

# University of Ruhuna Faculty of Allied Health Sciences Galle Sri Lanka

# Student Handbook 2020

Bachelor of Science Honours in Medical Laboratory Science Bachelor of Science Honours in Nursing Bachelor of Pharmacy Honours



බබලන සිරිලක දකුණේ විරුවන් බිහිකළ දෙරණේ පඬුවන් වොරැඳුණු පොරණේ සරසවියයි මේ රුහුණේ

විදහා ශිල්ප කලා නැණ හරවත් ලබමින් දන මන කරමින් පැනවත් දෙස බස රැස සුරකින ඔද තෙදවත් මිනිසුන් වෙමු ලෝ පසසන ගුණවත්

යුක්තිය ශක්තිය බව නිති සිහිකර දෑගොත් කුල මල පටු මත බිඳහැර නම රැක පරසිදු රෝහණ පුරවර හිරු සදු වෙමු ලක් සරසවි නිල'ඹර

ගීපදමාලා : මහාචාර්ය සුනිල් ආරියරත්න තනු නිර්මාණය සහ සංගීතය : ආචාර්ය පණ්ඩිත් ඩබ්ලිව්. ඩි. අමරදේව





# University of Ruhuna Faculty of Allied Health Sciences Student Handbook 2020

# **Vision of the University**

To be the prime intellectual thrust of the nation

# **Mission of the University**

To advance knowledge and skills through teaching, research and services to serve the society

	Table of Contents	
СНАР	TER 1	1
Unive	rsity of Ruhuna	1
1.1. 1.2.	Introduction and brief history of the University Location of the University Organizational structure	1 2 5 6
СНАР	TER 2	9
	ty of Allied Health Sciences	9
	troduction	9
<b>2.2.</b> Vi	ision and Mission of the Faculty	10
<b>2.3.</b> Ai	im of the Faculty	10
2.4. A	dministrative staff and contact information	10
2.5. Si	ite map of the Faculty	11
	egree Programmes	11
2.7. G	raduate Profiles	12
СНАР	TER 3	14
Acade	emic Regulations and Procedures	14
3.1.	Admission Requirement	14
3.2.	5	15
3.3.		15
3.4.	Orientation programme	15
	Course Structure and academic calendar	16
	Credit Framework Policy	16
	Accreditation and Specifications of the Degree Programmes	17
	Attendance requirements	17
3.9.	By-law of the University and Rules and Regulations for students in University of Ruhuna	18
3 10	By-laws of Degree Programmes	18
5.10.	By-laws of Degree Programmes	10
	TER 4	19
<b>Depar</b> 4.1.	rtment of Medical Laboratory Science	19
4.1.		19 19
	Vision and Mission of the Department	19
4.4.	Research areas of the Department	20
	Academic staff of the Department	20
4.6.	Course structure	21
4.7.	Subject units offered by the Department for BSc Honours Medical Laborat	
	Science degree	22
4.8.	Subject descriptions for BSc Honours Medical Laboratory Science degree	23
4.9.	By-Laws of the Bachelor of Science Honours in Medical Laboratory Science	се
	Degree	28
4.10.	Code of Conduct at clinical or work placement for Medical Laboratory	
	Science students	35

#### **CHAPTER 5**

378		
Depart	tment of Nursing	38
5.1.	Introduction	38
	Degree offered by the Department	38
	Vision and Mission of the Department	38
5.4.	Research areas of the Department	39
	Academic staff of the Department	40
	Course Structure	.40
5.7.	Subject units offered by the Department for Bachelor of Science Honours Nursing degree	in 41
5.8.	Subject Description for Bachelor of Science Honours in Nursing degree	
F 0	By Lowe of the Recheler of Science Hencure in Nursing Degree	43
	By-Laws of the Bachelor of Science Honours in Nursing Degree Code of Conduct for students at clinical or work placement for Nursing	52
5.10.	students	56
CHAP <sup>-</sup>	TER 6	59
Depart	tment of Pharmacy	59
6.1.	Introduction	59
	Degree offered by the Department	59
	Vision and Mission of the Department	60
6.4.	Research areas of the Department	60
	Academic staff of the Department	61
	Course structure	61
6.7.	Course units offered by the Department for Pharmacy Honours degree	60
6.8.	Course unit description for Pharmacy Honours degree	62 64
	By-laws of the Pharmacy Degree Programme	77
6.10.	Code of Conduct for students at clinical or work placement for Pharmacy	
0.10.	students	88
CHAP <sup>-</sup>		92
	nations	92 92
	Examinations conducted by the Faculty	<b>92</b>
	Eligibility for examinations	92 93
7.3.	Examinations and Evaluation Structure of Medical Laboratory Science	55
	Degree subject units	93
7.4.	Examination and Evaluation Structure of Nursing Degree subject units	
		96
7.5.	Examination and Evaluation Structure of Pharmacy Degree course units	98
7.6.		103
7.7.	•	104
7.8.	0	104
7.9. 7.10.		105 105
7.10.	venileation of grades	100

**CHAPTER 8** 

106

	s and Awards for students	106
8.1.	Annual student awards	106
8.2.	Dean's awards and Dean's list for overall performance	106
8.3.	The Vice Chancellor's award and Vice Chancellor's list for overall	
	performance	107
CHAP		111
	y facilities	111
9.1.	Introduction	111
9.2.	Staff of the Library	111
9.3.	Library Opening Hours	112
9.4. 9.5.	Library Collections	112 112
9.5. 9.6.	Library Resource Classification Library Catalogue	112
9.0. 9.7.	Library Services	113
9.8.	Library Membership	114
9.9.	Borrowing Library Resources	114
9.10.		115
9.11.	Fines and Payments	115
		440
	TER 10 ing Resources	116 116
	The cultural center	116
	Resource Centre for Modern Languages	116
10.2.	Resource Centre for Modern Languages	110
CHAP	TER 11	117
	s and Recreation	117
	Physical education	117
	Facilities for sports	117
	Sports events	118
11.4.	Recreational activities	118
CHAP	TER 12	119
	nt Service Facilities	119
	Student Affairs Branch at the university	119
	Student counseling service	119
	Mentoring services	119
	Health services	120
12.5.	Hostel facilities and policy	120
12.0.	Bursary policy and other scholarships	120
	TER 13	122
	r Guidance Unit	122
-		122
13.2.	Staff of Career Guidance Unit	122
CHAP	TER 14	124
	nt Union and Societies	124
	Student Union of Faculty of Allied Health Sciences	124
14.2.	Student Societies	124

ANNEXURE	125
ANNEX 1	126
General Rules and Regulations for university students	126
ANNEX 2	128
Prohibition of Ragging and other forms of Violence in Educational Institutions	
	128
ANNEX 3	1323
Examination Rules, Offences and Punishments	1323

## CHAPTER 1 University of Ruhuna

#### 1.1. Introduction and brief history of the University

The University of Ruhuna is a public university in the southern province of Sri Lanka. The Ruhuna University College was established on 1<sup>st</sup> September 1978, under the section 24 of the University Act No. 16 of 1978. The Ruhuna University College was given full University status on 1<sup>st</sup> February 1984. The central administration block of the University is located at Wallamadama, Matara. At present the University of Ruhuna comprises of ten faculties namely Agriculture, Allied Health Sciences, Engineering, Fisheries and Marine Sciences & Technology, Humanities and Social sciences, Management and Finance, Science, Medicine, Technology and Graduate studies.

Faculties of Humanities and Social Sciences, Fisheries and Marine Sciences & Technology, Management & Finance, Science, Graduate Studies are located in the main University premises at Wallamadama. Faculties of Agriculture, Engineering, Medicine and Technology are located at; Mapalana (Kamburupitiya), Hapugala (Galle) Karapitiya (Galle) and Karagoda-Uyangoda (Kamburupitiya), respectively. The Faculty of Allied Health Sciences which is the youngest and ninth Faculty of the University of Ruhuna, is temporary located at Mahamodara and Uluvitike (Galle), until the construction of buildings on a spacious 6 acre land at Walahanduwa (Galle) is completed.

The University offers Bachelor, Master, MPhil and PhD degrees in their respective disciplines. In addition, Diploma and Certificate courses are conducted in various disciplines.

At the inception of the University of Ruhuna for the Bachelors' degree programmes in 1978, a total of 272 students were enrolled. In the year 2018, it has increased up to 8367 students, across nine faculties recording its fast growth during the past four decades.

Faculty Name	No. of Students
Faculty of Agriculture	780
Faculty of Allied Health Sciences	324
Faculty of Engineering	894
Faculty of Fisheries and Marine Sciences & Technology	212
Faculty of Humanities & Social Sciences	2093
Faculty of Management and Finance	1591
Faculty of Medicine	1004
Faculty of Science	1025
Faculty of Technology	444

#### Distribution of students among the ten faculties (2018)

## 1.2. Location of the University

University of Ruhuna main campus is located 4 km from Matara town along the Colombo Hambantota (A2) main road. Matara (<u>Sinhala</u>: මාතර <u>Tamil</u>: மாத்துறை) (originally Mahathota) is a city on the southern coast of Sri Lanka, 160 km from Colombo. Matara historically belongs to the area called Ruhuna, one of the three kingdoms in Sri Lanka. First Indians who arrived to the island according to the Mahawansa settled in the area, along the bank of Nilwala river.

Travelling from Colombo to Matara can be made either by train or buses. There are only a limited number of trains but buses are available every half an hour through the normal route or expressway. The journey through normal route takes about four hours from Colombo while one and half hours through expressway.

#### 1.3. Officers of the University

Chancellor	Venerable Akuratiye Nanda Thero
Vice-Chancellor	Senior Prof. T.S.D. Amarasena MBBS (RUH), MD (COL), DCH (COL), DCH (Sydney)
Deputy Vice-Chancellor	Prof. E.P.S. Chandana BSc (RUH), MPhil (RUH), PhD (Japan)

#### Deans of the Faculties

Agriculture	Prof. Sudas D. Wanniarachchi BSc Agric (RUH), MSc, PhD (Guelph, Canada)
Allied Health Sciences	Dr. Imendra Kotapola BDS (PDN), PhD (Japan)
Engineering	Dr. H.P. Sooriyaarachchi BSc (Eng Hons) (Moratuwa), CEng, MIE (SL), MEng (Tokyo), PhD (Sheffield, UK)
Fisheries and Marine Sciences & Technology	Dr. H.B. Asanthi BSc (Honors) (RUH), PhD (Montpellier, France)
Graduate studies	Senior Prof. M.V. Weerasooriya MBBS (PDN), DMSc, FNASSL
Humanities and Social Sciences	Dr. Upali Pannilage BA, MPhil, PhD (RUH) PGDip (COL)
Management and Finance	Dr. T.S.L.W. Gunawardana BBA (RUH), MSc (Agder, Norway) PhD (Bodo, Norway)
Medicine	Prof. I.V. Devasiri – MBBS (RUH), DCH (COL), MD (COL)
Science	Prof. P.A. Jayantha BSc (KLN), MSc (SJP), PhD (QUT, Australia)
Technology	Senior Prof. W.D.G. Dharmarathna BSc (PDN), MSc, PhD (Tufts, USA)
Librarian	Mr. N Hettiarachchi

BSc (Hon) (RUH) MSSc (Lib & Inf Sci) (KLN)

#### 1.4. Organizational structure



#### Organizational Structure of the University

Pathology Pharmacology Physiology Psychiatry Surgery

#### 1.5. Contact information of the University

#### 1.5.1. Postal Addresses

Main administration block of the University is located at Wellamadama. Faculties of Humanities and Social Sciences, Fisheries and Marine Sciences & Technology, Management & Finance, Science, Graduate Studies are in the main University premises at Wellamadama (Matara).

