

**KAATSU Highly Advanced Medical  
Technology Training Centre (PVT) Ltd.**

**aka**

**KAATSU International for  
Undergraduate-studies  
(KIU)**

**FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF ACUPUNCTURE**

**Proposal for  
Bachelor of Science in Acupuncture  
(Honours) Degree Program**

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# **INTRODUCTION**

## **BACHELOR OF SCIENCE IN ACUPUNCTURE (HONOURS) DEGREE**

The curriculum of the proposed Bachelor of Science in Acupuncture (Honours) degree to be awarded by KIU was designed and developed in accordance with the guidelines laid down by the World Health Organization (WHO)<sup>1</sup> as well as global standards for Acupuncture of several international and training programmes.

The proposed degree programme has a strong focus on professional leadership and includes continuing education courses, support courses from basic and behavioural sciences, core courses in Acupuncture and clinical training in Acupuncture. Thus this proposed degree programme is designed to develop advanced skills such as critical thinking, analytical thinking, problem solving, and reflective thinking skills. Further, the curriculum focuses on developing information technology skills, social skills, communication skills, presentation skills and a variety of professional practice skills.

Students are supported to improve skills on Acupuncture therapy through applying the knowledge and skills in the skill laboratory and in clinical settings with a mentorship of dedicated faculty of professionals in this field.

### **Background**

On successful completion of the degree program, students will earn necessary academic credentials required for new opportunities in international job market as Acupuncture practitioners. Thus, the Department of Acupuncture at KIU will take all efforts to maintain the quality and the standards of the B.Sc. in Acupuncture (Honours) degree on par with international standards.

Although, Acupuncture is a historical concept, today it has transformed into one of the most rewarding careers. As the interest for alternative therapies have been on the rise among the population, most countries have regulated this system of practice and has been included for health insurance.

Understanding this need for qualified Acupuncture practitioners, this proposal is submitted to offer a standardized degree of Bachelor of Science in Acupuncture for global needs.



# **CHAPTER**

# **01**

## **ADMISSION CRITERIA AND PROCEDURE**

**1.1 Admission criteria and evaluation procedure**

**1.2 Profiles of students admitted previously**

**1.3 Reports on the progress of academics conform into the minimal entry programmers, including-number applied, number selected, number retained over the study period, number graduated (over the past five years)**

# **1. ADMISSION CRITERIA AND EVALUATION PROCEDURE**

The Bachelor of Science in Acupuncture (Honours) programme (120 Credits) of KIU is an exclusive degree course designed to acquire necessary knowledge and skills to earn the credentials required as an Acupuncture practitioner to practice in the global settings.

## **1.1 Admission criteria and evaluation procedure**

Applications will be called by advertising on the newspapers, other media and KIU website. Applications received by the KIU on or before the due date, will be screened for eligibility. Students for B.Sc. in Acupuncture (Honours) degree programme will be admitted on the basis of the admission policy of the KIU.

### **1.1.1. Entry qualifications**

1. The entry requirements of the B. Sc in Acupuncture (Honours) degree programme as follows:
  - Three passes in Advanced Level (A/L) in Bioscience stream or equivalent qualification for international students.

### **1.1.2. Selection procedure**

Applicants who have above the qualifications will be to be eligible to follow this programme.

### **1.1.3. Registration procedure**

A person who has been selected as a student shall be required to register for the respective academic year to follow the B.Sc. in Acupuncture (Honours) degree programme of study. The date of registration shall be specified and informed by the KIU. Originals of all required certificates should be produced on registration as required by the KIU.

A Student Identity Card will be issued following payment of due fees for official purposes. Registration should be maintained continuously throughout the degree programme by paying the appropriate fees.

## **1.2. Profiles of students admitted previously**

Since KIU expects to initiate its first B.Sc. in Acupuncture (Honours) degree programme following the approval of the University Grants Commission, enrolment of students has not been commenced. A database of profiles of KIU students will be maintained after commencing the student enrolments.

During the student's stay in KIU a variety of transitions will occur. The student will explore concepts and issues that have local and global significance. They will gain confidence to approach new areas. The student will acquire skills necessary to conduct scientific inquiry and research and show independence in learning with necessary competency in the management of patients.

The student should complete all academic, clinical and non-academic activities included in the curriculum to obtain the degree.

### 1.3. Reports on the progress

Since KIU is awaiting the UGC approval to commence degree programmes, student enrolment has not yet commenced.

#### 1.3.1. Assessments or evaluations

Examinations will be held covering all subjects taught during the programme. The GPA for the semester will be released and will be counted for the final GPA. Awarding of classes will be based on the final GPA achieved by the student, according to the UGC criteria.

#### 1.3.2. Eligibility to sit examinations

Students with 80% attendance in each course and satisfactory completion of practical, laboratory clinical and assignments will be eligible to sit the examinations.

#### 1.3.3. Submission of assignments

Students should submit all assignments within the due period of submission

#### 1.3.4. Methods of assessments

Theoretical component will be assessed by continuous assessments and final examination. Continuous assessments will include written tests, simulations and assignments. Written examinations include Multiple Choice Questions (MCQ), Short Essay Questions (SEQ) and Structured Essay Questions. Assessment of clinical skills will be achieved through clinical examination and viva voce.

The Grade Point Average (GPA) for each year will be counted for the final GPA. The marks for each module will be 100% and the pass mark for all modules will be 50%. A student will be considered as failed the module if he or she fails to obtain 50% marks. Classes will be awarded and degree will be classified according to the final GPA score of all academic years.

**Table 1.1: Grades and GPA Values**

Grades	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	E
Grade Point	4.00	4.00	3.70	3.30	3.00	2.70	2.30	2.00	1.70	1.30	1.00	0.00

**Table 1.2: Cut-off Levels of GPA for Awarding Classes/Pass**

Awarding Classes/Passes	First	Second Upper	Second Lower	Pass
Grade Point Average(GPA)	3.70	3.30	3.00	2.00

# **CHAPTER**

# **02**

## **ACADEMIC PROGRAMME**

**2.1 Study Program**

**2.2 Credit and Qualification framework**

**2.3 Qualification descriptors**

**2.4 Intended learning outcomes of the programme and individual courses**

**2.5 Details of contents of courses/modules**

**2.6 Teaching and learning methods**

**2.7 Teaching panel-on regular/contract/visiting basis**

**2.8 Laboratory/practical/clinical classes and manuals of instructions on individual laboratory/practical's and clinical session**

**2.9 Rules and regulation of assessments**

**2.10 By-Laws**

**2.11 Past question papers and answer scripts (if available)**

**2.12 Results of graduating class (over the past five years if available)**



## 2. ACADEMIC PROGRAMME- B.Sc. in Acupuncture (Honours) Degree

Understanding the need for quality Acupuncture practitioners, this proposal is submitted to offer a quality, standardized, B.Sc.in Acupuncture (Honours) degree programme (120 Credits) enabling students to become competent graduate who fulfills the international requirements.

### Vision of the Institution

“To be the bridge in higher education and professional development appropriate to global needs”

### Mission of the Institution

Providing higher education and professional development, geared to meet challenges of global needs and aspirations through dedicated professional training and excellence in teaching and research.

## 2.1. Study Program

### 2.1.1. Program objectives:

The objective of the B.Sc. in Acupuncture (Honours) degree programme is to prepare a student to be a competent Acupuncture practitioner to manage a variety of diversified responsibilities in global health care settings.

### 2.1.2. Outline of the curriculum

This is a four year degree programme. Preparatory courses is be followed by all students.

## YEAR ONE

### Preparatory Courses:

Course Code	Title of the course	Lecture hours	Lecture credits	Lab/Clinical/Tutorial hours	Lab/clinical/Tutorial credits	Total hours	Total credits
HS 0501	English Language	75	5	-	-	75	5
IT 0201	Computer studies	15	1	30/0	1	45	2
<b>Total</b>						120	7

## YEAR ONE

Course Code	Title of the course	Lecture hours	Lecture credits	Lab/Clinical/Tutorial hours	Lab/clinical/Tutorial credits	Total hours	Total credits
ACU1401	Human Anatomy	45	3	30/0	1	75	4
ACU1602	Human Physiology	75	5	30/0	1	105	6
ACU1403	Biochemistry	45	3	30/0	1	75	4
ACU1404	Psychology and introduction to sociology	60	4	-		60	4
ACU1205	Ethics and legal issues	30	2	-		30	2
ACU1206	Interpersonal communication	30	2	-	-	30	2
ACU1207	First Aid and CPR	15	1	30/0	1	45	2
ACU1308	Epidemiology	45	3	-	-	45	3
ACU1309	Nutrition and dietetics	45	3	-	-	45	3
<b>Total</b>		390	26	120/0	4	510	30

## YEAR TWO

ACU2401	Microbiology and Parasitology	45	3	30/0	1	75	4
ACU2302	Pathology	30	2	30/0	1	60	3
ACU2503	Public Health	75	5	-	-	75	5
ACU2304	Pharmacotherapeutics	45	3	-	-	45	3
ACU2205	Biostatistics	45	3	30/0	1	75	4
ACU2306	Basic Medical, Psychiatric and Paediatric conditions	45	3	-	-	45	3
ACU2207	Gynaecology and Obstetrics	30	2	-	-	30	2
ACU2108	Basic Surgical, Eye and ENT conditions	15	1	-	-	15	1
ACU2109	Radiology and diagnostic imaging	15	1	-	-	15	1
ACU2410	Philosophy and theories of Acupuncture	45	3	0/45	1	90	4
<b>Total</b>		390	26	90/45	4	525	30

## YEAR THREE

ACU3301	Research methodology	45	3	-	-	45	3
ACU3802	Acupuncture- meridians, aetiology and pathogenesis	105	7	0/45	1	150	8
ACU3803	Acupuncture- diagnostics and techniques	105	7	0/45	1	150	8
ACU3904	Clinical observation	15	1	0/360	8	375	9
ACU3205	Massage therapy	15	1	0/45	1	60	2
<b>Total</b>		285	19	0/495	11	780	30

## YEAR FOUR

<b>ACU4701</b>	Acupuncture therapeutics I	90	6	0/45	1	135	7
<b>ACU4602</b>	Acupuncture therapeutics II	75	5	0/45	1	120	6
<b>ACU4903</b>	Clinical practice	15	1	0/360	8	375	9
<b>ACU4804</b>	Dissertation	-	-	0/720	8	720	8
<b>Total</b>		180	12	0/900	18	1350	30

## 2.2. Credit and Qualification Framework

The credit system of B.Sc. in Acupuncture programme is based on the Qualification Framework of the Ministry of Higher Education of Sri Lanka.

It is expected that the student will undertake formal study of 16 weeks per semester and two semesters per year for 4 years. The subjects offered are equivalent in value of 120 credits during these four years. This course will consist of theory, laboratory work, clinical and self-study in different settings. The course credits are calculated as follows:

- i. One credit of theory is equivalent to 15 hours of lectures
- ii. One credit of laboratory work is equivalent to 30 hours
- iii. One credit of tutorials is equivalent to 45 hours
- iv. One credit of clinical is equivalent to 45 hours

For research, a minimum of 90 notional hours including time spent on literature review is equivalent to one credit. (Reference: 2013 Sri Lanka Qualification Framework of Ministry of Higher Education).

Credits are awarded after the successful completion of the work and assessment on achievement of learning outcomes.

English language and IT skills competencies are scheduled at the beginning of the programme.

## 2.3. Qualification descriptors

The Bachelor of Science in Acupuncture (Honours) degree programme is designed to offer an internationally accepted qualification to practice as competent Acupuncture practitioner. According to the Sri Lanka Qualification Framework (SLQF) the proposed degree programme will achieve level 6 as it includes **120** credits.

## **2.4. Intended learning outcomes of the programme**

The following are the intended learning outcomes of the degree programme. Intended learning outcomes for individual courses are included in the descriptions of individual courses.

### **2.4.1. Intended Learning Outcomes of the Programme**

On completion of the B.Sc. in Acupuncture (Honours) degree programme, graduates will be able to:

#### **Technical skills**

- 1) Describe normal human structures and functions and their relevance to the practice of Acupuncture
- 2) Apply knowledge of Acupuncture principles to the diagnosis of diseases
- 3) Identify clinical conditions and refer to other health-care professionals when required, and in a timely manner
- 4) Formulate an appropriate Acupuncture treatment based on an understanding of the components and indications and contraindications
- 5) Develop specific treatment plans, including time-lines for treatment and review, based on individual patient signs and symptoms
- 6) Diagnose and differentiate diseases/disorders according to Acupuncture principles and techniques, and formulate an appropriate treatment plan
- 7) Interpret clinical laboratory findings
- 8) Give nutritional, dietary and preventive medical advice
- 9) Review and monitor the health of the patient and modify treatment accordingly
- 10) Independently acquire technical knowledge about diseases not necessarily covered in the training

#### **Communication capabilities**

- 1) Appropriately apply Traditional Chinese Medicine (TCM) and western medical terminologies in practice
- 2) Communicate effectively with patients, other health professionals, regulatory bodies, instrument suppliers and the general public

#### **Responsible and sustainable practice capabilities**

- 1) Practice within regulatory and ethical frameworks
- 2) Identify key business issues and draw on appropriate professional resources

## Research and information management capabilities

- 1) Understand and acquire new knowledge from clinical research
- 2) Remain informed and apply advances in knowledge where appropriate
- 3) Critically review research publications relevant to Acupuncture
- 4) Describe the steps involved in research within an ethical framework
- 5) Disseminate or communicate research processes and findings to peers, other professionals, the public and the government in an ethical manner

## 2.5. Details of Contents of Courses

Following is a description of detailed contents of each course. The following description includes intended learning outcomes, teaching and learning methods, resources, assessment methods and recommended readings for each module.

### ACU1401 Human Anatomy

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU1401	<b>Credits: 4</b> (Lec 45 hrs + Lab 30 hrs=75 hrs)
<b>Title</b>	:	Human Anatomy	
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Describe basic structures of the human body</li> <li>• Describe the anatomical positions of the body</li> <li>• Explain the structure of cells and the main four types of tissues;</li> <li>• Briefly describe the structure of the skeletal system and the importance of the skull, vertebral column and the pelvic girdle and the shoulder girdle.</li> <li>• Briefly explain the structural adaptations of the main joints ie. the hip joint, the knee joint, the ankle joint, the shoulder joint, the elbow and the wrist.</li> <li>• Discuss the different types and structures of muscles in the human body</li> <li>• Briefly describe the anatomy of the heart, and the vascular system</li> <li>• Differentiate between arteries and veins</li> <li>• Briefly describe the anatomy of the respiratory system</li> <li>• Identify the structures and the position of organs of the digestive system and their functional importance</li> <li>• Understand the structure and location of liver and gall bladder</li> <li>• Differentiate between the central nervous system and the peripheral nervous system</li> <li>• Explain the structure of the main organs of the central nervous system, the spinal cord, and be able to draw a cross section of the main nerve tracts in the spinal cord.</li> <li>• Explain the structure of the organs of the urinary system</li> <li>• Describe the structures of the nephron</li> <li>• Explain the relevance, location, and the structure of glands of the endocrine system,</li> <li>• Differentiate between male and female reproductive systems</li> <li>• Explain the structure of the organs of the immune System</li> </ul>	
<b>Course Contents :</b>			
Introduction to the Human Body, anatomy of the cells and tissues, main divisions of the body organs and systems, skeletal system, - joints and articulation, introduction to the muscular system, cardiovascular			

system, anatomy of the heart, blood and blood vessels, clinical applications of cardio vascular system, respiratory system ,digestive system, abdominal wall, accessory organs and peritoneal cavity, nervous system, urinary system , endocrine system, pituitary gland, thyroid gland, para thyroid gland, adrenal glands, pancreas, reproductive system and immune system

**Resources**

Multimedia projector, magi board, marker pens, skill laboratory, pictorial charts, posters, diagrams, mannequins, anatomical models, internet, CDs, magazines and journals

<b>Methods of Teaching and Learning</b>	: Lectures, group discussions, skill laboratory work, video presentations, assignments
<b>Assessment</b>	: The course will be evaluated with continuous assessments and final examination at the end of semester which will consist of <b>multiple choice questions (MCQs) and short essay questions each of 1hour duration.</b> Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)
<b>Recommended Reading</b>	: 1. Sinnatamby C. S. , (2006) Lasts Anatomy; 12 <sup>th</sup> Ed. Churchill Livingstone 2. Waugh. A, Grant. A (2010) Anatomy and Physiology in Health & Illness – Ross & Wilson;11 <sup>th</sup> Ed. Churchill Livingstone 3. Agur. A.M.R., Grants Atlas of Anatomy (2012);13 <sup>th</sup> Ed. Lippincott Williams & Wilkins 4. Abrahams P. H., McMinns Clinical Atlas of Human Anatomy (2013); 7 <sup>th</sup> ED. Mosby 5.Snell R. S. Snell, (2010) Clinical Neuro Anatomy; 7 <sup>th</sup> Ed. Lippincott Williams & Wilkins ) 6. Essentials of Interactive Functional Anatomy (DVD-ROM) ; <a href="http://www.insight-media.com">www.insight-media.com</a>

## ACU1602 Human Physiology

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU1602 <b>Credits: 6</b> (Lec. 75 hrs. + lab. 30 hrs. = 105 hrs)
<b>Title</b>	:	Human Physiology
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Explain the structure and functions of organelles and cell membrane</li> <li>• Describe the formation and distribution of body fluids</li> <li>• List the constituents of blood and the way the coagulatory system operates</li> <li>• Describe innate immunity and acquired immunity</li> <li>• Define the terms action potential, relative refractory period and absolute refractory period in relation to nerve tissue</li> <li>• Outline the conducting system of the heart and events during a cardiac cycle</li> <li>• Explain the mechanics of breathing in inspiration and expiration</li> <li>• Define Glomerular Filtration Rate (GFR) and the factors that affect GFR</li> <li>• Describe the synthesis, regulation and actions of hormones</li> <li>• Explain deglutition, digestion and absorption of food</li> <li>• Outline the role of sex hormones in the development of internal and external genitalia</li> <li>• Explain sensory system and motor system</li> <li>• Outline mechanism of sound transmission and image formation in retina</li> <li>• Explain the tests to assess the functions of cranial nerves</li> </ul>
<b>Course contents</b>	:	Introduction to mammalian cell, body fluid, blood and coagulation, immunology, excitable tissues, autonomic nervous system, cardiovascular system and functions of the heart, respiratory system and its adaptation to gas exchange, renal physiology, endocrine system and the synthesis and regulation of hormones, physiology of gastrointestinal system, liver and pancreas, physiology of reproductive system, central nervous system, special senses, cranial nerves
<b>Resources</b>	:	Multimedia projector, magi Board, Science laboratory, pictorial charts, posters, DVD, video presentations, journals
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, laboratory work, assignments
<b>Assessment</b>	:	<p>The module will be evaluated with assessments and final examination at the end of semester, which will consist of multiple choice questions (MCQs) and short essay questions each of 1hour duration.</p> <p>Method:            CA 40% + FE 60% = Z 100%            If Z &gt; 50% the student will pass the course.            (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Waugh. A, Grant. A (2010), Ross and Wilson - Anatomy and Physiology in Health and Illness ; 11<sup>th</sup> Ed. Churchill Livingstone</li> <li>2. Tortora. GA, Derrickson. BH (2013), Principles of Anatomy &amp; Physiology; 14<sup>th</sup> Ed. Wiley</li> <li>3. Venkatesh. D, Sudhakar HH(2013), Basics of Medical Physiology ; 3<sup>rd</sup> Ed. Lippincott Williams &amp; Wilkins</li> <li>4. Barret. KE, Barman.SN, Boitano. S, Brooks. H (2012), Ganongs Review of Medical Physiology –; 24<sup>th</sup> ED. McGraw Hill</li> <li>5. Visualizing Human Physiology, #38AZ13030, <a href="http://www.insight-media.com">www.insight-media.com</a></li> </ol>

