# Master of Science In Yoga Science and Therapy [MSc YST]

# **SYLLABUS**

(Implemented from academic session 2021-22)



# Department of Physiotherapy Faculty of Medical Sciences Guru Jambheshwar University of Science and Technology, Hisar-125 001

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#### **PREAMBLE**

At the outset it must be mentioned that the present document should best be taken as a guiding framework. In preparing the same we are well aware that in some small pockets in the country, the teaching of Yoga is thriving in creative directions. A few departments are grounded in clinical perspectives, some other in the experimental research and industrial-organizational areas. The Learning Outcome based curriculum framework (LOCF), it is to be better understood as a document to be studied in relation to other advances in the field of Yoga. It intends to offer a broad guideline to reorient the organization of teaching-learning processes at the PG level to augment the quality of learning in the context of contemporary challenges of higher education in India. It explores the opportunities to improve class room transaction, teacher preparation and sense of relevance for the learners. In this endeavour it departs from the earlier scheme in a major way and explicitly states the learning outcomes and uses that to organize the diverse teaching-learning processes. In so doing it tries to address the needs of society, groups and the individual.

This scheme considers learning as an experiential and participatory activity with sufficient space for innovation and initiative, building the scientific spirit of objectivity and critical perspective. In this venture teachers and learners are assumed to jointly engage in a creative exercise of knowledge construction and skill building. In the last few decades, the discipline of Yoga has also emerged as a new treatment measure. Yoga is a physical, mental, and spiritual practice or discipline which originated in ancient India and is followed in all over the world. Many studies have tried to determine the effectiveness of yoga as a complementary intervention for many ailments. Its training can empower students asses diagnose and treat various disorders or diseases and mal alignments. Teaching program therefore must include the agenda/ courses which are meaningful to the surrounding society. Educational institutions must reach out to the society. This will give us opportunity to get validation of skill training, knowledge acquisition, research and demonstration of relevance of graduate attributes. In turn, this kind of experience will also help shaping the learning outcomes. The employability gap would also be addressed. Preparing teachers to teach through pedagogies suitable to promote the values given in the LOCF document is an essential condition for the attainment of LOCF. It is perhaps the most daunting challenge in order to fulfil the mandate of LOCF. The diversity maintenance and appreciation, along with standardisation of teaching -learning across the nation requires accommodating local realities with an open mind.

Yoga or yogasanas are considered as art and science of healthy living by our ancient gurus. It is
method to bring harmony of body and mind for general well being. Yoga is considered as one of

the greatest gifts to the world by Indians for healthy living. Students in particular are benefitted by learning yoga. Keeping its various advantages and proved evidence in improving the health, efficiency and managing stress related problems. Yoga science and therapy is helpful in the Prevention, Restoration and Rehabilitation, Maintenance and Promotion of optimal physical function. The practitioners of Yoga therapy contribute to society and the profession through practice, teaching, administration and the discovery and application of new knowledge about Yoga Therapy and Science experiences of sufficient excellence and breadth by research to allow the acquisition and skills and behaviours as applied to the practice of Yoga Therapy and Science. Learning experiences are provided under the guidance and supervision of competent faculty, in both, classroom as well as in clinic. The designed curriculum will prepare the entry-to-practice Yoga Therapy and Science to be an autonomous, effective, safe and compassionate professional, who could work efficiently as a yoga therapist in the hospitals, spa, wellness centre, start their yoga centre and join the Yoga department of the universities as an assistant professor and are responsive to the current and future needs of the health care system.

Yoga plays crucial role in promoting balanced and all round personality growth of every person. Yoga therapy involves instruction in yogic practices and teachings to prevent reduce or alleviate structural, physiological, emotional and spiritual pain, suffering or limitations. Yogic practices enhance muscular strength and body flexibility, promote and improve respiratory and cardiovascular function, promote recovery from and treatment of addiction, reduce stress, anxiety, depression, and chronic pain, improve sleep patterns, and enhance overall well-being and quality of life. The core skills used by Yoga science and therapy are asanas, mudras, pranayama, shatkarmas, dhyan and alternative therapies.

Specifically, Yoga practitioners improve the client's quality of life by:

- encouraging one to relax, slow the breath and focus on the present.
- shifting the balance from the sympathetic nervous system and the flight-or-fight response to the parasympathetic system and the relaxation response.
- achieving tranquility of the mind and create a sense of well-being, feelings of relaxation, improved self-confidence, improved efficiency, increased attentiveness, lowered irritability, and an optimistic outlook on life.
- Improved flexibility, loosening of the muscles and connective tissues surrounding the bones and joints.
- Promoting optimal mobility, physical activity, and overall health and wellness;

- Preventing disease and maintaining health of healthy individual;
- Geriatric care and Rehabilitation;
- Managing acute and chronic conditions, activity limitations and participation restrictions;
- Improving and maintaining optimal functional independence and physical performance;
- Yoga and meditation practices exert positive influence on addictive behaviors.
- Calming and restorative; it lowers breathing and heart rate, decreases blood pressure, lowers
  cortisol levels, and increases blood flow to the intestines and vital organs.
- a fundamental emphasis is placed on accepting one's moment-to-moment experiences
   creating mindfulness and not forcing the body past its comfortable limits.

#### LEARNING OBJECTIVES OF THE COURSE

# COMMUNICATION

 Effective communication and interpersonal skill which are adapted to meet the needs of diverse individuals and groups.

# ETHICAL AND LEGAL STANDARDS

• Adherence to safe, ethical and legal standards of current practice (as identified by professional organizations, federal and state law and accrediting bodies).

# DIAGNOSIS AND PLAN OF CARE

- Development of diagnoses with consultation to Physician and an individualized plan of care for the management and prevention common ailments.
- Demonstrate effective history taking, examination, evaluation, and re-evaluation that leads to an appropriate Yoga Therapy diagnosis and prognosis for patients with disorder of the following systems.
- Develop an appropriate plan of care and intervention for patients with disorders.
- Assess and address needs of individuals and communities for health promotion and prevention of movement dysfunction.

# OTHER OBJECTIVES

- To train students in Yoga Therapy so as to enable the students to become well versed in Yoga Therapy
- To integrate Yoga Therapy with other systems of medicine to speed up the process of recovery
- To explore the possibilities of promoting Yoga Therapy integrating medical practice at conventional medical facilities attached to the institute
- To produce Yoga Therapists with in-depth understanding of basic sciences and mechanism of action of every technique prescribed for a disease
- To bring all round personality development of the students at all levels of their personality
- To produce the therapists of high calibre who could work efficiently as a yoga therapist in the hospitals, spa, wellness centre, start their yoga centre and join the yoga department of the universities as an assistant professor

## 1. TEAM MEMBER

Effective participation as an intra- and inter-professional team member.

# 2. PRACTICE MANAGEMENT

Effective management for delivery of Yoga services in diverse settings.

# 3. TEACHING AND LEARNING PRINCIPLES

Application of teaching and learning principles in educational, practice, and community settings.

# 4. EVIDENCE-BASED PRACTICE

Application of principles of critical thinking and clinical reasoning to evidence-based Yoga Therapy practices.

# 5. PROFESSIONAL RESPONSIBILITY AND COMMITMENT

Responsibility and commitment to the profession and society through life-long learning and involvement in activities beyond the job responsibilities.

#### LEARNING OUTCOMES OF THE COURSE

On completion of this course, the students will be able to:

- Become proficient in the theory and practice of Yoga and its nature, scope, development of
  yoga through the ages, different types of yoga like Karma Yoga, Bhakti Yoga, Jnana Yoga,
  Raja yoga, Hatha yoga and Mantra Yoga, Meditation and Its nature and scope, different types
  of meditation, the concepts Hatha Pradipika and Gheranda Samhitha, Chakra theory and
  Kundalini yoga and relevance to the modern life.
- 2. Become well versed in human anatomy & physiology of Cell structure. systems in the body like Skeletal system, Muscular system, Digestive system, Circulatory system, Respiratory system, Excretory system, Endocrine system, Nervous system and Reproduction. Also knowledge about Nutrition and dietetics.
- 3. Understand the knowledge of nature ,characteristics and development of Indian philosophy. Indian Philosophical systems like Vedic thought, Upanishad, Shad darshan, Shrimad Bhagwad Geeta, Samkhya karika and Patanjali Yoga Darsana.
- 4. Understand the knowledge about Definition of psychology, Methods of psychological sciences like Introspection method, Observation method, Case study method and Observation method. To awre of Scope and substance of Indian Psychology, Cognitive process like Sensation, Perception, Attention, Memory, Language, Thinking, Concept formation and creativity, Extra sensory perception, Fundamentals of Attitudes, learning, motivation and emotion. Additionally knowledge of Yoga Psychology and Definition& characteristics of Personality and Indian approaches to Personality
- 5. Acquire practical and theoretical skills of Kriyas, Asanas, Mudras, Bandas, Pranayamas and meditation.
- 6. Acquire comprehensive medical knowledge of the disease and it's Yogic Management. All the diseases are connected with different systems, students will have understanding and knowledge of sign, symptoms, prevalence and their Patho-physiology, medical management and total rehabilitation with Integrated approach of Yoga therapy.
- 7. Recognise the common health problems consulting a physician.
- 8. Become aware of the research advances and developments in the field of Yoga.

