Harper Collins Publishers, 2009
3. Swami Kuvalyananda : Pranayama, Kaivalyadhama, Lonavla, 2010
4. Swami Satyananda Saraswati: Asana, Pranayama, Bandha, Mudra, Bihar School of Yoga, Munger, 2005-06.

Course Name: PRACTICUM BIOCHEMISTRY & BIOMECHANICS
Course Code: BSY-CP- 410
Total Credit: 02
Teaching Hours: 6 Hrs (04 Sessions per Week)
Final Exam (SEE) 35 Marks
Internal Assesment: 15 Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand the principle and procedure of each experiment.
- Demonstrate each experiment skillfully.
- Interpret the result during experiment.

UNIT-1: DEMONSTRATION [20 HRS]

Identification and Analysis of Constituents in Normal Urine –Urea-Uric acid – creatinine – Calcium and Phosphorous – Sulphate Ammonia – Chloride; Identification and Analysis of Constituents in Abnormal Urine – Protein, blood, bile pigments – bile salts, sugar, Ketone bodies; Identification and Analysis of glucose, fructose, lactose, maltose, sucrose; Identification and Analysis of Albumin, Casein, gelatin; Identification and Analysis of Blood glucose; Identification and Analysis of Blood Urea; Identification and Analysis of Urinary creatinine; Identification and Analysis of Gastric juice; Identification and Analysis of Urinal Chlorides.

UNIT-2: DEMONSTRATION [30 HRS]

Velocity; acceleration; angular velocity; angular acceleration; Mass; Pressure; Gravity; Friction; Torque; Kinematics – the description of motion e.g. type, location, direction; planes of movement; type of displacement (movement); Qualitative analysis in Asanas movements, joint forces and muscular moment in Asanas, Energy work and muscular power during an movement in Asanas.

Center of Gravity, Equilibrium, line of Gravity; Fundamental movements at various joints; Angle of Pull, All or None Law, Reciprocal Innervations and inhibition; Stretch and postural reflex during the practice of Yoga posture; Force, Lever; Newton's Laws of Motion .

UNIT-3: TEACHER'S CONINUOUS EVALUATION [10 HRS]

TEXT BOOKS

1. Keith Wilson & John Walker :Principles & Techniques of Practical Biochemistry, 5th edition
2. V.K.Malhotra :Practical Biochemistry for students, 4thedition, 2008, 12th edition 2012, Jaypee Brothers medical Publishers Ltd.
3. Yoga Biomechanics by Jules Mitchel, Handaspring publication, US 2018

REFERENCE BOOKS

1. ShrutiMohanty&Aparna B. Varma:Practical Clinical Biochemistry, Jaypee Brothers medical Publishers ltd. 2013
2. D.M. Vasudewan&Subir Kumar Das :Practical Textbook of Biochemistry for medical students, Jaypee Brothers medical Publishers ltd. 2013
3. Patel: Yoga and Rehabilitation, JayPee Brothers, Medical Publication, 2008.
4. McGinnis, P.: Biomechanics of sport and exercise. Champaign, IL: Human Kinetics, 2013

Semester-V



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Course Name: YOGOPNISHADS-I
Course Code: BSY-CT- 501
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Objective:

1. To understand the subtle essence of Trishikh Brahmopnishad
2. To understand the subtle essence of Dhyana Bindopnishad
3. To understand the subtle essence of Nadabindopnishad
4. To understand the subtle essence of Brahma- Vidyopnishad

UNIT 01: TRISHIKH BRAHMOPNISHAD [15 hrs]

Concept of Evolution from Brahman to Panchakarana, Gnosis, Yoga for Gnosis, Karmayoga, Jnanayoga, Ashtangayoga, Ten folds of Yama & Niyama, Asanas, Controlling of Breath & purification of Nadi, Agni Kendra, position of kundalini & its functions, Circulation of Prana in Nadis, Kumbhaka with Chin Mudra, Pranayama, Control of mind with Sanmukhi Mudra, Dharana on panchatatwa, Dhyana on Vasudeva leading to Turiya. Dhyana on Brahman.

UNIT 02: DHYANA BINDOPNISHAD [25 Hrs]

Forms of Pranava, Meditation on Pranava, Pranav dhyana with Pranayama, Other techniques of Pranav dhyana, Dhyana on Brahman, Dhyana of Trideva, Dhyana on Heart, Merging of Prana 7 Brahma, Six folds of Yoga, four asanas, Seat of Yoni, Four Chakra, Group of Nadis, Ten Pranas, Oneness of Prana & Apana, Ajapa-hamsa-vidya, Awakening of Kundalini, Awakening of Kundalini with Brahmacharya, Tribandha, Khecharimudra, Vajroli, Two kinds of Bindu-their union leading to Jivana mukti, Mahamudra, Manifestation of Atman in Heart, Visualisation of Parmatman with application of Nada.

UNIT 03: NADABINDOPNISHAD [15 Hrs]

Vairajya-vidya, Pranava & its 12 Mantra, Nada its effect on mind, Turiya Awastha, Power of Sound in relation to mind. Videha-mukti through Nada.

UNIT 04: BRAHMA- VIDYOPNISHAD [15 Hrs]

Four Mantras of Pranav, Liberation by sound of Pranav, Real form of Jiva, Hamsa Vidya, Finite & Infinite Atma, Three kind of preceptors, Pranav Hamsa, Hamsa Mantra.