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## ACU1403 Biochemistry

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU1403 <b>Credits: 4</b> (Lec. 45hrs + Lab. 30hrs =75hrs)
<b>Title</b>	:	Biochemistry
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Explain the cell structure and biological membranes</li> <li>• Describe the macromolecules on the basis of composition, structure and functions</li> <li>• Describe the digestion, absorption and transportation of macro molecules</li> <li>• Explain the pathways of metabolism</li> <li>• Describe the structure of DNA and RNA and explain how genetic information is stored in its base sequence and transferred.</li> <li>• Explain how proteins synthesis can be controlled at the level of transcription and translation.</li> <li>• Describe the biochemical basis of haemoglobin and plasma proteins</li> <li>• Describe the biochemical actions of hormones in homeostasis</li> <li>• Recognize the importance of principles of nutrition necessary for maintaining health</li> </ul>
<b>Course Contents:</b>		
Introduction to cell structure and biological membranes, composition, structure and functions of protein, carbohydrates and lipids, digestion and absorption of macromolecules and transport, metabolism, DNA, RNA and protein synthesis ,biochemistry of blood, biochemistry of hormones, principles of nutrition		
<b>Resources:</b> Multimedia projector, magi board, science laboratory, pictorial charts, posters, magazines and journals.		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, laboratory work , assignment
<b>Assessment</b>	:	<p>The course will be evaluated with continuous assessments and final examination at the end of semester which will consist of multiple choice questions (MCQs) and short essay questions of 1 hour duration each.</p> <p>Method:  CA 40% + FE 60% = Z 100%  If Z &gt; 50% the student will pass the course.  (CA = Continues Assignment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1 Ferrier. DR. (2013), Lippincott's Illustrated Reviews Biochemistry; 6<sup>th</sup> Ed. Lippincott Williams &amp; Wilkins</li> <li>2. Gupta. RC,(2010) Essentials of Medical Biochemistry (with DVD); CBS publishers &amp; Distributors , India</li> <li>3. Murray RK, (2012) Harpers Illustrated Biochemistry; 29<sup>th</sup> Ed. Tata McGraw Hill</li> </ol>



## ACU1404 Psychology and introduction to sociology

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU1404	<b>Credits:4</b> ( Lec. 60 hrs)
<b>Title</b>	:	Psychology and social aspects of health	
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Gain overall knowledge and skills to understand biological basis of human behavior</li> <li>• Identify the basis of differences in the behavior of individuals)</li> <li>• Identify the stages of growth and development of human being</li> <li>• Describe the psychological methods of intervention</li> <li>• Outline the social aspects of behaviour</li> <li>• Identify the influences of socio-cultural aspects of individuals, groups and populations</li> <li>• Explain the adjustments of individual to health issues</li> <li>• Apply the knowledge of psychosocial aspects of health in providing service</li> </ul>	
<b>Course content:</b>			
<p>The concepts of Psychology, the biological basis of behavior, various stages of life cycle, factors influence growth and development, understanding the individual, attention, concentration and cognitive styles, individuals difference in the behavior, personality, higher mental process in human behavior, aspects of learning, pain, stress and coping, psychological interventions, definition of sociology and related concepts, social aspects of behavior, adjustments of individual to health issues, society and culture, culture and socialization, family and social systems, socio-political problems, social groups.</p>			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, books, journals, video			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, presentations, assignments	
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of multiple choice questions (MCQs) and short essay questions.</p> <p>Method: CA 40% + FE 60% = Z 100% If Z &gt; 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>	
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Subbarao. B (2006) Psychology and Sociology for Paramedicals; 1<sup>st</sup> Ed. Jaypee Brothers ,New Delhi, India</li> <li>2. Ramalingam. T, Bid. D (2001) Psychology for Physiotherapist (2009); 1<sup>st</sup> Ed. Jaypee Brothers ,New Delhi, India</li> </ol>	

**ACU1205 Ethics and legal issues**

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU1205	<b>Credits: 2</b> ( Lec. 30 hrs)
<b>Title</b>	:	Ethics and legal issues	
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"><li>• Explain ethics and professional behaviour</li><li>• Describe the importance informed consent and confidentiality</li><li>• Identify and respect patient rights</li><li>• Describe responsibility and accountability</li><li>• Explain legal issues in practice</li><li>• Maintain quality assurance in practice</li></ul>	
<b>Course Contents:</b> Introduction to ethics, principles of ethics, practical application of ethics, ethics and ethical dilemmas, rights of patients, responsibility and accountability in practice, professionalism, legal aspects, legal issues in practice, quality assurance in practice			
<b>Resources:</b> Multimedia projector, screen, magi board, markers,			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, presentations, role play, assignments	
<b>Assessment</b>	:	This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of and short essay questions of 2hour duration. Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)	
<b>Recommen ded Reading</b>	:	1. Mclean. SAM. (1996) Contemporary Issues in Law, Medicine and Ethics: 1 <sup>st</sup> Ed. Dartmouth Publishing Co. Ltd., 2. Sugru. C. & Solbrekke. TD (2011) ,Professional responsibility: New Horizons and Praxis., 1 <sup>st</sup> Ed. Rout ledge	

## ACU1206 Interpersonal communication

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU1206	<b>Credits: 2 (Lec.30hrs)</b>
<b>Title</b>	:	<b>Interpersonal communication</b>	
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Explain the process of communication.</li> <li>• Apply good communication strategies in health care relationships.</li> <li>• Identify levels and types of communication.</li> <li>• Describe communication strategies</li> <li>• Develop skills in reporting and documenting.</li> </ul>	
<b>Course content</b>			
Definitions and basic assumptions in human communication, communication in health care relationships, patient – family relationship, non-verbal communication levels and types of communication, communication strategies, reporting and documenting.			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, language laboratory, DVD, CD			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, role play, presentations	
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of short essay questions of 2hours duration and a practical examination.</p> <p>Method: CA 40% + FE 60% = Z 100% If Z &gt; 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>	
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Williams. D (1997), Communication Skills in Practice : A Practical Guide for Health Professionals; 1<sup>st</sup> Ed. Jessica Kingsley</li> <li>2. DeVito. JA (2007)The interpersonal communication book; 11<sup>th</sup> Ed. Pearson/Allyn and Bacon</li> <li>3. Improving your speaking skills, #38AZ13882,<a href="http://www.insight-media.com">www.insight-media.com</a></li> <li>4. Speaking with credibility and confidence, #38AZ13880, <a href="http://www.insight-media.com">www.insight-media.com</a></li> </ol>	

## ACU 1207 First Aid and CPR

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU1207
		<b>Credits: 2</b> ((Lec. 15 + lab 30 hours=45 hrs)
<b>Title</b>	:	First Aid and CPR
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"> <li>• Develop skills and knowledge in taking immediate action during emergency situations.</li> <li>• Describe how to assess a person in an emergency</li> <li>• Demonstrate the ability assess and act during life threatening emergencies</li> <li>• Perform cardio-pulmonary resuscitation as a lifesaving method.</li> </ul>
<b>Course content</b>		
Knowledge and practical limitations of the first aider, assessing the situation and applying basic first aid techniques in - wounds, burns, fainting, bleeding, sprains and dislocations, choking, drowning, poisoning, bites and stings, bandaging, identifying emergencies, epilepsy and convulsive disorders, cardiovascular emergencies, head and spinal injuries, chest and abdominal injuries, lifesaving procedures, CPR		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, audio visual aids, mannequins, skills laboratory		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, practical's, assignments
<b>Assessment</b>	:	This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of short essay questions of 2hours duration and a practical examination. Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)
<b>Recommen ded Reading</b>	:	1. Thygerson. AL, Gulli.B & Krohmer. JR (2007), First Aid, CPR and AED; 5 <sup>th</sup> Ed. Jones & Bartlett Learning. 2.American Red Cross (2014), First Aid/CPR/AED Participant's Manual with Emergency First Aid Guide;Rev.7/14 , Stay Well 3. Clement. I, Text Book on First Aid and Emergency Nursing (2012); 1 <sup>st</sup> Ed. Jaypee Brothers ,New Delhi, India

## ACU 1308 Epidemiology

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU1308
		<b>Credits:3 ( Lec.45 hrs)</b>
<b>Title</b>	:	Epidemiology
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the epidemiology concepts and studies in the context of the historical evolution and landmark achievements</li> <li>• Describe disease concepts using basic epidemiologic principles including the natural history of disease, measurement of risk, models of disease transmission, levels of prevention, including environmental and genetic causes of disease</li> <li>• Describe causality in epidemiology and apply this knowledge to evaluate the effect of causality on a study design</li> <li>• Assess the effects of bias, confounding power of studies and validity, reliability and generalizability in epidemiologic studies and apply this knowledge through study design and analysis</li> <li>• Evaluate and synthesis scientific literature on an epidemiologic problem using the concepts provided during this course in a term paper and oral presentation;</li> </ul>
<p>Course contents: The course introduces the basic principles and methods of epidemiology and demonstrates their applicability in the field of public health. Topics to be covered include the historical perspective of epidemiology, measurers of disease occurrence and association, causal inference and basic study designs.</p>		
<p><b>Resources:</b> Multimedia projector, Screen, Magi Board, DVD, video, audio and visual aids</p>		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, presentations, assignments and journal clubs
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and <b>final examination at the end of semester which will consist of short essay questions of 2hours duration.</b></p> <p>Method: CA 40% + FE 60% = Z 100% If Z &gt; 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Hennekens CH and Buring JE (1987) Epidemiology in Medicine, 1<sup>st</sup> Ed., Lippincott Williams and Wilkins</li> <li>2. Rothman KJ (2012) Epidemiology: An Introduction, 2<sup>nd</sup> Ed., Oxford University Press</li> </ol>

## ACU1309 Nutrition and dietetics

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU1309
		<b>Credits: 3 (Lec. 45 hrs.)</b>
<b>Title</b>	:	Nutrition and dietetics
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the importance of food in human development, food and energy balance in human body.</li> <li>• Describe the chemical nature of carbohydrate, protein and lipids, vitamins and minerals and their importance in health</li> <li>• Describe the importance of vitamins and minerals, their sources and outline of deficiency symptoms</li> <li>• Describe the major nutritional problems and intervention measures taken to overcome them</li> <li>• Explain proper diet as a form of therapy</li> <li>• Identify the nutritional requirements of infants, children and adolescents, pregnant mothers and elders and different ways of supplying them.</li> </ul>
<p>Course contents:            This course Introduces to nutrition and dietetics, food and energy, principles of nutrition and the requirements of nutrients, nutritional values of food, balanced diet and meal planning, nutritional problems, dietary therapy, community nutrition, low cost nutritious diet, nutrition throughout lifespan</p>		
<p><b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, facilities, Internet, Video, Audio-visual aids</p>		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, assignments
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of short essay questions of 2hours duration.</p> <p>Method:            CA 40% + FE 60% = Z 100%            If Z &gt; 50% the student will pass the course.            (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Wildman. REC (2002) The Nutritionist: Food, Nutrition and Optimal Health: 1<sup>st</sup> Ed. Haworth Press.</li> <li>2 Wickramanayake .TW (1996) Food and Nutrition; Published by Hector Kobbekaduwa Institute</li> </ol>

## ACU2401 Microbiology and Parasitology

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU2401 <b>Credits:4</b> (Lec.45 hrs.+ Lab 30hrs = 75 hrs)
<b>Title</b>	:	Microbiology and Parasitology
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Discuss the important concepts of general bacteriology, general mycology, general virology and general parasitology</li> <li>• Explain the concepts in immunology</li> <li>• Discuss the pathogenesis, specific microbial investigations and implications of microorganisms in health care.</li> <li>• Understand common parasitic infections and methods employed in prevention and control of such</li> <li>• Know the microorganisms in food, water and food borne diseases</li> </ul>
<b>Course content:</b>		
<p>Classification, general structure, growth of bacteria, viruses and fungi, innate immunity and adaptive Immunity, cells and tissues of the immune system, specimen collection and transport, microbial genetics, molecular techniques applied in diagnosis of infectious diseases, control of micro-organisms, specific microbial infections, safety of individuals in the hospital and the community, measures taken to reduce the cost of hospital infections, parasitic infections, microorganisms of water, milk and food</p>		
<b>Resources:</b> Multimedia projector, screen, markers, science laboratory, DVD, internet, CD, posters, pictorials, internet, video presentations		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, laboratory work, assignments
<b>Assessment</b>	:	<p>The course will be evaluated with continuous assessments and final examination at the end of semester which will consist of multiple choice questions (MCQs) and short essay questions each of 1hour duration.</p> <p>Method:            CA 40% + FE 60% = Z 100%            If Z &gt; 50% the student will pass the course.            (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Goering. RV &amp; Dockrell HM.(2012)Mims Medical Microbiology ; 5<sup>th</sup> Ed. W. B. Saunders</li> <li>2. Greenwood. D, Slack. RCB, Peutherer. JF, Barer. MR (2007 ), Medical Microbiology ; 17<sup>th</sup> Ed. Churchill Livingstone</li> <li>3. Harvey. RA, Cornelissen. CN (2012) Lippincott's Illustrated Review Microbiology ; 3<sup>rd</sup> ED. Lippincott Williams &amp; Wilkins</li> <li>4. Fernando. N, Mallikahewa. RR &amp; Gunasekara. K, Clinical Microbiology for Paramedical Undergraduates – 1<sup>st</sup> Ed.</li> <li>5. Panicker. CKJ (2007) Text book of Medical Parasitology ; 6<sup>th</sup> Ed .J aypee Brothers, New Delhi, India</li> </ol>

## ACU 2302 Pathology

<b>Type/Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU2302
		<b>Credits: 3</b> (Lec 30 hrs. + Lab. 30 hrs.=60 hrs)
<b>Title</b>	:	Pathology
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Identify the general pathological processes involving the human body</li> <li>• Describe the inflammatory response and factors affecting wound healing</li> <li>• Explain hemorrhage , haemostasis and the coagulation process</li> <li>• Explain haemodynamic disorders and shock</li> <li>• Indentify the difference of benign and malignant tumours</li> <li>• Describe the defense mechanisms of the human body</li> <li>• Explain the pathogenesis, pathological changes and complications of common disorders involving different systems of the human body</li> <li>• Correlate the pathological changes with the clinical manifestations</li> <li>• Describe the various types of diagnostic tests and procedures that can help to make a diagnosis</li> </ul>
<b>Course Content:</b>		
Introduction to general pathology, inflammatory response and healing mechanisms , haemorrhages and the process of haemostasis, haemodynamic disorders, differences between neoplasm and infection, benign and malignant tumours, pathological effects of treatment, infectious diseases, immuno pathology, autoimmune disorders ,systemic pathology, anaemias, haematological tests, chemical tests, bacteriological tests		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, science laboratory , video, internet, pictorial charts, posters, specimens, magazines and journals		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, laboratory work, assignments
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of <b>multiple choice questions (MCQs) and short essay questions each of 1hour duration.</b></p> <p>Method:            CA 40% + FE 60% = Z 100%            If Z &gt; 50% the student will pass the course.            (CA = <i>Continues Assignment</i>, FE = <i>Final Examination</i>, Z = <i>Total Marks</i>)</p>
<b>Recommened Reading</b>	:	<ol style="list-style-type: none"> <li>1. Lakhani. SR, Dilly. S. &amp; Finlayson. CJ (2009) Basic Pathology: An introduction to the mechanisms of disease; 4<sup>th</sup> Ed., Hodder Arnold, London, UK.</li> <li>2. Choudhri. K , A Guide to pathology(2005); 8<sup>th</sup> Ed. , Jaypee Brothers, New Delhi, India.</li> <li>3. Krishna. V, Text book of pathology(2004); 1<sup>st</sup> Ed., Orient Longman, India</li> <li>4. Mohan. H, Text book of Pathology (2013); 6<sup>th</sup> Ed. Jaypee Brothers , New Delhi, India.</li> <li>5 Break the chain: Your role in preventing the spread of infection, #38AZ9942 <a href="http://www.insight-media.com">www.insight-media.com</a></li> </ol>



## ACU2503 Public Health

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU2503
		<b>Credits: 5</b> (lectures 75 hrs.)
<b>Title</b>	:	Public Health
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Major definitions of public health;</li> <li>• Significant aspects of the history of public health theory and practice;</li> <li>• Basic definitions, models and concepts of health and disease including the relationship between disease, health and wellbeing;</li> <li>• Concepts of mental and somatic diseases and their practical implications;</li> <li>• The concepts of distal and proximal causes of disease and ill health and the relevance of these concepts to improving population health and reducing health inequalities;</li> <li>• Major ethical theories and concepts relevant for public health, including human rights concepts;</li> </ul>
<p><b>Course Content:</b>            This course provides an introduction to:            Historical roots of public health, public health and health services, primary health care; national health systems ,disease vectors and other proximal causes of morbidity and mortality, social, economic and environmental determinants of health and wellbeing, health inequalities – causation and mitigation, significant aspects of the history of ethics relevant to ethical public health practice</p>		
<p><b>Resources:</b> Multimedia projector, Screen, Magi Board, DVD, Laboratory facilities, audio/visual aids, Internet</p>		
<b>Methods of Teaching and Learning</b>	:	Lectures, Group Discussions, assignments
<b>Assessment</b>	:	<p>The module will be evaluated with continuous assessments and final examination at the end of semester which will consist of short essay questions each of 2hours duration.</p> <p>Method:</p> <p>CA 40% + FE 60% = Z 100%</p> <p>If Z &gt; 50% the student will pass the course.</p> <p>(CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<p>1 Park K.(2011 ) Park’s Text Book of Preventive and Social Medicine; 21<sup>st</sup> Ed. Banarsidas Bhanot Publishers</p> <p>2. Aschengrau .A, Seage. GR (2013), Essentials in Epidemiology in Public Health; 3<sup>rd</sup> ED. Jones and Bartlett Learning, MA</p>