- 9. Acquire a spirit of scientific inquiry and oriented to the principles of research methodology
- 10. Become proficient by developing scientific temper and experience
- 11. Plan and design a module of yoga for a particular problem
- 12. Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the scientific norms and expectations
- 13. Improve skills as a self directed learner; recognise continuing educational needs, select and use appropriate learning resources
- 14. Demonstrate competence in basic concepts of research methodology and be able to critically analyse relevant published research literature
- 15. Work towards realization of health for all, as a national goal through Yoga
- 16. To understand the medical ethics and never prescribe a module without consulting a doctor
- 17. To become well versed in research and improve the skills of carrying research with medical researchers in the field of yoga
- 18. To demonstrate the usefulness of yoga through contiguous effort and encourage a patient to practice yogic techniques without fail
- 19. To convince a patient to understand the root cause of his / her problem as Yoga believes in the concept 'identification of a disease is 50% cure'

# SCHEME OF EXAMINATION FOR MSc. YOGA SCIENCE AND THERAPY (YST)

# STUDY (CREDIT BASED SEMESTER SYSTEM)

(Implemented from academic session 2021-22)

				S	EMESTER	ΙI				
S. No.	Course No.	Subject	Title		ching Week			Marks		
				L-T-P	Credits	The	eory	Prac	ctical	Total
						Internal	External	Internal	External	Marks
1	MYST 101	Foundation of Yoga	PC	6-0-0	6	30	70			100
6	MYST 102	Hatha Yogic Texts	PC	6-0-0	6	30	70			100
3	MYST 103	Human Anatomy & Physiology- I	PC	6-0-0	6	30	70			100
4	MYST 104	Human Anatomy & Physiology- II	PC	6-0-0	6	30	70			100
5	MYST 105	Research Methodology	PC	6-0-0	6	30	70			100
6	MYST 106P	Practical- Yoga Skill and Prowess-I	PC	0-0-12	6			30	70	100
	,	Total Credits			36	150	350	30	70	600

				SI	EMESTER	II					
S. No.	Course No.	Subject	Title		ching Week	Marks					
				L-T-P	Credits	The	eory	Pra	ctical	Total	
						Internal	External	Internal	External	Marks	
1	MYST 201	Patanjala Yoga Darshan	PC	6-0-0	6	30	70			100	
2	MYST 202	Yoga Philosophy	PC	6-0-0	6	30	70			100	
3	MYST 203	Yoga Therapy for Common Ailments –I	PC	6-0-0	6	30	70			100	
4	MYST 204	Yoga Therapy for Common Ailments –II	PC	6-0-0	6	30	70			100	
5	MYST 205P	Practical- Yoga Skill & Prowess- II	PC	0-0-12	6			30	70	100	
6	MYST 206P	Practical- Methods of Scientific Writing and Synopsis presentation	PC	0-0-12	6			30	70	100	
		Total Credits	<u> </u>		36	120	280	60	140	600	

				SE	MESTER	III					
S. No.	Course No.	Subject	Title		ching Week	Marks					
				L-T-P	Credits	The	eory	Prac	ctical	Total	
						Internal	External	Internal	External	Marks	
1	MYST 301	Yoga & Naturopathy	PC	6-0-0	6	30	70			100	
2	MYST 302	Health and Yogic Diet	PC	6-0-0	6	30	70			100	
3	MYST 303	Bio- statistics	PC	6-0-0	6	30	70			100	
4	MYST 304	Methods of Teaching Yoga and Value Education	PC	6-0-0	6	30	70			100	
5	MYST 305P	Yoga Therapy Techniques- Practical cum Viva-voce	PC	0-0-12	6			30	70	100	
6	MYST 306P	Field training- Practical	PC	0-0-12	6			100		100	
	,	Total Credits			36	120	280	130	70	600	

				SE	EMESTER	IV				
S. No.	Course No.	Subject	Title		ching Week		Marks			
				L-T-P	Credits	The	eory	Prac	ctical	Total
						Internal	External	Internal	External	Marks
1	MYST 401	Shrimad Bhagwad Geeta and Samkhya Karika	PC	6-0-0	6	30	70			100
2	MYST 402	Yogic Counselling	PC	6-0-0	6	30	70			100
3	MYST 403	Yoga and Mental Health	PC	6-0-0	6	30	70			100
4	MYST 404	Integrated Alternate Therapy	PC	6-0-0	6	30	70			100
5	MYST 405P	Dissertation	PC	0-0-24	12				100	100
6	MYST 406P	Advanced Yoga Technique- Practical cum Viva-voce	PC	0-0-12	6			30	70	100
	,	Total Credits			42	120	280	30	170	600

# MSc. Yoga Science and Therapy

## Semester-I

# **MYST 101- Foundation of Yoga**

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 101	Foundation of Yoga	PC	6-0-0	6

<u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment, Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

# **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To explain Yoga and its important streams and Indian Philosophy.
CO2	To explain brief origin & history of Yoga and essentials of Yoga.
CO3	To appreciate the Yogic way of living, which they can inculcate in their life style and will
	be prepared to teach others the benefits of same.
CO4	To describe life sketches and contributions of eminent Yogi's in the field of Yoga.

# **Course Content**

# **Unit-I: Introduction:**

- Yoga it's Meaning and Definition.
- Aim and Objectives of Yoga
- Origin, history and development of yoga.
- Relevance and scope of Yoga in modern age
- Misconceptions about yoga and their solutions.
- Difference between yogic and non-yogic system of exercises.

# **Unit-II: Essentials of Yoga Practices**

- Disciplines and failures in Yogic Practices
- Place & Timing of Yogic practices
- Diet for Yoga Practitioner: pathya & apathya
- Obstacles in the Path of Yoga Practice
- Sequence for yogic practices

# Unit-III: Types of Yoga: it's brief Introduction

- Hatha yoga
- Raja yoga
- Mantra yoga
- Laya yoga
- Karma yoga
- Gyana yoga
- Bhakti yoga

# Unit-IV: Life sketch & contribution of Eminent Yogi's and Institutes of Yoga

- Maharshi Patanjala, Gorakshanath and Swami Vivekanand
- Swami Kuvalyananda (Kevalyadham, Lonavala)
- Swami Satyanand (Bihar School of yoga)
- Swami Shivananda (Divine Life Society)
- Swami Vivekananda Yoga Anumandhan Samsthan, Banglore (SVYASA), Morarji Desai National Institute of Yoga, Delhi (MDNIY) and Central Council for Research in Yoga & Naturopathy, Delhi, (CCRYN)

# **Essential Readings:**

- 1. Vijnananand Saraswati-Yog Vijyan, Yoga Niketan Trust, Rishikesh, 1998.
- 2. Rajkumari Pandey-Bhartiya Yoga Parampara ke Vividh Ayam, radha publication, ND, 2008
- 3. Swami Vivekanand Jnan, Bhakti, Karma Yoga & Rajyoga, Advait Ashram, Culcutta 2000.
- **4.** Kamakhya Kumar -Yoga Mahavigyan, Standard publisher, New Delhi.
- **5.** Kalyan (Yogank)- Gita press Gorakhpur, 2002.
- 6. Kalyan (Yoga Tatwank)-Gita press Gorakhpur, 1991.

#### Semester-I

# **MYST 102- Hatha Yogic Texts**

(Based on Hatha Pradipika and Gheranda Samhita)

Course Code	Subject	Title	Teaching hrs/Week		
			L-T-P	Credits	
MYST 102	Hatha Yogic Texts	PC	6-0-0	6	

**Course Assessment Methods** (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe the knowledge of the Yogic practices quoted in Hatha Yoga texts and their
	values and benefits for human being.
CO2	To explain prerequisites of Hatha Yoga, the principles of Hatha Yoga and essential Hatha
	Yoga text.
CO3	To explain the various Yoga practices described in Hatha Pradipika.
CO4	To explain the various Yoga practices described in Gheranda Samhita.

## **Course Contents**

# Unit-I: Hatha Pradipika-I

- Hatha yoga Its definition & objectives.
- Origin & tradition of Hatha yoga.
- utility of hatha yoga
- Place, Environment & Season for Hatha sadhana.
- Aids & Obstructions to Hatha sadhana.
- Prohibited & conductive food in Hatha sadhana
- Asana in Hatha Prdeepinka: Types, Technique, Process and Benefits
- Pranayama in Hatha Prdeepinka: Types, Technique, Process and Benefits

# Unit-II: Hatha Pradipika-II

- Shatkarma: Objectives, Types, Techniques, Process and Benefits
- Mudra &Bandhas: Objectives, Types, Techniques, Process and Benefits
- concept of Samadhi
- concept of nadanusandhana
- Nature of Kundalini and methods of awakening

#### Unit-III: Gheranda Samhita- I

- Place, Environment & Season for Hatha sadhana.
- Prohibited & conductive food in Hatha sadhana
- Introduction to saptasadhana
- Shatkarma: Objectives, Types, Techniques, Process and Benefits
- Asana: Objectives, Types, Techniques, Process and Benefits

# Unit-IV: Gheranda Samhita- II

- Mudra: Objectives, Types, Techniques, Process and Benefits
- Pratyahar: Prohibited & conductive food in Hatha sadhana
- Pranayama: Objectives, Types, Techniques, Process and Benefits
- Dhyan: Objectives, Types, Techniques, Process and Benefits
- Samadhi: Objectives, Types, Techniques, Process and Benefits

- 1. Hatha Yoga Pradeepika-Swami SatyanandaSaraswati, Bihar school of Yoga, Munger
- 2. Hatha Pradeepika- Swami Kuvlyanand, Kevlyadham, Lonavala
- 3. Gherand Samhita- Swami Satyananda Saraswati, Bihar school of Yoga, Munger
- 4. Gherand Samhita- Swami Digamberanand, Kevlyadham, Lonavala

# Semester-I

# MYST 103- Human Anatomy & Physiology- I

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 103	Human Anatomy & Physiology- I	PC	6-0-0	6

Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment, Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

## **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe inclusive knowledge of the gross structure and development of human body.
CO2	To provide a basis for enhancing the knowledge of body's structure and function.
CO3	To get familiarized with the structure of the different systems in the human body.
CO4	To illustrate Anatomy and Physiology of various systems.

# Unit -1: Cell, Tissue & Immune system

- Cellorganelles-Mitochondria, Glogibody, ER, Lysosome, Peroxisome, Centrosome, Plasma membrane, cytoplasm, Nucleus-Nuclear membrane, chromosome, nucleolus, DNA&RNA
- Homeostas, Transport across cell membrane
- Tissue: Types,Structure and function
- Immunity: Innate immunity, Acquired immunity,
- Allergy, hypersensitivity and immunodeficiency,
- Psycho-neuro-immunology.