Books:

1. Upanishad Sandesh: Divya Prakashan, Haridwar
2. Jnana Khand, Gayatri Prakashana
3. BrahmVidya Khand, Gayatri Prakashana
4. Sadhna Khand, Gayatri Prakashana
5. The Yoga- Upanishads, TR Srinivasa Ayyangar, Vasant Press, ADYAR, Madras.

Course Name:	YOGA THERAPY WITH DISEASE SPECIFIC YOGA THERAPY MODULES-I
Course Code:	BSY-CT-502
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE)	70 Marks
Internal Assessment:	30 Marks

Objectives:

- To understand the principles of Yoga Therapy according to diseases.
- To prepare standard Yoga Therapy protocol according to diseases.
- To understand the cause of disease and the role of Yoga in health and healing.

UNIT-1: FUNDAMENTALS OF YOGA THERAPY [15 HRS.]

Concept of Yoga therapy, Meaning, definition, principles, impact factors and limitations, qualities of Yoga therapy, therapeutic physiology of Shatkarma Asan, Pranayam, Mudra, Bandha, Dharna and Dhyana.

UNIT-2: CARDIOVASCULAR DISORDERS [15 HRS.]

Introduction to Cardio vascular disorders- hypertension; (definition, etio- pathogenesis, classification and its Yogic management), atherosclerosis/coronary artery disease(definition, etio- pathogenesis, classification and its Yogic management), Ischemic heart disease- Angina pectoris/myocardial infarction (definition, etio- pathogenesis, classification and its Yogic management)

UNIT-3: RESPIRATORY DISORDERS [15 HRS.]

Introduction to respiratory disorder, Bronchial Asthma (definition, etio- pathogenesis, classification and its Yogic management), Chronic Obstruction Pulmonary disorders (COPD), (definition, etio- pathogenesis, classification and its Yogic management), Allergic Rhinitis (definition, etio- pathogenesis, classification and its Yogic management), Pulmonary tuberculosis (definition, etio- pathogenesis, classification and its Yogic management).

UNIT-4: GASTRO INTESTINAL DISORDERS. [15 HRS.]

Gastro Intestinal disorder, Acid peptic disease (definition, etio- pathogenesis, classification and its Yogic management), Irritable Bowel Syndrome (definition, etio- pathogenesis, classification and its Yogic management), Hepatitis (definition, etio- pathogenesis, classification and its Yogic management), Diabetes Mellitus (definition, etio- pathogenesis, classification and its Yogic management), and Hypo/Hyper Thyroidism (definition, etio- pathogenesis, classification and its Yogic management).

TEXT BOOKS

1. Yogrishi Swami Ram Dev: Yog Sadhana evam Yog Chikitsa Rahasya: Divya Prakashan, Haridwar
2. Acharya Balkrishna: Yog Vijnanam, Divya Prakashan, Haridwar, 2017.
3. Basavaraddi I V: Yoga Therapy Series, MDNIY, New Delhi
4. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
5. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)

BOOKS FOR REFERENCE

1. Yogic Management of Common Ailments: Kaivalyadhama, Lonavla, Pune.
2. Yogic management of Common Diseases: Dr Swami Karmananda; Yoga Publication Trust, Munger, Bihar.
3. Yogic management of Asthma & Diabetes: Dr Shankardevananda; Yoga Publication Trust, Munger, Bihar.
4. Yogrishi Swami Ramdev: Yoga in synergy with Medicakl Science, Divya Prakashan, 2007

Course Name:	RESEARCH METHODOLOGY AND STATISTICS
Course code:	BSY-CT-503
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE)	70 Marks
Internal Assessment:	30 Marks

Objectives

Following the completion of the course, students shall be able to

- Understand the concept of research and its methodology for carrying minor and major research.
- Feed and analyze the data.
- Organize the data and represent the data.

UNIT- 1: INTRODUCTION TO RESEARCH METHODOLOGY [15 HRS.]

Definition of research; Importance of Studying Research Methods: Evaluating Research Reports; Conducting Research, Thinking Critically about Research; Types of research Applied Research & Basic Research; Goals of Research: description, explanation, prediction, and control of behavior; Ethics of research: Informed consent, Anonymity, Confidentiality, Plagiarism.

UNIT- 2: INTRODUCTION TO RESEARCH PROCESS [15 HRS.]

Research questions; Literature review; Different Sources of Information: Primary, Secondary, Tertiary source; Electronic Databases: Google Scholar, Pubmed & PsycINFO; Hypothesis Sampling and Generalization - Population and Sample; Probability Sampling: Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling; Sampling Bias and Nonprobability Sampling: snowball sampling, convenience; Types of Biological data (Scales of measurement) – nominal, ordinal, interval, ratio; Types of variables – Independent, dependent, confounding variable; Reliability & Validity.

UNIT-3: INTRODUCTION TO RESEARCH DESIGN [15 HRS.]

Cross-sectional studies and its advantages and disadvantages; Cohort studies and its advantages and disadvantages; Randomized controlled trials and its advantages and disadvantages; Factors need to be considered when designing a study: Availability of data, Sampling methods, Data collection, Cost of the design, time implications and loss to followup, Controls, Ethical issues, Issues of bias and confounding.