## ACU 2304 Pharmacotherapeutics

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU2304	<b>Credits:</b> 3 (Lec. 45 hrs.)
<b>Title</b>	:	Pharmacotherapeutics	
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"><li>• Explain pharmacokinetics and pharmaco-dyanemics</li><li>• Acquire knowledge of drugs actions in each body system and related diseases.</li><li>• Explain drugs used in malignancy</li><li>• Describe anti- infective and anti- inflammatory drugs</li></ul>	
Course contents: Introduction to pharmacology: pharmacokinetics and pharmaco-dyanemics, pharmacology related to nervous system, gastro-intestine tract, cardio vascular system, respiratory system, genito- urinary tract, pharmacology of endocrine system, pharmacology of chemotherapeutic agents, drugs used in infections and inflammation			
<b>Resources:</b> Multimedia projector, screen, white board, DVD, internet, CD,			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, assignments	
<b>Assessment</b>	:	The course will be evaluated with continuous assessments and final examination at the end of semester which will consist of multiple choice questions (MCQs) and short essay questions each of 1hour duration. Method: Assignments and final examination. CA 40% + FE 60% = Z 100% If $Z > 50\%$ the student will pass the course. ( <i>CA = Continues Assessment, FE = Final Examination, Z = Total Marks</i> )	
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"><li>1. Misbahuddin,(2007) Community Pharmacology: A problem based approach; 1<sup>st</sup> Ed. Jaypee Brothers ,New Delhi, India</li><li>2. Katzung. BG, Trevor. AG. &amp; Masters. SB, ( 2009) Basic and Clinical Pharmacology; 11<sup>th</sup> Ed. MaGraw Hill</li><li>3. Pharmacology and the Healthcare Professional: Pharmacodynamics. DVD#38AZ13890, <a href="http://www.insight-media.com">www.insight-media.com</a></li><li>4. Pharmacology and Healthcare Professional: Principles of Pharmacology. DVD #38AZ13888.<a href="http://www.insight-media.com">www.insight-media.com</a></li></ol>	

## ACU2405 Biostatistics

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU2405
		<b>Credits: 4</b> (Lec.45hrs.+ Lab 30hrs.=75hrs)
<b>Title</b>	:	Biostatistics
<b>Learning Outcomes</b>		<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the scales of measurement the variable and the consents</li> <li>• Define the term frequency distribution</li> <li>• List the properties of normal distribution</li> <li>• understand hypothesis testing</li> <li>• Describe graphical methods of data presentation</li> <li>• Describe the numerical measures of data presentation</li> <li>• Inferential statistics</li> <li>• Describe probability and laws of probability</li> <li>• Describe Z distribution and Z transformation</li> <li>• Describe t distribution and T transformation</li> <li>• Describe <math>x^2</math> distribution and <math>x^2</math> transformation</li> <li>• Describe binomial distribution and binomial transformation</li> <li>• Describe regression and correlation</li> <li>• Using statistical package for social sciences (SPSS Computer Software)</li> </ul>
<b>Course Content :</b>		
Introduction to the scales of measurement the variable and the constant, descriptive statistics, Introduction to probability, normal distribution, the point and interval estimation, differences of means, proportions, sampling distributions and standard error, confidence intervals and tests for means, hypothesis testing, power, effect size, fundamental procedures for analysing and interpreting data; graphical displays of data, common selected statistical tests: t-tests, chi-square tests for categorical variables, correlation, and regression with biomedical applications		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos		
<b>Methods of Teaching and Learning</b>	:	Lectures , group discussions, computer laboratory work, assignments
<b>Assessment</b>	:	<p>The course will be evaluated with continuous assessments and final examination at the end of <b>semester which will consist of short essay questions of 2hours duration.</b></p> <p>Method: CA 40% + FE 60% = Z 100%</p> <p>If <math>Z &gt; 50\%</math> the student will pass the course. (CA = <i>Continues Assessment</i>, FE = <i>Final Examination</i>, Z = <i>Total Marks</i>)</p>
<b>Recommen ded Reading</b>	:	1.Sprinthal.RC, 2011; Basic Statistical Analysis, 9 <sup>th</sup> Ed. Pierson

### ACU2306 Basic Medical, Psychiatric and Paediatric conditions

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU2306 <b>Credits:3</b> (Lec. 45hrs)
<b>Title</b>	:	Basic Medical, Psychiatric and Paediatric Disorders
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Explain modern terminology used in identifying diseases</li> <li>• Recognize common medical disorders</li> <li>• Recognize common psychiatric disorders</li> <li>• Recognize common paediatric disorders</li> <li>• Describe and interpret the available investigative procedures</li> <li>• Recognise medical emergencies</li> <li>• Recognise malignancies</li> </ul>
<b>Course Content :</b>		
<p>Infectious , tropical and sexually transmitted disorders, genetic disorders, respiratory disorders, cardiovascular disorders, blood disorders, gastro intestinal disorders, liver, biliary, splenic and pancreatic disorders, renal disorders, endocrine disorders, rheumatology and bone disorders, neurological disorders, skin disorders, dementia, delirium, schizophrenia, affective disorders, deliberate self harm, anxiety disorder, obsessive compulsive disorder, dissociative disorder, hypochondrial disorder, personality and behavior disorder, alcohol abuse and dependence, drug abuse and dependence, obesity, bulimia nervosa , anorexia nervosa, sexual dysfunction, short stature, behavioural disorders, attention deficit disorders, epilepsy and other convulsive disorders, cerebral palsy, autism, juvenile rheumatoid arthritis, muscular dystrophies</p>		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, assignments
<b>Assessment</b>	:	<p>The course will be evaluated with continuous assessments and final examination at the end of semester which will consist of MCQs and short essay questions each of 1hour duration.</p> <p>Method: CA 40% + FE 60% = Z 100% If Z &gt; 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Kumar. P &amp; Clarke. M, (2012) Clinical Medicine ; 8<sup>th</sup> Ed. -W. A. Saunders</li> <li>2. Walker. BR., Ralston. SH ( 2014) Davidson's Principles and Practice of Medicine – 22<sup>nd</sup> Ed. Churchill Livingstone</li> <li>3. Ghai OP, Paul. VK, Bagg. A, (2013) Ghai Essential Pediatrics ; 8<sup>th</sup> Ed. Jain Publishers, India</li> <li>4 Ahuja.N (2006), Short Text Book of Psychiatry; 6<sup>th</sup> Ed. Jaypee Brothers, New Delhi, India</li> </ol>

**ACU 2307 Gynaecology and Obstetrics**

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU2307	<b>Credits: 2</b> (Lec. 30 hrs.)
<b>Title</b>	:	Gynaecology and Obstetrics	
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"><li>• Explain the menstrual disorders</li><li>• Describe the Pelvic inflammatory diseases</li><li>• Recognise malignancies in the female reproductive system</li><li>• Understand normal physiological changes that take place during Pregnancy, delivery and lactation</li><li>• Explain the intra uterine development of the foetus</li><li>• Identify the deviation from normal pregnancy, labour and puerperium</li></ul>	
<b>Course content</b> Amenorrhoea, increases and irregular menstruation, dysmenorrhoea and premenstrual tension, leucorrhoea, pelvic inflammatory diseases, infertility and sub fertility, malignancies in female reproductive system, agalactia, mastitis, normal pregnancy, abnormal pregnancy, labour and delivery, postpartum complications			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, posters, charts, diagrammes, internet, audiovisual aids,			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, assignments	
<b>Assessment</b>	:	The module will be evaluated with continuous assessments and final examination at the end of semester which will consist of MCQs and short essay questions each of 1hour duration. Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)	
<b>Recommen ded Reading</b>	:	1. Monga. A, Dobbs. SP (2011) Gynecology by Ten Teachers; 11 <sup>th</sup> Ed.CRC Press 2. Baker P N , Kenny. L (2011) Obstetrics by Ten Teachers ; 19 <sup>th</sup> Ed.CRC Press 3. Sachdeva. RK (1987) A Guide to Obstetrics and Gynaecology ; 5 <sup>th</sup> ED. Jaypee Brothers, New Delhi, India.	

**ACU 2108 Basic Surgical, Eye ant ENT Conditions**

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU2108	<b>Credits:1</b> (lec. 30 hrs)
<b>Title</b>	:	Basic Surgical, Eye ant ENT Conditions	
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"><li>• Identify the modern terminology used in identifying Surgical, Eye and ENT conditions</li><li>• Recognise surgical acute abdomen</li><li>• Recognise common Eye condition</li><li>• Recognise common ENT conditions</li><li>• Outline and interpret the modern investigative procedures available</li></ul>	
<b>Course content :</b> Acute abdomen, appendicitis, cholecystitis, intestinal obstruction, pancreatitis, ureteric colic, renal colic, external hernias, hemorrhoids, varicose veins, varicose ulcers, myopia, astigmatism, diplopia, squint, retinal detachment, optic atrophy, cataract, ophthalmoplegia, glaucoma, night blindness, deafness and deaf mutism, tinnitus, menieres disease, vertigo			
<b>Resources:</b> multimedia projector, screen, magi board, markers, DVD, videos, internet			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, assignments	
<b>Assessment</b>	:	This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of MCQs and short essay questions each of 1hour duration. Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)	
<b>Recommen ded Reading</b>	:	1. Browse. NL, Black. J, Burnand.KG , Thomas.WEG (2005) Browsers' Introduction to the Symptoms and Signs of Surgical Diseases ; 4 <sup>th</sup> Ed. CRC Press 2. Kochar.SK,(2009) Common Surgical Emergencies ; 2 <sup>nd</sup> Ed. Jaypee Brothers, India 3.The Wills Eye Manual ; Lippincott Williams & Wilkinson	

**ACU2109 Radiology and diagnostic imaging**

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU2109	<b>Credits:</b> 1 (lec. 15 hrs.)
<b>Title</b>	:	Radiology and diagnostic imaging	
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"><li>• Demonstrate knowledge and understanding of the scientific concepts underpinning modern radiologic physics including nuclear magnetic resonance and ultrasound</li><li>• Understand to interpret radiological findings</li><li>• Order basic radiological investigations where appropriate</li></ul>	
<b>Course content :</b> Introduction to radiographic environment, principles of radiographic exposure, introduction to radiography, radiation protection, radiographic positioning, radiation physics, advanced imaging modalities.			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, images , internet,			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, assignments	
<b>Assessment</b>	:	This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of <b>MCQs and short essay questions each of 1hour duration.</b> Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assignment, FE = Final Examination, Z = Total Marks)	
<b>Recommen ded Reading</b>	:	1. Lisle. DA (2012) ,Imaging for students ; 4 <sup>th</sup> Ed. CRC Press 2. Singh. H (2012) , Radiology for Undergraduates and General Practitioners ; 1 <sup>st</sup> Ed. Jaypee Brothers, New Delhi, India	

## ACU2410 Philosophies and theories of Acupuncture

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU2410	<b>Credits: 4</b> (lec. 45hrs. + Tutorials 45 hrs.=90 hrs)
<b>Title</b>	:	Philosophies and Theories of Acupuncture	
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the history of Acupuncture</li> <li>• Understand the concepts of Traditional Chinese Medicine (TCM)</li> <li>• Describe various theories related to Acupuncture</li> <li>• Understand the functions of zang - fu organs</li> <li>• Understand the modern scientific theories on acupuncture</li> <li>• Explains the concepts of meridians and collaterals</li> <li>• Describe the twelve regular meridians and eight extra meridians</li> </ul>	
<b>Course content</b>			
<p>Historical study of Acupuncture and concepts of TCM including description of yin and yang theory, the theory of the five elements, theory of essence, qi, blood and body fluids, the zang organs and their functions, fu organs and their functions, scientific basis and modern theories of acupuncture, the concept of the meridians and collaterals, the twelve regular meridians, and the eight extra meridians.</p>			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, internet			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, tutorials, assignments	
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of MCQs and short essay questions each of 1hour duration.</p> <p>Method: Assignments and final examination. CA 40% + FE 60% = Z 100% If Z &gt; 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>	
<b>Recommen ded Reading</b>	:	<p>1. Maciocia. G (2012) The Foundations of Chinese Medicine: 2nd Ed. Churchill Livingstone 2 Jingsheng. Z (2002) Chinese Acupuncture and Moxibustion: 2<sup>nd</sup> Ed. Shanghai University of TCM Press</p>	



## ACU3301 Research Methodology

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU3301
		<b>Credits: 3 (Lec. 45 hrs.)</b>
<b>Title</b>	:	Research Methodology
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Analyze the similarities and differences between the scientific method and research process</li> <li>• Critically analyze the relevance of research studies in promoting the health and adaptation of patients</li> <li>• Values the principles of beneficence, justice and respect for human dignity in conducting research</li> <li>• Identify a research problem</li> <li>• Value literature review</li> <li>• Define population and sample and state the relationship between them</li> <li>• Recognize the differences between normal, ordinal interval and ratio scales of measurements</li> <li>• Collect data, analyse and interpret</li> <li>• Write a proposal with regard to the research</li> </ul>
<b>Course Content</b>		
<p>Importance of research, historical aspects of research, types of research , importance of ethics in research, principles of research ethics, identifying a research problem, overview of research process, research methods, quantitative and qualitative research, literature review for research, applying the research process, qualitative and quantitative research methods conceptual phase of the research process, overview of data collection, data analysis and interpretation, understanding a research article, critiquing a research article, proposal writing</p>		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos		
<b>Methods of Teaching and Learning</b>	:	Lectures, Group Discussions, literature review
<b>Assessment</b>	:	<p>The module will be evaluated with continuous assessments and final examination at the end of semester which will consist of short essay questions of 2hours duration.</p> <p>Method:            CA 40% + FE 60% = Z 100%            If <math>Z &gt; 50\%</math> the student will pass the course.            (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>
<b>Recommen ded Reading</b>	:	<p>1.Sprinthall.RC, 2011; Basic Statistical Analysis, 9<sup>th</sup> Ed. Pierson            2. Hennekens. CH &amp; Buring. JE (1987); Epidemiology in medicine, 1<sup>st</sup> Ed. Lippincott Williams and Wilkins.</p>

## ACU3802 Acupuncture – meridians , aetiology and pathogenesis

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU3802	<b>Credits: 8</b> (lec.105hrs. + Tutorials 45hrs.=150hrs)
<b>Title</b>	:	Acupuncture Diagnostics -I	
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the pathogenic factors that are responsible for causing disease</li> <li>• Understand the conflict between pathogenic factors and anti-pathogenic qi</li> <li>• Understand the resultant imbalance of yin and yang</li> <li>• Understand the resultant disturbance in qi and blood</li> <li>• Explain the disturbances of body fluid mechanism</li> <li>• Explain the endogenous production of pathogenic factors</li> <li>• Describe the pathogenesis of meridians , zang and fu organs</li> </ul>	
<b>Course content</b>			
<p>Aetiology- internal causes, external causes , phlegm and stasis of blood, miscellaneous causes, pathogenesis and the conflict between pathogenic factors and anti pathogenic qi, the imbalance of the yin and yang, the failure of qi and blood, disturbances in the body fluid metabolism, endogenous production of pathogenic factors, pathogenesis of the meridians, the pathogenesis of the zang – fu organs</p>			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, internet			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, tutorials, assignments	
<b>Assessment</b>	:	<p>This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of <b>MCQs of 1 hour duration and structured essay question each of 2 hour duration.</b></p> <p>Method:            CA 40% + FE 60% = Z 100%            If Z &gt; 50% the student will pass the course.            (CA = <i>Continues Assessment</i>, FE = <i>Final Examination</i>, Z = <i>Total Marks</i>)</p>	
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Maciocia. G (2012), The Foundations of Chinese Medicine: 2nd Ed. Churchill Livingstone</li> <li>2. Zhaoguo. L (2002), Diagnostics of Traditional Chinese Medicine : 1st Ed. Publishing House Shanghai University of TCM (1st Edition)</li> <li>3. Zhufan. X (2000) Practical Traditional Chinese Medicine; 1st Ed. Beijing Foreign Language Press</li> </ol>	

### ACU3803 Acupuncture diagnostics and techniques

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU3803	<b>Credits: 8</b> (lec.105hrs. + Tutorials 45 hrs.=150hrs)
<b>Title</b>	:	Acupuncture diagnostics II	
<b>Learning Outcomes</b>	:	<p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Understand four diagnostic methods employed in history taking and examination</li> <li>• The technique employed in pulse reading</li> <li>• Analyze this findings from history and examination to describe the nature of disease</li> <li>• Understand measures of prevention of diseases and principles of treatment</li> <li>• Understand the techniques in acupuncture</li> <li>• Describe the different ancillary techniques in acupuncture</li> </ul>	
<b>Course content</b>			
<p>Methodology of case – taking and examination on the basis of the four diagnostic methods, examination of pulse , nature of disease (differentiation of syndromes) - according to the eight principles, according to the theory of qi, blood and body fluids, according to the theory of zang – fu organs , according to the theory of meridians and collaterals, according to etiology, according to six meridians, according to the theory of wei, qi, ying and xue , according to the theory of triple jiao, prevention of diseases and principles of treatment, techniques of acupuncture and ancillary techniques.</p>			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, Videos, Internet,			
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, tutorials, assignments	
<b>Assessment</b>	:	<p>The module will be evaluated with continuous assessments and final examination at the end of semester which will consist of <b>MCQs of 1 hour duration and structured essay question of 2hour duration.</b></p> <p>Method:            CA 40% + FE 60% = Z 100%            If Z &gt; 50% the student will pass the course.            (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)</p>	
<b>Recommen ded Reading</b>	:	<ol style="list-style-type: none"> <li>1. Maciocia. G (2012), The Foundations of Chinese Medicine: 2nd Ed. Churchill Livingstone</li> <li>2. Zhaoguo. L (2002), Diagnostics of Traditional Chinese Medicine : 1st Ed. Publishing House Shanghai University of TCM (1st Edition)</li> <li>3. Zhufan. X (2000) Practical Traditional Chinese Medicine; 1st Ed. Beijing Foreign Language Press</li> </ol>	