# **Unit-2:** Muscular-skeletal system

- Anatomy of the Skeleton
- Classification of bones-Axialbones and appendicular bones
- Types of joint–Synovial joints and Fibrous joint
- Structure of synovial joints
- Types of Musclein the body(striate,Smoothmuscle,Cardiacmuscle)
- Mechanism of muscle contraction
- Neuromuscular junctions

# **Unit-3: Respiratory system**

- Respiratory system of human-Nose, nasalcavity, pharynx, trachea, lyrnx, bronchioles, lungs
- Mechanism of breathing(Expirationandinspiration)
- Transport of respiratory gases(transport of oxygen and transport of carbondioxide)
- Regulation of respiration
- Pulmonary ventilation

# Unit-4: Cardiovascular system

- Anatomy of heart
- Functional anatomy of blood vessels
- Composition and function of blood–Plasma, RBC, WBC and Platelet
- Properties of cardic muscle
- Generation and conduction of cardic impulses
- Cardiacoutput and cardiaccycle
- Bloodpressure and regulation of blood pressure
- Organisation of system icandpulmonarycirculation

- 1. Anatomy and physiology for nurses, Ross and Wilson
- 2. Anatomy and physiology for nurses- A. K. Jain
- 3. Manav sharer Rachana evam KriyaVigyan, AbrarAhemad, SadabAlam and Asish Mahavar, Vardhaman Publishers
- 4. Basic Anatomy and Physiology- A. K. Jain, second edition APC publications.

# <u>Semester-I</u> MYST 104- Human Anatomy & Physiology- II

Course Code	Subject	Title	Teaching hrs/Week		
			L-T-P	Credits	
MYST 104	Human Anatomy &	PC	6-0-0	6	
	Physiology- II				

# Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

# **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able to:
CO 1	To describe inclusive knowledge of the gross structure and development of human body.
CO2	To provide a basis for enhancing the knowledge of body's structure and function.
CO3	To get familiarized with the structure of the different systems in the human body.
CO4	To illustrate Anatomy and Physiology of various systems.

# Unit-1: Digestive system, Nutrients and Metabolism

- Digestive system of human-Mouth, bucklecavity, pharynx, oesophagus, stomach, largeintestine, smallintestine, anus
- Associated glands-Liver, Pancreas, salivary glands, gallbladder
- Physical digestion-Mastication, swallowing, peristalsis
- Chemical digestion- Digestion of carbohydrate, fats and protein
- Absorption of carbohydrate, fats and protein
- Gastro-intestinal motility,
- Gastro intestinal hormones
- Functions of colon (symbiosis),
- Nutrients- Carbohydrates, Fats, Proteins, Minerals, Vitamins, Dietary fibre,
- Balanced diet
- Metabolism: catabolism and anabolism

# **Unit2**: Excretory system

- Excretory system of human-Kidney, Ureter, urinary bladder, urethra
- Structure of nephron
- Mechanism of urin eformation-Ultra-filtration, selectivere-absorption, tubular secretion
- Water balance: regulation of water intake, water output and fluid volume
- Renal mechanisms for the control of blood
- Diuretics and Micturition

# Unit-3: Endocrine system & Reproductive system

Structure, location, secretion (hormones) and functions of important of end ocrineglands:

- Hypothalamus,
- Pituitary,
- Thyroid and parathyroid gland
- Adrenal,
- The endocrine pancreas,
- Pineal gland
- Secretion and functions of Testis and Ovaries
- Basic anatomy of reproductive system
- Menstrual cycle,
- Male and Female sex hormones,
- Pregnancy & Lactation

# **Unit-4: Nervous system & Special senses**

- Introduction to nervous system,
- Neuron: structure, types and functions
- Classification of nerve fibres
- Nerve conduction synaptic transmission
- Central nervous system: brain (fore brain, mid brain and hind brain) and spinal cord
- Autonomic Nervous system: sympathetic and para sympathetic
- Peripheral Nervous System: spinal and cranial nerves
- Basics about special senses: Eye (vison), ear (hearing) and tongue (taste)

- 1. Anatomy and physiology for nurses, Ross and Wilson
- 2. Anatomy and physiology for nurses- A. K. Jain
- 3. Manav sharer Rachana evam KriyaVigyan, AbrarAhemad, SadabAlam and Asish Mahavar, Vardhaman Publishers
- 4. Basic Anatomy and Physiology- A. K. Jain, second edition APC publications.

#### Semester-I

# **MYST 105- Research Methodology**

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 105	Research Methodology	PC	6-0-0	6

# Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

# **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe the basic theoretical concepts of conducting scientific research.
CO2	To describe basic concepts of research methodology process of research designing a scientific study.
CO3	To describe basic statistical concepts and specific statistical tests for analysis.
CO4	To pursue higher research.

# **Course Contents**

#### Unit I. Research Methodology Concepts-I

- **Introduction to research methodology**—definition of research, types of research, need for Yoga research
- The research process
- **Literature review**—Purpose, Process, digital source: PubMed, etc., presentation of literature review
- **Ethics of research**—Laboratory ethics, Publication ethics, Ethical bodies—IEC& IRB, Guidelines for good clinical practice
- Scales of measurement—nominal, ordinal, interval, ratio
- **Data collection methods**: Observation, Interview, psychological tests, questionnaire, physiological tests, and archive

# Unit II. Research Methodology Concepts-II

- Sampling methods Population and Sample; Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling
- **Methods of controlling biases**-Randomization

- Types of variables- Independent, dependent, confounding variable
- Types of research design–Experimental designs, cross sectional design, Casestudy,
- **Survey Reliability:** Test-Retest Reliability, Internal Consistency, Internater Reliability
- Validity: Construct Validity, FaceValidity, Content Validity, Criterion Validity, Convergent and Discriminant Validity
- Issues of bias and confounding
  Selectionbias, Recall bias, Observer or measurement bias, Publication bias

# **Unit –III: Statistical Concepts–I**

- Descriptive statistics
- Inferential statistics
- Null Hypothesis SignificanceTesting: hypothesis and nullhypothesis
- Statistics and Parameters
- Sample and Population
- Generalization
- Onetailed, two tailed hypothesis
- Types of Error sand its control
- Central Limit Theorem

# Uni- IV: Statistical Concepts-I

- Point estimate and interval estimate
- Power analysis :Effectsize, samplesize
- p-value
- Confidence interval
- Statisticaltests and design
- Assumptions of tests
- Statistical tests for various designs: Correlation, proportions, paired-sample and independentsamplet-tests, Chi-Squaretests, ANOVA, Repeated Measures ANOVA, parametric and non-parametrictests.

- i. CRKothari.(2009).Research Methodology: Methods and Techniques. New Age International (P) Ltd.New delhi.
- ii. R.L.Bijlani.(2008).Medical Research: AllYouWanted to Know But Did Not Know Who to Ask.JaypeeBrothers Medical PublishersPvt.Ltd.New delhi
- iii. Zar,J.H.,&Zar.(1999).Biostatistical Analysis. Pearson Education.New Delhi

# <u>Semester-I</u> MYST 106P- Practical- Yoga Skill and Prowess-I

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 106P	Practical- Yoga Skill and Prowess-I	PC	0-0-12	6

Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To perform all the asana, pranayama, mudra, bandha and kriya.
CO2	To impart knowledge about the prevention of health problems by promoting positive
	health through Yoga practices
CO3	To describe the underlying mechanisms of Yoga practices.
CO4	To illustrate how to strengthen the different systems using Yoga which will help them to
	prevent health problems and promote positive health.

# **Course Contents**

# Unit-I: Prayer, Sithilikarana Vyayama, Breathing Practices

10 Marks

Prayer

Surya Namaskara

# Sithilikarana Vyayama

- Simple Jogging---Mukha Dhouti
- Forward jogging
- Backward jogging
- Side Jogging
- Twisting

# **Breathing Practices**

- Hands in and out breathing
- Hand stretch Breathing
- Ankle stretch Breathing
- Dog breathing

- Rotation of arms
- Forward & backward bending
- Back stretch
- Side Bending
- Neck Movement
- Rabbit breathing
- Tiger Stretch
- Tiger Breathing

# **Unit-II: Kriya and Meditation**

• Neti: Jal Neti and Rubber Neti

• Dhauti: Vaman

• Kapalbhatti: Vata karma and Vyut Karma

10+5 Marks

• Breath meditation, Om Meditation

# Unit-III Asana Standing Asana

- Tadaasana
- Triyaktadasna
- Katichackrasana
- Vrikshaasana
- Trikonasana

# **Sitting Asana**

- Dandasana
- Vakrasana
- Ardhamatesendryasana
- Akarnadhanurasana
- Mrjariasana
- Vygrasana
- Gomukhasana
- Vajarasana

# **Supine Asana**

- Uttanpadasana
- Ardha-Halasana
- Halasana

#### Asana

- Salabhasana
- Makrasana

## Unit IV: Pranayama and Mudra Bandha

# Pranayama

- Naddishodhan
- Suryabhedan'
- Chandrabhedan
- Mudra and Bandha
  - Moolbandha
  - Jalndharbandha
  - Uddiyanbandha
  - Ashwani Mudra

- Shankatasana
- Utkatasana
- Urdhavhasttotansana
- Sirshpadanghusthasana

20- Marks

- Padhashasana
- Ardha-Ustrasana
- Sashankasana
- Supta-Vajrasana
- Padmasana
- Toloangulasana
- Utthithapadmasana
- Matsyasana
- Naukasana
- Setubandhasana
- Shavasana
- Dhanurasana
- Vipratnaukasana

10+5 Marks

- Sheetali
- Sheetkari
- Shambhavi Mudra
- Vipratkarni Mudra

Viva-voce 10 Marks

- 1. Asana, Mudra, Pranayama and Bandha- Swami Satyanada Saraswati, BSY, Munger
- 2. Light on Yoga, BKS Iyenger
- 3. Hatha Yoga Pradeepika, Swami Satyanada Saraswati, BSY, Munger

# MSc. Yoga Science and Therapy Semester-II

# MYST 201 - Patanjala Yoga Sutra

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 201	Patanjala Yoga Sutra	PC	6-0-0	6

# **Course Assessment Methods** (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

## **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe Patanjala's contribution to the field of Yoga.
CO2	To get well verse with the Yogic principles and it's meaning mentioned in Patanjala
	Yoga Sutra.
CO3	The students will be able to understand human's psychology as Patanjala had explained.
CO4	To impart knowledge of Eights limbs.