UNIT-4: STATISTICS

Normal distribution– Skewness and kurtosis; Frequency distribution; Measures of central tendency– mean, median, mode; Measures of dispersion– range, variance and standard deviation; Graphical presentation of data– Bar graphs, Pie chart, line diagram, scatter plot; Paired samples t test; Percentage change.

UNIT-5: REPORTING RESEARCH

Parts and Order of Dissertation, Title Page, Abstract, Introduction, Method Section, Results Section, Discussion Section, Reference Section.

TEXT BOOKS:

1. R. L. Bijlani. (2008). Medical Research: All You Wanted to Know But Did Not Know Who to Ask. Jaypee Brothers Medical Publishers Pvt. Ltd. New Delhi.
2. Research Methodology in Yoga and Naturopathy, CCRYN, New Delhi
3. Research Publications: Patanjali Research Foundation, Haridwar

REFERENCE BOOKS:

1. C R Kothari. (2009). Research Methodology: Methods and Techniques. New Age International (P) Ltd. New Delhi.
2. Zar, J. H., & Zar. (1999). Biostatistical Analysis. Pearson Education. New Delhi

Course Name: FUNDAMENTALS OF COMPUTER APPLICATIONS
Course Code: BS-GE- 504
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Course Objectives

Following the completion of the course, students shall be able to

- Understand the Introduction to Computer System.
- Understand the Computer Software & Operating System
- Understand the Data Communication and Computer Network
- Understand the Internet and WWW

UNIT I- Introduction to Computer System

Introduction to Computer, Characteristics of Computer, Applications of Computer, Classification of Computer, Memory & Its Classification, Input devices, Output Devices, Interfaces. Types of Programming Languages: Machine Languages, Assembly Languages, High Level Languages, Data Organization: Drives, Files, Directories, Number Systems: Decimal, Binary, Octal, Hexadecimal, Number System Conversion, Operations on Number System.

UNIT II. Computer Software & Operating System

Introduction to Software, Types of Software, Program vs. Software, Introduction to Operating System, Function of Operating System, Types of Operating System

Unit-II Algorithm and Flowcharts

Algorithm: Definition, Characteristics, Advantages and disadvantages, Examples, Flowchart: Definition, Define symbols of flowchart, Advantages and disadvantages, Examples

UNIT III. Data Communication and Computer Network

Introduction to communication system, Mode of Communication, Introduction to Computer Network, Types of Computer Network, LAN,WAN,MAN Topologies, Transmission Media

UNIT I V. Internet and WWW

Internet: Introduction to Internet and its Applications, Connecting to the Internet, Email, World Wide Web(WWW): World Wide Web and Its Evolution, Uniform Resource Locator(URL), Browsers: Internet Explorer, OSI Model

Reference Books:

1. Fundamental of Computers – By V. Rajaraman B.P.B. Publications
2. Fundamental of Computers – By P.K. Sinha
3. MS-Office 2000(For Windows) – By Steve Sagman
4. Computer Today- By Suresh Basandra
5. Computer Networks – By Tanenbaum Tata McGraw Hill Publication

Course Name: COUNCELLING AND ITS YOGIC COMPONENTS
Course Code: BS-GE- 505
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Objectives:

Following the completion of this course, students shall be able to

- Understand human behaviour at different stages
- recognize behavioural problems and examine strategies for positive behaviour
- management identify different types of exceptionalities
- relate counselling theory to issues in counselling
- develop an ethical approach to counselling

Unit 1 NATURE AND SCOPE OF GUIDANCE [15 hrs]

Concept and Definition of Guidance and Counselling, Guidance and Life Goals, The Counselling Vocation, The Phases of the Counselling Process (Assessment, Intervention, and Termination), Characteristics of an Effective Counsellor
1.6 Personal challenges as a Counsellor

Unit 2 STAGES OF HUMAN DEVELOPMENT AND AREAS OF GUIDANCE [15 hrs]

Characteristics of Different Stages of Development (Physical, Cognitive, Emotional, Social, and Moral), Problems of Childhood, Problems of Adolescence, Problems of Adulthood and the Aged, The Concept of Adjustment and Adjustment at Different Stages of Life

Unit 3 EXCEPTIONALITY: TYPES AND PROBLEMS & COUNSELLING SPECIAL GROUPS [15 hrs]

Nature of Exceptionality, Intellectual Exceptionality: Intellectual Superiority and Mental Retardation, Sensory Handicaps: Visual, Aural, Motor and Speech Handicaps, Family and Personal Problems of the Exceptional, Care and Education of the Exceptional, Characteristics and Needs of Special Groups Socially and Economically Disadvantaged, Destitutes and Orphans, Delinquents, Drop-out, Aids Patients, Drug Addicts and Alcoholics, Paedophiles, Homosexuals.

UNIT 4: YOGIC COUNCELING [15 HRS.]

Mental Dynamics Involved in Existential Disorders as per 5th Chapter of Hathapradipika. Model Case History of Functional & Emotional Disorders. Possible "Collaborative Synthesis" between Yog and Psychotherapy in the Treatment of Existential Disorders. Stress Management Strategies as Inferred from PYS. Physiological Mechanism Underlying Stress - Response, Oxidative Stress. Essence of Psychological and Yogic Counselling

COURSE NAME:	YAGYOPATHY
Course Code:	BSY-SEC-- 506 (SEC-03)
Total Credit:	02
Teaching Hours:	30 Hrs (01 Lecture + 02 Practical Classes per Week)
Final Exam (SEE)	35 Marks
Internal Assesment:	15 Marks

Objective

Following the completion of this course, students shall be able to:

- Understand the relevance of Yajna
- Perform Yajna properly
- Understand the rituals of Yajna
- Know the health benefits and applications of Yajnopathy

UNIT - 1: INTRODUCTION TO YAJNA [10 HRS.]