The postal address of the University is, University of Ruhuna Wellamadama Matara 81000 Sri Lanka

Addresses of the other five faculties are as follows;

Faculty of Allied Health Sciences University of Ruhuna Godakanda, Galle, 80000 Sri Lanka

Faculty of Agriculture University of Ruhuna Mapalana, Kamburupitya, 81100 Sri Lanka

Faculty of Engineering University of Ruhuna Hapugala, Galle, 80000 Sri Lanka

Faculty of Medicine University of Ruhuna Karapitiya, Galle, 80000 Sri Lanka Faculty of Technology University of Ruhuna Karagoda-Uyangoda, Kamburupitiya, 81000 Sri Lanka

	Telephone	Fax
Wellamadama Complex	+94(0)412222681-2	+94(0)412222683
	+94(0)412227001-4	
Faculty of Agriculture	+94(0)412292200	+94(0)412292384
Faculty of Allied Health	+94(0)912243900	+94(0)912243900
Sciences		
Faculty of Engineering	+94(0)912245765	+94(0)912245762
Faculty of Fisheries and	+94(0)412227026	+94(0)412227026
Marine Sciences &		
Technology		
Faculty of Humanities and	+94(0)412227010	+94(0)412227010
Social Sciences		
Faculty of Management	+94(0)412227015	+94(0)412227015
and Finance		
Faculty of Medicine	+94(0)912234730	+94(0)912222314
Faculty of Science	+94(0)412222701	+94(0)412222701
Faculty of Technology	+94(0)413006134	+94(0)413006134
Faculty of Graduate	+94(0)412222681	+94(0)412222681
studies		

# 1.5.2. Telephone and Fax numbers of the University main campus and Faculties

#### 1.5.3. Electronic mail/web

The university can be reached by electronic mail through the mail domain of **ruh.ac.lk**. The email addresses of the academic staff and other officers are available in the University Web site: **http://www.ruh.ac.lk** 

## 1.5.4. Internal telephone numbers of the Wellamadama complex

Vice Chancellor	2000
Office	2101
Deputy Vice Chancellor	2001
Office	2137
Registrar	2110
Office	2109
Dean, Faculty of Fisheries and Marine Sciences & Technology	5101
Senior Assistant Registrar	5102
Dean, Faculty of Science	4101
Assistant Registrar	4102

Dean, Faculty of Humanities and Social Sciences	3101
Assistant Registrar	3102
Dean, Faculty of Management & Finance	3901
Assistant Registrar	3902
Dean, Faculty of Graduate Studies	2147
Assistant Registrar	2160
Librarian	2210
Bursar	2150
Senior Assistant Bursar (Finance)	2108
Assistant Bursar (Finance)	2103
Assistant Bursar (Supplies)	2115
Deputy Registrar (General Administration)	2120
Deputy Registrar (Examinations)	2130
Assistant Registrar (Student Affairs)	2135
Senior Assistant Registrar (Academic Establishment)	2144
Senior Assistant Registrar (Non-Academic Establishment)	2140
Engineer	2145
Director, Physical Education	2223
Medical Officer	2121
Carrier Guidance Unit	2132
Chief Security Officer	2126
Office	2127

#### CHAPTER 2 Faculty of Allied Health Sciences

#### 2.1. Introduction

The Faculty of Allied Health Sciences (FAHS) of the University of Ruhuna was established in September 2017. Initially, it was started in the Faculty of Medicine as Allied Health Sciences Degree Programme (AHSDP) to provide undergraduate studies in the disciplines of Medical Laboratory Science and Nursing in 2008, and Pharmacy in 2010. The need for such undergraduate degree programmes were felt for several decades in the health sector of the country, which increasingly demanded highly trained individuals to cope with the trends in modern healthcare system. These degree programmes have been commenced with the aim of producing graduates suitable for employment nationally and internationally.

This is the only FAHS located in Southern Province of Sri Lanka. The faculty now has three departments offering four year degrees namely, Bachelor of Science Honours in Medical Laboratory Science, Bachelor of Science Honours in Nursing and Bachelor of Pharmacy Honours. Dean's office, Departments of Pharmacy and Medical Laboratory Science are located at Uluvitike (about 6 km from Galle city) and Department of Nursing is located at Teaching Hospital, Mahamodara temporarily, until the construction of buildings at Walahanduwa (Galle) is completed.

Many academic staff members of these departments have foreign and local postgraduate qualifications. In addition to the permanent academic staff members, all the departments employ temporary academic staff members as assistant lecturers and demonstrators for supporting the academic activities of the departments. The permanent non-academic staff members who work in all the departments and the office of the Dean of the faculty provide services for the smooth running of all the undergraduate and postgraduate degree programmes of the faculty.

All three degree programmes are conducted in English medium and each degree programme consists of 120 credits. The curricula have been designed for four years complying with Sri Lanka Qualification Framework (SLQF) guidelines with essential components including individual research projects and appropriate training programmes (hospital, clinical, community and industrial).

All the departments possess well-equipped laboratories and other infrastructure facilities for teaching and research work. At present, the faculty admits 135 students for all three degree programmes (25 for Medical Laboratory Science, 80 for Nursing, 30 for Pharmacy) annually. The selection of students for undergraduate programmes is done by the University Grants Commission of Sri Lanka based on

the performance of students in the G.C.E. (Advanced Level) examination in biological stream.

The FAHS, University of Ruhuna intends to commence several new undergraduate degree programmes and postgraduate degree programmes relevant to health sciences in near future.

#### 2.2. Vision and Mission of the Faculty

#### 2.2.1. Vision of the Faculty

"To be the best Allied Health Science education institution in the country"

#### 2.2.2. Mission of the Faculty

"To provide educational opportunities for all pursuing higher education in allied health sciences to produce good quality technically competent health professionals to the country to achieve sustainable development goals through alignment of educational programmes to economic and health policies of the country".

#### 2.3. Aim of the Faculty

To prepare a competent, caring, compassionate and reflective allied health graduate skilled in the delivery of patient care in collaboration with other healthcare professionals and capable of becoming potential care giving leaders, educators and researchers in the field of allied health sciences.

#### 2.4. Administrative staff and contact information

Personnel	Name	Email	Mobile number	Internal Telephone
				number
Dean	Dr. Imendra Kotapola	<u>imendra.kotapola@yah</u> oo.com	+94 -714460919	+94-912-243-900
Head/Dept. of Medical Laboratory Science	Dr. H.H. Peiris	bbharshi@yahoo.com	+94 -718332615	+94-912-234676
Head/Dept. of Nursing	Ms. S.M.E.B. Weeratunga	eranthiweeratunga@ya hoo.com	+94 -778858519	+94-912-243241
Head/Dept. of Pharmacy	Dr. S.K. Hettihewa	krishanthi2001@yahoo. com	+94 -711943078	+94-912-232896
Senior Assistant Librarian	Mr. P.G. Nishantha	nishantha84@lib.ruh.ac	+94-718484775	+94-912-223141
Assistant Registrar	Ms. M. Ranasinghe	ar@ahs.ruh.ac.lk	+94-714276713	+94-912-247490
Assistant Bursar	Ms. A.G. Kaushalya	ab@ahs.ruh.ac.lk	+94-713840408	+94-912-247590

#### 2.5. Site map of the Faculty



#### 2.6. Degree Programmes

The Faculty offers primarily undergraduate programmes; Bachelor of Science Honours in Medical Laboratory Science (BSc Honours Medical Laboratory Science), Bachelor of Science Honours in Nursing (BSc Honours Nursing) and Bachelor of Pharmacy Honours (BPharm Honours) of four-year duration. These are fulltime programmes consisting of a number of course units offered in two semesters (Nursing and Pharmacy programmes) and three terms (Medical Laboratory Science programme) per year. Nursing and Pharmacy programmes run through eight semesters and Medical Laboratory Science programme runs through twelve terms. The term system of Department of Medical Laboratory Science will be changed to semester system in near future. Examinations and evaluations are held at the end of each semester and term. The undergraduate programmes comprise of number of course/subject units offered by individual departments.

## 2.7. Graduate Profiles

Graduate profiles of the three degree programmes are as follows:

## 2.7.1. Graduate Profile of Medical Laboratory Science Degree

The BSc Medical Laboratory Science graduate of University of Ruhuna will,

- have the knowledge and the skills to carry out, develop and evaluate laboratory test procedures in the clinical laboratories in Sri Lanka.
- be a quality manager with the ability to apply and monitor quality laboratory procedures and to ensure safety in the laboratories.
- be a scientist at the interface of modern laboratory science and medical science, assisting the pathologists and clinicians in diagnosing, monitoring and screening of both communicable and non-communicable diseases.
- be readily employable in Medical Research Laboratories to carry out research.
- adhere to national and international norms and practices of ethics when they perform their duties.
- be a lifelong-learner and a self-learner who will strive his or her best to maintain the knowledge, skills and attitudes on their respective fields up to date.
- be able to communicate effectively with the patients and be sensitive to their needs and circumstances in which they are in.
- contribute their best as a member of the healthcare delivery team.
- have the capability in training the future undergraduates in Medical Laboratory Science and contribute to the development of the field of Medical Laboratory Science in practice and teaching.
- be able to use the knowledge gained during undergraduate period to pursue on postgraduate studies effectively.

## 2.7.2. Graduate Profile of BSc Nursing Degree

The BSc Nursing graduate of University of Ruhuna will,

- be a fully qualified nurse capable of applying and monitor quality nursing care to the health care users nationally and internationally.
- be a part of the multidisciplinary health care team with positive interactions in managing patients in the hospital and in the community.
- be a lifelong self-active learner with postgraduate studies, contributing to knowledge by planning and conducting nursing research activities and sharing the findings with their colleagues.
- be a mentor with the capabilities of facilitating, supervising, training and acting as a role model for future undergraduates.

- be a policy maker who is involved in the upliftment of the country's health requirements in order to achieve best health indicators to the country.
- be a manager and a leader in the field of nursing and in the health sector to enhance the field of nursing in Sri Lanka according to the health needs of the country.
- be a great nursing professional who is actively involved maintaining existing standards and creating new standards of nursing, and to improve the professionalism among the nursing professionals.

## 2.7.3. Graduate Profile of Pharmacy Degree

The BPharm graduate of University of Ruhuna will,

- have the knowledge, skills and correct attitudes to perform the Pharmacist's duties in health institutions in Sri Lanka and abroad.
- be a fully qualified pharmacist to perform duties and to help pharmaceutical industry in drug development, manufacturing and marketing.
- have the knowledge in practical aspects of delivering quality assured products as per pharmacopoeia, WHO and ISO standards.
- have the skills and attitudes as pharmacist to inform and counsel patients regarding drug therapy.
- be fully equipped with capabilities which are necessary for positive interactions with patients in community.
- be a professional and life long active learner contributing knowledge to develop the primary health care needs of the country.
- have the knowledge, skills and positive attitudes in training future undergraduates in Pharmacy and contribute to the development of the field of Pharmacy.
- maintain a high standard of professional ethics in discharging professional obligations.
- be able to pursue post graduate studies successfully in pharmacy and related fields.

## CHAPTER 3 Academic Regulations and Procedures

#### 3.1. Admission Requirement

#### 3.1.1. On the Basis of G.C.E. (A/L) results

All applicants for the admission to Bachelors Degree programmes in the FAHS must satisfy the general university admission requirements laid down by the University Grants Commission. Transfer students referred by the University Grants Commission for admission to this faculty shall be admitted only with the recommendation of the Faculty Board.

#### 3.1.2. Lateral entry

The criteria approved by the UGC standing committee for Allied Health Sciences will be applied for the recruitment of lateral entrants for the degrees offered by the FAHS.

Up to 30% of the students may be selected from the professionals who have completed training at training schools of the Ministry of Health in Sri Lanka. Recruitment will be based on selection examination and interview. In addition, those candidates must fulfill the following criteria to be selected for the relevant degree programmes.

- Pass in Biology (Zoology & Botany), Chemistry, Physics for GCE (A/L) in one sitting for Bachelor of Nursing and Medical Laboratory Sciences degrees
- Pass in GCE (A/L) in Biology (Zoology & Botany), Physics and Credit in Chemistry for Bachelor of Pharmacy degree
- Minimum 05 year service in state sector at the time of closure of application
- Below 45 years at the time of closure of application (Upper limit for age can be decided by Senate and Council of the respective University under exceptional circumstances)
- At least a pass (S) in English for GCE (O/L) Examination
- Registration in the Ceylon Medical College Council/Sri Lanka Medical Council/Sri Lanka Nursing Council

#### 3.2. Registration as a new student

A student admitted to the faculty is registered as a fulltime student. He/she is required to maintain his/her registration during the total period of study (four years) in the faculty.

After the registration, every student is issued a registration number, an identity card which contains his/her photograph, a faculty handbook, and a student record book. This identity card is a valid mandatory document of identification of the student and should be kept with the student when entering the faculty premises, attending classes in the faculty, hospital or during field visits, sitting for examinations and entering faculty hostels. It should be produced when it is requested by any authorized personnel in the university. The identity card will be essential to enter the university premises and to borrow books from the library. These should be kept safely until the degree is awarded. In case of loss of a student identity card/student record book, it should be immediately reported to the Assistant Registrar/FAHS along with a copy of the police complaint.