# **Course Contents**

#### **Unit-1: SAMADHI PADA**

- What is Yoga?
- Culmination of Yoga (sutra: 3)
- Vritti and its classifications (sutra: 5-11)
- Necessity of Abhyāsa & Vairāgya (sutra: 12)
- Foundation of Abhyāsa (sutra: 13-14)
- Lower & higher form of Vairagya(sutra: 15-16)
- Definition of Samprajïa and Asamprajïa Samādhi (sutra: 17-20)
- Definition & attribute of Ishwara (sutra: 24-25)
- Pranava and Sādhana for Ishwara (sutra: 27-28)
- Result of Sādhana (sutra: 29)
- Obstacles in the path of Yoga(sutra: 30-31)

#### **Unit-2: SADHANA PADA**

- Discipline for Sādhana (sutra: 1-2)
- Klesha Avidya, Asmita, Räga, Dvesha and Abhinivesha (3-9)
- Modification of the Klesha. Meditation (sutra: 10-11)
- Karmäshaya and its fruits (sutra: 12-14)
- Pleasure and Pains are both painful (sutra: 15-17)
- Four stages of Guënäs (sutra: 19)
- Puruña and Prakåti(20-24)
- Definition of Häna (sutra: 25-26)
- Stages of enlightenment (sutra: 27)
- Necessity of Yoga Practice (sutra: 28)
- Bahiranga Yoga (sutra: 29-55)

#### **Unit-3: VIBHUTI PADA**

- Antaranga Yoga(sutra: 1-3)
- Kaivalya siddhis
- Saàyamaand its results, applications (sutra: -6)
- Parinäma(sutra: 9-13) –Siddhis(sutra: 16-49)
- Attainment of Kaivalya (sutra: 56)
- Sources of Siddhis (sutra: 1)
- Influence of Karma (sutra: 7)

## **Unit-4: KAIVALYA PADA**

- Five means of Siddhis,
- concept of Nirman Chitta
- Manifestation, Source and disappearance of Väsanäs (sutra: 8-11)
- Theory of perception (sutra: 15)
- Mind and its manifestation (sutra: 16-23)
- Heading to Kaivalya (sutra: 27-34)

- 1. Four Chapters of Freedom, Swami Satyanada saraswati, BYS, Munger
- 2. The Science of Yoga, Taimini
- 3. Patanjala Yoga Sutra- Geeta Press Gorakhpur
- 4. Patanjala Yoga Sutra- Nandalal Dashora

**Semester-II** 

# MYST 202- Yoga Philosophy

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 202	Yoga Philosophy	PC	6-0-0	6

# <u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks **Question paper will be in both English and Hindi languages.** 

## **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	to give comprehensive knowledge about therapeutic basis of yoga as mentioned in
	ancient literature including Vedās, Upanishads, and shat darshanas etc.
CO2	To get well verse with the essence of Vedas and Upanishads.
CO3	To adopt it as their life style.
CO4	To teach others the benefits of such lifestyle.

# **Course Contents**

## **Unit-1: Introduction to Yoga Philosophy:**

Vedas: meaning, definition, types and concept of yoga in:

- Rig veda
- Yajur Veda
- Sama veda
- Atharva veda
- Upveda's

# Unit-2: Yoga Philosophy in Upanishads - I

• **Ishavasyopanishad:**Concept of Karmanishta; Concept of Vidya and Avidya; Knowledge of Brahman; Atma Bhava.

- **Mundaka Upanishad:** Two approaches to Brahma- Vidya- Para and Apara; The greatness of Brahmavidya; Worthlessness of Selfish-karma; Tapas and Gurubhakti; The origin of creation, the ultimate aim of Meditation- Brahmanubhuti.
- Katha Upanishad: Definition of Yoga; Nature of Soul; Importance of Self Realization.
- **Prashna Upanishad:** Concept of Prana and rayi (creation); Panchapranas; The six main questions;
- **Chhandogya Upanishad:** Om (udgitha) Meditation; Shandilyavidya.

# Unit-3:Yoga Philosophy in Upanishads-II

- Swetaswataropanishad: (Chapter II) Techniques and Importance of Dhyanyoga, suitable place for Dhyana, sequence of pranayama & its importance, Prior symptoms of Yogasiddhis, Importance of Yogasiddhis, Tattvajna, (ChapterVI) Nature of God, techniques for Realization, Attainment of liberation.
- Yogakundali Upanishad: Methods of Pranayama Siddhi, Types of Pranayama, means of Self-realization.
- **Nadabindoopanishad**: Hansavidya: description of various limbs of Omkar, 12 matras of omkar and its results of their application with Pranas, Types of nadas, nature of nadanusandhan sadhana, state of Manolaya.
- **Dhyanbindoopanishad**: importance of Dhyanayoga, Nature of Pranav, Techniques of Pranav meditation, Shadangyoga, Atmadarshan through Nadanusandhan.procedures of Dhyana and its results.
- Yogarajopnishad: Mantrayoga, Layayoga, Hathayoga, Rajayoga, nine chakras,

# **Unit-4: Yoga Philosophy in Darshnas:**

- General Introduction
- Astik and Nastik Darshan
- Yoga and Samkhya Darshan
- Nayaya and Vashesik Drashan
- Memansa and Vedant darshan

- 1. 108 Upanishad: Acharya Shriram Sharma, Yugnirman Yojana, Vistar trust, Mathura
- 2. Ten major Upanishads: Geeta press, Gorakhapur
- 3. Ishadi Nau Upanashida, Geeta press, Gorakhapur
- 4. Rig veda, Acharya Shriram Sharma, Yugnirman Yojana, Vistar trust, Mathura
- 5. Yajur veda, Acharya Shriram Sharma, Yugnirman Yojana, Vistar trust, Mathura
- 6. Sama veda, Acharya Shriram Sharma, Yugnirman Yojana, Vistar trust, Mathura
- 7. Athra veda, Acharya Shriram Sharma, Yugnirman Yojana, Vistar trust, Mathura
- 8. Shatdarshana Sw Sukhabodhananda RK mat publications

<u>Semester-II</u>

MYST 203-Yoga Therapy for common ailments -I

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 203	Yoga Therapy for common ailments –I	PC	6-0-0	6

# **Course Assessment Methods** (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

# **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	Independently handle a patient and administer yoga therapy;
CO2	To appreciate the relative contribution of each organ system to the homeostasis.
CO3	Illustrate the physiological response and adaptations to environmental stresses; List physiological principles underlying pathogenesis and disease management.
CO4	To explain the sign, symptoms, prevalence and their Patho-physiology, medical management and total rehabilitation with Integrated approach of Yoga therapy.

## **Course Contents**

#### **Unit-1: Introduction to common ailments**

- i. Introduction to stress
- ii. Physiology of stress
- iii. Psychosomatic ailments
- iv. Introduction to Yoga therapy-Adhija Vyadhi concept, IAYT

## **Unit-2: Musculo-Skeletal Disorders**

- i. BackPain
  - A. Classification of backpain: organic and functional
    - a) Lumbar Spondylosis
    - b) Inter vertebral discprolapse(IVDP)

- c) Spondylolis thesis
- d) Spondylitis
- e) Psychogenic-Lumbago
- B. Medical Management
- C. Yogic Management
- ii. Neck pain
  - A. Classification
    - a) Cervical Spondylosis, radulopathy
    - b) Functional neck pain
    - c) Whiplashinjury
  - B. Medical Management
  - C. Yogic Management
- iii. Arthritis
  - A. Classification
    - a) Rheumatoid Arthritis
    - b) Osteoarthritis
  - B. Medical Management
  - C. Yogic Management
- iv. Muscular Dystrophy
  - A. Medical Management
  - B. Yogic Management
- v. Evidence based Yoga therapy for musculo-skeletal Disorders

# **Unit-3:Respiratory Disorders**

- i. Introduction to Respiratory disorders
  - a. Brief classification-Obstructive, Restrictive, infectious and inflammatory
  - b. Introduction to Pulmonary function tests and their principles
- ii. Bronchial Asthma
  - A. Definition, Pathophysiology, Classification, Clinical Features,
  - B. Medical Management
  - C. Yogic Management
- iii. Allergic Rhinitis & Sinusitis
  - A. Definition, Pathophysiology, Classification, Clinical Features,
  - B. Medical Management
  - C. Yogic Management
- iv. Chronic Obsstructive Pulmanary Disease (COPD)
  - A. Chronic Bronchitis
    - a) Definition, Pathophysiology, Classification, Clinical Features,
    - b) Medical Management
    - c) Yogic Management
  - B. Emphysema
    - a) Definition, Pathophysiology, Classification, Clinical Features,
    - b) Medical Management
    - c) Yogic Management
- v. Evidence based Yoga therapy for Respiratory Disorders

## **Unit-4: Cardiovascular system**

- i. Introduction to Cardiovascular Disorders
- ii. Hypertension
  - a. Definition, Pathophysiology, Classification, Clinical Feature
  - b. Medical Management
  - c. Yogic Management
- iii. Atherosclerosis/Coronary artery disease
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- iv. Ischemic Heart disease-Anginapectoris/Myocardial Infarction
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- v. Evidence based Yoga therapy for Cardiovascular Disorders

- i. Yoga for Bronchial Asthma Dr H R Nagendra, R Nagaratna, SVYP
- ii. Yoga for Hypertension and Heart Diseases Dr H R Nagendra, R Nagaratna, SVYP
- iii. Yoga for Diabetes Dr H R Nagendra, R Nagaratna, SVYP
- iv. Yoga for Obesity Dr H R Nagendra, R Nagaratna, SVYP
- v. Integrated approach of yoga therapy for positive health-Dr. R Nagaratha, Dr. H R. Nagendra
- vi. Yoga for common disorders- Swami Koormananda Saraswati

<u>Semester-II</u>

MYST 204-Yoga Therapy for common ailments -II

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 204	Yoga Therapy for common ailments –I	PC	6-0-0	6

<u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

# **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

# **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:		
CO 1	Independently handle a patient and administer yoga therapy;		
CO2	To appreciate the relative contribution of each organ system to the homeostasis.		
CO3	Illustrate the physiological response and adaptations to environmental stresses; List physiological principles underlying pathogenesis and disease management.		
CO4	To explain the sign, symptoms, prevalence and their Patho-physiology, medical management and total rehabilitation with Integrated approach of Yoga therapy.		