### ACU3904 Clinical Observation

<b>Type/ Status</b>	:	Compulsory	
<b>Course Code</b>	:	ACU3904	<b>Credits: 9</b> (Lec.15 hrs + clinicals 360 hrs.= 375hrs)
<b>Title</b>	:	Clinical Observation	
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"><li>• Familiarize with the clinical training in acupuncture</li><li>• Understand the different types of needles and other instruments used in acupuncture practice</li><li>• Understand the importance of hand washing and techniques of sterilization</li><li>• Apply the knowledge of anatomy in locating acupuncture points from prominent anatomical landmarks.</li><li>• Understand the methods of history taking and physical examination in Acupuncture practice</li><li>• Describe methods of needling techniques and positions</li><li>• Master the technique of inserting needles</li><li>• Prepare a comprehensive clinical work book on observations made</li></ul>	
<b>Course content</b> Familiarization with the clinical setup, needles and instruments used for acupuncture, the importance of hand washing, sterilization procedures and disinfection, importance of using sterile techniques, identify points and measurement from anatomical land marks, methods employed in history taking and examination of patients with various diseases, identify the correct technique and position to insert needles for therapeutic purposes, practice needling on dummies, self and co – students,			
<b>Resources:</b> Multimedia projector, screen, magi board, markers, manikins and clinical training centre			
<b>Methods of Teaching and Learning</b>	:	Lectures, guided supervision, group discussion, clinical demonstrations, writing of clinical work book, assignments	
<b>Assessment</b>	:	Presentation, writing of clinical log book	
<b>Recommen ded Reading</b>	:	1. Practical Manual 2. Jayasuriya. A (2002), Clinical Acupuncture; 1st Ed. Jain Publishers, India	

## ACU3205 Massage therapy

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU 3205
		<b>Credits: 2</b> (lec.15hrs. + Practical's 45 hrs.=60hrs)
<b>Title</b>	:	Massage Therapy
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"> <li>• Combine the practice of massage with acupuncture</li> <li>• Acquire skills in different massage techniques</li> <li>• Practice within the code of Ethics and the standards of practice</li> </ul>
<b>Course content:</b> Massage anatomy, massage physiology, massage strokes, requirement of massage therapy, head massage therapy, limbs massage therapy, Body front massage therapy, back massage therapy, baby massage therapy, pregnancy massage therapy, aged massage therapy. Self massage.		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, clinical training centre		
<b>Methods of Teaching and Learning</b>	:	Lectures, practical demonstrations, assignment
<b>Assessment</b>	:	The module will be evaluated with continuous assessment a final examination at the end of semester which will consist of short essay questions of 1hour duration and a practical skill demonstration. Method: Assignments and final examination. CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assignment, FE = Final Examination, Z = Total Marks)
<b>Recommen ded Reading</b>	:	1. Clay. JH (2008), Basic Clinical Massage Therapy; 1st Ed. Lippincott Williams & Wilkins 2. Biel. A (2014), A Trail Guide to the Body: How to locate Bones, Muscles and more 5th ED. Books of Dicovery 3. Jiangshan. L (2011), Tuina Massage Manipulations ; 1st ED. Singing Dragon/ Jessica Kingsley Publishers

## ACU4701 Acupuncture Therapeutics I

<b>Type/ Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU4701 <b>Credits: 7</b> (lec.90hrs. + Tutorials 45 hrs.=135hrs)
<b>Title</b>	:	Acupuncture Therapeutics I
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"> <li>• Understand herbs used in Traditional Chinese Medical practice</li> <li>• Explain aetiology, pathology, differentiation and the rationale behind treatment of - headaches, dizziness, common cold and influenza, cough, breathlessness, wheezing, asthma, eczema, allergic rhinitis, sinusitis, tinnitus, tiredness, chest painful obstruction syndrome, epigastric pain, hypochondrial pain, abdominal pain, abdominal masses, diarrhoea and constipation</li> </ul>
<b>Course content</b> Chinese Herbal Medicine in therapeutics, aetiology, pathology, differentiation and treatment principles on – headaches, dizziness, common cold and influenza, cough, breathlessness, wheezing, asthma, eczema, allergic rhinitis, sinusitis, tinnitus, tiredness, chest painful obstruction syndrome, epigastric pain, hypochondrial pain, abdominal pain, abdominal masses, diarrhoea and constipation		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, Videos, internet		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, tutorials, assignments
<b>Assessment</b>	:	This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of MCQs of 1hour duration and structured essay question each of 2 hour duration. Method: Assignments and final examination. CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)
<b>Recommen ded Reading</b>	:	1. Maciocia. G (2011) The Practice of Chinese Medicine : 1st Ed. Churchill Livingstone 2. Maciocia. G (2010) The Psyche in Chinese Medicine : 1st Ed. Churchill Livingstone 3. Zhufan. X (2000) Practical Traditional Chinese Medicine ; 1st Ed. Beijing Foreign Language Press

## ACU4602 Acupuncture Therapeutics II

<b>Type/Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU4602
		<b>Credits: 6</b> (lectures 75hrs. + Tutorials 45 hrs.=120hrs)
<b>Title</b>	:	Acupuncture Therapeutics II
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: Describe the aetiology, pathology, differentiation and the rationale behind treatment of, <ul style="list-style-type: none"> <li>• painful urination syndrome, enuresis , incontinence and oedema;</li> <li>• painful obstruction syndrome;</li> <li>• low backache and sciatica;</li> <li>• myalgic encephalomyelitis, parkinson’s disease, wind stroke, atrophy syndrome, and multiple sclerosis;</li> <li>• bleeding, dysmenorrhoea, menorrhagia and metorrhagia, premenstrual tension,</li> <li>• mental and emotional problems, insomnia and poor memory</li> </ul>
<b>Course content</b> Aetiology, pathology, differentiation and treatment principles on – painful urination syndrome, enuresis and incontinence, oedema, painful obstruction syndrome, low backache and sciatica, myalgic encephalomyelitis, parkinsons disease, wind stroke, atrophy syndrome, multiple sclerosis, bleeding, dysmenorrhoea, menorrhagia and metorrhagia, premenstrual tension, mental and emotional problems, insomnia and poor memory,		
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, internet,		
<b>Methods of Teaching and Learning</b>	:	Lectures, group discussions, tutorials, assignments
<b>Assessment</b>	:	This course will be evaluated with continuous assessments and final examination at the end of semester which will consist of MCQs of 1 hour duration and structured essay question of 2 hour duration. Method: CA 40% + FE 60% = Z 100% If Z > 50% the student will pass the course. (CA = Continues Assessment, FE = Final Examination, Z = Total Marks)
<b>Recommended Reading</b>	:	1. Maciocia. G (2011) The Practice of Chinese Medicine ; 1st Ed. Churchill Livingstone 2. Maciocia. G (2010) The Psyche in Chinese Medicine ; 1st Ed. Churchill Livingstone 3. Zhufan. X (2000) Practical Traditional Chinese Medicine ; 1st Ed. Beijing Foreign Language Press

### ACU4903 Clinical Practice

<b>Type/Status</b>	:	Compulsory
<b>Course Code</b>	:	ACU4903
		<b>Credits: 9</b> (Lectures 15 hrs + clinical’s 360hrs.= 375hrs)
<b>Title</b>	:	Clinical Practice
<b>Learning Outcomes</b>	:	By the end of this course, the student will be able to: <ul style="list-style-type: none"> <li>• Demonstrate the ability to read pulse and tongue</li> </ul>

	<ul style="list-style-type: none"> <li>• Demonstrate to arrive at a diagnosis(differentiation)</li> <li>• Work out the treatment and management plan</li> <li>• Insert needles at correct location and depth</li> <li>• Manage emergencies, pain and substance abuse</li> <li>• Demonstrate acupuncture anaesthesia</li> <li>• Demonstrate skills on auriculotherapy and head needle therapy</li> <li>• Understand the ancillary techniques of acupuncture</li> <li>• Compile a case report</li> </ul>																						
<b>Course content</b>																							
Pulse and tongue reading, identify differentiation, strategy of treatment and management plan for the patient, treatment procedures under strict supervision, learning the art of puncturing the needles at the correct location, depth and without causing any discomfort to the patient, demonstrate skills in management of emergencies, management of pain, management of substance abuse, acupuncture anaesthesia, auriculo-therapy, head needle therapy, ancillary techniques employed in Acupuncture,																							
<b>Resources:</b> Multimedia projector, screen, magi board, markers, DVD, videos, internet clinical training centre																							
<b>Methods of Teaching and Learning</b>	: Lectures, guided supervision of clinical practice, case writing																						
<b>Assessment</b>	: <table border="0" style="width: 100%;"> <tr> <td>Continuous assessment:</td> <td></td> </tr> <tr> <td>Case reports (50 No' s):</td> <td style="text-align: right;">Marks 05%</td> </tr> <tr> <td>Final Assessment</td> <td style="text-align: right;"><b>Marks</b></td> </tr> <tr> <td>    A) Duration : 40 min</td> <td></td> </tr> <tr> <td>        history taking</td> <td style="text-align: right;">20%</td> </tr> <tr> <td>        examination and diagnosing</td> <td style="text-align: right;">20%</td> </tr> <tr> <td>    Duration : 20min</td> <td></td> </tr> <tr> <td>        clinical management plan</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>        needling technique</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>    B) Duration : 10min</td> <td></td> </tr> <tr> <td>        viva voce</td> <td style="text-align: right;">05%</td> </tr> </table>	Continuous assessment:		Case reports (50 No' s):	Marks 05%	Final Assessment	<b>Marks</b>	A) Duration : 40 min		history taking	20%	examination and diagnosing	20%	Duration : 20min		clinical management plan	25%	needling technique	25%	B) Duration : 10min		viva voce	05%
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needling technique	25%																						
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viva voce	05%																						
<b>Recommended Reading</b>	<ol style="list-style-type: none"> <li>1. Practical manual</li> <li>2. Jayasuriya.AC (2002) Clinical Acupuncture; 1st Ed. Jain Publishers, India</li> </ol>																						

### ACU4804 Dissertation

<b>Type/ Status</b>	: Compulsory	
<b>Course Code</b>	: ACU4804	<b>Credits: 8</b> (Guided study 720 hrs)
<b>Title</b>	: Dissertation	
<b>Learning Outcomes</b>	: <p>By the end of this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Utilize the knowledge of the scientific method to investigate a chosen area of study relevant to acupuncture practice</li> </ul>	



<b>Course content</b>	<ul style="list-style-type: none"> <li>Apply and integrate concepts of the total programme to investigate the area of study following the specified guidelines of a self-directed learning</li> </ul>
	By doing this module the student will achieve the ability to conduct a research under the guidance. The student is expected to conduct a literature review on a selected topic and develop a research proposal. At the completion of the research project the findings are to be presented to an academic forum
<b>Resources:</b> IT Lab facilities, Books, journals. multimedia projector, screen, magi board, markers, dvd, videos, , internet, books, journals	
<b>Methods of Teaching and Learning</b>	: Web-based learning, group discussions, computer lab work, progress report writing, Guided study
<b>Assessment</b>	: Students are expected to follow the research process. They are supposed to conduct a research project in a selected area following the specified guidelines of a self-directed learning in negotiation with a member of staff. This is mainly focused on web based learning. Develop a body of knowledge for use in improving the quality of acupuncture practice. The limit of the study is 10000 words. Attendance to computer lab workshops is compulsory. A minimum mark of 50% should be obtained in assessments. At the completion of this module it will be evaluated in full at the semester end exam.  Method: Proposal : 20% Research report : 50% Presentation : 15% Defense : 15%
<b>Recommended Reading</b>	: 1. Sprinthall.RC, 2011; Basic Statistical Analysis, 9 <sup>th</sup> Ed. Pierson 2. Hennekens. CH & Buring. JE (1987); Epidemiology in medicine, 1 <sup>st</sup> Ed. Lippincott Williams and Wilkins 3. Rao.PSSS, Richards. J (2006) Introduction to Biostatics and Research methods; 4 <sup>th</sup> ED. PHI Learning (PVT) Ltd.

## **a. Teaching and Learning Methods**

### **i. Text books:**

Text books/ Hand-outs have been identified for each course. Additional reading materials are available in the form of text books and e-library facility for students to access as necessary.

### **ii. Online activities and discussion forums:**

In some of the courses there will be online activities in the form of quizzes and assignment submission. There will also be discussion forums where teachers and learners can discuss important topics that are of practical importance as well as areas in the course material which are not clear to learners.

### **iii. Interactive Sessions:**

Interactive sessions will be held on pre-assigned dates, where learners can clarify problems in the instructional material. Permanent and Visiting Academic staff will undertake this task.

### **iv. Web-based learning**

Students are provided with a laptop computer in their course package. They will be able to use Wi-Fi to get access to the e-library, internet and CDs for their web- learning.

### **v. Laboratory/ practical/ manual of instruction:**

There will be practical sessions where learners will be provided hands on experience to learn the required skills. Qualified and experienced subject-specialized graduate staff will be available for guidance.

Laboratory technicians will be appointed to take care of the Science lab instruments and equipment.

### **vi. Clinical training:**

Students in the B.Sc. in Acupuncture (Honours) degree programme will undergo clinical and practical training in acupuncture in their third and fourth years to acquire necessary skills in the management of patient. The acupuncture training centre situated at the KIU in the Department of Acupuncture will have the necessary facilities for this training. Qualified Western and Ayurvedic physicians with necessary qualifications in Acupuncture will conduct this training under the supervision of the Head of Department of Acupuncture.

## **b. Teaching Panel – Regular/ Visiting Basis**

The following is the proposed team of academic staff with a brief description about the related expertise.

The recruitments will be completed before the commencement of the degree programme. Where appropriate, experts are invited as visiting lectures in order to augment the theoretical knowledge.

1. Prof. Ariarane Gnanathanan - Professor in Medicine, Department of Clinical Medicine, Faculty of Medicine, University of Colombo, Sri Lanka
1. Prof. Neluka Fernando- Professor in Microbiology, Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayawardenapura
2. Prof. Sagarika Ekanayake- Professor in Biochemistry, Department of Biochemistry, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka
3. Prof.S.W.Wimalasekara- Professor in Physiology, Department of Physiology, Faculty of Medical Sciences, University of Sri Jayawardenepure, Sri Lanka
4. Dr.Bimalka S. Seneviratne- MD, Histopathology; Diploma in Pathology; MBBS, Senior Lecturer, Department of Pathology, Faculty of Medical Sciences, University of Sri Jayawardenapura; Consultant Pathologist, Senior Registrar in Pathology, National Hospital of Sri Lanka.
5. Dr.Janani Kottachchi- (MD- Medical Microbiology –Colombo; Post graduate Diploma in medical Microbiology – Colombo; MBBS- Sri Lanka) Senior Lecturer, Department of Microbiology, University of Sri Jayewardanepura, Sri Lanka.
6. Dr. T.D.C.P. Gunasekara- PhD Biomedical Sciences- Japan; Master of Science- Microbiology India; B.Sc Microbiology- India) Senior Lecturer, Department of Microbiology, Faculty of Medical Sciences, University of SriJayewardenepura, Sri Lanka.
7. Dr. M.Manoji Weerasekara- PhD, Molecular Medicine- New Zealand; M.Phil- Microbiology-SJP; B.Sc.Microbiology- India; Senior Lecturer SJP.
8. Dr. G. I. D. D. A. D. Athukorala- MBBS; PG Diploma - Med. Micro; MD - Med. Micro) Lecturer, Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka; Senior Registrar; in Medical Microbiology, Colombo South Teaching Hospital, Lady Ridgeway Hospital for Children, and National Cancer Institute, Sri Lanka.
9. Dr. Thushari Dissanayaka-MD in Medical Microbiology (Colombo), Diploma in Medical Microbiology (Colombo); MBBS, Srilanka Lecturer –Department of Microbiology, Faculty of Medical Sciences, SJP.
10. Dr.RanjiniAmarakoon- PhD (Food Science and Technology) Czech Republic; M.Sc. (Food Science and Technology) PGIA, Peradeniya; B.Sc.(Agri) Peradeniya; Visiting Lecturer, Kelaniya; Temp. Senior Lecturer, SJP, Dept. Of Food Science and Technology, Faculty of Applied Sciences, SJP.
11. Mr.R.M.Thilakarathna- MA (Linguistics); BA (Languages); Dip. In Teaching English as a Second Language (TESL); Lecturer in English Teaching, University of Colombo.
12. Mr.M.A.Siriwardena-B.Pharm., Rajeeve Gandhi University of Health Sciences, India; Reading for M.Phil (pharmacology) SJP.

### **c. Laboratory/Practical Classes and Manuals**

## YEAR ONE

Course Code	Title of the course	Lab/Clinical hours	Lab/clinical credits
ACU1401	Human Anatomy	30/0	1
ACU1602	Human Physiology	30/0	1
ACU1403	Biochemistry	30/0	1
ACU1404	Psychology and Social aspects of Health	-	
ACU1205	Ethics and Legal Issues	-	
ACU1206	Communication and Communication skills	-	-
ACU1207	First Aid and CPR	30/0	1
ACU1308	Epidemiology	-	-
ACU1309	Nutrition and dietetics	-	-
		120/0	4

## YEAR TWO

ACU2401	Microbiology & Parasitology	30/0	1
ACU2302	Pathology	30/0	1
ACU2603	Public Health	-	-
ACU2304	Pharmacotherapeutics	-	-
ACU2205	Bio Statistics	30/0	1
ACU2306	Basic Medical, Psychiatric and Paediatric Disorders	-	-
ACU2207	Gynaecology and Obstetrics	-	-
ACU2108	Basic Surgical, Eye and ENT conditions	-	-
ACU2109	Radiology and diagnostic imaging	-	-
ACU2410	Philosophy and Theories of Acupuncture	-	-
		90/0	3

## YEAR THREE

ACU3301	Research Methodology	-	-
ACU3802	Acupuncture- Diagnostics I	-	-
ACU3803	Acupuncture – Diagnostics II	-	-
ACU3904	Clinical observation	0/360	8
ACU3205	Massage Therapy	0/45	1
		0/405	9
ACU4801	Acupuncture Therapeutics I	-	-
ACU4802	Acupuncture Therapeutics II	-	-
ACU4903	Clinical Practice	0/360	8
ACU4504	Dissertation	0/450	5
		0/810	13

## YEAR FOUR

**Practical manual – see annexure**

**d. Rules and Regulations of Assessments**

Assessment methods include continuous assessments and Final examinations are explained in the individual courses.