यज्ञ का परिचय: यज्ञ शब्द का निर्वचन व परिभाषा। यज्ञ का इतिहास, यज्ञ के प्रकार, यज्ञार्थ सामग्री व उपकरण। पंचमहायज्ञ: पंचमहायज्ञ के लाभ, ब्रह्मयज्ञ, देवयज्ञ, बलिवैश्वदेवयज्ञ, अतिथियज्ञ व पितृयज्ञ मन्त्रार्थ-स्मरण सहित विधि। शास्त्रों में यज्ञ का स्वरूप:- चारों वेद, गीता, उपनिषद, मनुस्मृति, ब्राह्मण-ग्रन्थ, गृहसूत्रा व मीमांसादर्शन इत्यादि में।

UNIT - 2: INTRODUCTION TO YAJNOPATHY [10 HRS.]

यज्ञ के विभिन्न पहलू:- यज्ञ से चिकित्सा, ग्लोबल वार्मिंग का समाधान, वृष्टि, कृषि व अध्यात्म उन्नति। यज्ञ पर वैज्ञानिक शोध:- चिकित्सा शोध, माइक्रोबायोलॉजिकल ; बैक्टीरिया, फंगस, वायरस, कैमिकल (Co₂, So, No, Pb, As, Hg, CCIF) व सूक्ष्मकण एवं रेडिएशन पर यज्ञ ऊर्जा के प्रभाव पर शोध।

UNIT- 3 APPLICATION OF YAJNOPATHY [10 HRS]

Application of Yajnopathy for common ailments: Obesity, Hypertension, Diabetes, Thyroidism, Skin Disease, Sinusitis, Asthma, Stress.

REFERENCES

1. Vaidic Nitya Karma Vidhi: Divya Prakashan, Haridwar
2. Yagya-yoga-yurveda Chikitsa: Divya Prakashan, Haridwar
3. Yajna se hoga sunahra kal: Dr Rochna Bharti, Srirang Prakashan, Nashik
4. Yajynopathy: Brahmvarchas, Sri Vedmata Gayatri Trust, Shantikunj, Haridwar.
5. Yajnotherapy: Sandip Arya, Vijaikumar Govindram Hasanand, 4408 nai sadak, New Delhi.



विभागाध्यक्ष योग विज्ञान विभाग
पतंजलि विश्वविद्यालय, हरिद्वार

Course Code: BSY-CP- 507
Total Credit: 04
Teaching Hours: 120 Hrs (08 Sessions per Week)
Final Exam (SEE) 70 Marks
Internal Assesment: 30 Marks

Objective

Following the completion of this course, students shall be able to

- Undersatand about various therapeutic Yoga modules.
- Undersatnd the way of application of Yoga therapy modules.
- Know disease wise application of Yoga therapy modules.
- Differentiate between Yoga training and therapeutical application of Yoga

UNIT 1- ANATOMY & PHYSIOLOGY OF YOGIC PRACTICES [15 HRS]

Mechanism of Asana, difference between Asana and exersice

UNIT 2- YOGA THERAPY MODULES FOR CARDIOVASCULAR DISORDERS RESPIRATORY DISORDERS [40 HRS]

Hypertension; hypotension, atherosclerosis, coronary artery disease, Angina pectoris/myocardial infarction. Bronchial Asthma, Chronic Obstruction Pulmonary disorders (COPD), Allergic Rhinitis, Pulmonary tuberculosis

UNIT-3: GASTRO INTESTINAL DISORDERS. [25 HRS.]

Gastro Intestinal disorder, Acid peptic disease, Irritable Bowel Syndrome, Hepatitis, Diabetes Mellitus and Hypothyroidism, Hyperthyroidism.

UNIT-4: YAJNA KARMA & MARMA THERAPY [40 HRS]

Practice and procedure of Yajna including learning and memorization of mantras. Do's and Don'ts of Yajna. Identification of various marma points; Application on Marma Points; Activation of Marma Points, its practice and procedure. Therapeutic application of Marma points. Understanding, memorization and recitation of Mantras

TEXT BOOKS

1. Yogrishi Swami Ram Dev: Yog Sadhana evam Yog Chikitsa Rahasya: Divya Prakashan, Haridwar
2. Acharya Balkrishna: Yog Vijnanam, Divya Prakashan, Haridwar, 2017.
3. Basavaraddi I V: Yoga Therapy Series, MDNIY, New Delhi
4. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
5. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008) Yogrishi Swami
6. Ramdev Ji: Vedic Nityakarma Vidhi, Divya Prakashan, Haridwar, 2010 Basavaraddi, I.V. & others: SHATKARMA: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
7. Swami Dharendra Bhrmahachari: Yogasana Vijnana, Dharendra Yoga Publications, New Delhi, 1966.
8. Swami Kuvalyananda: Asana, Kaivalyadhama, Lonavla, 1983