## **Course Contents**

# **Unit-1: Gastro Intestinal Disorders**

- i. Acid Peptic Disease (APD)
  - a. Introduction to APD: Gastritis-Acute&Chronic, Dyspepsia, Peptic Ulcers
  - b. Clinical Features
  - c. Medical Management
  - d. Yogic Management
- ii. Constipation and Diarrhea
  - a. Definition, Pathophysiology, Clinical Features
  - b. Medical Management
  - c. Yogic Management

- iii. Irritable Bowel Syndrome
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- iv. Inflammatory Bowel Disease
- v. Ulcerative colitis & Crohn's diseases
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- vi. Evidence based Yoga therapy for GastroIntestinal Disorders

# Unit 2: Excretory system, Obstetrics and Gynaecological Disorders

- i. Chronic Renal Failure
  - a. Causes, clinical features
  - b. Medical management
  - c. Yogic Management
- ii. Renal Stones
  - a. Medical management
  - b. Yogic Management
- iii. Irritable Bladder
  - a.Medical management
  - b. Yogic Management
- iv. Menstrual disorders: Dysmenorrhea, Oligomenorrhea, Menorrhagia
  - a. Definitions, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- v. Pre-menstrual Syndrome
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- vi. Yoga for Pregnancy and Childbirth
  - a. Introduction to pregnancy, Complicated pregnancies: PIH, Gestational DM
  - b. Ante-natalcare
  - c. Post-natalcare
- vii. Infertility-male and female PCOS
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- viii. Evidence based Yoga therapy for Excreatory, Obstetrics and Gynaecological Disorders

## **Unit-3: Endocrine system**

- i. Diabetes Mellitus(I&II)
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- ii. Hypo and Hyper-thyroidism
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b.Medical Management
  - c.Yogic Management

# iii. Obesity

- a. Definition, Pathophysiology, Classification, Clinical Features
- b. Medical Management
- c. Yogic Management
- iv. Metabolic Syndrome
  - a. Definition, Pathophysiology, Classification, Clinical Features
  - b. Medical Management
  - c. Yogic Management
- v. Evidence based Yoga therapy for Endocrinal and Metabolic disorders

# **Unit-4: Psychological Disorders**

- I. Neurological Disorders:
  - i. Headaches: Migraine and Tension headache
    - a. Causes, Classification, clinical features
    - b. Medical management
    - c. Yogic Management
  - ii. Cerebrovascular accidents
    - a. Causes, clinical features
    - b. Medical management
    - c. Yogic Management
  - iii. Epilepsy; pain; Autonomicdys functions
    - a. Causes, clinical features
    - b. Medical management
    - c. Yogic Management
  - iv. Parkinson'sdisease
    - a. Causes, clinical features
    - b. Medical management
    - c. Yogic Management
  - v. Evidence based Yoga therapy for Neurological Disorders

#### II. Psychiatric disorders

Introduction to psychiatric disorders, classification—Neurosis, Psychosisi.

i. Neurosis

A. Anxiety disorders

a. Generalisedanxiety disorder

b. PanicAnxiety

c. ObsessiveCompulsive Disorder

d. Post-traumaticstressdisorder

e. Phobias

f. Medical Management

g. Yogic Management

ii. Psychosis

d. Schizophrenia

e. Bipolar affective disorder

f. Medical Management

g. Yogic Management

**B**.Depression

a. Dysthymia

for

b. Major depression

c. Medical Management

d. Yogic Management

iii. Evidence

based Yoga

therapy Psychiatric

disorders

books:

#### **Reference books:**

i. Yoga for Pregnancy – Dr H R Nagendra, R Nagaratna, Dr Shamanthakamani, SVYP

ii. Yoga for Digestive Disorders – Dr H R Nagendra, R Nagaratna, SVYP

iii. Yoga for Arthritis – Dr H R Nagendra, R Nagaratna, SVYP

iv. Yoga for Back Pain - Dr H R Nagendra, R Nagaratna, SVYP

v. Yoga for Depression - Dr H R Nagendra, R Nagaratna, SVYP

vi. Yoga practices for Anxiety and Depression - Dr H R Nagendra, R Nagaratna, SVYP

vii. Yoga for Cancer - Dr H R Nagendra, R Nagaratna, SVYP

viii.Integrated approach of yoga therapy for positive health-Dr. R Nagaratha, Dr. H R Nagendra – SVYP

ix. Yoga for common disorders- Swami Koormanand Saraswati, BSY, Bihar

# <u>Semester-II</u> MYST 205P- Practical- Yoga Skill and Prowess-II

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 205P	Practical- Yoga Skill and Prowess-II	PC	0-0-12	6

<u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To understand advanced Yoga techniques.
CO2	To impart knowledge about the prevention of health problems by promoting positive health through Yoga practices.
CO3	To understand the underlying mechanisms of yoga practices.
CO4	To illustrate how to strengthen the different systems using Yoga which will help them to prevent health problems and promote positive health.

#### **Course Contents**

#### Unit-I: Prayer, and Sukshma Vyayama

10 Marks

Suksha Vyayama By Swami Dhirendra Bharamachari

#### **Unit-II: Kriya And Meditation**

10 +5 Marks

• Neti: Sutra Neti

• Dhauti: Danda and Vastra

• Kapalbhatti: Sheet Karma

• Trataka

Nauli

• Mind Sound Resonance Technique

• Soham Sadhana

Unit-III Asana 20 Marks

#### **Standing Asana**

Garudasana

Natarajasana

Vatayanasana

Murdhasana

- Ekpadangusthasana
- Chackrasana
- Sarvangpusthi

#### **Sitting Asana**

• Ardhamatsendryasana

• Akarnadhanurasana-II

• Purna-Ustrasana

• Purnmatsenyandrasana

- Rajkapot
- Mayurasana
- Bakasana
- Sirsasana

- Uttankoormasana
- Kukkutasana

#### Yogamudrasana

#### **Supine Asana**

- Karanpeedasana
- Sarvangasana

- Setubandhasarvangasana
- Markatasana

#### **Prone Asana**

• Bhungasana

Kapotasana

#### Unit-IV: Pranayama and Mudra Bandha

#### Pranayama

- Bhastrika
- Bhramari
- Anulom-Vilom
- Breathing (VibhagyiPranayam)
- Ujjayi
- Udgeet
- Sectional

#### **Mudra and Bandha**

- Shambhavi Mudra
- Mahamudra
- Kaki Mudra
- Mahaveda
- Mahabandha

Viva Voce: 10 Marks

#### Including all the practices described in Semester-I.

#### **Reference Books:**

- 1. Asana, Mudra, Pranayama and Bandha- Swami Satyanada Saraswati, BSY, Munger
- 2. Light on Yoga, BKS Iyenger
- 3. Hatha Yoga Pradeepika, Swami Satyanada Saraswati, BSY, Munger

10 +5 Marks

<u>Semester-II</u>

#### MYST 206P- Practical- Methods of Scientific Writing and Synopsis presentation (Dissertation)

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 206P	Practical- Methods of Scientific Writing and Synopsis presentation	PC	0-0-12	6

<u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:	
CO 1	To impart practical knowledge on writing and communicating scientific information of various scientific/research investigations.	
CO2	To write their own Synopsis and dissertation.	
CO3	To learn computer Skills such as Microsoft excel, word etc.	
CO4	To write and Present research article, Synopsis through Oral and poster presentations.	

### Course Contents

#### **Unit -1: Writing for Synopsis**

- Research Process An Overview
- Introduction Title, Abstract
- Literature review Types: Review of scriptures and Modern scientific literature, why literature review, how to conduct literature review, use of Pub Med, and other online sources, presentation of literature review.
- Aims and Objectives Statements of aims and objectives, research questions, hypothesis, null hypothesis, rationale of study, operational definition.
- Methods Participants, Inclusion & Exclusion criteria, Design, Intervention, Assessment tools, independent & dependent variables,
- Ethics of research Laboratory ethics, Publication ethics, Ethical bodies IEC &IRB, Guidelines for good clinical practices
- Plan of data extraction and Tabulation (Demo Table)
- Plan for Statistical Analysis
- Use of Mendeley reference manager
- Use of ITRANS 99/krutidev

#### **Unit -2: Writing for Dissertation**

- Dissertation preparation
- Format, Introduction,
- Literature Review (Scriptural and Scientific),
- Aims & Objectives,
- Methods,
- Results and Discussion,
- Conclusion,
- Appraisal,
- References,
- Appendix,
- Text/legend,
- Tables and picture formatting

#### **Unit -3: Presentation Skills**

- MS Word, Excel, Power point
- Presentation of research article
- Presentation of synopsis
- Oral and poster presentations

#### **Unit-4: Synopsis**

Students will prepare their Synopsis and also prepare a PPT and present it.

**Note:** Please note that during this time each student is will write the synopsis under the supervision of a qualified guide and get ready for presentation. It is mandatory for all candidates to present their plan of research work in the presence of internal experts & guide and at the end of semester External expert.