In addition, for a nursing student, a Clinical Experience Record Book will be given. Further, a Pharmacy student will be given a Clinical Orientation Programme Book. These books need to be maintained appropriately and in case of a loss, a student should pay Rs. 300.00 and obtain a new book.

#### 3.3. Registration fees

Students should pay following fees at the registration.

Registration Fee	Rs. 200.00 per year
Medical Fee	Rs. 50.00 per year
Science Deposit Fee	Rs. 100.00 to be paid on admission
Library Fee	Rs. 100.00 to be paid on admission

Also, students should renew their registration at the beginning of each academic year by paying relevant fees.

#### 3.4. Orientation programme

The orientation programme consists of Foundation Module and Intensive English Course. It is usually conducted during the first six weeks after the registration. However, the period of the programme depends on the time available between the registration of students by UGC and the commencement of the academic programmes of the faculty. The main aim of the programme is to guide students to become self-directed learners, improve their English language, communication, information technology (IT) and soft skills, and familiarize the students to university environment. It also introduces students to the disciplines of Medical Laboratory Science, Nursing and Pharmacy. It also includes introduction to study skills required as a learner in higher education, seminar presentations, teamwork, time management, critical appraisal and academic writing.

After the successful completion of the Intensive English Course, students will sit for the University Test of English Language (UTEL) examination. 80% attendance for the classes is required to sit for the UTEL examination. A student must obtain an English Language Proficiency of Level 5 (Levels are 1-9) to successfully complete his/her degree programme. Failure to achieve UTEL proficiency level 5 on or before the final examinations would result in delay in awarding the degree.

#### 3.5. Course Structure and academic calendar

Course structure and academic calendar for each degree programme are described under each department (Chapters 4, 5 and 6).

#### 3.6. Credit Framework Policy

Each degree programme offers 120 credits. A credit is a time-based quantitative measure used to determine the weightage of a course/subject unit. The number of study hours of each course/subject unit is arranged according to the number of credits assigned as follows:

One credit is considered equivalent to 50 notional learning hours for a taught course, laboratory studies course or field studies/clinical work. In case of industrial/work-based training, including time allocated for assessments and in case of research, including time allocated for literature survey, one credit is considered equivalent to a minimum of 100 notional hours\* (Sri Lanka Qualification Frame work).

\*The notional learning hours include direct contact hours with teachers and trainers, time spent in self-learning, preparation for assignments, carrying out assignments and assessments.

In a subject/course unit, one credit is equivalent to direct contact hours of,

- 15 for lectures
- 30-45 for practical/laboratory work
- 100 for research project
- 50 for clinical appointments
- 100 for the work-based training (field, elective, community placements)

Credits must be earned after successful completion of the work required and assessment of learning outcomes.

#### 3.7. Accreditation and Specifications of the Degree Programmes

## 3.7.1. Sri Lanka Qualification Framework

The Sri Lanka Qualification Framework is a nationally consistent framework for all higher education qualifications offered in Sri Lanka. It recognizes the volume of learning of students and identifies the learning outcomes that are to be achieved by the holders of respective qualifications. SLQF comprises of ten levels and the descriptors of each of these levels are stated in a comprehensive manner. Since the volume of learning is considered in the SLQF, the number of credits that should be earned by students of each qualification is also given.

According to the SLQF level 6, the minimum number for credits a student must earn to complete the Bachelor of Science Honours in Medical Laboratory Science, Bachelor of Science Honours in Nursing and Bachelor of Pharmacy Honours degrees are 120.

#### 3.7.2. Accreditation

Bachelor of Science Honours in Medical Laboratory Science and Bachelor of Pharmacy Honours degrees are accredited by Ceylon Medical College Council and Sri Lanka Medical Council respectively. Bachelor of Science Honours in Nursing degree is accredited by Sri Lanka Nursing Council.

Bachelor of Science Honours in Medical Laboratory Science, Bachelor of Science Honours in Nursing and Bachelor of Pharmacy Honours degrees are recognized internationally. Thus, our graduates have equal chance as for those graduates from other Universities to apply for employment opportunities and to obtain scholarships/ partnerships/placements in other local and foreign institutions or universities for higher education.

#### 3.8. Attendance requirements

Attendance is recorded in every academic activity; number of medical certificate submissions and daily attendance percentage for the subjects are calculated. A student must maintain an 80% attendance or 65% with medical certificates attendance for classes (lectures, practical/clinical orientation programme and tutorial) and 100% for clinical/work-based placements to be eligible to sit for the examination of a course/subject unit. Attendance

requirements for each degree programme are further described under the by-laws (Chapter 4, 5 and 6).

#### 3.8.1. Medical certificates

If a student is unable to attend lectures and/or practical classes due to an illness he/she should inform the university medical officer within a week. If a student wishes he/she can get medical assistance from a government or a private doctor, the University Medical Officer should also approve the medical certificates issued by them. Further details of submission of medical certificates are mentioned in the General Rules and Regulations set by the University of Ruhuna (ANNEX 1).

# 3.9. By-law of the University and Rules and Regulations for students in University of Ruhuna

University by-law will be distributed among the students at registration. All students should abide to the by-laws of the University of Ruhuna. Furthermore, students should follow and abide to the General Rules and Regulations set by the University of Ruhuna (ANNEX 1) and Guidelines for Prohibition of Ragging and other forms of Violence in Educational Institutions (ANNEX 2).

## 3.10. By-laws of Degree Programmes

By-law of each degree programme consists of all the academic related information, regulation and activities. The by-laws of each degree programme are described in the chapters 4, 5 and 6. All students should be aware and refer the by-law of the relevant degree programme during the academic period.

#### CHAPTER 4 Department of Medical Laboratory Science

#### 4.1. Introduction

The Department of Medical Laboratory Science is situated in Uluvitike premises which is in close proximity to the Teaching Hospitals, Karapitiya and Mahamodara. The present annual intake for the Medical Laboratory Science degree programme is 25. The Department has several lecture halls, tutorial rooms and well-equipped laboratories.

#### 4.2. Degree offered by the Department

The Department of Medical Laboratory Science awards Bachelor of Science Honours in Medical Laboratory Science, [BSc Honours Medical Laboratory Science] degree for those who successfully complete the degree programme and pass the stipulated examinations. It was started as a full-time four year programme in the year 2008.

Bachelor of Science Honours in Medical Laboratory Science degree programme intends to give a sound scientific knowledge and attitudes combined with the necessary skills to work in any medical laboratory.

The Medical Laboratory Science is a demanding field of science which combines the use of new technologies with the application of theoretical knowledge to perform complex procedures on tissue specimens, blood samples and other body fluids. It has an important role in modern medicine. The laboratory investigations provide critical information to the clinicians in the diagnosis and monitoring of diseases.

The Medical Laboratory Science graduates will have a challenging and a rewarding career in medical and research laboratories both in the government and the private sector. The Medical Laboratory Science degree programme will prepare to face the challenges in the ever-evolving field of Medical Laboratory Science.

#### 4.3. Vision and Mission of the Department

The Vision of the Department of Medical Laboratory Science is to be the best Medical Laboratory Science degree programme in Sri Lanka.

The Mission of the Department of Medical Laboratory Science is to teach and train undergraduates in Medical Laboratory Science which will enable them to develop academic and technical competence in clinical laboratory practice and to manage a clinical laboratory in cooperation with the laboratory personnel and other healthcare professionals.

#### 4.4. Research areas of the Department

The laboratories of the Department of Medical Laboratory Science are equipped with many necessary instruments and other resources to carry out research in many disciplines. The academic staff of the Department of Medical Laboratory Science conducts research in the fields of:

Biochemistry Clinical Biochemistry Microbiology Haematology Histopathology Parasitology

in collaboration with academic staff members of the Faculty of Medicine. A considerable number of valuable research publications and communications are produced annually.

All Medical Laboratory Science undergraduates should carry out an individual research project during the third term of their final year, under the supervision of the academic staff members. 10 credits have been allocated for these research projects and are evaluated by project reports and poster presentations.

#### 4.5. Academic staff of the Department

+.J. Academic Stari of the Department
Head
Dr. H.H. Peiris, BSc (Hons) (KLN), MSc (PDN), PhD (Ruhuna)
Senior Lecturers:
Dr. W.V.R.T.D.G. Bandara, BSc sp. Human Biology (Hons) (SJP), MPhil (SJP), PhD (RUH)
Dr. Kalani B. Gunawardana, BSc (Hons) (PDN), MSc (PDN), PhD (USA)
Dr. H. M. Kasuni Akalanka, BSc (Hon)(KLN), PhD (SJP), M.I. Chem C
Lecturers:
Ms. E.H. Silva, BSc sp MLS (Hons) (SJP)
Ms. J.A.N. Sandamali, BSc sp MLS (Hons) (PDN), MSc (PDN)
Ms. Prabhavi Wijesiriwardhana, BSc sp MLS (Hons) (PDN), MSc (PDN)
Ms. Kalani Jayasekara, BSc sp MLS (Hons) (PDN)
Ms. Sachinthi Amarasiri, BSc MLS (Hons) (RUH)
Ms. A.A.D.S. Amarasinghe, BSc MLS (Hons) (RUH)
Ms. W.B.N.T. Fernando, BSc MLS (Hons)
Ms. U.G.S. Janeesha, BSc MLS (Hons) (PDN)

#### 4.6. Course structure

#### 4.6.1. Duration of the course

This is a fulltime course which runs over 12 terms.

#### 4.6.2. Medium of the instruction

The course is conducted in English medium.

#### 4.6.3. Academic year

Each academic year consists of three terms. In a term, academic activities run over 10 weeks. After completion of the academic activities assigned to the first and second terms, continuous assessments are held within a period of two weeks. At the end of the third term, year-end examinations are held. Two weeks study leave will be granted prior to all year end examinations. The students will be given two weeks of vacation after each examination. One week of holidays will be given for Sinhala and Tamil New year and for Christmas.

#### 4.6.4. General Academic calendar

First Term	Weeks	Second Term	Weeks	Third Term	Weeks
Academic activities	10	Academic activities	10	Academic activities	10
Term-1 Continuous Assessment	02	Term-2 Continuous Assessment	02	Study Leave	02
Vacation	04	Vacation	04	Year End Examination Vacation	02
Holidays	01	-	-	Holidays	01
Total	17	Total	16	Total	19

# 4.7. Subject units offered by the Department for BSc Honours Medical Laboratory Science degree

Academic Year	Subject unit code	Subject unit	No. of credits allocated
Veen 4	MLS 1101	Basic Sciences	7
Year 1	MLS 1102	Cell Biology and Biochemistry	8
	MLS 1103	Human Biology	9
	MLS 1104	Medical Laboratory Practice	4
	MLS 1105	Basic Statistics	2
Total	I		30
	MLS 2101	Medical Microbiology and Immunology	10
Year 2	MLS 2102	Statistics, Epidemiology and Research Methods	4
	MLS 2103	Haematology	9
	MLS 2104	Medical Parasitology	2
	MLS 2201	Basic Genetics, Molecular Genetics and Molecular Biology	3
	MLS 2202	Transfusion Medicine	2
Total			30
	MLS 3101	Histopathology and Cytopathology	5
Year 3	MLS 3102	Clinical Biochemistry	6
	MLS 3103	Laboratory Management	4
	MLS 3104	Biotechnology	2
	MLS 3201	Andrology/Sub-fertility and reproductive health	1
	MLS 3202	Animal Research	2
	MLS 3301	Practical Training (Haematology, Microbiology, Histopathology, Clinical Biochemistry, Parasitology, Transfusion Medicine)	10
Total	•		30
Year 4	MLS 3301	Practical Training (Haematology, Microbiology, Histopathology, Clinical Biochemistry, Parasitology, Transfusion	20

		Medicine)		
	MLS 4301	Research project	10	
Total	I		30	
Total Credits			120	
Identification of subject unit code				
First three letters indicate the degree programme: Medical Laboratory Science.				

Next number indicates the Academic year of the subject: First year 1, Second Year 2.

Second digit indicates the term at which the subject commences, and last digit/s indicates the order of subject commencement.