**i. Continuous Assessments (CA):**

The CA will contribute towards the CA mark (CA) and will account for 40% of the overall mark. The continuous assessments (CA) will include theory, practical and assignments.

**ii. Final Examination (FE)**

The FE will account for 60% of the overall mark. This final examination will consist of multiple choice questions (MCQ), structured essay paper, short essays. Practical's in acupuncture will consist of clinical case discussion and needling technique of 60 min. duration and viva Voce of 10min. duration.

**iii. Overall Mark**

Overall Assessment Mark (Z) = 40% CA + 60% FE

The overall assessment mark (Z%) of a student in respect of any course offered in the programme shall be based on both the continuous assessment mark and the mark obtained at the final examination. The overall Assessment mark (Z%) of a graduate shall be computed as follows:

$$CA\ 40\% + FE\ 60\% = Z\ 100\%$$

If  $Z > 50\%$  the student will pass the course.

**iv. Grade Points and Grade Point Average (GPA)**

The Grade Point Average (GPA) will be computed using the grades assigned for compulsory courses and optional courses, taken for credit. Research project will be evaluated on a pass/fail basis.

On completion of the course unit a Grade Point will be assign by the instructor(s) using the following table:

Range of Marks	Grade	Grade Point Value	Implication
80- 100	A+	4.0	<i>Exceptional</i>
75- 79	A	4.0	<i>Outstanding</i>
70- 74	A-	3.70	<i>Excellent</i>
65- 69	B+	3.30	<i>Very Good</i>
60- 64	B	3.00	<i>Good</i>
57- 59	B-	2.70	<i>Very Satisfactory</i>
54-56	C+	2.30	<i>Satisfactory</i>
50- 53	C	2.00	<i>Minimum pass</i>
45- 49	C-	1.70	<i>Below a pass</i>
40-44	D+	1.30	<i>weak</i>
30-39	D	1.00	<i>Very weak</i>
00-29	E	00	<i>Fail</i>

A+, A, A-, B+, B, B-, C+, C constitute pass grades. A student obtaining a grade less than C should pass the course unit at a future sitting.

The Grade Point Average (GPA) will be computed using the following formula:

$$\text{GPA} = \frac{\sum c_i g_i}{\sum c_i} \quad \text{where } c_i = \text{number of credit units for the } i^{\text{th}} \text{ course, and } g_i = \text{grade point for the } i^{\text{th}} \text{ course}$$

#### v. Assessment and Evaluation throughout the Programme

##### Evaluation Procedure of the Programme

Course work and research projects of the B.Sc. in Acupuncture (Honours) degree programme will be evaluated as follows.

##### Evaluation of Course work

For all courses a minimum of 80% attendance is expected. The scheme of the evaluation of the courses is given under each course.

Based on the scheme given, the overall performance of a student in a given course shall be evaluated by the respective instructor(s) and a grade will be assigned. The minimum grade a student should achieve to pass a course is C. Students will be informed of the evaluation scheme by the instructor at the beginning of a given course.

#### e. By Laws

##### BY-LAWS APPLICABLE TO THE KHAMTTC

Initially KHAMTTC will consist of a single faculty, the Faculty of Health Sciences. This faculty will offer B.Sc. degree programs in Nursing, Acupuncture and Kaatsu. These programs will be governed by the respective by- laws, of KHAMTTC approved by the Senate and Council.

#### i. General By-Laws for students at KHAMTTC

- i. On admission to KHAMTTC, students shall be issued an identity card from the Registrar's office. This Identity card should be carried by the students at all times and produced when required.
- ii. Any change of address must be immediately brought to the notice of the Head of the Department.
- iii. Students should maintain proper standards of conduct and behavior. Smoking and consuming alcohol and illicit drugs are prohibited within the KHAMTTC. Students should not enter the institutional premises under the influence of alcohol.
- iv. Students are requested to confirm to the rules of the other institutions they may visit during their course.
- v. Student attendance will be marked in all teaching sessions. The attendance will be evaluated at the end of each semester. The students should have 80% attendance in each and every components of all subject.
- vi. Every registered student of the institution shall have either student Identity Card or Student's Record Book which shall be produced when called upon to do so by a member of the Academic Staff or by any officer authorized by the Director Academic or Registrar.
- vii. If any registered student fails to produce or willfully refuses to produce or neglects to produce such Identity Card or Student's Record Book when called upon to do so by an authorized officer such student shall be deemed to be guilty of an offence punishable under these By-Laws.
- viii. No public meeting may be held by any student(s), Student Society, or other Association of students on the institutional premises except with the written permission of the Director Academic. The latter shall be obtained in a manner prescribed by notice from time to time.
- ix. If students plan to do such outside the institutional premises but as a group of students of KHATTC, they should seek permission from the Dean.
- x. For the purpose of this section a public meeting may be a gathering of five or more students with or without fees being charged.
- xi. The holding of an unauthorized meeting shall be considered an act of indiscipline and those responsible shall be liable for disciplinary action.

- xii. Unless the prior consent of the Director Academic has been obtained, no subscriptions may be collected from students of the KHAMTTC by any student(s).
- xiii. Any teacher of the KHAMTTC may request appropriate authority to take necessary action for a breach of Code of Conduct.

**ii. Examination By Laws**

**(A) By laws governing the conduct of examinations**

- i. A candidate shall be present at their respective examination hall 15 minutes before the commencement of an examination and shall enter the examination hall with the permission of the supervisor.
- ii. Candidates shall occupy the seats carrying their respective Index Numbers allocated by the KHAMTTC.
- iii. Candidates shall take into the examination hall only pens, pencils, erasers, foot rulers, boxes of colors, mathematical instruments and such other essential articles or material authorized by the Chief Examiner.
- iv. No candidate shall be admitted to the examination hall after thirty minutes have elapsed from the commencement of an examination and no candidate shall be permitted to leave the examination hall before thirty minutes have elapsed from the commencement of the examination.
- v. Every candidate should bring to the examination hall his Admission Card, and student's identity card issued by the KHAMTTC. If a candidate loses the identity card or admission card during the examination period, he/she should immediately report to the registrar/senior assistant registrar and obtain a duplicate of such document.
- vi. A candidate shall produce any document, written material or item of stationery in his possession or custody when requested to do so by the supervisor.
- vii. No candidate shall exchange anything with any other candidate, copy anything written by any other candidate or communicate with, any other candidate. A candidate shall not permit or assist any other candidate to copy.
- viii. A candidate shall use only the answer scripts and sheets of paper issued each day for the purpose of the examination.
- ix. Stationery (writing paper, drawing paper, graph paper, etc.) shall be issued to candidate as required. A candidate shall not tear, fold, crumple, scratch or in any other way damage any item of stationery issued to him. A



candidate shall use only the stationery issued to him by the supervisor and invigilator, and shall leave on his desk his answer scripts, mathematical tables and any other returnable material issued to him before he leaves the examination hall. A candidate shall not take out of the examination hall any paper, answer book or any other material issued to him by the supervisor or other authorized officer.

- x. Before answer an examination paper a candidate shall write his index number with the name of the examination in the appropriate space in the answer sheet and write his or her index number on every sheet or paper used by him or her. No candidate shall write his or her name or make any identification mark in any answer script. Any candidate who writes an index number and code other than his own on an answer script shall be guilty of an examination offence.
- xi. All papers used for rough work as well as writing paper shall be attached to the answer script, but all material, which does not form a part of the answer script, shall be cancelled by drawing lines across such material.
- xii. A candidate shall conduct herself/ himself in the examination hall in such manner as not to cause any obstruction or harassment to the supervisor, the invigilators and other candidates, and shall observe silence both inside the examination hall and outside.
- xiii. A candidate shall not permit another person to impersonate him at any examination, and shall not appear on behalf of any other person at any examination.
- xiv. The supervisor or an invigilator may obtain from a candidate a written statement in respect of any incident that occurs in the examination hall. A candidate shall not decline to make such statement or to place his signature on such statement.
- xv. During the course of answering a paper, no candidate shall be permitted to leave the examination hall temporarily. In case of emergency the supervisor may grant permission to do so under his or her supervision.
- xvi. A candidate shall remain seated in his seat till the answer scripts are collected. The candidate himself or herself shall hand over his or her answer script only to the supervisor or invigilator.
- xvii. A student who withdraws or absents himself/herself from any Degree examination without a valid reason shall not be eligible for Honors at a subsequent examination unless special permission is granted by the Senate.

- xviii. Students are prohibited from carrying cellular phones during the course of written, oral, clinical or practical examination; it shall be the responsibility of every candidate to refrain from any act that may lead to any suspicion that he has committed any examination offence or is likely to commit such offence.

**(B) Examination Offences**

- i. Possession of any notes, electronic devices and documents, while in the examination center, other than those issued at the center for purposes of the exam.
- ii. Copying.
- iii. Cheating.
- iv. Removing items of stationery and other material belonging to KHAMTTC from the examination hall.
- v. Misconduct.
- vi. Impersonation.
- vii. Improper access to the contents of a question paper or to the subject matter of a test, or obtaining aid and assistance to commit an examination offence.
- viii. Exercising improper influence on officers engaged in the conduct of an Examination.
- ix. Any examination offence considered as an examination offence by KHAMTTC.

**(C) Penalties for Examination Offences**

- i. **Possession of any unauthorized materials:** Cancellation of candidature for any period not exceeding one academic year.
- ii. **Copying:** cancellation of candidature and debarring the candidate from sitting for any examination conducted by KHAMTTC for any period not exceeding one years and the imposition of other penalties as recommended by the Board of Inquiry.
- iii. **Cheating:** cancellation of candidature and debarring the candidate from sitting for any examination conducted by KHAMTTC for a Period of time, not exceeding one year decided by the Board of Inquiry.
- iv. **Removing out of the examination hall items of stationery and other material belonging to KHAMTTC:** Cancellation of candidature and debarring the candidate from sitting for any examination conducted by KHAMTTC for a period of time determined by the Board of Inquiry.
- v. **Improper conduct:** Cancellation of candidature and debarring the candidate from sitting for any examination conducted by KHAMTTC for a period not exceeding one year and other penalties as decided by the Board of Inquiry.
- vi. **Impersonation:** Cancellation of candidature and debarring the candidate from sitting for any examination conducted by KHAMTTC for a period not exceeding one year and other penalties at the of discretion the Board of Inquiry.
- vii. **Exercising improper influence on examiners or officers engaged in the conduct of an examination:** Any penalty imposed by the Board of

- Inquiry.
- viii. **Committing an examination offence for the second time:** Cancellation of Candidature.

**iii. Examination By-Laws for the Award of Bachelor of Science in Acupuncture (Honours) Degree**

By-Laws made by the Council of the KHAMTTC of Sri Lanka under Section 135 of the Universities Act No. 16 of 1978 and its subsequent amendments.

These By-Laws may be cited as the Bachelor of Science in Acupuncture (Special) Degree (B.Sc) By-Laws.

These By-Laws shall be effective for degrees awarded in and after the Academic Year 2015/2016 in respect of examinations held in and after the Academic year 2014/ 2015 for students admitted to the Bachelor of Science in Acupuncture (Honours) Degree Programme offered from the Academic Year 2015/2016.

- i. Subject to these By-Laws, a student may be admitted to the degree programme Bachelor of Science in Acupuncture (Honours) if he/ she;
  - a) Has been duly admitted as an internal student of KHAMTTC and has been registered as a student of the KHAMTTC and
  - b) Has passed the Bachelor of Science in Acupuncture (Honours) end of semester I in year 1 Examination, and
  - c) Has passed the Bachelor of Science in Acupuncture (Honours)- end of semester II in year 1 Examination, and
  - d) Has passed the Bachelor of Science in Acupuncture (Honours)- end of semester I in year 2 Examination, and
  - e) Has passed the Bachelor of Science in Acupuncture (Honours)- end of semester II in year 2 Examination, and
  - f) Has passed the Bachelor of Science in Acupuncture (Honours)- end of semester I in year 3 Examination, and
  - g) Has passed the Bachelor of Science in Acupuncture (Honours) Final Examination - end of semester II in year 3 Examination, and
  - h) Has passed the Bachelor of Science in Acupuncture (Honours), - end of semester I in year 4, and
  - i) Has passed the Bachelor of Science in Acupuncture (Honours) Final examination- end of semester II in year 4, and
  - j) Has paid such fees or other dues as may be prescribed by KHAMTTC, and
  - k) Has fulfilled any other conditions or requirements as may be prescribed by the KHAMTTC.
- ii. It is compulsory for every student who is eligible to sit the examination to have fulfilled all requirements by the scheduled date of examination for the

respective batch of students.

- iii. The candidate should have a minimum of 80% attendance in all academic activities such as lectures, tutorials, and practical, for a particular examination, to be eligible to sit for that examination.
- iv. To be eligible to sit an examination, the signature of the Head of the Department of Acupuncture for satisfactory attendance at lectures, tutorials, practical classes, and all other requirements should be obtained. Those who have defaulted institutional dues, even though they may have satisfied stipulated academic requirements, will not be permitted to sit any exam.
- v. A student may be granted permission to postpone a scheduled attempt only if a valid reason is submitted and accepted by the Faculty Board. In such an event, the subsequent attempt may be considered as the first attempt of the particular student.
- vi. Medical Certificates
  - a) A student who is absent for an assessment must inform the head of department and submit a valid medical certificate (MC) to the Medical Officer at KHAMTTC Health Center within three (3) days. This medical certificate will be verified by this Medical Officer. If the medical certificate is not accepted the student will be considered as "absent".
  - b) Students are advised to present themselves before the MO at KHAMTTC Health Center in case of illness. If this is not possible, students are advised to get a MC from a Registered Medical Officer.
  - c) Having scrutinized any MC submitted, the KHAMTTC shall decide whether the MC submitted by a student will be accepted by the institution for granting any benefit or giving any concessions. The final authority on this matter will be the Dean.
  - d) A student not covered by an MC will be given zero marks for the attempt.
- vii. Valid Excuses:
  - a) Medical certificate acceptable to the Faculty Board, and persons/institutions entitled to issue valid medical certificates for the above purposes
    - I. Medical Officer of the KHAMTTC Health Center
    - II. A consultant in any government or private hospital
    - III. A District Medical Officer (DMO) in government hospital
    - IV. A medical certificate issued by a Teaching/ General/ Base hospital
  - b) Death of immediate family member (parents/ brother/Sister, if married, spouse, children) one week prior to the exam or during the exam the death certificate should be submitted for approval of the senate.
- viii. In the absence of an accepted excuse, failure to sit any due or scheduled examination shall be considered as an unsuccessful attempt at that examination.
- ix. If a student is unable to sit the examination at the first scheduled attempt as a result of his/her being repeated in academic activities due to valid excuse, he/she has to sit the next available examination. The examination immediately following the expiry of the postponement recommended by the Faculty Board shall be the candidate's first attempt. If the missed examination is the

candidate's first attempt he/she will be eligible for distinctions and Honours at the next scheduled examinations.

- x. If the candidate fails to sit for a subject without a valid excuse acceptable to the Faculty Board, the candidate should take the relevant subject in the next available examination as his/ her second attempt. The candidate therefore would not be eligible for distinctions and or Honours, He/she can complete the other subjects of the examinations.
- xi. If the candidate is unable to sit for a scheduled examination due to his/her being repeated in a clinical placement or due to incomplete clinical experience record, the candidate will not be eligible for Distinctions and/or Honours when he/she completes the examination.
- xii. An overall average of 50% marks in subject shall be considered as the pass mark in the subject.
- xiii. A student considered to be eligible for the award of the Bachelor of Science Acupuncture (Special) degree when the student;
  - a) Complete the course by obtaining 121 credits,
  - b) Pass all the courses required for B.Sc. in Acupuncture (Nursing) degree programme.
- xiv. The examinations will be held during the last week of the semester.
- xv. The examination immediately following the completion of the course shall be deemed to be the first due or scheduled attempt.
- xvi. A candidate shall be deemed to have sat the first scheduled examination unless a valid excuse has been submitted and accepted by the Faculty Board.
- xvii. A student can hold a studentship for a maximum period of 8 years for the B.Sc. in Acupuncture (Special) degree from the date of first registration for the respective degree.

**f. Past Question Papers**

Since recruitments have not been started for B.Sc. in Acupuncture (Honours) degree programme this is not applicable.

**g. Results of Graduating Class**

Since the B.Sc. in Acupuncture (Honours) degree programme has not been commenced this part is not Applicable.

**CHAPTER**

**03**

**STANDARDS AND QUALITY ASSUARANCE  
MECHANISMS AND PROCEDURES**

- 3.1 Internal Quality Assurance Mechanisms and Procedures;**
- 3.2 External Quality Assurance Mechanisms and Procedures;**
- 3.3 Subject Bench Mark Statement;**
- 3.4 Credit and Qualification Framework;**
- 3.5 Qualification Descriptors;**
- 3.6 Code of Practice for Students And Staff;**
- 3.7 Students Feedback and Comments Through Questionnaire;**
- 3.8 Peer Observations;**
- 3.9 Labour Market Survey and Employer Feedback;**

## **5. Standards and Quality Assurance Mechanisms and Procedures**

### **a. Internal Quality Assurance Mechanisms and Procedures**

The degree awarding KIU will adhere to the guidelines stipulated by the Sri Lankan Credit and Qualification Framework (SLCQF) to monitor the learner's journey. Periodic review of People, Processes and Programmes will be made with the assistance of internal Quality Assurance Team (QAT). The QAT will be appointed by the Council. The QAT shall include Deputy Director Academic, Heads of Departments and three external subject experts appointed by the Director Academic from each respective disciplinary/subject

area to look after and propose mechanisms for maintaining quality of academic standards and to manage quality of students learning. The KIU will also seek assistance from the Subject Review Panel of the QAAC of the UGC in this regard.

**i. Appropriate design of the program**

- a) Standardized curriculum: the curriculum has been developed based on the guidelines set by WHO and similar degree programs offered by reputed universities in China, UK, Canada and USA. Academics and professionals/ experts were consulted in developing the curriculum and subsequent revisions.
- b) Detailed Course Outlines: detailed curriculum with well-defined course objectives, learning outcomes, pedagogical methods, evaluation and examination criteria, are made available for learners before the delivery of Course modules.
- c) Regular curriculum revisions: Periodic curriculum reviews will be conducted in every five years to update, promote and to improve programs. Syllabi shall be revised subjected to requirements and changes in the industry/environment. Such revisions shall be made after consulting experts, students representatives and interested stakeholders.
- d) Opinion of subject specialists: subject experts advice is sought in curriculum development, revisions and in other special occasions.