#### **Reference books:**

American Psychological Association. Publication Manual of the American Psychological Association (6th edition), Washington

#### **MSc. Yoga Science and Therapy**

#### Semester-III

#### MYST 301-Yoga & Naturopathy

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 301	Yoga & Naturopathy	PC	6-0-0	6

#### <u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rests of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe various naturopathy practices, their principles and methods.
CO2	To impart the principles of Naturopathy that are compatible to Yoga therapy.
CO3	To integrate Naturopathy with Yoga for recovering from a disease sooner.
CO4	To understand and prescribe the line of treatments employed for relieving the common disease conditions.

#### **Course Contents**

#### **UNIT I: Introduction:**

- Brief history of Naturopathy.
- Meaning & Definition of Naturopathy.
- Principles of Naturopathy.
- Basic elements of Naturopathy.

#### **UNIT II: Principles & Methods**

#### A. Mud Therapy

- Definition Mud Therapy
- Types of Mud
- Preparation and Method of Application
- Benefits
- Indication and Contraindication

#### B. Hydro Therapy

- Introduction to Hydrotherapy
- Physiological and Therapeutic Properties
- Hydrotherapy Interventions: Hip Bath, Steam Bath, Enema, Packs, Compress, Fomentation.

#### C. Sun Therapy

- Definition
- Benefits
- Indication and Contraindication

#### **UNIT III: Principles & Methods of:**

#### A. Massage Therapy

- Definition
- Principles of Massage Therapy
- Types of Massage Therapy
- Preparation and Method of Application
- Benefits
- Indication and Contraindication

#### **B.** Diet Therapy

- Basis of Diet and its type
- Precaution to be taken
- Indications
- Contraindications

#### C. Fasting

- Fasting Therapy
- Type of Fasting
- Importance of Fasting
- Precaution to be taken
- Indications
- Contraindications

#### UNIT IV: Treatment of various disorders by Naturopathy

- Common Cough & Cold,
- Fever
- Constipation
- Spondylitis
- Arthritis.
- Asthma

- Insomnia
- Hypertension
- Diabetes
- Obesity
- Stress.

#### **Essential Readings:**

- 1. K.S. Joshi-Speaking of Yoga and Naturopathy, Orient Paperback, New Delhi, 1990.
- 2. H.K. Bhakru, The complete Hand book of Nature Cure, Jaico Publishing House.
- 3. Dr. Henry Lindlhai-The practice of Nature Cure, CCRYN, New Delhi, 2012.
- 4. Dr. Rakesh Jindal- Prakritik Ayurvigyan, Arogya seva prakashan, Modinagar, U.P.
- 5. Dr. Rudolf Diet and Nutrition, Himalayan Institute Press.
- 6. Principles of Naturopathy- Dr. Bhakru
- 7. Dr. Rudolf Diet and Nutrition, Himalayan Institute Press.

#### Semester-III

#### MYST 302- Health and Yogic Diet

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 302	Health and Yogic Diet	PC	6-0-0	6

Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rests of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe various Swastha Vritta practices, their principles and concepts
CO2	To understand the concept of health, diet and value of nutrition.
CO3	To understand and practice daily regimen, night regimen and seasonal regimen for
	health promotion, disease prevention and age reversal.
CO4	To apply concept of Yogic food as an alternative to treat illness and disease.

#### **Course Contents**

#### **Unit-1: Swastha Vritta (Health and Wellness)**

- Health and Fitness: Definition
- Swastha vritta: Meaning, Definition, Aims and Aspects;
- Wellness: Meaning, Definition, Indicators and dimensions;
- Dincharya (Daily regimen) & Ratricharya (Night Regimen):
- Meaning, definition and sequential elements with their practical applications;
- Ritucharya (Seasonal Regimen): Meaning, Definition, Types with their salient features, Season wise Accumulation,
- Aggravation and Pacification of three Humors (vata, pitta, kapha);
- Season wise Does and Don'ts;
- Application of Dincharya, Ratricharya

#### Unit -2: Basic concepts and components of food and nutrition

- Concept of food,
- Functions of Food;
- Components of Food & their Classification;
- Understanding Nutrition

#### Macro Nutrients -Sources, Functions and Effects on the Body;

- Carbohydrates
- Protein
- Fats

#### Micro Nutrients - Sources, Functions and Effects on the Body;

- Vitamins
- Minerals

#### **Unit – III: Diet, Energy and Metabolism**

- Meaning and Definition of Diet
- Ancient and Modern Classification
- Balanced Diet
- Energy-Basic Concepts, Definition and Components of Energy Requirement,
- Concept of Metabolism, Anabolism, Catabolism,
- Calorie Requirement-BMR, SDA,
- Physical Activity;
- Factors Affecting Energy;
- Requirement and Expenditure,
- Factors affecting BMR.

#### Unit - IV: Yogic concept of diet & nutrition

- General Introduction of Ahara (Diet),
- Concept of Mitahara;
- Definition and Classification in Yogic diet according to traditional Yoga texts;
- Concepts of Diet according to Gheranda Samhita, Hatha Pradeepika and Bhagavad geeta-Rajasic, Tamasic and Sattvic food;
- Guna and Ahara;
- Importance of Yogic Diet in Yog Sadhana;
- Yogic Diet and its role in healthy living;
- Diet according to the body constitution (Prakriti) Vata, Pitta and Kapha.

#### **Reference books:**

- i. Ramesh Bijlani: Eating Wisely and Well, Rupa Publication India Pvt. Ltd, 2012
- ii. Prof. Ramharsh Singh Swashthavritta Vigyan, Chaukhambha Sanskrit Prakashan, Varanasi, 1998.
- iii. Sriram Sharma Acharya- Jivem Sharadah Shatam, Akhand Jyoti Mathura 1998.
- iv. Dr. Rudolf Diet and Nutrition, Himalayan Institute Press.
- v. Prof. Ramharsh Singh-Yog ewam Yogic Chitksha, Chaukhambha Sanskrit Prakashan, Varanasi. 1998.
- vi. Swastha Vritta Vigyan ewam Yogic Chiktsha- Dr. Rakesh Giri, Sikhsha Bharti, Uttrakhand1

#### Semester-III

#### **MYST 303- Bio-statistics**

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 303	Bio-statistics	PC	6-0-0	6

Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rests of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:	
CO 1	To use various data analysis methods and tools.	
CO2	Trained with practical tools employed in research.	
CO3	To write their dissertation and journal article in standard scientific writing standards.	

#### **Course Contents**

#### **Unit-1: Introduction to Statistical Analysis**

- Introduction to data analysis,
- framing steps for data analysis,
- data extraction and cleaning,
- structure of data,
- Introduction to research software and packages(R-Studio or any other)

#### **Unit-2: Exploratory Analyses**

- Missing value analysis
- Outlier analysis
- Descriptive statistics
- Reverse scoring questionnaire data
- Simple and interactive graphs for analysis

#### **Unit-3: Confirmatory Analyses**

- Tests for Assumptions: Normality, Equivalence of Variance, and Independence
- •Running parametric and non-parametric statistical tests using R: correlation, t-test, chi-square tests, ANOVA, post-hoc power analysis
- Graphical presentation of data Bar graph, Pie chart, line diagram, scatter plot

#### **Unit-4: Understanding and Writing Reports**

- Understanding reporting of correlation, chi-square, t-tests, and ANOVA.
- Understanding effects of interactions 1-way, 2-way interactions.
- Understanding graphical representations of results graphs and tables.
- Writing reports for various statistical tests: correlation, chi-square, t-tests, and ANOVA.
- Using APA style for reporting test statistics
- Using R to generate APA style tables.

#### **Reference books:**

- 1.C R Kothari. (2009). Research Methodology: Methods and Techniques. New Age International (P) Ltd. New Delhi.
- 2.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 Joseph Adler, (2010). R in a nutshell. O'Reilly. Cambridge

# <u>Semester-III</u> MYST 304- Methods of Teaching Yoga and Value Education

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 304	Methods of Teaching Yoga and Value Education	PC	6-0-0	6

Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rests of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:	
CO 1	To describe principles, methods, scope and role of teaching Yoga.	
CO2	To teach teaching techniques, class management and lesson planning.	
CO3	To introduce educational tools of Yoga teaching.	
CO4	To teach the concept of Yoga education and values.	

#### **Course Contents**

#### **Unit 1: Principles and Methods Of Teaching Yoga**

- Teaching and Learning: Concepts and Relationship between the two
- Principles of Teaching: Levels and Phases of Teaching
- Quality of perfect Yoga Guru
- Yogic levels of learning, Vidyarthi, Shishya, Mumuksha
- Meaning and scope of Teaching methods
- Factors influencing Teaching methods and Sources of Teaching methods
- Role of Yoga Teachers and Teacher training.

#### Unit 2: Basics of Yoga Class Management Lesson Planning

• Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group)

- Techniques of Individualized
- Teaching Techniques of group teaching
- Essentials of Good Lesson Plan: concepts, needs, planning of teaching
- Models of Lesson Plan
- Action Research of Yoga: Meaning, Roles, Steps in action research in Yoga Teaching;
- Lesson Plan and its Practical applications

#### **Unit 3: Educational Tools of Yoga Teaching**

- Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class etc;
- Classroom problems: Types and Solutions,
- Characteristics and essentials of good Yoga teaching;
- Time table: Need, Types, Principles of Time table construction;
- Time Table for Yoga teaching;
- Meaning, Importance and Types of Educational technology;
- Role of Educational Technology in Yoga.

#### **Unit 4: Yoga and Value Education**

- Concept of Value,
- Definition of value,
- Types of Values;
- Value Oriented Education,
- Value education and its components;
- Value oriented personality,
- Role and function of values in Society;
- Yoga as global value,
- Yoga as value and yoga as Practice;
- Contribution of Yoga towards the development of values.