BOOKS FOR REFERENCE

1. Science Studies Pranayam, Patanjali Research Foundation, Haridwar 2011
2. Yogic Management of Common Ailments: Kaivalyadhama, Lonavla, Pune.
3. Yogic management of Common Diseases: Dr Swami Karmananda; Yoga Publication Trust, Munger, Bihar.
4. Yogic management of Asthma & Diabetes: Dr Shankardevananda; Yoga Publication Trust, Munger, Bihar.
5. Yogrishi Swami Ramdev: Yoga in synergy with Medicakl Science, Divya Prakashan, 2007
6. Yajynopathy: Brahmvarchas, Sri Vedmata Gayatri Trust, Shantikunj, Haridwar.
7. Yajna se hoga sunahra kal: Dr Rochna Bharti, Srirang Prakashan, Nashik.
8. Yajnotherapy: Sandip Arya, Vijaikumar Govindram Hasanand, 4408 nai sadak, New Delhi.
9. Marma Chikitsavijnana: Prof. Sunil Kumar Joshi, Mrityunjaya Mission, Aadi Arts, Haridwar.
10. Swami Kuvalyananda: Pranayama, Kaivalyadhama, Lonavla, 2005
11. Nagendra, H.R : The art and Science of Pranayama, Swami Vivekananda Yoga Prakashan, 2005, Bangaore.
12. Lajpat, Dr. R.: Discovering Human Potential Energy, Abhinav Rai Publication, Gurgaon, 1996.
13. Basavaraddi I. V. & Others : Teachers Manual for School Teachers, MDNIY, New Delhi, 2010

Course Name: CASE STUDY/EXPLORATORY RESEARCH/SURVEY
Cours code: BSY-CP-508
Total Credit: 02
Teaching Hours: 60 Hrs (04 Sessions per Week)
Final Exam (SEE) 35 Marks
Internal Assesment: 15 Marks

Objectives:

Following the completion of the course, students shall be able to

- Understand the concept of research and its methodology for carrying minor and major research.
- Understand the tricks of analyzing the data efficiently.
- Have an idea about various statistical tests and their application.
- Write a research project/Case Study/ Survey

RESEARCH PRACTICAL

A Case Study/ Exploratory Research/ Survey Has to be conducted under the supervision of a Lecturer /Assistant Professor.

A pilot research shall be carried out by each student under the supervision of a Lecturer /Assistant Professor. As part of the research project, students will record the effect of any intervention of his/her choice for a common variable in a particular group of sample.

This pilot research should be submitted to the supervisor and the course coordinator.

Semester-VI



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Course Name: YOGOPNISHADS-II
Course Code: BSY-CT- 601
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Objective:

1. To understand the subtle essence of Yoga Kundalyopnishad
2. To understand the subtle essence of Mandala Brahmopnishad
3. To understand the subtle essence of Yogacudamanyopnishad
4. To understand the subtle essence of Yogtawopnishad

UNIT 01: YOGA KUNDALYOPNISHAD [15 hrs]

Padmasana & Vajrasana, Rousing of Saraswati, Varieties of Pranayama, Surya, Ujjai, Shitali, Bhastraka Kumbhaka, Tri Bandha, Times of Kumbhaka Practice, Obstacles in practice of yoga & to overcome them. Kundalini, Samadhi-yoga, Khechari Vidya, Khechari Mantra, Purnima Trataka, Meditation tool of attaining Brahma.

UNIT 02: MANDALA BRAHMOPNISHAD [15 Hrs]

Four fold yama, Nine fold Niyamas, Shadangayoga, five inherent defect of Body, Trataka; three kind of Introspection, Trataka & Amanaska, Jyotir Atman by Shambhavi, Pranav through Shanmukhi, Unmani State.

UNIT 03: YOGACUDAMANYOPNISHAD [15 hrs]

Yogacudamanyopnishad: Shadanga Yoga, Chakras, Places of Nadis, Prana, Ajapa Gayatri, Three Bandha, Khechari Mudra, Maha mudra, Pranava prayer, Turiomkara, Four Hamsa, Purification of Nadis by pranayama, Shanmukhi Mudra. Withdrawal of sense organs with Pranayama.

UNIT 04: YOGTATWOPNISHAD [15 HRS]

Ashtanga Yoga, Parmatmana & Jiva, Four kinds of Yoga, Yama, Niyama & Asanas, overcoming the obstacles, Matha, Purification of Nadi, Kewal Kumbhaka, Pranav Japa, Ghata, Pratyahara, Dharana, Meditation. Samadhi, Maha bandha, Maha Veda, Khechari, Three Bandha, Viparitkarna, Vajroli, Amroli, Raja Yoga, Cause of detachment, Workshop of Pranav.

Books:

1. Upanishad Sandesh: Divya Prakashan, Haridwar
2. Jnana Khand, Gayatri Prakashana
3. BrahmVidya Khand, Gayatri Prakashana
4. Sadhna Khand, Gayatri Prakashana
5. The Yoga- Upnishads, TR Srinivasa Ayyangar, Vasant Press, ADYAR, Madras.

Course Name: YOGA THERAPY WITH DISEASE SPECIFIC YOGA THERAPY MODULES-II
Course Code: BSY-CP- 602
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Objectives:

Following the completion of the course, students shall be able to

- Understand the principle of Yoga therapy for each disease
- Write standard Yoga therapy protocol for each disease.
- Understand the causes of disease and the role of Yoga for its healing.

UNIT -1: NEURO MUSCULAR DISORDERS [15 HRS.]