**Effective Delivery**

- a) Quality Culture: Establish a quality culture within the institution by maintaining continuous quality in all aspects of “best practice model” of course delivery activities.
- b) Selection of competent staff: As in the UGC criteria, Only 2<sup>nd</sup> Class Upper Division Hours Degree or above graduates will be considered when recruiting lecturers instructors and trainers to the KHAMTTC. In addition to the highest academic professional credentials in respective areas, their basic delivery skills and behavioural traits are tested at the selection.
- c) Ensure quality of teaching: according to the policy of the institution, academic and academic support staff will be made aware of their duties and responsibilities (in writing) and practices are maintained throughout the year
- d) Lectures by visiting experts: Whenever possible and appropriate, industry experts are invited for visiting lectures in order to augment the theoretical knowledge so that students will appreciate the theory in practice.
- e) Feedback: students will be provided with specific feedbacks on their learning regularly and in timely manner.



- f) Communication: provide opportunities for teacher- student interaction which helps both parties to grow. This leads the teacher to identify the effectiveness of teaching and the learner to identify the progress of their learning.
- g) Continuous Professional Development: Continuous Improvement in People (Staff), Processes (Delivery), and Products (Programmes) shall be taken care of throughout.
- h) Academic guidance and counselling: At the beginning of a programme, students are given a Hand Book containing all the details of the programme. Every student is assigned to an Academic Advisor throughout the program for advice and counselling as required. Constant observation of performances of students will be done in order to provide regular, timely and specific feedback.
- i) Use of effective delivery tools in order to provide best practice model of training, both conventional and modern teaching tools will be used to encourage students in active learning. In addition, e-learning facilities will be provided to promote student involvement. Course Management Systems (CMS) will be in place for the management of the courses.
- j) Up to date laboratories: general and specialized skill laboratories with ultra-modern equipment and technology are maintained to conduct laboratory sessions for the course modules that require practical exposure.
- k) Clinical training placements: Clinical training program is introduced to the courses as and when they are required.
- l) Continual professional development: teachers will be given opportunities for continual professional development based on the needs identified through performance appraisal

#### **The accuracy and consistency of assessment decisions**

- a) Teacher performance reviews: The performance of teaching staff will be reviewed by a group of peers (at least two) and evaluated by a senior academic staff. At the end of each course module students evaluations will be obtained. Reports with suggestions for improvements are given for appropriate corrective actions to be taken. Review records/results will be made available for internal and external reference.
- b) Assessment Practice: According to the standards and well represented, formative and summative evaluation will be conducted to evaluate the learner's knowledge and skills and to identify whether students meet the required standards. Consistency of evaluation will be maintained through standardized Examination rules and regulations of KIU. Confidentiality of the conduct of examinations will be assured.
- c) Moderation of papers by external reviewers Moderation of question papers will be done for both continuous assessments and final examinations by a subject expert. Copies are maintained.
- d) Second marking of randomly selected answer scripts/ assignments: Randomly selected answer scripts, from among stratified samples such as

highest marks, average marks and lowest mark recorded, shall be sent to outside experts for second marking and records of such evaluations will be made available for the stakeholder reference on request.

### **Maintenance of documentations**

- a) Record Keeping: attendance records, programme outlines, lesson plans, hand outs, all AV material, online learning, guidance given, reviews, feedback records, assessment plans, assignments, question papers with moderated papers, marking sheets etc. will be maintained for continuous improvement and quality assurance.
- b) Accessibility of records: Students will be given access to their own records relevant to all aspects of learning.

### **Monitor, review, and evaluation for continuous improvement**

- a) Student feedback: For each and every course modules, students are given an opportunity to give their feedback on teacher, on delivery methods, and the content of the course module. A check is made whether the corrective action is taken for the suggestions made in the feedback.
- b) Review of procedures: written procedures related to quality maintenance will be reviewed on regular basis to identify for further improvements.

The degree awarding institution of KIU understands that the “QUALITY” as a journey, but not a goal or destination. Hence, we will strive to continual management of academic standards and the quality of students learning opportunities.

The following Standards and Quality Assurance mechanisms are implemented in order to ensure the external quality of the programme/s.

### **b. External Quality Assurance Mechanisms and Procedures**

Institutional review and subject review of the University Grant Commission will be the initial quality assurance of the KIU. In order to maintain as well as quality improvement, the KIU will follow the procedures given below:

- a) Regular review of the Quality: QAAC-UGC will be invited to audit our programmes on regular basis.
- b) Employability of graduates: reviews will be conducted to identify the quality of the products of the KIU by contacting the employers.
- c) Opinions of external reviewers: to get the outsiders perspective, KIU will conduct seminars with external subject specialists as well as from the visiting academics of this faculty.
- d) Revision of self regulatory/ quality assurance procedures: regular discussions will be conducted with external reviewers to obtain their views and suggestions on necessary revisions.

**c. Subject Bench Mark Statement**

Please refer to annexure 3 for Subject Benchmark Statement for B.Sc. in Acupuncture (Honours) degree programme.

**d. Credit And Qualification Framework**

Please refer to page no.11 of this document for this framework.

**e. Qualification Descriptors**

Please refer page no 12 for these descriptors.

**f. Code of Practice for Students and Staff**

Please refer to Annex 4. For Code for Students and Annex 5 Code for Academic Staff.

**g. Students Feedback and Comments Through Questionnaire**

Since there are no student enrollments a document with students feedback is not available.

**h. Peer Observations**

Awaiting subject review.

**i. Labour Market Survey and Employer Feedback**

Since there is no output thus, no way to get the feedback from a labour market survey and employer feedback.

**CHAPTER**

**04**

**ACADEMIC AND RESEARCH  
COMPETENCIES OF STAFF**

- 4.1 Academic qualifications of the regular and visiting staff;**
- 4.2 Availability of required expertise in the required basic and post-graduate staff;**
- 4.3 Prescribed recruitment criteria and job description of academic staff;**
- 4.4 Staff development programmes and in-service training programmes;**
- 4.5 Databases of on-going research;**
- 4.6 Database on research publications by the staff;**
- 4.7 Interactions with the industry and methods of research information dissemination ;**

## **6. ACADEMIC AND RESEARCH COMPETENCIES OF STAFF**

In addition to the permanent staff with post graduate qualification and experience in relevant subjective and academic disciplines, there are a number of

- Senior academics retired from other universities have given their consent to teach and consultancy;
- Professors and Senior academics attached to other universities have given their consent for teaching and consultancy during their off time;
- Visiting academics from China, Japan and Canada are willing for teaching and consultancy;
- Qualified academics will be recruited additionally prior each study programme according to the UGC criteria as well as the requirements.

**a. Academic qualifications of the regular and visiting staff**

**i. Regular Staff**

- **Dr. C. Indrapala**  
**M.B.B.S., PG Diploma in Acupuncture**

**Professional Qualifications**

Completed Internship appointments in Medicine and Surgery on 31<sup>st</sup> March 2001 at Sri Jayawardenepura General Hospital.

Worked as Senior House officer in Medicine at Sri Jayawardenepura General Hospital for a period one year from 01<sup>st</sup> April 2001

Medical officer at District Hospital Beruwala from 31<sup>st</sup> March 2002 to 29<sup>th</sup> September 2006

Medical officer at Infectious Disease Hospital, Angoda from 1<sup>st</sup> October 2006 to 31<sup>st</sup> December 2011.

Medical Officer at Health Curative Department, CMC from 2<sup>nd</sup> January 2012 to 31<sup>st</sup> January 2014.

Visiting Lecturer in Acupuncture at University Medical Centre Ljubljana, Slovenia.

Appointed Head of Department of Acupuncture at KIU, Sri Lanka from February 2014.

***Other Professional Related Activities:***

Attended seminar and congresses on acupuncture over the last 8 years worldwide

**6.1.2 Visiting Staff**

- **Prof. Ariarane Gnanathanan**  
**MBBS, MD (Col), MRCP, M.Phil., FRCP**

**Postgraduate Education:**

- MD Postgraduate Doctorate in General Internal Medicine, University of Colombo, Sri Lanka
- M.Phil - Research Degree on "A National, Hospital Based Survey of snakes (Venomous and Non Venomous) responsible for human bites in Sri Lanka - A Clinico - Epidemiological Study"

**Professional Qualification:**

- MBBS Degrees with second Class honours, University of Peradeniya, Sri Lanka.
- Full registration as a Medical Practitioner with the Sri Lanka Medical Council (Registration number 8713)
- Specialist registration: Board certification in General Medicine, Postgraduate Institute of Medicine (PGIM), University of Colombo (Certification effective from 15<sup>th</sup> May 1994)
- 7<sup>th</sup> April 1997 MRCP (UK) Diploma
- FRCP (UK) May 2007

**Research Work:**

- The thesis titled "*A National, Hospital Based Survey of snakes (Venomous and Non Venomous) responsible for human bites in Sri Lanka - A Clinico - Epidemiological Study*" was submitted successfully to the University of Colombo and was awarded the degree of MPhil in December 2004. This thesis examines clinico- epidemiological survey of identified snake bites in Sri Lanka.
- Biochemical and toxinological studies of *Hypnale hypnale* venom, 2008 onwards. Fundamental Research Grant Scheme (FRGS), Collaboration with University Malaya.
- Biochemical and toxinological studies of Sri Lankan Cobra venom 2007/2008 collaboration with University of Taiwan, Molecular Biology Unit. (Paper is submitted for publication in Clinical Toxicology)
- Prevention of krait bites by promotion of sleeping above ground level and bed net use.

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Professor in Medicine	Department of Clinical Medicine, Faculty of Medicine (University of Colombo)	Present
Honorary Consultant Physician	University Medical Unit, National Hospital of Sri Lanka, Colombo	Present

Associate Professor in Clinical Sciences	International Medical University (IMU), Kuala Lumpur, Malaysia.	January 2009
Head	Department of Clinical Medicine, Faculty of Medicine, University of Colombo	January 2008
Senior Lecturer in Medicine (Grade 1)	Department of Clinical Medicine, Faculty of Medicine, University of Colombo	April 2002
Senior Lecturer in Medicine (Grade 2)	Department of Clinical Medicine, Faculty of Medicine, University of Colombo	April 1997
Research fellow	WHO Venom antivenom Research Laboratory, Tropical School of Medicine, Liverpool, UK	May 1997 - October 1997
Honorary Registrar in General Internal Medicine (Professor David Warrell)	Department of Infectious Diseases and Tropical Medicine, Nuffield Department of Medicine, John Radcliffe Hospital, Headington, Oxford, UK	May 1996 - May 1997
Lecturer in Medicine	Department of Clinical Medicine, Faculty of Medicine, University of Colombo	April 1994
Resident Physician	National Hospital of Sri Lanka, Colombo	September 1993 - April 1994
Acting Visiting Physician	Base Hospital, Matale	August 1993 - September 1993
Senior Registrar (General Medicine)	Professorial University Medical Unit, National Hospital of Sri Lanka, Colombo	July 1992 - July 1993
Registrar (rotations in General Medicine and Subspecialties)	National Hospital of Sri Lanka, Colombo	September 1989 - May 1992
Registrar in Medicine	Professorial Medical Unit, Teaching Hospital, Peradeniya	September 1986 - September 1989
Resident House Officer	Professorial Paediatric Unit, Teaching Hospital Peradeniya	May 1986 - August 1986
Intern House Officer	Teaching Hospital Peradeniya	May 1985 - May 1986

- **Prof. S.S. Neluka Fernando**  
**Ph.D, MBBS, Diploma in Medical Microbiology**

**Postgraduate Education:**

- Ph.D. at University College London. Thesis titled Investigations into the Variation of Strains of *Helicobacter pylori* and the Host Response to infection from different geographical locations.

**Professional Qualification:**

- MBBS at North Colombo Medical College.
- Diploma in Medical Microbiology at University of Colombo

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
House Surgeon	Base Hospital Matara- Sri Lanka	1993 ( 6 months)
House Physician	Base Hospital Matara- Sri Lanka	1993 ( 6 months)
Demonstrator in Anatomy	Faculty of Medicine	January, 1994 - December, 1995
Lecturer in Medical Microbiology	Faculty of Medicine, Kelaniya	January 1994 - December, 1995
Lecturer in Microbiology	Faculty of Medical Sciences, University of Sri Jayewardenapura	1995 December - 2001 September
Professor in Microbiology	Faculty of Medical Sciences, University of Sri Jayewardenapura	January 2009 to date
Senior Lecturer in Microbiology	Faculty of Medical Sciences, University of Sri Jayewardenapura	September 2001 to 2009
Head	Department of Microbiology Faculty of Medical Sciences, University of Sri	14th July,



	Jayewardenapura	2004 to 31st Jan 2012
Coordinating the launch of the Medical laboratory Science degree program	The Open University of Sri Lanka	from Feb 2012-Dec 2012

- **Prof. Sagarika Ekanayake**  
**B.Sc. (Chemistry), M.Phil. (Biochemistry), Ph. D. (Applied Nutrition & Food Chemistry)**

**Postgraduate Education:**

- Ph D (Applied Nutrition & Food Chemistry) at University of Lund, Sweden.
- M Phil (Biochemistry) at University of Sri Jayewardenepura, Sri Lanka.

**Professional Qualification:**

- B Sc (Chemistry, Hon- 2nd Upper) at University of Peradeniya, Sri Lanka.

**Research Work:**

Undergraduate & other research completed

- Oxalic acid content of commonly consumed green leafy vegetables (HB B Sc).
- Antioxidant activity, fibre and oxalic acid content of *Lasia spinosa* (Kohila) (HB B Sc).
- Proximate composition of coconut meat, first and second extractions of Coconut milk (HB B Sc).
- Chemical composition of processed meat products and their compatibility with Sri Lankan standards (HB B Sc).
- Evaluation of protein nutritional quality of processed *Cycas circinalis* flour (HB Sc).
- Mammalian toxicity of *Bacteria thurnegenesis* (Bti) Sri Lankan isolates (Industrial Technology Institute/ MLS B Sc).
- Effect of different processing methods of kurakkan on glycaemic indices of foods (BSc).
- Increase utilization of virgin coconut by enrichment of carotenoids and traditional oils with essential fatty acids and antioxidant potential of traditional oils.
- Analysis of fatty acid profiles, peroxide values and acid values in some commonly utilized oils (ICHEM).
- Mineral contents of some commonly consumed green leafy vegetables (HB BSc)

- Proportion of known common risk factors of gastric intestinal tract (GIT) carcinomas among patients attending clinics at Cancer Institute Maharagama (MBBS).
- Awareness and practice of diabetic diet control among patients attending diabetic clinic at Colombo South teaching hospital (MBBS).
- Selected aspects of complementary feeding (MBBS).
- Hypoglycemic activity of *Canthium coramandelicum* leaves.

#### Postgraduate research completed

- Glycaemic indices of typical Sri Lankan foods (GI), factors affecting GI and effect of low GI foods on diabetes (Type 2 individuals) (02 M Sc, 02 M Phil, 01 PhD).
- Bioactivities (cytotoxicity, antibacterial activity) of underutilized Palmyrah flour & pulp (Ph D).
- Process induced improvement of protein quality of minor cereals (M Sc).
- Effect of maturity of different tomato varieties on carotenoid content and carotenoids of tomato based products (M Sc).
- Studies on selected bioactivities in *Gymnema lactiferum* leaf and hypocholesterolaemic effect of *Canthium coramandelicum* leaf and palmyrah pinnatu (M Phil).
- Hypercarotenaemia in infants and *in vivo* degradation products of carotenoids in foods rich in provitamin A carotenoids (M Phil).
- Toxicological analysis of poly aromatic hydrocarbons in food and environment (PG Diploma in Toxicology)
- Increase utilization of virgin coconut and traditional oils with essential fatty acids and their antioxidant potential (02 M Phil - external supervision)

#### Current research activities

- Glycaemic indices (GI) and other health promoting properties of typical Sri Lankan foods and factors affecting GI (01 PhD ongoing).
- Screening of medicinal plants for anti-glycation and antioxidant activities and investigation of their chemical constituents (01 PhD ongoing).
- Blood glucose lowering potential of 'Fadna diabtea' in healthy and diabetic individuals (Industry collaboration).
- Determination of association of risk factors for development of coronary artery disease and nutritional status & immune status on the recovery following coronary artery bypass surgery (CAB G) (01 M Phil ongoing).
- Determination of association of nutritional status, biochemical parameters and histopathological features of breast cancers from selected centres (01 M Phil ongoing).

#### **Employment Record:**

Post	Place	Period
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Assistant Lecturer (Chemistry)	Faculty of Science, University of Peradeniya	04.1992-08.1992
Lecturer (Biochemistry)	Faculty of Medicine, University of Kelaniya	09.1992-05.1994
Lecturer I Senior Lecturer (Biochemistry)	Faculty of Medical Sciences, University of Sri Jayewardenepura	1994/06 - 2009/03
Professor in Biochemistry	Faculty of Medical Sciences, University of Sri Jayewardenepura	2009/04
Head	Department of Biochemistry, Faculty of Medical Sciences, University of Sri Jayewardenepura	2011, January 1st -to date
External Visiting Lecturer/Professor and Examiner	Institute of Chemistry Ceylon, Faculty of Applied Sciences / University of Sri Jayewardenepura, Faculty of Medicine / University of Colombo, Faculty of Science / University of Kelaniya, Faculty of Medicine / Southeast Asian Institute of Technology and Medicine, Faculty of Medicine / Kothalawela Defence University, Ratmalana	1999 - 2012

- **Prof. S.W.Wimalasekara**  
MBBS, M. Phil., D. Phil.

**Postgraduate Education:**

- Master of Philosophy, University of Colombo, Sri Lanka.
- Doctor of Philosophy, University of Sri Jayewardenepura, Sri Lanka.

**Professional Qualification:**

- Bachelor of Medicine and Bachelor of Surgery, M.B.B.S. (N.C.M.C.).

**Research Work:**

*Main research interests are Clinical Neurophysiology and Respiratory Physiology*

- "The effects of iron deficiency on cognitive function and neurophysiological function in early adolescent females" - Swedish International Development Agency/ SAREC funded PhD project collaboration between the University of Sri Jayewardenepura and the Departments of International and Maternal Child health, the department of Psychology and the department of clinical neurophysiology of the Uppsala University Sweden.