#### **Reference Books:**

- 1. Swami Satyananda Saraswati: Yoga Education for Children, Bihar Schools of Yoga, Munger, 1990.
- 2. Swami Satyananda Saraswati: A Systematic Course in the Ancient Tantric Techniques of Yoga and Kriya, Bihar Schools of Yoga, Munger, 2004.
- 3. Dr. Gharote M L: Teaching methods for Yogic practices, Kaivalyadhama, Lonavala

## <u>Semester-III</u> MYST 305P: Practical- Yoga Therapy Techniques- Practical cum Viva-voce

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 305P	Practical- Yoga Therapy Techniques- Practical cum Viva- voce	PC	0-0-12	6

Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To describe comprehensive knowledge of therapeutic techniques applicable for various
	ailments.
CO2	To demonstrate usage of therapeutic aspect of Yoga in promotive, preventive, and curative
	therapy, demonstrate each technique prescribed for a disease.
CO3	To explain the working principles behind the techniques prescribed for various diseases.
CO4	To understand contraindications and indications of Yogic practices in order to efficiently
	use Yoga as a therapy and explain the precautions to be taken before practicing the special
	techniques.

#### **Course Contents**

#### Unit-1:

- Yoga Practices for respiratory disorders
- Yoga practices for cardio vascular disorders

#### Unit-2:

- Yoga practices for Endocrinal and metabolic disorders
- Yoga practices for Musculo-skeletal disorders

#### Unit-3:

- Yoga practices for obstetrics and gynecological disorders
- Yoga practices for GID

#### Unit-4:

- Yoga practices for excretory system disorders
- Yoga practices for neurological and psychiatric disorders

#### **Recommended books:**

Yoga for common ailments manual (All series books), SVYP, Bangalore, 2002

Semester-III

#### **MYST 306P: Field Training- Practical**

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 306P	Field Training- Practical	PC	0-0-12	6

#### Course Assessment Methods (Total Marks: 100=Internal 100):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To use practical knowledge of therapeutic techniques applicable for various ailments.
CO2	To demonstrate usage of therapeutic aspect of Yoga in promotive, preventive, and curative
	therapy, demonstrate each technique prescribed for a disease.
CO3	To use Clinical training at Yoga therapy hospital so as to elevate the level of practical knowledge in students.
	knowledge in students.
CO4	To understand contraindications and indications of Yogic practices in order to efficiently use Yoga as a therapy and explain the precautions to be taken before practicing the special
	techniques.

#### **Course Contents**

Each student will spent 6 hours per day for 1 month in hospitals/yoga center/health center (Govt./private) for learning the Yoga treatment of various diseases and he/she will prepare a practical record of learned yoga treatment with minimum of 10 case studies.

#### Case History Writing (Minimum 10 Case Studies)

- Introduction to general parameter
- Introduction to special parameter
- Education of Participant Care
- Psychological analysis by Triguëa and Tridoça,
- (Analysis of Prakåti and Vikåati of participants)
- Data Entry and Data Analysis
- Report Writing
- Case Presentation

#### Format of Case Study Writing is enclosed (ANNEXURE-I).

At the end of the semester student is supposed to submit certificate of one month training to qualify the subject.

#### MSc. Yoga Science and Therapy

#### **Semester-IV**

#### MYST 401-Shrimad Bhagwad Geeta and Samkhya Karika

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 401	Shrimad Bhagwad	PC	6-0-0	6
	Geeta and Samkhya			
	Karika			

**Course Assessment Methods** (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

**Course Objectives & Course Outcomes** 

Sr. No.	At the end of semester, student will be able:
CO 1	To discuss Shrimad Bhagvad Geeta as basic philosophical and theoretical
	foundations of Yoga.
CO2	To relate and implement in every day activities and motivate others to follow Yogic
	style of living.
CO3	To discuss Samkhya karika as basic philosophical and theoretical foundations of
	Yoga.
CO4	To a deeper understanding to Yogic concepts mentioned in them.

#### **Course Contents**

#### Unit-1: Introduction to Bhagavad Gita,

- General Introduction to Bhagavad Gita
- History of Bhagavad Geeta
- Definitions of Yoga, their relevance & Scope
- Importance of Bhagavad Geeta in modern time

#### **Unit-2: Essentials of Bhagavad Gita**

Samkhya and Gyan Yoga

- Karma Yoga
- Bhakti Yoga

#### Concept of

- Atmaswarupa,
- Stithaprajna
- Trividha sradha
- Dharma

#### Unit-3: Introduction to Samkhya darshan-I

- General Introduction to Samkhya karika
- Nature of Dukha
- Introduction to 25 elements
- Praman- Vivechan
- Satkaryavada
- Vyakta-Avyakta
- Causes of Failure

#### **Unit-4: Introduction to Samkhya darshan-II**

- Nature of Gunas
- Purasha Vivechana
- Buddhi k Lakshana and Dharma
- Ahamkara se Sarg Privritti
- Trayodash karana ewam Sukshma sharir
- Mukti vivechana

#### **Reference books:**

- 1. Sadhak sanjeevani- Swami Ramsukha Das, Geeta Press, Gorakhapur
- 2. Bhagavad Geeta- Geeta Press, Gorakhapur
- 3. Shrimad Bhagavad Geeta Yathartharoopa, Swami Prabhupada, Iskon Temple
- 4. Samkhaya Karika—Ishwar Krishna. Chokhamba Publication, Delhi
- 5. Samkhaya Karika- Ishwar Krishna, Motilal Banarasi Das, Delhi

#### **Semester-IV**

**MYST 402-Yogic Counselling** 

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 402	Yogic Counselling	PC	6-0-0	6

#### **Course Assessment Methods** (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	get familiarize with the basic concept of mainline and Yogic counselling.
CO2	To know the importance of counselling in Yoga therapy and the technique of counselling.
CO3	To describe basic concept of Psychology and Psychotherapy and their role in Yogic Counselling.
CO4	To discuss of role of Yoga in development of personality and its concept.

#### **Course Contents**

#### Unit 1 Introduction to Psychology and Cognitive psychology

- Definition of mind according to modern science and yoga;
- comparative understanding of the process of perception, learning, Intelligence, Creativity, memory and emotions according to modern psychology and yoga psychology;

A brief understanding of conventional methods of

- Psychotherapy
- Existential/Humanistic Therapy;
- Psychodynamic Therapy;
- Behavioural Therapy;
- Cognitive Therapy.

#### Unit 2: Yoga for personality development

Meaning and Definition

- Nature of personality
- Determinants of Personality

#### Theories of personality -

- Frued's Psychoanalytic Theory
- Roger's Humanist Theories;
- Eysenck's Theory of Personality
- The Five-Factor Theory of Personality;
- Yoga for total personality development as research data presentations

#### **Unit 3: Yogic Counselling**

• Role of Shuddhi Prakriyas in treatment of illnesses , prevention and promotion of positive Health;

#### Concepts of

- Karma Shuddhi (Yama, Niyama),
- Ghata Shuddhi (Shat-karma),
- Snayu Shuddhi (Asana),
- Prana Shuddhi (Pranayama),
- Indriya and Mano Shuddhi (Pratyahara),
- Chitta Shuddhi (Dharana, Dhyana and Samadhi)

#### Unit 4: Principles and techniques of counselling

- Qualities of a counselor;
- Role of catharsis as understood by modern psychology and counseling;
- Yogic understanding of recognizable and unrecognizable stresses as karma, samskaras
- Methods recommended for cleansing (chitta shuddhi ) in healing,

Yoga techniques to be used during counselling to cope with

- Hyper Sensitive Mind,
- Excessive Speed Of Mind,
- Problems Of Perfectionist Personality,
- Hereditary And Congenital Problems,
- Psychological Conflicts,
- Calamities/ Life Events (Present, Past, Concerns About Future Distressing Events), Ageing Etc

#### **Reference Books**

- i. Introduction to Psychology, , Morgan, C. T., King R. A., Weisze J. R. and Schopler, J. (1987), Mc Graw Hill
- ii. Theories of personality, Hall C. S. Lindzey, G. (1978), New York: Wiley Eastern Limited,
- iii. Raja Yoga Dr H R Nagendra SVYP
- iv. The Secret of Action Dr H R Nagendra SVYP
- v. The Science of Emotions Culture Dr H R Nagendra SVYP

#### Semester-IV

#### MYST 403-Yoga and Mental Health

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 403	Yoga and Mental Health	PC	6-0-0	6

### Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks. **Question paper will be in both English and Hindi languages.** 

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	to undersatand the aspects of mental health in texts such as Shrimad Bhagvad Geeta, Yoga
	Vasistha and Upanishads.
CO2	To explain basic philosophical and theoretical foundations of Yoga and to connect aspects of mental health with them.
CO3	To relate concept of Mental Health in Bhagwat Geeta to treat various mental health issues.
CO4	To describe concept of adhi;s and vyadhi;s and Psychosomatic Ailments with reference to Yoga Vasistha.