#### 4.8. Subject descriptions for BSc Honours Medical Laboratory Science degree

#### MLS 1101 Basic Sciences

Chemistry: Introduction to chemistry, Organic chemistry–Structure and bonding; Hybridization & resonance; Stereochemistry; Acids & bases; Analytical chemistrytitrimetry, atomic emission, atomic absorption and flame emission spectroscopy; UV-Visible spectroscopy; Chromatography; Radio isotopes and their applications; Physical chemistry- Thermodynamics, Colligative properties and electrolyte solutions

Physics: Mechanics; Waves & vibrations; Geometrical and Applied Optics; Heat; Electricity and Magnetism; Electronics

#### MLS 1102 Cell Biology and Biochemistry

Introduction to biochemistry; Structure of cell; Carbohydrates structure & functions; Amino acids & protein structure & functions; Lipids structure & functions; Nucleotides & nucleic acids structure & functions; Nucleotides & nucleic acids structure & functions; Transport across cell membranes; Biological oxidation & reduction; Vitamins; Introduction to metabolism; Carbohydrate metabolism; Amino acid & protein metabolism; Lipid metabolism; Biosynthesis of proteins; Metabolism of Nucleotides; Mineral Metabolism; Hormone action; Hemoglobin structure & synthesis

#### MLS 1103 Human Biology

Tissue types & characteristics; Transport across the cell membrane, osmolality & tonicity; Volume & composition of body fluid compartments, Starling force & their derangement; Hemopoiesis; Hemostasis; Blood & its components, function & physiological variation in blood; Blood collection, transport & storage; Blood groups / HDN; Hemoglobin synthesis, types & properties; Hemoglobin catabolism, bilirubin

metabolism & plasma protein & lymph; Introduction to components of immune system; Specific & non-specific immunity, response to viral & bacterial infections; Application of immunology in laboratory practice; Anatomy, histology & physiology of heart, respiratory track, gastro-intestinal tract, urinary system, endocrine system, male & female reproductive system, musculoskeletal system, central nervous system

#### **MLS 1104 Medical Laboratory Practice**

Services of pathology laboratory; Use of microscope; SI units and Calculations for the laboratory; Laboratory acquired infections and Universal precautions; Principals of laboratory waste disposal; Sterilization & disinfection; Use of spectrophotometer; Introduction to laboratory safety, Chemical & radiation safety; Testing process & test methodologies; Pre analytical phase in Hematology & Molecular biology, Biochemistry, Microbiology, Histopathology & Cytopathology; Analytical phase & post analytical phase; Ethics in laboratory Medicine; Introduction to Laboratory Accreditation; Internal quality control; External quality control

#### MLS 1105 Basic Statistics

Statistics for Medical Laboratory Sciences; Variables and Variability; Analyzing, Summarizing and Presenting Data; Normal Distribution; Basics in Probability; Population and Sampling; Hypothesis Testing; Chi Square Tests; Diagnostic Tests; Correlation and Regression

#### MLS 2101 Medical Microbiology and Immunology

Introduction to Microbiology; Immunology; Host parasite relationship; Bacterial Genetics; Metabolic pathways used by bacteria; Gram positive organisms; Gram negative organisms; Food & Water bacteriology; Antimicrobials; Methods of testing antibacterial sensitivity; Mycology-superficial, subcutaneous, systemic & opportunistic fungal infections; Anti-fungal agents; Seriological diagnosis of fungal infections; General & systemic Virology; Gram stain; Special staining techniques; Biochemical examination of bacteria; Processing of samples for microbiological assessments

#### MLS 2102 Statistics, Research Methodology and Epidemiology

Introduction to epidemiology; Epidemiology in communicable and noncommunicable diseases; Measurements in Epidemiology; Study Designs in Epidemiology; Errors in Epidemiological methods; Screening; Applied Statistics in Medical Laboratory Sciences; Research methods; Ethical issues in Research; Report writing and Dissemination of information

MLS 2103 Hematology

Haematopoiesis and molecular basis; Classification of Anaemia; Hypoproliferative anaemia – Iron deficiency; Vitamin B12 & Folate deficiency anaemia; Marrow failure syndromes; Haemolytic anaemia; Membrane defects; Haemoglobin defects; Enzyme defects; Myeloid disorders; Myeloproliferation; Myelodysplasia; Acute Myeloid Leukaemia; Lymphoma and lymphoproliferative disorders; Multiple myeloma; Acute Lymphoblastic Leukaemia; Haemostasis; Platelet function; vWF; Coagulation; Acquired defects of haemostasis; Inherited defects of haemostasis; Stem cell transplantation; Disseminated Intravascular Coagulation; Genetic changes relevant to haematological diseases

#### MLS 2104 Medical Parasitology

Features and classification of Parasites of Medical Importance; Direct examination of faeces and concentration techniques; Identification of Helminth eggs and larvae found in faeces; Identification faecal protozoan trophozoites, cysts and oocysts; Collection, transport and preservation of parasitological specimens; Collection, transport and preservation of parasitological specimens; Intestinal helminths/protozoa; Examination of Blood for malaria parasites; Examination of blood for microfilariae in lymphatic filariasis (LF); Examination of Human Specimens for emerging /Re-emerging and imported infections; Less frequently needed parasitology tests; Identification of medically important arthropods; Malaria; Lymphatic filariasis

#### MLS 2201 Basic Genetics, Molecular Genetics and Molecular Biology

Genome structure; Cell cycle & genome perpetuation; Basic genetic concepts & population genetics; Nucleic acid structure; Gene expression; Analysis of DNA

#### MLS 2202 Transfusion Medicine

General immunohaematology; ABO blood group system; Rhesus blood group system; Other blood group systems; Techniques for identifying blood groups & antibody screening; Compatibility testing prior to transfusion; Blood grouping & Pregnancy; Blood grouping & compatibility testing in Autoimmune Haemolytic anaemia; Donor selection & Screening of donor blood; Blood component preparation, storage precautions and uses; HLA system & transfusion Medicine; Therapeutic apheresis; Transfusion reactions; Quality control in blood banking; Future of transfusion Medicine

#### MLS 3101 Histopathology and Cytopathology

General Pathology; Cell injury, cellular and tissue response to damage; Cellular adaptation to injury; Basic concepts of thrombosis and infarction; Basic concepts of neoplasia; Basic concepts of molecular basis of carcinogenesis, cellular changes in neoplastic cells; Pathological pigmentation; Calcification; Amyloidosis; Immunohistochemistry; Cytopathology; Introduction to Histotechnology; Fixation of tissue; Tissue processing; Paraffin section cutting; Decalcification of tissue;

Scientific basis of routine stains used in histology & H&E staining technique; Special stains & staining techniques

#### MLS 3102 Clinical Biochemistry

Clinical componenet - Diabetes and hypoglycaemia; Disorders of lipid metabolism; Disorders of water and electrolytes; Acid base disorders; Investigations for; cardiovascular diseases; Liver and GI disorders; Endocrine dysfunction – pituitary and Thyroid; Adrenal gland and reproductive system disorders; Disorders of bone metabolism; Clinical enzymology;

Analytical componenet - Introduction to immunoassays; Immunochemical techniques for Qualitative Analysis; Immunochemical techniques for Quantitative Analysis; Labelled Immunochemical Assays; Introduction to spectral techniques; Flame photometry and atomic absorption; Fluorimetry; Nephelometry and turbidimetry; Automation and point of care testing; Quality management in chemical pathology; Principles of screening and the use of biochemical tests in inborn errors of metabolism and malignant disease; Chromatographic methods; Mass spectrometry; Principles of osmometry and electrophoresis, Ion-selective electrodes; Therapeutic drug monitoring, toxicology and drugs of abuse.

#### MLS 3103 Laboratory Management

Introduction to laboratory management; Principles of management; Laboratory accreditation - management requirements; Competency evaluation; Management of point of care (POC) testing; Calculation of reference ranges; Laboratory management – decision making; Test costing; Defining and measuring strategy for successful lab benchmarking; Laboratory audits; Laboratory accreditation technical requirements; Laboratory safety and emergency management; Effective communication in lab management; Employee selection, performance appraisals and scheduling; Laboratory chain management; Quality management in a haematology. microbiology & immunology, Genetics. histopathology & cytopathology laboratories; Total quality management; Laboratory manager's role private sector perspective; Evaluation of test kits; Ethics in laboratory Medicine; Introduction to new tests / procedures; Management of collection centers; Outsourcing management; Supply chain management; Management of laboratory information systems; Managerial leadership; Managing change; Selection and implementation of new equipment and procedure; Financial Management and Generation of revenue; Overview of laboratory management and current health care environment; Human resource management

#### MLS 3104 Biotechnology

Overview on biotechnology; Issues related to biotechnology; Cell fraction and constituent detection; Protein chemistry; Nucleic acid extraction; Enzymes and biotechnology; Industrial biotechnology; Gene libraries and screening; Animal

transgenic; Introduction to bioinformatics; Recombinant DNA technology; Regulation of metabolism; Animal cell culture; Biotechnology in medicine

#### MLS 3201 Andrology, Sub-fertility and Reproductive Health

Spermatogenesis and Oogenesis; Anatomy and physiology of female reproductive system; Anatomy and physiology of male reproductive system; The female reproductive cycle; Andropause and Menopause; Disorders in male reproductive system and subfertility; Disorders in female reproductive system and subfertility; Seminal fluid analysis; Assisted Reproductive Technologies; Sperm Processing Techniques in Assisted Reproduction Technologies; Sperm bank and storage of sperms; Laboratory ethics in ART

#### MLS 3202 Animal Research

Animals in research; Ethics in animal research; Breading animals for research Purposes; Basics of handling rats/mice for research purposes; Maintenance of an animal research facility; Nutrition

#### MLS 3301 Work Placement

The main training centres include the Clinical Biochemistry, Histopathology, Haematology and Microbiology laboratories and the Blood Bank of the Teaching Hospital Karapitiya, Histopathology laboratory of the Teaching Hospital Mahamodara, Department of Pathology, Department of Microbiology, Department of Parasitology and Nuclear Medicine Unit of the Faculty of Medicine and National Institute of Health Sciences, Kalutara.

#### MLS 4301 Research Project

All Medical Laboratory Science undergraduates are supposed to conduct an individual research project during their final year, under the supervision of the academic staff members of the faculty. 10 credits are allocated for the research project and it is evaluated by a dissertation and poster presentations.

## 4.9. By-Laws of the Bachelor of Science Honours in Medical Laboratory Science Degree

Bachelor of Science Honours in Medical Laboratory Science Degree [BSc Hons (MLS)]

#### By-Law No: 100-2018.

#### UNIVERSITY OF RUHUNA

By-Laws made by the Council of the University of Ruhuna, on XXXXXXXX under Section 135 of the Universities Act No. 16 of 1978 and amendments thereof.

#### <u>BY-LAW</u>

This By-Law may be cited as the Bachelor of Science Honours in Medical Laboratory Science By-Law No: 100-2018 of the University of Ruhuna and shall come into effect on XXXXXXXXX.

- 1. General Requirements for Award of the Degree
  - 1.1 The Degree of the Bachelor of Science Honours in Medical Laboratory Science hereinafter referred to as "the degree" may be awarded by the University of Ruhuna, Sri Lanka, to a student who:

a) has been admitted to the University as a student under section 135 of the Universities Act No.16 of 1978 and amendments thereof, and

b) has been a duly registered student of the University, during the period of study prescribed by this By-Law, and

c) has completed the courses of study to the satisfaction of the Senate, as prescribed by this By-Law and Rules and Regulations made thereunder, and

d) has passed examinations as prescribed by this By-Law and Rules and Regulations made thereunder, and

e) has paid such fees as prescribed by the University for his/her case, according to the Rules and Regulations of the University, and

f) has fulfilled all the above requirements within eight academic years from the date of enrollment to the academic programme of the University, provided that it shall be within the power of the Senate to declare for some specified reason/s that a student is eligible for the award of the Degree at a subsequent occasion, and
- (g) has no ongoing disciplinary inquiry conducted against him by the University, and
- (h) has no ongoing inquiry conducted against him by the University on examination offences.
- 2. Programme of Study
  - 2.1 Duration of the Bachelor of Science Honours in Medical Laboratory Science Degree shall be of four academic years (twelve terms). The Degree Programme shall consist of compulsory subject units.
  - 2.2 During the four academic years of the degree programme, a student shall complete subject units of 120 credits including an individual research project and a work placement.
  - 2.3 During the four academic years student shall achieve the English Proficiency of University Test of English Language for Academic Purposes (UTEL) level 5 or equivalent approved by the Senate.
- 3. Registration for subject units
  - 3.1 Students shall register for all subject units at the beginning of the academic year or the term, within the time specified by the Faculty, failing which they will not be allowed to follow the respective subject unit/s.
  - 3.2 The available subject units for an academic year will be announced by the Faculty at the beginning of the respective academic year, enabling the students to register within the time specified by the Faculty.
  - 3.3 A candidate admitted to the Degree Programme shall not be permitted concurrent registration for any other fulltime course of study at University of Ruhuna or elsewhere.
  - 3.4 Prescribed fees for registration and examinations wherever relevant shall be paid as determined by the Council of the University of Ruhuna (hereinafter referred to as "the Council").
- 4. Evaluation
  - 4.1 The method of evaluation shall be by one or more of the following methods and will be announced by the Faculty at the commencement of the relevant year.