**Employment Record:**

Post	Place	Period
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Associate professor in Physiology	Department of Physiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka	1.12.2009 - to date
Senior Lecturer in Physiology	Department of Physiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka	1.02.2002 - 30.11.2009
Lecturer in Physiology	Department of Physiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka	1.12.1993 - 31.01.2002
Medical Officer in Gynaecologic Oncology	National Cancer Institute, Maharagama, Sri Lanka	21.06.1993-30.11.1993
Demonstrator in Physiology	Department of Physiology, Faculty of Medicine, University of Ruhuna, Sri Lanka	21.07.1992 -20.06.1993

- **Dr. Janani Kottachchi**

**MBBS, Diploma in Medical Microbiology, MD in Medical Microbiology**

**Postgraduate Education:**

- Master Degree (MD) in Medical Microbiology at Post Graduate Institute of Medicine, University of Colombo.
- Post Graduate Diploma in Medical Microbiology at Post Graduate Institute of Medicine, University of Colombo.

**Professional Qualification:**

- Bachelor of Medicine, Bachelor of Surgery, (MBBS) in Medicine, Surgery, Paediatrics, Gynaecology & Obstetrics.
- Diploma in Medical Microbiology (Colombo).

**Research Work:**

- Participated in a work shop on 'How to design and manage your research project' in year 2002 at Post Graduate Institute of Medicine, Colombo.
- A research project was carried out for MD on 'Identification of Bacterial Aetiologic Agents Causing Acute Exacerbations in Patients with Chronic Obstructive Pulmonary Disease' on patients at National Hospital of Sri Lanka, Colombo. The results were submitted in a form of dissertation which was accepted by the board of study in Microbiology.
- 'Comparison of carbapenem MIC by E test and Vitek 2 in resistant Pseudomonas and Ainetobacter isolates'. The study carried out at Princess Alexandra Hospital, Australia during the period of overseas training.
- Carried out the laboratory work of 'Tigecycline Evaluation and

Surveillance Trial' at Princess Alexandra Hospital, Australia.

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Senior Lecturer	University of Sri Jayewardenepura	2.04.2011- up to date
Lecturer	University of Sri Jayewardenepura	1.07.2009- 1.04.2011
Senior Registrar	National Hospital of Sri Lanka, Colombo	11.11.2009- 30.06.2009
Covering up Microbiologist	General Hospital, Anuradhapura	18.05.2008- 10.11.2008
Senior Registrar	Sri Jayawardhanapura General Hospital	1.09.2007- 15.05.2008
Senior Registrar	Colombo South Teaching Hospital, Kalubowila	1.04.2007- 31.08.2007
Senior Registrar	Lady Ridgeway Hospital for children, Colombo	1.02.2007- 31.03.2007
Registrar	Lady Ridgeway Hospital for children, Colombo	1.07.2006- 31.01.2007
Registrar	National Institute of health Services, Kalutara	1.01.2006- 31.06.2006
Registrar	National Hospital of Sri Lanka, Colombo	1.07.2005- 31.12.2005
Registrar	Training in Medical Virology, Medical Research Institute, Colombo	1.04.2005- 31.06.2005
Registrar	National Hospital of Sri Lanka, Colombo	1.01.2005- 31.03.2005
Registrar	Bench training, Medical Research Institute, Colombo	1.01.2004- 31.12.2004
Medical Officer in Microbiology	Medical Research Institute, Colombo	1.11.2002- 31.12.2003
Trainee in Diploma Microbiology	Post Graduate Institute of Medicine, Colombo	5.11.2001- 31.10.2002
Medical Officer in Anaesthesia	National Hospital of Sri Lanka	15.09.1996- 4.11.2001
Intern House Officer	General Hospital Kalutara	15.09.1995- 14.09.1996

- **Dr. T.D.C.Prabhashinie Gunasekara**  
**Ph.D. (Bio Medical Sciences), M. Sc. (Microbiology), B. Sc. (Microbiology)**

**Postgraduate Education:**

- Ph.D. (Bio Medical Sciences) at Tokyo Medical and Dental University, Japan. 2011 March  
Thesis titled "Role of Reactive Oxygen Species (ROS) in endosomal B cell antigen receptor signaling."
- M. Sc. (Microbiology) at University of Pune, India. 2000. First Class  
Subjects offered for Master of Science (Microbiology) 1998 - 2000  
General microbiology ,Virology ,Basic biochemistry, Quantitative biology, Environmental microbiology, Microbial metabolism and physiology, Medical microbiology, Immunology, Molecular biology, Biotechnology.

**Professional Qualification:**

- B. Sc. (Microbiology). University of Pune, India. 1998. First Class.

**Research Work:**

- Thesis titled "Role of Reactive Oxygen Species (ROS) in endosomal B cell antigen receptor signalling."

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Senior Lecturer Grade II	Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura	April 2011 to date
Lecturer in Microbiology	Faculty of Medical Sciences, University of Sri Jayewardenepura (FMS/USJP), Sri Lanka.	February, 2003 - April, 2011
Assistant Librarian	University of Colombo	May, 2002 - February, 2003
Temporary Research Assistant	Department of Microbiology, University of Sri Jayawardhanapura	February, 2001 - April, 2002

- **Dr. M. Manoji Weerasekara**  
**Ph.D. in Molecular Medicine, M.Phil. in Microbiology, B.Sc. in Microbiology**

**Postgraduate Education:**

- Ph.D. in Molecular Medicine at Otago University, New Zealand.
- M.Phil. in Microbiology at University of Sri Jayewardenepura, Sri Lanka.

**Professional Qualification:**

- B.Sc. in Microbiology at Osmania University, India.

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Senior lecturer	University of Sri Jayewardenepura, Sri Lanka	22.01.2008-up to date
Lecturer	University of Sri Jayewardenepura, Sri Lanka	20.01.2003-20.01.2008
Visiting lecturer, Microbiology	Department of Chemistry, University of Sri Jayewardenepura, Sri Lanka	01.01.2003-01.03.2005
Visiting lecturer, Molecular biology	Postgraduate institute of Medicine, University of Colombo	01.01.2003-01.03.2005
Visiting lecturer, Microbiology	Department of Microbiology, University of Kelaniya	08.09.2003-01.03.2005
Research assistant	University of Sri Jayewardenepura, Sri Lanka	15.02.2000-01.01.2002
Research Fellow	Department of Oral Biology, Prince Philip Dental Hospital, University of Hong Kong	15.11.1999-15.02.2000
Demonstrator	Department of Microbiology, University of Sri Jayewardenepura, Sri Lanka	01.04.1999-01.11.1999

- **Dr. G.I.D.D.A.D. Athukorala**  
**MBBS, Pg.D. in Medical Microbiology, MD Medical Microbiology**

**Postgraduate Education:**

- Post Graduate Diploma in Medical Microbiology (November, 2006) at

Post Graduate Institute of Medicine, University of Colombo, Sri Lanka.

- MD Medical Microbiology (March, 2010) at Post Graduate Institute of Medicine, University of Colombo, Sri Lanka.
- Royal College of Pathologists Pat! Examination in Medical Microbiology at Royal College of Patologists, United Kingdom.

**Professional Qualification:**

- MBBS (June, 2002) at Faculty of Medicine - Ragama, University of Kelaniya, Sri Lanka.

**Research Work:**

- In vitro study to determine antimicrobial activity of selected Ayurvedic preparations against bacteria and fungi causing superficial skin infections.
- Audit on blood cultures to find out the frequency of missing clinical details and risk alerts on request forms, to determine the compliance with reporting significant blood culture results to the relevant clinicians, to re-audit the compliance with completing CDRs and to re-audit the blood culture contamination rates at Heartlands hospital, Good Hope hospital and Sollihul hospital in Birmingham, United Kingdom.
- Bactericidal effects of topical acids on pathogenic organisms - an invitro study.
- Causative organisms and demographic data of infective endocarditis in a tertiary care hospital in Sri Lanka.
- Antibiotic associated diarrhoea due to *Clostridium difJicile* in three tertiary care hospitals in Sri Lanka.
- The usefulness of rapid screening test in discriminating normal and infected urine specimens under Sri Lankan conditions.
- A study on bio-burden of doctors and other healthcare workers hands, stethoscopes and other medical devices in a Sri Lankan setup - Potential risk of nosocomial infections.
- A study on the appropriateness of current rabies post exposure therapy in a government hospital of Sri Lanka.

**Employment Record:**

Post	Place	Period
Lecturer in Medical Microbiology and Consultant Clinical Microbiologist	Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka	12/02/2012 - to date
Honorary International Clinical Fellow in Medical Microbiology	Department of Microbiology, Heart of England NHS Foundation Trust, Birmingham, United Kingdom	14/11/2011 - 12/10/2012
Lecturer in Medical	Department of Microbiology,	03/04/2007 - 25/10/2011



Microbiology	Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka	
Senior Registrar in Medical Microbiology	Department of Microbiology, Colombo South Teaching Hospital, Sri Lanka	01/03/2010 - 28/02/2011
Lecturer in Medical Microbiology	Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka	01/01/2010 - 28/02/2010
Registrar in Medical Microbiology (Special Appointment - Paediatrics)	Department of Microbiology, Lady Ridgeway Hospital for children, Colombo, Sri Lanka	01/10/2009 - 31/12/2009
Registrar in Medical Microbiology (Special Appointment - Immunocompromized Patients)	Department of Microbiology, National Cancer Institute of Sri Lanka	01/07/2009 - 30/09/2009
Registrar in Medical Microbiology (2nd Appointment)	Department of Microbiology, National Hospital of Sri Lanka	01/11/2008 - 30/06/2009
Registrar in Medical Microbiology (1 <sup>st</sup> Appointment)	Department of Microbiology, Teaching Hospital, Karapitiya, Sri Lanka	01/05/2008 - 31/10/2008
Registrar in Medical Microbiology (Md - Dissertation)	Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka; Colombo South Teaching Hospital, Sri Lanka; National Hospital of Sri Lanka	01/01/2008 - 30/04/2008
Registrar in Medical Microbiology (Short Appointment)	Department of food and water microbiology, Medical Research Institute, Colombo, Sri Lanka	17/12/2007 - 31/12/2007
Registrar in Medical Microbiology (Short Appointment)	Department of Immunology, Medical Research Institute, Colombo, Sri Lanka	03/12/2007 - 16/12/2007
Registrar in Medical Microbiology (Short Appointment)	National Sexually Transmitted Diseases and AIDS control programme, Sri Lanka	19/11/2007 - 02/12/2007
Registrar in Medical Microbiology (Short Appointment)	Epidemiology Unit, Sri Lanka	05/11/2007 - 18/11/2007
Registrar in Medical Microbiology (Short Appointment)	Faculty of Medicine, Colombo, Sri Lanka and National Reference Centre for Tuberculosis, Sri Lanka	22/10/2007 - 04/11/2007

Registrar in Medical Microbiology (Short Appointment)	Department of Mycology, Medical Research Institute, Colombo, Sri Lanka	08/10/2007 - 21/10/2007
Registrar in Medical Microbiology (Short Appointment)	Department of Virology, Medical Research Institute, Colombo, Sri Lanka	10/09/2007 - 07/10/2007
Registrar in Medical Microbiology (Bench Appointment)	Department of Bacteriology, Medical Research Institute, Colombo, Sri Lanka	26/03/2007 - 09/09/2007
Registrar in Medical Microbiology (Bench Appointment)	Department of Microbiology, Sri Jayawardenepura General Hospital, Kotte, Sri Lanka	01/01/2007 - 25/03/2007
Medical Officer in Medical Microbiology	Department of Microbiology, Colombo North Teaching Hospital, Ragama, Sri Lanka	03/11/2006 - 31/12/2006
Medical Officer	Rural Hospital, Katugahahena, Sri Lanka	01/11/2004 - 02/11/2005
Resident House Officer	Medical Statistics Unit, De Soyza Hospital for Women, Colombo 08, Sri Lanka	03/02/2004-02/11/2004
Intern Medical Officer in Obstetrics and Gynaecology	Ward 14/16, De Soyza Hospital for Women, Colombo 08, Sri Lanka	03/08/2003-02/02/2004
Intern Medical Officer in Surgery	Ward 32/40 and 21140 ,National Hospital of Sri Lanka	03/02/2003-02/08/2003
Demonstrator in Microbiology		01/08/2002 - 31/01/2003

- **Dr. Thushari Dissanayaka**

**MBBS, Diploma in Medical Microbiology, MD in Medical Microbiology**

**Postgraduate Education:**

- Master Degree in Medical Microbiology at Post Graduate Institute of Medicine, University of Colombo, Sri Lanka.
- Post Graduate Diploma in Medical Microbiology at Post Graduate Institute of Medicine, University of Colombo, Sri Lanka.

**Professional Qualification:**

- Bachelor of Medicine, Bachelor of Surgery, (MBBS) in Medicine, Surgery, Paediatrics, Gynaecology & Obstetrics.

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Lecturer in Microbiology	University of Sri Jayewardenepura, Sri Lanka	01.12.2008-to date
Fellow in Microbiology	Princess Alexandra hospital, Brisbane, Queensland, Australia	21.05.2013-17.05.2013
Senior Registrar	Colombo South Teaching Hospital, Kalubowila	03.03.2011-02.03.2012
Registrar	National Hospital of Sri Lanka, Colombo	01.06.2010-30.11.2010
Registrar	Teaching Hospital, Peradeniya	01.12.2009-31.05.2010
Registrar	National Cancer Institute, of Sri Lanka, Maharagama	01.09.2009-30.11.2009
Registrar	Lady Ridgeway Hospital for children, Colombo	01.06.2009-31.08.2009
Registrar	Workshops on hospital infection control and antibiotics	01.05.2009-31.05.2009
Registrar	Dissertation for MD Microbiology, Colombo South Teaching Hospital, Kalubowila	01.01.2009-30.04.2009
Registrar	Training in Virology, Mycology and Immunology, Medical Research Institute, Colombo	01.10.2008-31.12.2008
Registrar	Bench Training, Sri Jayewardenepura General Hospital	01.07.2008-30.09.2008
Registrar	Bench Training, Teaching Hospital, Karapitiya	01.04.2008-30.06.2008
Registrar	Bench Training, Medical Research Institute, Colombo	01.01.2008-31.03.2008
Medical Officer in Microbiology	Colombo South Teaching Hospital, Kalubowila	01.11.2007-31.12.2007
Trainee in Diploma in Medical Microbiology	Post Graduate Institute of Medicine, Colombo	01.11.2006-31.10.2007
Medical Officer in Ophthalmology	District General Hospital, Matale	22.12.2005-31.10.2006
Medical Officer in Ophthalmology	Sri Jayewardenepura General Hospital	02.05.2005-21.12.2005
Medical officer in general medicine	Sri Jayewardenepura General Hospital	20.03.2005-01.05.2005

Intern House Officer	Sri Jayewardenepura General Hospital	20.03.2004-19.03.2005
Demonstrator in Microbiology	Faculty of Medical Sciences, University of Sri Jayewardenepura	01.06.2003-18.03.2004

- **Dr. Bimalka Samanthi Seneviratne**  
**MBBS, Diploma in Pathology, MD (Histopathology)**

**Professional Qualification:**

- Bachelor of Medicine & Bachelor of Surgery (MBBS) at North Colombo Medical College, Ragama, Sri Lanka.
- Diploma in Pathology at Postgraduate institute of Medicine University of Colombo.
- Doctor of Medicine in Histopathology (MD) at University of Colombo.

**Research Work:**

- Prevalence of benign & malignant breast diseases among women aged 25- 75 years, in Boralessgamuwa MOH area.
- Pattern of thyroid enlargement and associated factors of thyroiditis.
- Pathological conditions of the female genital tract associated with sub fertility in patient's seeking treatment at the sub fertility clinic at Colombo South Teaching Hospital.
- Factors affecting the quality of specimens received at the histopathology laboratory, University of Sri Jayewardenepura.
- Risk factors of colorectal malignancies in a semi urban population - ongoing study, commenced in May 2010.
- Analysis of "Thy 03- Follicular Proliferation category" with the subsequent histological diagnosis - ongoing study, commenced in March 2010.

**Employment Record:**

Post	Place	Period
Senior Lecturer-Grade I / Consultant Pathologist	Dept. of Pathology Faculty of Medical Sciences University of Sri Jayewardenepura	from 01/01/2013 to date
Head	Department of Pathology, Faculty of Medical Sciences, University of Sri Jayewardenepura	from January 2010 to December 2012

Senior Lecturer in Pathology ( Grade II)	Faculty of Medical Sciences, University of Sri Jayewardenepura	from November 2002 to December 2009
Lecturer in Pathology	Faculty of Medical Sciences University of Sri Jayewardenepura	from July 2001 to December 2002
Senior Registrar in Pathology	National Hospital of Sri Lanka	from December 2000 to June 2001
Registrar in Pathology	National hospital of Sri Lanka	from November 1995 to November 2000
Medical officer in Pathology (MO)	Sri Jayewardenepura General Hospital	December 1994 to November 1995
Post internship - Medical officer/ OPD	General Hospital , Matara	from April 1994 to December 1994
Internship - Intern medical officer	Base Hospital, Wathupitiwela	from April 1993 to April 1994

- **Dr. Ranjini Amarakoon**  
**PhD (Food Science & Technology), M. Sc. (Food Science & Technology),**  
**B.Sc. (Agric special)**

**Postgraduate Education:**

- PhD (Food Science & Technology) on a scholarship offered from Tomas Bata University in Zlin, Czech Republic.

- M. Sc. (Food Science & Technology), Board of Study food Science & Technology,  
Post Graduate Institute of Agriculture (PGIA), Sri Lanka.

**Professional Qualification:**

- B.Sc (Agric sp), Faculty of Agriculture, University of Peradeniya.

**Research Work:**

- Thesis- 'The effect of cooking on nutritional quality of selected legumes' three years  
Research funded by the Ministry of Education, Youth & Sports, CZ. Supervised by Prof. Stanislavs Kracmar and Prof. Frantisek Bunka (2006-2009), Dept of Biochemistry Faculty of Technology, Tomas Bata University, CZ.
- Directed study- 'Post harvest loss reduction in Mango'. Three years research project funded by CARP (Council for Agricultural Research Policy) carried out in the Food Research Institute -Supervised by Dr. K.H. Sarananda (1997-1999).

**Employment Record:**

Post	Place	Period
Acting Director (Processing Development)	The Coconut Development Authority (CDA)	1 year & 4 months
Deputy Director	The Coconut Development Authority (CDA)	5 years & 1.5 months
Research Assistant	Food Research Institute, Peradeniya, Sri Lanka	01.05.95- 01.08.99
Demonstrator	Dept. of Food Sc. & Tech: Faculty of Agriculture, University of Peradeniya, Sri Lanka	1994-1995

- **Mr. M. A. Siriwardhene**  
**B. Pharm.**

**Professional Qualification:**

- B. Pharmacology at Rajiv Gandhi University of Health Sciences, Karnataka State, India.