#### **Course Contents**

#### **Unit-I: Introduction**

- Concept of Mental Health
- Importance of mental Health
- Crisis Of Mental Health
- Characteristics of Mental Health
- Mind and Conciousness

#### **Unit-2: Bhagwad Geeta**

• General Introduction of Bhagwat Geeta

- Concept of Mental Health in Bhagwat geeta
- Symptoms/characterstics of Mentally Healthy Person
- Gyan Yoga, Karma Yoga and Bhakti Yoga for Mental Health

#### Unit-3: Yoga Vasistha

- General Introduction of Yoga vasistha
- Concept of yoga
- Concept of adhis and vyadhis and Psychosomatic Ailments
- The four Dwarpaals of Freedom
- Jana saptanbhumika(Seven Stages)

#### **Unit- 4: Upanishads**

- Taittiriya Upanishad: Concept of panchakosha
- Kena Upanishad: Self and the mind, Intuitive realization of truth, Moral of yakshayah
- Katha Upanishad: Definition of yoga, Nature of Soul, Importance of self realization
- Prashna Upanishad: The six main Questions
- Mandukya Upanishad: Four Stages of Consciousness

#### Reference books:

- i. 108 Upanishad: acharya Shriram Sharma, Yugnirman Yojana, Vistar trust, Mathura
- ii. Ten major Upanishads: Geeta Press, Gorakhapur
- iii. Sadhak sanjeevani- Swami Ramsukha das
- iv. Bhagwat Geeta- Geeta Press, Gorakhapur
- v. Shrimad BhagwatGeetaYathartharoopa, Swami Prabhupada, Iskon Temple
- vi. Yoga Vasistha, ChokhambhaPrakshan, New Delhi

#### **Semester-IV**

**MYST 404-Integrated Alternate Therapy** 

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST 404	Integrated Alternate Therapy	PC	6-0-0	6

### Course Assessment Methods (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Instruction for paper setting:**

Nine questions are to be set by the examiner. Question No. 1 will be compulsory and based on the entire syllabus (all the four sections). It will contain 7 short answer type questions, each of two marks. Rest of the eight questions are to be given by setting two questions from each of the four sections of the syllabus. A candidate is required to attempt other four questions by selecting one from each of the four sections. All the questions including Q. No. 1 carry 14 marks **Question paper will be in both English and Hindi languages.** 

**Course Objectives & Course Outcomes** 

Sr. No.	At the end of semester, student will be able:
CO 1	To understand concept of Ayurveda and role of Doshas, Dhatus, Malas and Agni.
CO2	To explain the concept of health, disease, ritucharya, dincharya and treatment of disease
	through Ayurvedic system.
CO3	To describe the principles of Integrative medicine such as Ayurveda, Naturopathy, Unani, Siddhas, Homeopathy etc, that are compatible to Yoga therapy.
CO4	To become the best Yoga therapists with the confidence in the application of preventive and curative power of Yoga Therapy.
CO4	To make use of non-invasive, lesser/ nil side effects, well prognosis and most economical treatments of AYUSH compared with the surgical and drug therapy approaches which is inappropriate in many of the NCDs.

#### **Course Contents**

#### Unit-1: Ayurveda

#### (B) Definition of Ayurveda

- Definition of Vedas Introduction of division of Vedas.
- Definition of Ayurveda Different types of Ayu and chronology of Ayurveda

#### (C) Concept of Doshas, Dhatus, Malas and Agni

- Concept of dosha's Vata, Pitta and Kapha
- Concept of dhatu's and mala's
- Concept of agni's Types of agni and concept of Ama.

#### Unit-2: Chikitsa

#### (A) Concept of Chikitsa

- Shishyaguna Concept of Chikitsa chatushpada,
- Qualities of royal physician.
- Dinacharya, rutucharya and rutusandhi- features and significance.

#### (B) Concept of health and disease

- Concept of health according to sushruta.
- Concept of disease and its classification.
- Concept of agryasangrahas

### (C) Concept of drugs in Ayurveda and its formulation

- Concept of drugs in ayurveda, different types of formulations and concept of treatments in ayurveda.
- Panchakarma and its procedures.

#### **Unit-3: Alternative Treatment-I**

#### (A) Manipulative Therapy

- Introduction to Manipulative Therapy
- Types of movement
- Benefits
- Indication and Contraindication

#### (B) Chromo and Magneto Therapy

- Introduction to Chromo therapy
- Physiological and Psychological Effect of Color
- Introduction to magneto therapy
- Physiological and Psychological Effect of magnet

#### (C) Aroma Therapy and Acupressure

- Introduction to Aromatherapy
- Modes of Application
- Indication and Contraindication
- Basis of acupressure and reflexology

#### **Unit-4: Alternative Treatment-II**

#### (B) Siddha

- Brief History of Siddha
- Basic principals of Siddha
- Concept of Siddha
- Mode of action
- Diagnosis and treatment
- Drugs
- Benefits

#### (C) Unani

- Introduction to Unani
- Concept and principles of Unani
- Basic elemements
- Branches of Unani
- Treatment

## (D) Homeopathy

- Brief Introduction and History
- Cardinal Principles
- Philosophy of Homeopathy
- Effectiveness of Homeopathy
- Treatment
- Benefits
- Indication and Contraindication

#### **Reference books:**

- i. Introduction to Ayurveda and Yoga by David Frawley.
- ii. Ashtanga Sangraha by Vagbhata.
- iii. Prof. Ramharsh Singh Swashthavritta Vigyan, Chaukhambha Sanskrit Prakashan, Varanasi, 1998.
- iv. Sriram Sharma Acharya- Jivem Sharadah Shatam, Akhand Jyoti Mathura 1998.

#### **Semester-IV**

#### **MYST 405P: Dissertation**

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST-405P	Dissertation	PC	0-0-24	12

<u>Course Assessment Methods</u> (Total Marks: 100=External 100):

100 marks for external examination.

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To expose them in research and motivate them to conduct scientific research and pursue
	higher research.
CO2	To interpret the data and draw a conclusion from it.
CO3	To develop the skill of writing and communicating to scientific world and establish the
	underlying mechanism of the findings

During this time each student will write the dissertation (research study) under the supervision of a qualified guide from the Department of Physiotherapy and get ready for presentation. It is mandatory for all candidates to present and undergo a viva-voce on basis of their research work and in the presence of internal as well as an external expert.

#### Semester-IV

#### MYST 406P: Advanced Yoga Techniques- Practical cum viva-voce

Course Code	Subject	Title	Teaching hrs/Week	
			L-T-P	Credits
MYST-406P	Advanced Yoga Techniques	PC	0-0-12	6

### <u>Course Assessment Methods</u> (Total Marks: 100=External 70+ Internal 30):

Two Minor Tests each of 20 marks, class performance measured through percentage of lecture attended (4 marks). Assignment Quiz etc. (6 marks) and end semester examination is of maximum 70 marks.

#### **Course Objectives & Course Outcomes**

Sr. No.	At the end of semester, student will be able:
CO 1	To conduct and use practical knowledge about advanced meditation techniques.
CO2	Enhances the growth of personality as an Integrated personality.
CO3	To present a technique effectively based on the condition of a patient.

#### **Course Contents**

- Worksheet writing and correction in a Practical Record.
- Class taking by students and correction.
- Experience writing

Unit- 1: Cyclic Meditation	10 Marks
Unit- 2: Yoga Nidra	10 Marks
<b>Unit- 3: Mind Sound Resonance Technique</b>	10 Marks
Unit-4: Pranic Energisation Technique	10 Marks
Viva-Voce	20 Marks
Practical Record	10 Marks

#### **Reference books:**

- i. Perspective of stress management- Dr. H. R. Nagendra and Dr. R. Nagarathna, SVYP.
- ii. Pranic Energisation Technique- Dr. H R Nagendra, SVYP.
- iii. MSRT Dr H R Nagendra, SVYP.
- iv. Yoga for Cancer Dr.H R Nagendra, Dr. R Nagaratna, SVYP.
- v. Yoga Nidra- Swami Satyananda Saraswati, YPT, Bihar school of Yoga, Munger

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## Annexure-I

## **Case Study Writing Format**

1.	Introduction		
Name	:		
Doctor	in charge	:	
Therap	ist	:	
Consul	tants :		
Subsec	tion	:	
Introdu	action	:	
2.	Introduction to the	e Ailment	
2.1 De	finition:		
2.2 Ca	uses:		
2.3: Sig	gn & Symptoms:		
2.4 Ge	neral Line of treatr	ment:	
3.	<b>Case writing</b>		
Provisi	onal Diagnosis		:
Date o	f Admission		:
Date o	f Discharge		:
3.1.	<u>Demographic Data</u>		
Name,	Gender/Age		:
Marita	l status	:	
Educat	ional qualification	:	
Occupa	ation	:	
3.2.	Presenting Complai	nt(s)	
3.3.	History of present i	llness [HPI]	
3.4.	Co-Morbidity:		

3.5.	Co-Medication:	
3.6.	Allergy History:	
3.7.	Anthropometry:	
Heigh	t	
Weigh	nt	
ВМІ		
Waist		
Hip		
Waist	/ Hip Ratio	
3.8.	Past history of Illness [PHI]	
Childh	nood disease :	
Allerg	ies :	
Accide	ents & injuries :	
Hospi	talization :	
Medio	cation :	
3.9.	Family history of illness	
Pateri	nal :	
Mate	rnal :	
Sibling	g :	
3.10.	Personal history	
Addic	tions if any :	
Nutrit	ion pattern	
i.Veget	arian/non-vegetarian :	
ii.Typica	al daily food intake :	

al daily fluid intake	
nt loss/gain? Amount? :	
ite :	
nation Pattern	
Bowel :	
Bladder :	
Sweat :	
trual history	:
ty- Exercise pattern	
Duration/type of exercise	:
Spare time activity	:
Class Book nottons	
Sleep-Rest pattern :	
Strass history	
<u>Stress filstory</u>	
Vital signs	
<u> </u>	:
blood pressure	•
Physical Examination	
. ,	
·	
·	/
ecific Examination Naturopathy	
	nt loss/gain? Amount? :  itte  nation Pattern  Bowel :  Bladder :  Sweat :  trual history  ty- Exercise pattern  Duration/type of exercise  Spare time activity  Sleep-Rest pattern :  Stress history  Vital signs  Pulse  Respiratory Rate  Blood pressure  Physical Examination  eneral Examination Alopathy  pecific Examination Ayurveda  pecific Examination Ayurveda

## 5. Provisional Diagnosis

Management Plan Pratiprasava
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i.Annamaya	kosha
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ii.Pranamaya kosha

iii.Manomaya kosha

iv.Vijnanamaya kosha

v.Anandmaya Kosha

## 6. Parameters

Variable	Before yoga (BY)	After yoga (AY)	% change
Pulse (Beats/min)			
Respiratory Rate (cycles /min)			
Sys Blood Pressure (mm Hg)			
Dia Blood Pressure (mm Hg)			
Breath Holding Time (Sec)			
Weight (Kg)			
Symptom Score			
Medication Score			

## 7. Discussion

### 8. Conclusion