- (i) Formative assessments
- (ii) Continuous Assessment (Theory/Practical/Objective Structured Practical examinations (OSPE)/ Viva based practical)
- (iii) Year-End Examinations (Theory/Practical/ OSPE / Portfolio evaluation /Viva-voce)
- (iv) Research Project (Dissertation and Poster presentation)
- 4.2 Evaluation shall consist of continuous assessments and year-end examinations for all subject units of first three academic years. The fourth academic year evaluation shall consist of assessment of work placement and the research project.
- 4.3 The examinations prescribed by this By-Laws and the Regulations thereunder shall be conducted by a Board of Examiners comprising the Dean of the Faculty of Allied Health Sciences, Head of the Department of Medical Laboratory Science and the Unit Coordinators of all relevant Subject Units of the year.
- 4.4 Grade Point Value (GPV) of each Subject Unit will be calculated giving a weight of 70% to the year-end examination (comprises 40% practical and 30% theory) and 30% to the continuous assessment/s.
- 4.5 Those who are unable to sit for a continuous assessment shall not earn marks for that component.
- 4.6 If the student sitting for an year-end examination for the second or subsequent attempt, final grade shall be decided based on the marks obtained in the year-end examination. For such attempts, marks allocation will be 60% for practical and 40% for theory. However, when a student fails to sit for an examination, the continuous assessment component will be included in the calculation of pass mark for each unit at the first sit examinations (i.e. first time physically sitting the examination).
- 4.7 The pass mark for each subject unit in the year-end examinations is 50% (Grade C).
- 4.8 If a student was unable to pass a subject unit in the first attempt, he/she shall re-sit that subject unit in the subsequent year-end examination.

- 5. Eligibility to sit for examinations
  - 5.1 In order to sit the first scheduled examination, the student shall maintain a minimum of 80% attendance separately for lectures, practical classes and tutorial classes of each subject Unit. Even with approved medical certificates a minimum attendance of 65% has to be maintained in order to be eligible to sit for the relevant subject/units.
  - 5.2 If a student has not maintained the minimum required attendance for even a single subject unit, he/she shall not be eligible to sit all the subject units of the relevant year end examination. They need to sit the next scheduled examination which will be considered as the second attempt and he/she will not be eligible for the award of classes.
  - 5.3 A student shall be deemed to have sat the first scheduled examination, irrespective of whether it has been actually attempted or not. However, if the student has submitted a valid excuse which has been recommended by the faculty board and accepted by the Senate the immediate available attempt shall be considered as the student's first attempt at the examination.
  - 5.4 A student who fails to submit the Assessment Portfolio of the work placement on or before the deadline (i.e. within two weeks of the completion of the work placement), shall not be eligible to sit for the Year 4 Practical Examination. Such students shall be allowed to sit the practical examination with the next batch of students after the submission of the portfolio and they will not be eligible for the award of classes.
- 6. Allocation of Grades
  - 6.1 Depending on the level of overall performance, grades and Grade Point Values (GPV) shall be allocated for the Subject units as follows:

Marks (%)	Grades	GPV
90 - 100	A+	4.0
80 - 89	A	4.0
75 - 79	A-	3.7
70 - 74	B+	3.3
65 - 69	В	3.0
60 - 64	B⁻	2.7
55 - 59	C+	2.3
50 - 54	С	2.0
45 - 49	C⁻	1.7
40 - 44	D+	1.3
30 - 39	D	1.0
00 - 29	E	0.0

6.2 Grade Point Average (GPA) is calculated to the second decimal place as follows for each academic year.

$$\text{GPA} = \frac{\sum (c_i g_i)}{\sum (c_i)}$$

where,  $c_i$  and  $g_i$  are the number of credits and the Grade Point Values (GPV) respectively for the  $t^{th}$  Subject Unit.

6.3 The overall GPA will be calculated using the following weightings of the GPA of each year-end examination:

Year 1 (y1) contributes a total of 20% Year 2 (y2) contributes a total of 25% Year 3 (y3) contributes a total of 25% Year 4 (y4) contributes a total of 30%

Overall GPA will be calculated as follows;

$$Overall \ GPA = \frac{20}{100} \ GPAy1 + \frac{25}{100} \ GPAy2 + \frac{25}{100} \ GPAy3 + \frac{30}{100} \ GPAy4$$

- 6.4 A candidate who obtains grade **C** or better for a subject unit shall be considered to have passed in that subject unit.
- 6.5 A student who obtains grades C<sup>-</sup>, D<sup>+</sup>, D or E for a particular subject unit shall re-sit the year-end examination and improve the grade of the subject unit within the stipulated period as stated in 1.1 (f) above. The maximum grade that could be awarded is C.
- 7. Requirements for Graduation

A student shall be deemed to have passed the Bachelor of Science Honours in Medical

Laboratory Sciences Degree Examination if he/she has earned,

- (a) a minimum of 120 credits, and
- (b) grades of **C** or better for all Subject Units, and
- (c) a Grade Point Average (GPA) of 2.00 or above.

#### 8. Award of Classes

A student shall be awarded a class, if he/she;

- a) has fulfilled all the stipulated conditions in section 7, and
- b) has earned not more than two C grades by repeating examinations in the immediately available re-sit attempt, and
- c) has fulfilled the following additional requirements within four academic years from the date of first registration, provided that it shall be within the power of the Senate to declare the eligibility for the award of a class at a subsequent occasion.

GPA ≥ 3.70	First Class
GPA 3.30 - 3.69	Second Class (Upper Division)
GPA 3.00 - 3.29	Second Class (Lower Division)

9. Award of the Degree

Student shall achieve the English Proficiency of University Test of English Language for Academic Purposes (UTEL) level 5 which is conducted by the Faculty or equivalent which is approved by the Senate to award the Bachelor of Science Honours in Medical Laboratory Sciences Degree.

- 10. Effective Date of the Degree
  - 10.1 The effective date of the degree shall be the last date of the assessment of the research presentation for that batch of students. In the event that a student was referred in one or more subject units, in the first, second, third or fourth years but has completed the research project and its presentation, the effective date of the degree shall be the last date of the year-end examinations in which the student has passed the referred subject/s.
  - 10.2 In case a student has an ongoing inquiry for an examination or disciplinary offence conducted against him by the University, results of the relevant examination/s shall not be released until the inquiry is completed. In such situations, the effective date of the degree shall be determined by the Senate or the Council of the University of Ruhuna.

11. Award of the Diploma/Higher Diploma in Medical Laboratory Science (DMLS/HDMLS)

The students who are unable to complete the degree within eight academic years of registration shall be awarded the Diploma in Medical Laboratory Science (SLQF level 3) or Higher Diploma in Medical Laboratory Science (SLQF level 4) based on the following criteria.

- 11.1 The student should apply for the above, before the elapse of one year from the completion of the eight-year period.
- 11.2 A student who has passed all first year subjects, and the subjects Clinical Biochemistry and Haematology shall be awarded Diploma in Medical Laboratory Science (DMLS).
- 11.3 A student who has passed all first year subjects and the subjects Clinical Biochemistry, Haematology, Histopathology & Cytopathology and Medical Microbiology & Immunology will be awarded Higher Diploma in Medical Laboratory Science (HDMLS). They are not allowed to apply for DMLS.
- 11.4 In order to apply and be eligible for DMLS or HDMLS, students shall complete the work placement and complete the research project, with or without success at the examination for these components.

#### 12. Interpretations

12.1 In this By-Law unless the context otherwise requires:

"University" means the "University of Ruhuna, Sri Lanka" as established by the Gazette Notification No. 281/07 dated 24-01-1984.

"Council" means "the Council of the University of Ruhuna", constituted by the Universities Act No.16 of 1978 and amendments thereof.

"Senate" means "the Senate of the University of Ruhuna", constituted by the Universities Act No. 16 of 1978 and amendments thereof.

"Faculty of Allied Health Sciences" means, "Faculty of Allied Health Sciences", University of Ruhuna".

"Faculty Board" means "the Faculty Board of the Faculty of Allied Health Sciences, University of Ruhuna".

"Dean" means "the Dean of the Faculty of Allied Health Sciences, University of Ruhuna".

12.2 Any question regarding the interpretation of this By-Law shall be referred to the Council whose decision thereon shall be final and conclusive.

# 4.10. Code of Conduct at clinical or work placement for Medical Laboratory Science students

## Work Placement

No student shall change the Work Placement appointment allocated to him/her without the prior permission of the supervisor and the Head of the Department.

#### Attendance and Punctuality

Attendance at Work Placement is compulsory. The student should obtain prior leave from the supervisor consent before he/she gets absent himself/herself from laboratory work. The student should spend the full amount of time scheduled on the time table in the laboratory/training centre.

The student's dress should be neat and clean. The dress should be appropriate and decent. Students are recommended to wear covered shoes within the laboratory. Hair should be combed neatly. Male students should shave their beard and mustache fully. An overcoat must be worn by students during their work in the laboratory. The overcoat should be tailored according to the specifications given by the university.

In the corridors and public areas of the hospital and the other training centres, the students should not talk loudly and should not walk obstructing the corridors.

## Dress code Design for the Overcoat

a) Front view



#### (b) Back view



• Length of the

overcoat should be up to the knee level.

- Length of the sleeve should be up to the level of the wrist.
- Length of the colour band at the end of the sleeves should be 2 inches.
- End of the sleeve should have an elastic band of 2 inches.
- Width of the collar should be 2 inches.
- Width of the back belt should be 2 inches.
- Size of the chest pocket; width 5 inches, height 6 inches.
- Size of the waist pockets; width 8 inches, height 8 inches.

Dress and appearance at all times should be appropriate and conform to the profession. It is strongly recommended that students should be clean, neat and tidy in their appearance. Males should wear longs with shirt and covered shoes. Hair should be neatly combed. Male students should shave their beard and mustache fully. Students should wear the appropriate name tags during their clinical work. Wearing of specially designed overcoats is desirable.

#### Laboratory/Hospital Records

Strict confidentiality should be maintained with regard to the information obtained from patients' records or reports. The student should not remove any patient record/report available in the laboratory.

#### Laboratory Equipment

Student should use all laboratory equipment with utmost care. Accidental breakages of such equipment should be brought to the immediate notice of the supervisor.

#### **Communicable Diseases**

Students who are suffering from a communicable disease should not attend academic work and should inform the University Medical Officer or a person appointed by the faculty to act in that capacity. In addition they should inform the supervisor and the Course Coordinator.

## CHAPTER 5 Department of Nursing

#### 5.1. Introduction

The Department of Nursing is presently situated within the premises of Teaching Hospital Mahamodara. The present annual intake for the BSc nursing degree programme is approximately 80 students. Teaching Hospital Karapitiya is also located in close proximity. The department has several lecture halls, tutorial rooms, library and skills laboratory for the nursing students.

## 5.2. Degree offered by the Department

The Department of Nursing, FAHS, University of Ruhuna awards a Bachelor of Science Honours in Nursing, BSc Honours (Nursing), degree for those who successfully complete the degree programme and pass the stipulated examinations. It was started as a full-time four year degree programme in the year 2008.

The Bachelor of Science Honours in Nursing degree is a pre-registration degree designed to equip nurse practitioners, who are beginners, with competencies in providing safe and effective nursing care of high standard in a variety of settings. The curriculum provides a sound scientific and humanistic foundation for nursing practice enabling the undergraduates to develop competencies necessary for the delivery of nursing care related to prevention and cure of diseases, maintenance, rehabilitation and promotion of health.

Apart from being sensitive and caring towards their clients, graduates of this programme will be able to articulate the nurses' role to other disciplines in health care. The programme will also introduce nursing research and evidence-based nursing practice at an early stage of the programme. Emphasis will be placed on developing critical and reflective thinking, problem solving and social skills of the students, and also skills to address professional, moral and ethical issues. The programme is designed to further encourage the students to acquire knowledge and insight through self- directed learning and motivate innovative approaches.