- Certificate of Proficiency in Pharmacists at Ceylon Medical College Council and qualified as a Pharmacist to practice Pharmacy in Sri Lanka.
- Special training program in Quality Assurance of Pharmaceuticals (Microbiology and Chemical Analysis of antibiotics) from National Pharmaceutical Control Bureau of Malaysia.

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Pharmacists	Colombo South Teaching Hospital, Kalubowila, Sri Lanka	1991-1995
Analytical Pharmacist	National Drug Quality Assurance Laboratory, Ministry of Health, Sri Lanka	1995-2006
Consultant (Initial development of B. Pharm. Program)	The Open University of Sri Lanka.	Jan-Sep 2006
Lecturer in Pharmacy and Biopharmaceutics	University of Sri Jayewardenepura, Sri Lanka.	Present

• **Mr. R.M. Thilakaratna**

**M.A. (Linguistics), B.A. (Languages), Dip. in Teaching English**

**Postgraduate Education:**

- M.A. (Linguistics) at University of Kelaniya.

**Professional Qualification:**

- B.A. (Languages) at University of Peradeniya.
- Dip. in Teaching English TESL at University of Peradeniya.

**Employment Record:**

<b>Post</b>	<b>Place</b>	<b>Period</b>
Lecturer in English Language Teaching	English Language Teaching Unit, University of Colombo	Present

• **Mr. Harsha Ariyawansa**

**M.Sc. in Artificial Intelligence, B.Sc. in Physical Science**

**Postgraduate Education:**

- Master of Science (Artificial Intelligence) degree at University of

Moratuwa.

**Professional Qualification:**

- Bachelor of Science (Physical Science) degree at University of Ruhuna Matara Srilanka.

Main subjects -Computer Science, Chemistry, Mathematics

Computer Science

1. Basic concepts of Information Technology
2. Programming Techniques (JAVA)
3. Internet services and Web Development
4. Data Structures and Algorithms
5. File Organization and Data Base Management System (SQL)
6. Object Oriented System Development
7. Operating Systems (programming language C)
8. Computer Architecture
9. Data Communication and Computer Networks
10. Multimedia Technologies
11. Internet Programming and Web Technologies(PHP)
12. System and Network Administration
13. Advance Software Engineering
14. E-Commerce and Professional Practice in IT
15. Visual Programming (VB.NET)
16. Internet Services and Protocols

Theory based computer project.(PHP/JAVA script/ MYSqlApache server) group project developed by the web based computer system for Sanasa Samithiya.

**Research Work:**

- Research-Banking system analyzing method.

**Employment Record:**

Post	Place	Period
Computer Software Engineer	Lean Sigma Consulting (Pvt) Ltd - Colombo 3	January 2009- January 2013
Software Developer, System Analysis & Designing	eDairyLanka project	2010-up to now



**b. Availability of required expertise in the required basic and post-graduate staff**

<b>Subject</b>	<b>Academic</b>	<b>Qualifications related to the subject</b>
<b>Pharmacotherapeutics</b>	Mr. M. A. Siriwardhene	<ul style="list-style-type: none"> <li>▪ B. Pharmacology.</li> <li>▪ Certificate of Proficiency in Pharmacists.</li> <li>▪ Special training program in Quality Assurance of Pharmaceuticals (Microbiology and Chemical Analysis of antibiotics).</li> <li>▪ Lecturer in Pharmacy and Biopharmaceutics.</li> </ul>
<b>Applied Human Anatomy</b>	Prof. S.W.Wimalasekara	<ul style="list-style-type: none"> <li>▪ Master of Philosophy.</li> <li>▪ Doctor of Philosophy.</li> <li>▪ Bachelor of Medicine and Bachelor of Surgery, M.B.B.S. (N.C.M.C.).</li> <li>▪ Associate professor in Physiology.</li> </ul>
<b>Applied Human Physiology</b>	Prof. S.W.Wimalasekara	<ul style="list-style-type: none"> <li>▪ Master of Philosophy.</li> <li>▪ Doctor of Philosophy.</li> <li>▪ Bachelor of Medicine and Bachelor of Surgery, M.B.B.S. (N.C.M.C.).</li> <li>▪ Associate professor in Physiology.</li> </ul>
<b>Applied Biochemistry</b>	Prof. Sagarika Ekanayake	<ul style="list-style-type: none"> <li>▪ Ph D in Applied Nutrition &amp; Food Chemistry.</li> <li>▪ MPhil in Biochemistry.</li> <li>▪ B Sc in Chemistry.</li> <li>▪ Professor in Biochemistry.</li> </ul>
<b>Microbiology &amp; Parasitology</b>	Prof. S.S. Neluka Fernando	<ul style="list-style-type: none"> <li>▪ Ph.D.</li> <li>▪ MBBS.</li> <li>▪ Diploma in Medical Microbiology.</li> <li>▪ Professor in Microbiology.</li> </ul>
	Dr. Janani Kottachchi	<ul style="list-style-type: none"> <li>▪ Master Degree (MD) in Medical Microbiology.</li> <li>▪ Post Graduate Diploma in Medical Microbiology.</li> <li>▪ Bachelor of Medicine, Bachelor of Surgery, (MBBS) in Medicine.</li> <li>▪ Diploma in Medical Microbiology.</li> <li>▪ Senior Lecturer in Microbiology.</li> </ul>
	Dr. T.D.C.Prabhashinie Gunasekara	<ul style="list-style-type: none"> <li>▪ Ph.D. (Bio Medical Sciences).</li> <li>▪ M. Sc. (Microbiology).</li> <li>▪ B. Sc. (Microbiology).</li> <li>▪ Senior Lecturer Grade II in Microbiology.</li> </ul>
	Dr. M. Manoji Weerasekara	<ul style="list-style-type: none"> <li>▪ Ph.D. in Molecular Medicine.</li> <li>▪ M.Phil. in Microbiology.</li> <li>▪ B.Sc. in Microbiology.</li> <li>▪ Senior lecturer in Microbiology.</li> </ul>
<b>Microbiology &amp; Parasitology</b>	Dr. G.I.D.D.A.D. Athukorala	<ul style="list-style-type: none"> <li>▪ Post Graduate Diploma in Medical Microbiology.</li> <li>▪ MD Medical Microbiology.</li> <li>▪ Examination in Medical Microbiology.</li> </ul>

		<ul style="list-style-type: none"> <li>▪ MBBS.</li> <li>▪ Lecturer in Medical Microbiology and Consultant Clinical Microbiologist.</li> </ul>
	Dr. Thushari Dissanayaka	<ul style="list-style-type: none"> <li>▪ Master Degree in Medical Microbiology.</li> <li>▪ Post Graduate Diploma in Medical Microbiology.</li> <li>▪ Bachelor of Medicine, Bachelor of Surgery, (MBBS).</li> <li>▪ Lecturer in Microbiology.</li> </ul>
<b>Interpersonal Communication</b>	Mr. Nelson De Silva	<ul style="list-style-type: none"> <li>▪ M.Phil by Research on Development Communication.</li> </ul>
<b>Psychosocial Health</b>	Mr. W.A.Keerthirathne Podimahathmaya	<ul style="list-style-type: none"> <li>▪ Post Graduate Diploma in Distance Education.</li> <li>▪ B.Sc. Nursing.</li> <li>▪ Diploma in Basic Nursing.</li> <li>▪ Diploma in psychiatry.</li> <li>▪ Diploma in teaching and supervision.</li> <li>▪ Advance diploma in education.</li> <li>▪ Management and leadership Senior Nursing Tutor</li> </ul>
<b>Pathology</b>	Dr. Bimalka Seneviratne	<ul style="list-style-type: none"> <li>▪ Bachelor of Medicine &amp; Bachelor of Surgery (MBBS).</li> <li>▪ Diploma in Pathology.</li> <li>▪ Doctor of Medicine in Histopathology (MD).</li> <li>▪ Senior Lecturer- Grade I / Consultant Pathologist.</li> </ul>
<b>Nutrition &amp; Dietetics</b>	Dr. Ranjini Amarakoon	<ul style="list-style-type: none"> <li>▪ PhD (Food Science &amp; Technology).</li> <li>▪ M. Sc. (Food Science &amp; Technology).</li> <li>▪ B.Sc (Agric sp).</li> </ul>
<b>Research Methodology</b>	Prof. Samath D Dharmarathne	<ul style="list-style-type: none"> <li>▪ M.Sc. Nursing (Research Based).</li> <li>▪ B.Sc. in Nursing.</li> <li>▪ General Nursing Certificate (Diploma).</li> <li>▪ Senior Lecturer (Grade I).</li> </ul>
<b>Biostatistics</b>	Prof. Samath D Dharmarathne	<ul style="list-style-type: none"> <li>▪ Ph.D. in Statistics.</li> <li>▪ M.Sc. in Statistics.</li> <li>▪ Postgraduate Diploma in Applied Statistics.</li> <li>▪ B.Sc. (Special) Degree in Mathematics.</li> <li>▪ Senior Lecturer Gr I.</li> </ul>

**c. Prescribed recruitment criteria and job description of academic staff**

**i. Recruitment Criteria**

Academic staff for the KHAMTTC will be recruited based on the criteria of University Grant Commission of Sri Lanka. UGC Circulars on academic staff recruitment are attached as **annexure 6**.

## **ii. Job Description for Academic staff**

### **Core Purpose of Job:**

Each member of the academic staff is expected to be devoted to the accomplishment of the purposes for which the Institution exists: instruction, research, and public service. Those members of the academic staff who comprise the faculty of the Institution are charged to determine the educational policy of the Institution through deliberative action in their respective units and divisions.

It is a basic principle that every member of the academic staff, of whatever rank, shall at all times be held responsible for competent and effective performance of his/her duties. In addition, faculty is expected to foster collegial relationships with supervisors, peers, students, and the University community.

Primary duties are effective classroom teaching, advising and academic counseling of students, committee work, research or scholarly activity, service such as assisting in recruitment of students and initiatives designed to help students succeed academically, and other assigned duties. Full-time faculty members are expected to schedule at least 08 office hours on campus each week during a semester at various times during the day, including afternoons. Office hours should be spread across the week (Monday-Friday) to provide the best opportunity for student accessibility. Part-time faculty is expected to schedule a proportionate number of office hours, usually two hours for each three credit hour course taught. Department heads must schedule at least 25 hours of office presence.

Faculty shall share in governance by attending and participating in meetings of the department, college, or University. Faculty shall serve on committees as elected or appointed with their consent provided such service does not interfere with duties related to regularly scheduled classes or interfere unduly with other work assignments related to their contractual obligations.

Deans and department heads should document communication informing faculty annually in each department of the criteria for annual performance review, tenure and promotion. This communication should occur at the beginning of each academic year.

### **Areas of Responsibility**

1. Conduct stipulated number of semester credit hours, or its equivalent, of instruction in organized classes each academic year.
2. Devise and implement new mechanisms or policies for rewarding outstanding faculty and for continually assessing faculty performance as scholars and teachers.
3. Implement the faculty recruitment strategy of building from the bottom (recruiting new Ph.D.'s and "rising stars") over the next five years.
4. Prepare development plans for rising stars and ensure that they are closely followed-up to ensure timely delivery.
5. Foster an exciting intellectual environment by providing opportunities for more dialogue and engagement.
6. Develop in each college or academic unit performance assessments for all faculty to promote excellence in faculty teaching, research, and public engagement and to ensure it is recognized and rewarded.
7. Ensure that all academic units have a robust form of assessment that generates full information, includes some type of student feedback and peer assessment, and provides feedback to teachers that enables them to improve their teaching continually.
8. Ensure that senior faculty members with teaching appointments remain actively involved in and committed to teaching and mentoring students over their careers at KHAMTTC.
9. Create a series of common intellectual experiences within the first two years directed at core competencies, including living-learning programs, student center teaching and formal coursework.
10. Encourage students to cross program boundaries in pursuit of their educational goals, and reduce the inherent difficulties posed by transfer pricing policies and other constraints.
11. Evaluate tuition, financial aid, and administrative structures for study abroad programs (external and KHAMTTC -based) to ensure that they are affordable, sustainable and of high quality.
12. Create inter-university collaborations with top-tier universities abroad in order to foster two-way flows of students, while being selective about the number of such programs.
13. Ensure that there are sufficient resources for proactive outreach and intervention and timely availability of services to students experiencing excessive stress or showing evidence of mental health issues.
14. Develop better data, criteria, and procedures for evaluating and tracking the quality of research, scholarship, and creativity of faculty and departments.
15. Require departments to develop strategic plans for enhancing or achieving academic

distinction and leadership.

16. Consider formal structures of coordination (e.g., steering committees, shared departments, super-departments, mergers) in disciplines or fields where these would significantly enhance academic excellence and reputation and/or improve the utilization of faculty resources.
17. Promote and support new initiatives that develop “cutting-edge” research and scholarship synergies across these academic groupings.
18. Focus and improve institution-wide services for the administration and support of research grants; Including government, foundation, and industry funding.
19. Maintain and selectively strengthen in cost-effective ways the core infrastructures for research, scholarship, and creativity, including in particular libraries and shared research facilities.
20. Make public engagement a distinctive feature of education at KHAMTTC.
21. Develop university-wide mechanisms to promote interconnections across forms or types of public engagement (e.g., extension, technology transfer, translational research, clinical programs, international programs, and service learning) without introducing new centralized structures.
22. Develop rigorous, systematic evaluations of all outreach and extension programs.
23. Strongly connect public engagement to on-campus research and educational strengths.
24. Promote stronger collaborations and partnerships between the institute and stakeholders that can make use of and strengthen KHAMTTC’s research (e.g., hospitals, research institutions, nonprofit organizations, government).

#### **d. Staff development programmes and in-service training programmes**

In order to achieve the objective of making teaching/learning more effective, more relevant, student oriented and of internationally high standard KHAMTTC plans to develop skills and competencies necessary for more effective and efficient performance among all members of the staff of the KHAMTTC.

Workshops will be designed to help, support and develop the skills and knowledge of academics in their teaching and research. They will be offered once per semester/ academic year. The wide range of opportunities and resources are also available to academic and Research staff.

A wide range of workshops cover the areas of:

- Research
- Teaching
- Quality Improvement

The aims & objectives of the workshops for non-academic staff are as follows:

- familiarize staff with key policies and procedures for the KHAMTTC;
- provide opportunities to reflect and potentially enhance efficiency and effectiveness .

**e. Databases of on-going research**

Since KHAMTTC is awaiting UGC Approval to function as a degree awarding institute there are no on-going research activities at present.

**f. Database on research publications by the staff**

Please refer to Annexure 7 for database on research publications of the staff.

**g. Interactions with the industry and methods of research information dissemination**

Once KHAMTTC commences its academic functions as a degree awarding institute it will interact with the industry on research dissemination.

# **CHAPTER**

# **05**

## **TEACHING AND TRAINING FACILITIES SPECIFIC TO STUDY PROGRAMME**

- 5.1 Teaching and Training Facilities specific for B.Sc. in Nursing (Special) Programme;**
- 5.2 Academic support staff and their qualifications and experience;**
- 5.3 Equipment for laboratory work/Practical classes;**

## **7. TEACHING AND TRAINING FACILITIES SPECIFIC TO STUDY PROGRAMME**

KHAMTTC is housed in a seven storied building (approximately 125,000 sq.ft.) newly constructed on 155 perches land with easy access road network and commuter transport systems located at No: 249/1, Malabe Road, Thalangama North, Koswatta, Battaramulla, Sri Lanka.

### **a. Teaching and Training Facilities specific for B.Sc. in Nursing (Special Programme)**

Please refer to **Annexure 8** for Teaching and Training Facilities specific for B.Sc. in Nursing (Special) degree programme at the KIU.

#### **i. Clinical Teaching Facilities**

This course has been designed only for the RN with more than two years' clinical experience. Post RN who possess a Diploma in General Nursing in the state sector Colleges of Nursing have already obtained sufficient practical training in the college skills labs and in variety of clinical settings. Therefore, these nursing students will not require further practical training in a hospital.

### **b. Academic support staff and their qualifications and experience**

Once KIU obtains UGC Approval functioning as degree awarding institute academic support staff will be recruited.

### **c. Equipment for laboratory work/Practical classes**

Please refer to **Annexure 9** for list of equipment in skills lab, science lab, and anatomy lab.



**STUDENT SUPPORT SERVICES AND  
WELFARE**

- 6.1 Information on study programme, student support services and facilities  
in print and electronic media;**
- 6.2 Student Prospectus/Handbook;**
- 6.3 Management Information Systems and procedures;**
- 6.4 Teaching/practical/clinical and tutorial Schedules**
- 6.5 Academic guidance and student counselling services**
- 6.6 Availability of canteens, hostels, library, computer facilities.**

## **8. STUDENT SUPPORT SERVICES AND WELFARE**

### **a. Information on study programme, student support services and facilities in print and electronic media**

#### **i. English Support Program**

English language support is offered by KHAMTTC for students who require

English knowledge because KHAMTTC conduct its programs in English.

English lectures are conducted by some visiting lecturers.

#### **ii. Cultural Activities**

KHAMTTC promotes multicultural for existence of students and staff.

Cultural activities related to Sinhala and Tamil new year, Wesak festival, Christmas are conducted annually.

To highlights the aesthetic activities of the students and annual talent show will be held.

#### **iii. Sports**

Facilities will be provided for outdoor games including Cricket, Rugger, Elle, Football, and indoor games including Table Tennis, Chess, Carom, a swim pool will be hired.

### **b. Student Prospectus/Handbook**

A student handbook has been prepared for student following the B.Sc. in Acupuncture (Honours) degree programme.

Please refer to **Annexure 10** for Student Handbook of B.Sc. in Acupuncture (Honours) degree programme.

### **c. Management Information Systems and procedures**

The data base of all student information will be linked with the Main Information Centre.

### **d. Teaching/practical and tutorial Schedules**

Please refer to **Annexure 11** for Teaching, Practical, and tutorial schedule of B.Sc. in Acupuncture (Honours) degree programme.

**e. Academic guidance and student counselling services**

**i. Student Counselling**

General counselling by the Faculty staff on academic matters is available to all prospective applicants and students.

A centre for student counselling is available at KIU. The counselling services are related to study problems, assignment, academic problems, relationships, personal or interpersonal problems, and marital, family or social problems. All counselling services are provided free of charge. Privacy of the student and the confidentiality of information will be protected. Services of a qualified psychologist will be obtained in future.

**ii. Career Guidance for Student**

Career guidance is usually given throughout the programme.

**f. Availability of canteens, hostels, library, computer facilities, etc.**

Please refer to Annexure 12 for a list of facilities available to student.