Neuro muscular: Back Pain (definition, etio- pathogenesis, classification and its Yogic management), Rheumatoid Arthritis (definition, etio- pathogenesis, classification and its Yogic management), Inter vertebral disc Prolapse (IVDP) (definition, etio- pathogenesis, classification and its Yogic management), spondylosis (definition, etio- pathogenesis, classification and its Yogic management), spondylolisthesis (definition, etio- pathogenesis, classification and its Yogic management), Radiculopathy (definition, etio- pathogenesis, classification and its Yogic management).

UNIT-2: OBSTETRICS & GYNECOLOGICAL DISORDERS [15 HRS.]

Yogic management for Pregnancy induced hypertension; Pre-eclampsia; Intra-Uterine Growth Retardation (IUGR); menstrual disorders (e.g., dysmenorrhea, pre-menstrual syndrome); Infertility; Menopause.

UNIT -3: NEUROLOGICAL DISORDER [15 HRS.]

Headache/ Migraine (definition, etio- pathogenesis, classification and its Yogic management), Idiopathic Parkinsonism Disease (definition, etio- pathogenesis, classification and its Yogic management), Schizophrenia (definition, etio- pathogenesis, classification and its Yogic management), Obsessive Compulsive Disorders (OCD) (definition, etio- pathogenesis, classification and its Yogic management), Epilepsy (definition, etio- pathogenesis, classification and its Yogic management).

UNIT- 4: CANCER MANAGEMENT [15 HRS.]

Proliferation, Tumor & Cancer; its causes, types, clinical features and its Yogic management. Side effects of chemotherapy, radiotherapy and its Yogic management.

TEXT BOOKS

1. Yogrishi Swami Ram Dev: Yog Sadhana evam Yog Chikitsa Rahasya: Divya Prakashan, Haridwar
2. Acharya Balkrishna: Yog Vijnanam, Divya Prakashan, Haridwar, 2017.
3. Basavaraddi I V: Yoga Therapy Series, MDNIY, New Delhi
4. Reddy M Venkata & others: Yogic Therapy, Sri M.S.R. Memorial Yoga series, Arthamuru A.P., 2005
5. Ramesh Bijlan : Back to Health Through Yoga, Rupa Publications India Pvt. Ltd, 2011

BOOKS FOR REFERENCE

1. Yogrishi Swami Ramdev: Yoga in synergy with Medical Science, Divya Prakashan, 2007
2. Swami Satyananda Saraswati : Yoga and Cardio Vascular Management, Yoga Publication Trust, Munger, 2005.
3. Clennell, B and Iyengar, G.S. : The Woman's Yoga Book: Asana and Pranayama for All Phases of the Menstrual Cycle, Menstrual Disorders (The Experience of Illness) (Paperback - Dec 3, 1992).
4. Nagarathna R and Nagendra H R: Yoga for Arthritis, Back pain, Diabetes, Pregnancy, Breathing Practices, Swami Vivekananda Yoga Prakasana, Bangalore, 2000.
5. Robin Monoro, Nagarathna R and Nagendra, H.R.: Yoga for Common Ailments, Guia Publication, U.K., 1990
6. Yogic management of Common Diseases: Dr Swami Karmananda; Yoga Publication Trust, Munger, Bihar.
7. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts

Course Name:	COMPLEMENTARY & ALTERNATIVE THERAPY
Course Code:	BSY-CT-603
Total Credit:	04
Teaching Hours:	60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE)	70 Marks
Internal Assessment:	30 Marks

Objectives

Following the completion of the course, students shall be able to

- To understand fundamentals of complementary medicine.
- To understand the fundamentals of Alternative Therapy.
- To know the basics of Acupressure to discuss protocol for CAT specific disease management.
- To discuss protocol for CAT specific disease management.

UNIT- I: FUNDAMENTALS OF CAT [10 HRS.]

CAT History meaning, definition, objectives and types, Prevalence; Contemporary need, Applications and Limitations; Yoga Therapy as Mind Body Therapy: origin, meaning definition aims, principles and practice, Impact, prevalence, applications and limitations.

UNIT- 2: MANIPULATIVE-BODY BASED THERAPY (MBT): [10 HRS.]

Manipulative body based therapy its meaning, definition, aims, principles, types, prevalence, impacts, applications and limitations. ,

UNIT- 3: ACUPRESSURE AND ENERGY MEDICINE- [30 HRS.]

Acupressure- (origin, meaning, definition, principles), five-elements theory, chi-clock cycle, Meridian Systems and Locating Acupoints on 12 Major Meridians and Reflexology. Energy Medicine: History, Meaning, Definition, Types, Principles, Applications and Limitations. Pranic Healing: Origin, History, Meaning and Sources of Prana; Principles, Law of Action, & Types (Basic, Advanced, and Psychotherapy); Bio-plasmic body/Aura: structure, types and size; Energy Centers (EC): Meaning, Types (Major, Minor and Mini), Sizes, Colors, Functions and Consequences of their Dysfunctions;

UNIT- 4: COMPLEMENTARY AND ALTERNATIVE THERAPIES [10 HRS.]

Complementary and Alternative Therapies for hyperacidity, migraine, insomnia, Depression and anxiety, menstrual disorders, Asthma and Pneumonia, low back pain, arthritis, obesity, diabetes, Hyper/ Hypotension, Hyperthyroidism, Hypothyroidism, Epilepsy, Anxiety, Obsessive compulsive disorder (OCD), Leucorrhoea.