## 5.3. Vision and Mission of the Department

The vision of the Department of Nursing is to be the leading center of excellence in the field of Nursing.

The mission of the Department of Nursing is to produce intellectually and professionally competent nursing graduates to meet the emerging health care

needs of local and international community with special emphasis on the social, economic and cultural needs of Sri Lanka.

#### 5.4. Research areas of the Department

Current research carried out by the members of the Department of Nursing are related to the following fields;

Nursing education Health promotion and disease prevention Palliative care Rehabilitation Geriatric care Women's health Child and adolescent's health Quality of life Nursing care quality Musculoskeletal disorders Addiction Psychological and psychiatric nursing Neuro-psychiatry Non-communicable disease Nutrition

The researches are conducted in collaboration with academic staff members of the Faculty of Medicine and annually a considerable number of valuable research publications and communications are made.

All Nursing students are supposed to conduct an individual research project during the 1<sup>st</sup> semester of their final year under the supervision of the academic staff members. Eight credits are allocated for the research project and it is evaluated by a project report and presentations.

In addition, Department of Nursing has research collaboration with the Ministry of Health of Southern Province focused on community health issues.

## 5.5. Academic staff of the Department

Ms. S.M.E.B. Weeratunga, *Dip. Nursing* (SJP - NTS), BSc Nursing (OUSL), MPhil (RUH)

#### Senior Lecturers:

Dr. K.G Imendra, BDS (PDN), PhD (Japan)

Ms. B.I. Wickramarachchi, Dip. Nursing, (COL - NTS), Post Basic Dip. Nursing (PBCN), BSc Nursing (OUSL), MPhil (RUH), Reading for PhD (Malaysia)

#### Lecturers:

Ms. K.K.P.M. Kumari de Silva, Dip. Nursing (Galle - NTS), BSc Nursing (OUSL), MPhil (RUH)
Ms. R.H.M.P.N. Rathnayake, BSc Nursing (SJP), Reading for PhD (RUH)
Mr. T.U.W. Abeygunasekara, BSc Nursing (PDN), Reading for MPhil (RUH)
Ms. A.D.S.S. Karunanayaka, BSc Nursing (SJP), Reading for MPhil (RUH)
Ms. M.W.K. Gamage, BSc Nursing (SJP), Reading for MPhil (SJP)
Ms. K.G.P. Nirmani, BSc Nursing (SJP), Reading for PhD (Japan)
Ms. N.H.D.P. Fonseka, BSc Nursing (SJP), Reading for MPhil (RUH)
Ms. H.J.H. Madhushanthi, BSc Nursing (SJP), Reading for MPhil (SJP)
Ms. S.M.T.D. Sundarapperuma, BSc Nursing (SJP), Reading for PhD (SJP)

## 5.6. Course Structure

#### 5.6.1. Duration of the course

This is a fulltime course which runs over 8 semesters.

#### 5.6.2. Medium of the instruction

The course is conducted in English medium.

#### 5.6.3. Academic year

Each academic year consists of 2 semesters. In a semester, academic and clinical work runs over 15 weeks with a mid-semester break of 1 week. A written examination will be held within a period of 2 weeks, after completion of 15 weeks of teaching in a given semester and 2 weeks of study leave. Clinical examination will be conducted at the end of the semester after giving 2 weeks clinical exposure to

the students. The students will be given maximum of 2 weeks of vacation after clinical examination in each semester. Two weeks of holiday will be given to the students during the academic year one week for Sinhala/Tamil New year and Year-end/Christmas.

First semester	Week	Second semester	Week
Academic activities and	8	Academic activities and	8
clinical placement (1st		clinical placement (1 <sup>st</sup>	
half)		half)	
Mid semester break	1	Mid semester break	1
Academic activities and	7	Academic activities and	7
clinical placement (2nd		clinical placement (2nd	
half)		half)	
Study leave	2	Study leave	2
End semester	2	End semester	2
examination		examination	
Clinical placement (for	2	Clinical placement (for	2
exam preparation)		exam preparation)	
Clinical examination	1	Clinical examination	1
Vacation	2	Vacation	2
University holidays	1	University holidays	1
Total	26		26

## 5.6.4. General Academic Calendar

# 5.7. Subject units offered by the Department for Bachelor of Science Honours in Nursing degree

Year 1 -	Subject	Subject unit	No. of credits
Semester	code		
1	NUR 1112	Anatomy I	2
	NUR 1122	Physiology I	2
	NUR 1131	Biochemistry	1
	NUR 1143	Fundamentals of Nursing I	3
	NUR 1151	Health Promotion and Social Aspect	1
		in Nursing	
	NUR 1161	Nursing Clinical Attachment I	1
Total			10
Year 1 –	NUR 1211	Anatomy II	1
Semester	NUR 1222	Physiology II	2
2	NUR 1232	Fundamentals of Nursing II	2
	NUR 1242	Microbiology and Parasitology in	2
		Nursing	

	NUR 1252	Pathology in Nursing	2
	NUR 1261	Nutrition in Nursing	1
	NUR 1274	Nursing Clinical Attachment II	4
Total	1		14
Year 2 –	NUR 2111	Pharmacology in Nursing 1	1
semester	NUR 2123	Medical Nursing I	3
1	NUR 2133	Surgical Nursing I	3
	NUR 2143	Psychiatry in Nursing	3
		(For theory – 1, for clinical placement – 2)	
	NUR 2150	Communication Skills and	Pass/fail
		Interpersonal Relationship	
	NUR 2161	Psychology in Nursing	1
	NUR 2175	Nursing Clinical Attachment III	5
Total		-	16
Year 2 -	NUR 2212	Pharmacology in Nursing II	2
semester	NUR 2221	Information Literacy in Nursing	1
2		(Introduction to IT, Patient Database	
		Management)	
	NUR 2232	Pediatrics Nursing I	2
	NUR 2242	Gynecology and Obstetrics in Nursing	2
	NUR 2252	Statistics and Epidemiology in	2
		Nursing	
	NUR 2266	Nursing Clinical Attachment IV	6
Total			15
Year 3 -	NUR 3112	Fundamentals of Research in Nursing	2
semester	NUR 3124	Medical Nursing II	4
1	NUR 3134	Surgical Nursing II	4
	NUR 3142	Community Health in Nursing	2
		(For theory – 1.0, for community	-
		training $-1.0$ )	
	NUR 3157	Nursing Clinical Attachment V	7
Total			19
Year 3 -	NUR 4136	Research Project (Proposal writing)	-
semester	NUR 3213	Pediatrics in Nursing II	3
2	NUR 3223	Gynecology and Obstetrics in Nursing	
	11011 0220	II	3
	NUR 3231	Dietetics in Nursing	1
	NUR 3247	Nursing Clinical Attachment VI	7
Total	1		14
Year 4 -	NUR 4112	Leadership and Management in	2
semester		Nursing	
L	1		I

1	NUR 4123	Professional Development in Nursing	3
		(Nursing Ethics, Trends and Issues	
		and Legal Aspects in Nursing)	
	NUR 4136	Research Project (Data Collection,	6
		Analysis, Thesis Writing, Presentation	
		and Defense)	
	NUR 4145	Nursing Elective Appointment	5
Total	I		16
Year 4 -	NUR 4214	Professorial Clinical Appointment in	4
semester		Medical Nursing	
2	NUR 4224	Professorial Clinical Appointment in	4
		Surgical Nursing	
	NUR 4234	Professorial Clinical Appointment in	4
		Pediatric Nursing	
	NUR 4244	Professorial Clinical Appointment in	4
		Gynecological and Obstetric	
		Nursing/Trauma and Emergency	
		Nursing	
Total			16
Total credits for the degree		120	
	Identification of subject unit		
The code consists of four digits prefixed by a set of three letters denoting the			
subject unit as described below.			
Three letters NUR (prefix) for Nursing degree programme			
First digit Academic year (1, 2, 3, 4)			
Second digit Semester of each academic year (1, 2)			
Third digit Subject unit number of each semester			
Fourth digi	it	Allocated credit value	
5			

# 5.8. Subject Description for Bachelor of Science Honours in Nursing degree

#### NUR 1112 - Anatomy I

Structure and function of cell, organization of the body for function; structure of heart and circulation, respiratory system, alimentary system and urinary system

## NUR 1122 - Physiology I

Functions of cell, organization of the body for function, homeostasis (body fluids including blood and distribution, properties of cell membrane, movement of fluid

across membranes), homeostasis, the function of heart and circulation, respiratory system, alimentary system and urinary system

## NUR 1131 – Biochemistry

Normal biochemical processes in the human body, metabolic abnormalities, principles of diagnostic and therapeutic procedures of metabolic abnormalities and deviations from norms related to biochemical and nutritional status

## NUR 1143 - Fundamentals of Nursing I

Introduction to nursing, history of nursing, health and illness, safety and personal hygiene, promoting comfort, vital signs, management of activity and mobility, management of nutrition and fluids, maintaining body temperature and encouraging patients in activities of daily living, assisting patients in elimination, breathing, communication, admission, discharge, transfer of a patient to a hospital

#### NUR 1151 - Health promotion and Social aspects in Nursing

Health promotion - Concepts of primary, secondary and tertiary prevention, health promotion strategies, monitoring and evaluation, assessment of health in physical, mental, social, and environmental dimensions, multi-sector-holistic approach in promoting health in the community

Social aspect - Basic concepts of sociology, social structure, man and society, socialization, urbanization and social factors related to health and illness, social and cultural anthropology

#### NUR 1161 - Nursing Clinical Attachment I

Clinical placement	Number of weeks
Medical wards	1
Surgical wards	1

#### NUR 1211 – Anatomy II

Structure and function of reproductive system, nervous system, endocrine system, musculoskeletal system, skin, immune system, basic concepts in genetics, and understanding of common congenital abnormalities

## NUR 1222 – Physiology II

Physiological basis of pain, sleep, speech, postural reflexes, overview of sensory and motor pathways, reproductive system, physiology of bones, calcium & phosphate metabolism, physiology of pregnancy and lactation

#### NUR 1232 – Fundamentals of Nursing II

Nursing process, physical examination, medication administration, asepsis, care of patients with special needs, end of life care, expressing sexuality, first aid and bandaging, assisting in therapeutic and diagnostic measures

#### NUR 1242 – Microbiology and Parasitology in Nursing

Microbiology - Basic microbiology, immunology and vaccination, controlling microorganisms in hospitals, sterilization and disinfection and clinical microbiology

Parasitology - Human parasitic diseases and life cycles and modes of transmission of parasites found in Sri Lanka and pathogenesis, laboratory diagnosis, treatment, prevention, and control of the diseases

#### NUR 1252 – Pathology in Nursing

Basics of general pathology, common diseases of organ systems including etiology, pathogenesis, morphological changes, functional derangement and their clinical significance and the basics of histopathology and hematology

#### NUR 1261 – Nutrition in Nursing

Principles and practices of nutrition, skills in improving the nutritional status of an individual and the community

#### NUR 1274 – Nursing clinical attachment II

Clinical placement	Number of weeks
Medical wards	4
Surgical wards	4

#### NUR 2111 – Pharmacology in Nursing I

Mechanisms of drug action, pharmacokinetics, therapeutic and adverse effects of drugs commonly used in clinical setting, legal and ethical aspects of drug administration, calculation of the drug dosages, storage and safety of drugs

## NUR 2123 – Medical Nursing I

Fluid and electrolyte balance, pain management, medical conditions of cardiovascular, respiratory, gastrointestinal, genitourinary and dermatological disorders

## NUR 2133 – Surgical Nursing I

Peri-operative nursing care, oncology care, wound management, surgical conditions of respiratory, gastrointestinal, cardiovascular, genitourinary and dermatological disorders

## NUR 2143 – Psychiatry in Nursing

Review of anatomy, physiology and biochemistry related to psychiatry, introduction to basic psychology and terminology used in psychiatry, history of psychiatry and present trends, psychiatric services available and future plans in Sri Lanka, stress and stress management, effective communication skills and professional relationship, principals of psychiatric nursing, and legal and ethical issues related to psychiatry

## NUR 2150 – Communication Skills and Interpersonal Relationship in Nursing

Theory and skill lab practice and focuses on introduction to educational psychology and learning theories, domains of learning objectives, principles of learning, learning – teaching strategies, significance of health education in nursing and selection and preparation of audio visual aids

## NUR 2161 – Psychology in Nursing

Scientific study of the behavior and mental processes of human beings, basic concepts of psychology, growth and development, higher mental processes, individual differences, motivation, social and cultural aspects of human behavior

Clinical placement	Number of weeks
Chest unit or chest hospital	1
Cardiology unit	1
Renal and Dialysis unit	1
Cardiothoracic unit	1
Rheumatology unit	1
Dermatology unit	1
Out Patient Department (OPD)- Injection room, Rabies unit,	4
Dressing room, clinics	

## NUR 2175 – Nursing Clinical Attachment III

Radiology and Endoscopy unit	1
National institute of mental health (NIMH)	4

#### NUR 2212 - Pharmacology in Nursing II

Different drug groups relevant to different systems in the body

#### NUR 2221 - Information Literacy in Nursing

Introduction to information technology and management of patient database, create a patient data base using an appropriate data storage program in a computer and to update such data bases, retrieve the information when necessary for patient treatment and management

## NUR 2232 - Pediatric Nursing I

Nurse's role in child health nursing, needs of a child at different developmental stages during illness/ wellness, growth, development and needs of a normal child

## NUR 2242 - Gynecology and Obstetrics in Nursing I

Nurse's role in maternal and new born care, sex education, premarital counseling, family planning, physiological and psychosocial changes during antepartal, intrapartal, and postpartal periods and extending from the preconceptual period through early parenting period, disorders of the reproductive system

#### NUR 2252 - Statistics and Epidemiology in Nursing

Statistics - Different methods of summarizing and presenting data and application of them in nursing and appropriate statistical methods, principles of sampling and sampling methods and other statistical parameters

Epidemiology - Basic epidemiological concepts and their application, epidemiological techniques to examine frequency, determinants and distribution of diseases, ill health conditions and health care services related to nursing

#### NUR 2266 - Nursing Clinical Attachment IV

Clinical placement	Number of weeks
Central sterilization supply division (CSSD) and Blood bank	1
Ear nose and throat (ENT) unit	1
Ophthalmology unit	1
Gynecology and Obstetrics wards, Labour Rooms (for female students)	4
Trauma and accident service (for male students)	

Trauma and accident service unit	1
Pediatric medical and surgical wards, neonatal intensive care	4
unit (NICU) and premature baby unit (PBU)	

#### NUR 3112 - Fundamentals of Research in Nursing

Research paradigms and underpinning philosophy of science, importance of knowledge and its experience, different types of research designs, critical evaluation of existing nursing related research literature

#### NUR 3124 – Medical Nursing II

Medical conditions of reproductive, nervous, musculoskeletal, endocrine, hematological disorders and medical conditions of the ear, nose and throat

#### NUR 3134 – Surgical Nursing II

Surgical conditions of reproductive, nervous, musculoskeletal, endocrine hematological disorders and the surgical conditions of the ear, nose and throat.

#### NUR 3142 – Community Health Nursing

Overview of the community care in Sri Lanka, activities in the antenatal and child welfare clinic, well women clinics, school health, environmental health, food water and sanitation, occupational health, health and social services and health promotion activities in the community

#### NUR 3157 – Nursing Clinical Attachment V

Clinical placement	Number of weeks
Medical wards	1
Surgical wards	1
Neurology unit	1
Neuro-Surgical unit	1
Orthopedic unit	1
Oncology unit	1
Sexually transmitted disease (STD) unit	1
Urology	1
Operating theater	3
Intensive care unit (ICU)	3

## NUR 3213 - Pediatric Nursing II

Etiology, signs and symptoms, pathophysiology, preventive and current diagnostic measures and curative treatments for the minor and major childhood diseases and disorders

#### NUR 3223 - Gynecology and Obstetrics Nursing II

Physical and psychosocial aspects of the child bearing woman, family and the new born, deviations from normal pregnancy labour and puerperium, high risk new born and emergency obstetrics, existing community welfare programs for maternal health, appreciate the role of nurses in maternal and child health programs, and well women services, subfertility, menopause, and disorders of reproductive system

#### NUR 3231 - Dietetics in Nursing

Plan meals containing adequate amounts of all nutrients for all age groups and plan therapeutic diets for different disease conditions according to the, socio-economic and cultural patterns and the activity level of the individual, family and community, practices of suitable cookery methods necessarily in the preparation of the health diet

#### NUR 3247 - Nursing Clinical Attachment VI

Clinical placement	Number of weeks
Medical wards	2
Surgical wards	2
Gynecology and Obstetrics wards, Labour Rooms (for	4
female students)	
Trauma and accident service (for male students)	
Trauma and accident service unit	1
Pediatric medical and surgical wards, NICU and PBU	5

#### NUR 4112 - Leadership and Management in Nursing

Role of a nursing administrator, principles of general management, hospital administration and nursing administration, principles of administration and their application by the different level of nurse managers, nursing services of the unit/ward, principles of supervision including philosophy, purpose, principles and methods of supervising plans, clinical supervision of students, and responsibilities of the head nurse in the clinical settings, role of a nurse manager in clinical teaching in nursing and evaluation of the student nurses

## NUR 4123 - Professional Development in Nursing

This subject includes trends and issues in nursing, nursing ethics and legal aspects in nursing.

Trends and issues in nursing - Historical growth and development of nursing and trends and issues in Sri Lanka, practice of professional nursing, changing pattern in various fields of nursing, importance and function of regional, national and international nursing councils and other agencies related to nursing, trends in nursing in the past, present and the predictions of the future of the nursing profession

Nursing ethics - Clinical nursing practice from an ethical perspective, implications from patient care and professional nursing practice, ethics to nursing practice, and codes of ethics and professional conduct

Legal aspect in nursing - Importance of legal implications in nursing practice, aspects such as epidemiology, diagnosis, circumstances, route of entry, principles of management, prevention (legal provisions and general education), ethical and medical issues and medico-legal duties of a nursing officer and educating the public

#### NUR 4136 - Research Project

The project provides evidence that the graduate student has engaged in scholarly and creative work in his or her profession.

Students will learn skills in library searching and information technology, skills necessary to develop a research proposal, applications of the principles of literature reviewing, principles of reporting and disseminating research findings, develop a research proposal with the help of supervisors and submit seeking ethical clearance.

Students are required to complete the research project they obtained ethical clarance and write a dissertation in order to meet the program's research requirement as a criterion to be eligible for graduation. The project is expected to address a problem relevant to nursing. Within this part of the research project, the student will engage in conducting the research including data collection, analysis and writing up dissertation which will involve the same level challenge and high standard as a thesis but will be approximately half the scale (40,000 words maximum). It should represent a contribution to knowledge, showing evidence of originality, critical insight and the capacity to carry out independent research. It will involve the introduction and evaluation of an innovative intervention in an area of clinical or nurse education practice.

#### NUR 4145 - Nursing Elective Appointment

Nursing elective appointment has been developed through a partnership approach with service users/carers and stakeholders. It aims to respond to current policy drives and in turn, provides the future workforce with health management teams that are compassionate, highly skilled, family centered, quality driven and able to work in a flexible way across diverse practice settings. By the end of proposed training, it is anticipated that students are introduced to a diverse range of nursing and other professional roles within the hospital setting. It includes 12 weeks of full time clinical placement with 12 night shifts.

Elective training will mainly consist of learning by practicing in a clinical setting under supervision and to conduct a case analysis by individual student. Bedside teaching and group teaching will be conducted during the clinical practice.

One of the following elective nursing areas can be selected by the students according to their preference and availability of opportunities in the specific specializations.

Midwifery Nursing (only for female students) Psychiatric Nursing Trauma and Emergency care Nursing Cardiothoracic Nursing Cardiology Nursing Pediatric critical care Nursing Renal Nursing Theater Nursing Oncology Nursing Neurology Nursing Intensive Care Nursing

## NUR 4214 - Professorial Clinical Appointment in Medical Nursing NUR 4224 - Professorial Clinical Appointment in Surgical Nursing NUR 4234 - Professorial Clinical Appointment in Pediatric Nursing NUR 4244 - Professorial Clinical Appointment in Gynecological and Obstetric Nursing/Trauma and Emergency Nursing

This increases student knowledge, skills and confidence in providing nursing care to surgical, medical, obstetric and pediatric patients, strengthen skills in preventive, curative and rehabilitative aspects and health promotion in Nursing

The student will have the opportunity to adapt to the Sri Lankan health care team and act as a 'shadow nurse' in the clinical setting. They are given further exposure on advanced clinical nursing experience under the supervision of clinical instructors in the following manner.

Clinical placement	Number of weeks
Professorial Clinical Appointment in Medical Nursing	5
Professorial Clinical Appointment in Surgical Nursing	5
Professorial Clinical Appointment in Pediatric Nursing	5
Professorial Clinical Appointment in Gynecological and Obstetric Nursing/Trauma and Emergency Nursing	5

## 5.9. By-Laws of the Bachelor of Science Honours in Nursing Degree

By-Laws for the Bachelor of Science Honours in Nursing Degree were originally approved by the Senate of the University of Ruhuna in its 234<sup>th</sup> meeting held on 08<sup>th</sup> October 2008. These by-laws will be subjected further revision.

- 1. These by-laws may be cited as the Bachelor of Science Honours in Nursing degree by-laws.
- 2. Subject to these By-Laws a student may be admitted to the degree of Bachelor of Science in Nursing if he/she;
  - a. has been duly admitted as an internal student of the University, and
  - has been registered as a student of the University for a period not less than 8 semesters for internal students or 4 semesters as a lateral entrant, and
  - c. has completed to the satisfaction of the Vice Chancellor, courses of study as prescribed by these By-Laws and Rules and Regulations made there under, and
  - has completed 120 credits in BSc nursing degree that will be covered in 8 semesters over a period of not less than 3 years and 9 months and
  - e. has paid fees or other dues as may be prescribed by the University, and
  - f. has fulfilled any other conditions or requirements as may be prescribed by the University.
  - g. has achieved the English proficiency of University Test of English Language for Academic Purposes (UTEL) level 5 or equivalent, and
  - h. has fulfilled any other conditions or requirements as may be prescribed by the University.
  - i. has no on-going disciplinary inquiry conducted by the University.
  - j. has no on-going inquiry conducted by the University on examination offences.
- 3. The examinations leading to the Degree of Bachelor of Science Honors in Nursing shall be;

- a. end of semester I in year 1,
- b. end of semester II in year 1,
- c. end of semester III in year 2,
- d. end of semester IV in year 2,
- e. end of semester V in year 3,
- f. end of semester VI in year 3,
- g. end of semester VII in year 4 and
- h. end of semester VIII year 4 respectively.
- 4. The subjects, courses of study and syllabi for the examinations leading to the Degree of Bachelor of Science Honors in Nursing, respectively and the number of papers, oral examinations and other forms of evaluation in each subject shall be prescribed by the Regulations made by the Faculty of Allied Health Sciences (here in-after mentioned as Faculty Board), and then approved by the Senate of the University of Ruhuna.
- 5. Each of the examinations prescribed by these By-Laws and the Regulations there-under shall be conducted by a Board of Examiners constituted for the conduct of that examination.
- 6. A candidate shall present him/herself for each examination leading to the Degree of Bachelor of Science in Nursing on the first occasion at which he/she is required to do so provided that he/she has fulfilled the By-Law No 8 and 9.
- 7. A student may be granted permission to postpone a scheduled attempt on the basis of a valid excuse<sup>1</sup> submitted and accepted by the Faculty Board and the attempt at which he/she sits the examination after the postponement shall be regarded as the attempt for which he/she has submitted a valid excuse. Students who are unable to sit an examination due to ill health must ensure that a relevant medical certificate is submitted within one week to the Assistant Registrar.

#### <sup>1</sup>Valid excuses for examination

- Medical certificate acceptable to the Faculty board. Persons/institutions entitled to issue valid medical certificates for the above purposes;
  - 1. University Medical Officer
  - 2. A consultant in any government / private hospital
  - 3. A District Medical Officer (DMO) in a government hospital
  - 4. A medical certificate issued by a Teaching/General/Base hospital
- b. Death of an immediate family member (parent/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 .Medical certificate from medical officers or institutions other than those listed will NOT BE ACCEPTED.