TEXT BOOKS

1. Yuan, Chun-Su., & Bieber, E. J. (2003). Textbook of complementary and alternative medicine. New York, NY: The Parthenon Publishing Group.
2. Sharma, S. (2013). Pran Chikitsa (2nd ed.). Mathura, India: Akhand Jyoti Samsthan.
3. Micozzi, M. S. (2015). Fundamentals of complementary and alternative medicine (5th ed.). China

REFERENCE

1. Sui, M. C. K. (2005). Advanced pranic healing. Bangalore, India: World India Pranic Healing Foundation-India.
2. Sui, M. C. K. (2005). Pranic Psychotherapy (2nd ed.). Bangalore, India: World India Pranic Healing Foundation-India.
3. Sharma, S. (2013). Chikitsa Upchar Ke Vividh Ayam (2nd ed.). Mathura, India: Akhand Jyoti Samsthan.
4. Lian, Yu-Lin; Chen, Chun-Yan; Hammes, M. & Kolster, B. C. (2005). Pictorial atlas of acupuncture: An illustrated manual of acupuncture points. Solvenia: h. f. ullmann.

Course Name: ADVANCE COMPUTER APPLICATIONS
Course Code: BS-GE- 604
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

FUNDAMENTALS OF COMPUTER APPLICATION

Objectives:

Following the completion of this course, students shall be able to:

- Gain knowledge about complete instructions and signs relating to Excel.
- Gain knowledge about complete instructions and signs relating to PowerPoint.
- Gain knowledge about complete instructions and signs relating to Computer Virus, Internet Search & Email.

Unit-1: Excel [15 Hrs.]

Starting Excel: Excel window, Ribbon, Excel Workbook and Worksheet, Opening workbook, Data entry, navigating the worksheet, Saving and Printing Workbook. Editing Excel : Selecting Cells and Ranges, Editing data, Modifying a Worksheet, Adding worksheets, rows and columns, Resizing rows and columns, moving and copying cells, freeze pane, Find and Replace data, Autofill. Formatting Worksheets: Formatting cells, Formatting rows and columns, Formatting text, Formatting worksheets using Styles Toolbar, Auto formatting, AutoCorrect, Format painter. Formulas and Functions: Formulas, Operators, Creating a formula, AutoSum, Relative, Absolute and Mixed Referencing, Functions, Spell Checking. Using Charts: Components of a Chart, Chart types, creating a Chart.

Unit-2 : PowerPoint [15 Hrs]

Power Point Presentation: Starting PowerPoint, Creating a presentation, Opening an existing presentation. Viewing slides - Normal View, Slide Sorter View, Notes Page, Slide Show. Working with slides - Adding a slide, deleting a slide, Adding text, moving a text box, format text. Adding WordArt, Format WordArt. Adding shapes, image and clipart. Adding theme to slide, changing the background. Formatting presentation using slide master. Objects and Animation: Creating Custom Animation Effects for objects, Modify Animation effects, Create a Slide Transition, Change the order of the slide, Slide Show Options, Rehearse Timing

Unit-3: Internet Search & Email [15 Hrs]

Search Engine, Types of Search Engine, Finding information through search engine, Different Search Engines, E-Commerce, Types of E-Commerce, E-Business, E-mail Management: Importance of E-mail, E-mail Services, Opening an email account using Gmail. Composing an email, Sending an email with attachment, Formatting text. E-mail actions- Reading an email, replying an email, forwarding an email, printing an email and deleting an email. Adding a signature. Creating folders/ labels for archiving emails.

Unit-7: Computer Virus [15 Hrs]

Computer Virus, Computer virus versus Biological virus, Computer virus classification - Boot sector virus, Companion virus, E-mail virus, Logic Bomb, Macro virus, Cross-site scripting virus, Worm, Trojan Horse. Effects of computer virus, the vulnerability of operating systems to virus, protection from virus and use of popular antivirus software.

Course Name: WELLNESS TOURISM
Course Code: BS-GE- 605
Total Credit: 04
Teaching Hours: 60 Hrs (03 Lectures + 01 Tutorials per Week)
Final Exam (SEE) 70 Marks
Internal Assessment: 30 Marks

Objective:

The course intent to upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country. Since health tourism constitute a niche market for the industry and the government as well, it becomes desirable for the students to get in touch with this new segment of tourism industry. After studying this course, the student shall be able to define the trends, issues and challenges in the field of health tourism in India.

Unit 1 Introduction to Tourism [12 hrs.]

Basic Meaning of word 'Wellness'. Aims & objectives, Introduction to Tourism: Meaning, nature, scope & objectives, Relevance of Yoga in relation to Tourism.

Unit II Components Of Tourism [12 hrs.]

Tourism Types, Products & Concepts, Tourism Elements & Components, Peace & Wellness Tourism, Factors affecting Wellness Tourism.

UNIT III Wellness Tourism [12 hrs.]

Health and Medical Tourism: Meaning, nature and scope, Health and Medical tourism Product, Health and Medical Tourism markets at global level, Advantages and disadvantages for India in Global Medical Tourism Market.

UNIT IV Health and Medical Tourism [12 hrs.]

Health and Medical Tourism in India, Role of Private sector in health and medical tourism, Traditional Health Care system in India, Government incentives for health and medical tourism in India.

Unit V Health Tourism Centres [12 hrs.]

Health Tourism Centres in India: Health Tourism Resources in Haridwar & Rishikesh, Patanjali Health Tourism Institutions, Health & Medical Tourism in Kerala & Tamil Nadu.

Reference

1. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
2. Conell, John, Medical Tourism.
3. Kumar, Medical Tourism in India (Management and Promotion)
4. Edlin, Gordon & Golanty, Eric, Health and Wellness.

Course Name: STUDY TOUR
Course Code: BSY-SEC-- 606 (SEC 04)
Total Credit: 02
Tour Hours: 07 days
Final Exam (SEE) 35 Marks
Internal Assesment: 15 Marks

UNIT-1: STUDY TOUR

The study tour is to give exposuer to the students on the activities being conducted by reputed Yoga Institutes/ Colleges/ Universities/ Yoga Centers/ Yogic Hospitals. The students may be taken to any one or more than one Yoga Institutes /Yoga Centers etc. of repute in India. The Study Tour shall be arranged the Institute and the expenses shall be borne by the concerned students only. Each student has to submit a Study Tour observation report that will be evaluated by the teacher who is in-charge of the study tour and also **counter signed by the Course Coordinator**. The Study Tour will carry marks as mentioned in the Scheme of examination.

UNIT-2: PRESENTATION

Presentations of Study Tour Report, its Utility and the exposer got to enhance their learning.

Course Name:	YOGA PRACTICUM -6
Course code:	BSY-CP-607
Total Credit:	04
Teaching Hours:	120 Hrs (08 Practical Hours per Week)
Final Exam (SEE)	70 Marks
Internal Assesment:	30 Marks

Objective

Following the completion of this course, students shall be able to

- Understand about various therapeutic Yoga modules.
- Understand the way of application of Yoga therapy modules.
- Know disease wise application of yoga therapy modules.
- Differentiate between Yoga training and therapeutical application of Yoga

UNIT -1: NEURO MUSCULAR DISORDERS [25 HRS.]

Back Pain, Rheumatoid Arthritis, Inter vertebral disc Prolapse (IVDP), spondylosis, spondylolisthesis Radiculopathy.

UNIT-2: OBSTETRICS & GYNECOLOGICAL DISORDERS [25 HRS.]

Pregnancy induced hypertension; Pre-eclampsia; Intra-Uterine Growth Retardation (IUGR); menstrual disorders Infertility; Menopause.

UNIT -3: NEUROLOGICAL DISORDER [25 HRS.]

Headache/ Migraine, Idiopathic Parkinsonism Disease, Schizophrenia, Obsessive Compulsive Disorders (OCD) Epilepsy.

UNIT- 4: CANCER MANAGEMENT [25 HRS.]

Cancer; side effects of chemotherapy and radiotherapy.

UNIT -5 ALL THE YOGA THERAPY MODULES OF YOGA PRACTICUM 9. [20HRS]

TEXT BOOKS

1. Yogrishi Swami Ram Dev: Yog Sadhana evam Yog Chikitsa Rahasya: Divya Prakashan, Haridwar
2. Acharya Balkrishna: Yog Vijnanam, Divya Prakashan, Haridwar, 2017.
3. Basavaraddi I V: Yoga Therapy Series, MDNIY, New Delhi
4. Reddy M Venkata & others: Yogic Therapy, Sri M.S.R. Memorial Yoga series, Arthamuru A.P., 2005
5. Ramesh Bijlan : Back to Health Through Yoga, Rupa Publications India Pvt. Ltd, 2011

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1. Yogrishi Swami Ramdev: Yoga in synergy with Medical Science, Divya Prakashan, 2007
2. Swami Satyananda Saraswati : Yoga and Cardio Vascular Management, Yoga Publication Trust, Munger, 2005.
3. Clennell, B and Iyengar, G.S. : The Woman's Yoga Book: Asana and Pranayama for All Phases of the Menstrual Cycle, Menstrual Disorders (The Experience of Illness) (Paperback - Dec 3, 1992).
4. Nagarathna R and Nagendra H R: Yoga for Arthritis, Back pain, Diabetes, Pregnancy, Breathing Practices, Swami Vivekananda Yoga Prakasana, Bangalore, 2000.
5. Robin Monoro, Nagarathna R and Nagendra, H.R.: Yoga for Common Ailments, Guia Publication, U.K., 1990
6. Yogic management of Common Diseases: Dr Swami Karmananda; Yoga Publication Trust, Munger, Bihar.
7. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts.

Course Name: COMPLEMENTARY AND ALTERNATIVE THERAPY (CAT) PRACTICUM
Course Code: BSY-CP-608
Total Credit: 02
Teaching Hours: 60 Hrs (04 Practical Hours per Week)
Final Exam (SEE) 35 Marks
Internal Assesment: 15 Marks

Aims of the paper: The teaching-learning of this paper will enable learner to -

1. Practice skills of therapeutics related to acupressure, for managing some of the common health problems and rejuvenation. [30HRS]
2. Demonstration of Complementary and Alternative therapies of low back pain, Arthritis, obesity, diabetes, hyper/ hypotension, Hyper/ Hypothyroidism, Hyperacidity, , migrain, insomnia, Depression, Anxiety, Menstrual disorders & Asthma, Pneumonia. [30HRS]



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