- a. The candidate should have above 80% attendance at lectures, tutorials and practical sessions of a particular subject, to be eligible to sit for the theory component of the subject.
- b. The candidate should have 100% attendance with satisfactory completion of the assigned number of skills/ procedures of clinical nursing experiences for a particular subject, to be eligible to sit for the clinical component of the subject.
- 9.

8.

- a. If the absence for lectures, tutorials and practical sessions are covered by a valid excuse acceptable to the Faculty Board, the candidate will be eligible to sit the theory component of the examination if he/she has achieved minimum of 65% of attendance.
- b. If the absence for clinical nursing appointments is covered by a valid excuse acceptable to the Faculty Board, the candidate will be eligible to sit the clinical component of the examination if he/she achieved required 100% attendance and assigned number of skills/ procedures with an additional training period with/without expense of his/her study leave period.
- 10. 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.
- 11. 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 even though he/she can complete the other subjects of the examination.
- 12. Should a student not be able to take the examination at the first scheduled attempt as a result of his/her being repeated in a clinical placement due to valid excuse, he/she has to sit the next available examination.
- 13. If the candidate is not eligible to sit for a scheduled examination due to poor attendance in a clinical placement or due to incomplete clinical nursing experience records, not due to a valid excuse, his/her next attempt will be considered as the repeat attepmt.
- 14. An overall average of 50% marks in a subject shall be considered as the pass mark in that subject, provided that a minimum of 50% of clinical practical marks and a minimum of 40% of theory marks is obtained.
- 15. In a combined theory paper constituting two or more number of subjects, the candidate should obtain a minimum of 40% marks for each subject unit and an overall average of 50% marks to be considered to have passed in that combined paper.
- 16. If a candidate obtains less than 25% for one subject unit in a combined paper, the candidate will be considered as referred in the whole combined paper.

- 17. If any student has failed the evaluations of clinical component, in the repeat attempt, the student has to resubmit/do the assignment or care/case study in an improved format and sit for the theory component of the evaluation as well.
- 18. If any student has failed the evaluations/not eligible for the evaluation of community based training, the student has to repeat the training and resubmit the assignment, do the presentation and sit for the theory component of the evaluation as well in the repeat attempt.
- 19. The assignments, care studies and thesis (research projects) required for relevant subjects should be submitted on due dates and late submission will be deducted 2 marks per each day.
- 20. A student is considered to be eligible for the award of the degree when the student (a) passes all the end semester examinations and the final examination (b) passes the qualifying examination in English language.
- 21. Lateral entrants: Duration of the proper academic programme is two calendar years. Students should earn all 120 credits during 2 years by sitting for all the examinations conducted during 4 years for internal students. They are exempted from the clinical training, but they have to take the clinical examinations with the internal students and earn the credits. In addition, they have to pass the qualifying examination in University Test for English Language (UTEL level 5).
- 22. Overall GPA is calculated using the GP values obtained for end semester examinations within four year.
- 23.
- a. A candidate who passes the final examination and obtains an overall average mark on or above "A" shall be eligible to get GPA of 4.0
- b. A candidate who passes the final examination and obtains an overall average mark of "A-" shall be eligible to get GPA of 3.7
- c. A candidate who passes the final examination and obtains an overall average mark of "B+" shall be eligible to get GPA of 3.3
- d. A candidate who passes the final examination and obtains an overall average mark of "B" shall be eligible to get GPA of 3.0
- e. A candidate who passes the final examination and obtains an overall average mark of "B-" shall be eligible to get GPA of 2.7
- f. A candidate who passes the final examination and obtains an overall average mark of "C+" shall be eligible to get GPA of 2.3
- g. A candidate who passes the final examination and obtains an overall average mark of "C" shall be eligible to get GPA of 2.0
- 24.
- A candidate who passes the whole examinations and obtains GPA of 3.7 and above shall be eligible for First Class.
- A candidate who passes the whole examinations and obtains GPA of 3.3 shall be eligible for Second Class Upper Division.
- c. A candidate who passes the whole examinations and obtains GPA of 3.0 shall be eligible for Second Class Lower Division.

d. A candidate who passes the whole examinations and obtains GPA of 2.0 shall be eligible to successfully completed nursing Degree.

## 5.10. Code of Conduct for students at clinical or work placement for Nursing students

#### Clinical groups and appointments

No student shall change the group or work placement/ appointment allocated to him/her without the prior permission of the clinical coordinator. Students are reminded that they have to conform to the rules of the medical institutions that they work in. Students should also be particularly mindful of the human rights of patients and be aware that students have no inherent right to interrogate or examine patients.

Objectives are given to students to be achieved during each clinical placement. Clinical skills development will be facilitated by simulated practice in a nursing skills laboratory. Students should engage in clinical training under the supervision of clinical facilitators. Nursing Clinical Experience Record book is provided to record the clinical experiences and it should be completed by the students during their clinical placements.

In the corridors and public areas of the hospital, the student should not talk loudly and should not walk obstructing the corridors. On entering the wards, the students should identify themselves to the ward staff and obtain permission to perform ward procedures.

#### Attendance and Punctuality

Attendance at clinical work is compulsory. All students are expected to attend clinical attachments on time and 100% attendance is mandatory for clinical attachments. Students who do not fulfill this requirement will not be allowed to sit for the clinical examination. Student should be present in the allocated clinical unit 5 minutes before the assigned time and should leave the clinical unit 5 minutes after the allocated time. The attendance will be calculated at the end of each semester.

Students should inform to clinical coordinator before 7.00 am if they are not able to attend to clinical placement. Messages after 7.00 am is not considered, and only those informed days can be covered during the attachment period with permission from the clinical coordinator. If student do not attend clinical training without prior permission, student will have to undergo two days training for each absent day.

#### Dress Code

Student should wear the uniform prescribed by the Ministry of Health. Dress and appearance at all times should be appropriate and conform to the profession. It is strongly recommended that students should be clean, neat and tidy in their

appearance. Hair should be neatly combed. Male students should shave their beard and mustache fully. Students should wear the appropriate name tags during their clinical work.

#### Conduct with the patients

The students should obtain consent of the patient/ guardian before examining a patient. All the nursing activities should be performed under the supervision of clinical facilitator.

Students should not disturb the patient if he/she is sleep, while having a meal or if he/she is uncomfortable. In the examination of a patient of the opposite sex, it is desirable to have a member of the same sex as a chaperon. Expose only the part that has to be examined and have adequate screening around the patient.

Do not examine patients during visiting hours. The student should introduce him/herself to the patient and address the patient with respect. The student should be courteous and considerate to the patient. No student should give money, tobacco, illegal drugs and alcohol to any patient.

The student shall maintain strict professional secrecy with regard to information obtained from the patient. The relationship of the student with patient's visitors should be at a professional level.

#### Hospital Records and equipment

The student should not remove hospital records, X-rays, ECG or laboratory reports of patients. Strict confidentiality should be maintained with regard to the information obtained from records.

Student should use hospital equipment like sphygmomanometers, glassware, thermometers etc. with utmost care. Accidental breakages of such equipment should be brought to the immediate notice of the ward staff.

#### Maintaining students' inventory

Nursing students should take the responsibility of maintaining students' inventory that is handed over to them by the nursing sister of the ward/unit during their clinical placements.

#### Out of bound period

From time to time, the hospital will be declared out of bound to clinical students on account of clinical examinations. During such periods, students are expected to keep away from the wards. However, if a student wishes to visit a near relative in the ward, he/she shall visit the ward during visiting hours after obtaining prior permission from the Clinical Coordinator.

#### **Communicable Diseases**

Students who are suffering from a communicable disease should not visit the wards. If in doubt, they should consult the University Medical Officer or a person appointed by the faculty to act in that capacity. In addition, they should inform the Clinical Coordinator.

#### Permission for medical treatments

In case of any illness during the clinical placements, students should obtain the permission from ward sister or nurse in charge in writing in the Health Record Book provided to the students by Department of Nursing.

## CHAPTER 6 Department of Pharmacy

## 6.1. Introduction

The Department of Pharmacy is situated at Uluvitike in Galle. The present annual intake for the Bachelor of Pharmacy Honours degree programme is 30 students. The department has several lecture halls, tutorial rooms, an IT room and well-equipped laboratories that are dedicated for the pharmacy students.

## 6.2. Degree offered by the Department

The Bachelor of Pharmacy Honours (BPharm Honours) degree programme was commenced in the year 2010 as a full-time programme which runs for four years. The Department of Pharmacy awards the Bachelor of Pharmacy Honours degree for those who successfully complete the degree programme and pass the stipulated examinations.

The curriculum of the Bachelor of Pharmacy Honours degree offered by the Department of Pharmacy incorporates both the pharmacy practice and the pharmaceutical science aspects equally. The graduate who completes the course will be able to select the area of interest. The BPharm degree consists of 120 credits which include lectures, practical, tutorials, a research project and hospital, clinical, community, and industrial oriented training programmes. The degree programme will cover major topics including chemical, physical, pharmaceutical and pharmacological properties of medicines and the application of these in the practice of pharmacy.

Practical experience in clinical settings including hospital and community pharmacy is emphasized in the Bachelor of Pharmacy Honours degree, particularly in the third and fourth years. This ensures that students are continually putting into practice the theory and hands-on skills they learn throughout the degree programme. The programme is designed to further encourage the graduates to acquire knowledge and insight through self-directed learning and motivate innovative approaches. The programme also aims to produce graduates who have highly developed analytical skills and leadership potential alongside sound clinical competence. Provisions of qualified pharmacists at degree level will enable a person to work in a hospital, community, industry, academic field, and regulatory environment efficiently maintaining international standards.

## 6.3. Vision and Mission of the Department

The vision of the Department of Pharmacy is to be the leading center of excellence in the field of Pharmaceutical Sciences and Pharmacy Practice.

The mission of the Department of Pharmacy is to produce pharmacy graduates who provide safe, high quality commitment to patient-centered, evidence-based and collaborative pharmacy practice in order to improve the health of the communities in which they serve.

## 6.4. Research areas of the Department

Current research interests of the academic staff are related to the following fields of Pharmacy Practice and Pharmaceutical Sciences.

Community Pharmacy Hospital Pharmacy Clinical Pharmacy Pharmacology and Pharmacotherapeutics Pharmacovigilance and Toxicology Cancer therapy Cosmeceuticals and Nutraceuticals Pharmaceuticals Pharmacognosy and Natural products Drug synthesis Molecular Genetics Pharmacoeconomics Pharmaceutical management and marketing

Research facilities are also offered to students who are seeking postgraduate qualifications such as MPhil and PhD Degrees in Pharmacy practice and Pharmaceutical sciences.

## 6.5. Academic staff of the Department

Head
Dr. S.K. Hettihewa, BSc Chemistry Special, (SJP), MSc (Nottingham, UK), MPhil
(PDN), PhD (Auckland, NZ), M.I. Chem. C.
Senior lecturers
Dr. A.S. Dissanayake, BSc Chemistry Special, (COL), PhD (USA)
Ms. K.A.K.D. Wijesekera, BSc Chemistry Special (SJP), MSc (CGI, Thailand)
Ms. G.A.M.Prasadi, B.Pharm (PDN), M.Phil in community Health (PDN)
Ms. V.M. Pathiraja, B.Pharm (PDN), M.Phil in Clinical Pharmacology (PDN)
Lecturers
Ms. H.W.A.S. Subasinghe, BSc Pharm (COL), PG Dip in Education (COL), MPhil
(RUH), PhD (UK)
Ms. L.A.N. Kulathunga, BSc Pharm (COL), MSc (COL), Reading for PhD (Japan)
Ms. P.W.D. Wasana, BPharm (PDN), Reading for PhD (Thailand)
Ms. K.D.S.V. Karunanayaka, BPharm (PDN), Reading for MPhil (RUH)
Ms. M. Jayasinghe, B. Pharm (PDN), PgD Applied Organic Chemistry (UOC), MBA-
Reading (UOC)
Ms. K.I.M. De Silva, B.Pharm (PDN), M.Phil in Molecular Biology Reading (PDN)
Ms. L.L. Sandamali, <i>B.Pharm (RUH)</i>

## 6.6. Course structure

## 6.6.1. Duration of the course

This is a fulltime course which runs over four academic years (8 semesters).

## 6.6.2. Medium of the instruction

The course is conducted in English medium.

## 6.6.3. Academic year

Each academic year consists of 2 semesters which runs for 15 weeks each. A minimum of two weeks of study break is given before the end semester examination which will be held after completion of 15 weeks. The students will be given a minimum of 2 weeks of vacation after end semester examinations before starting the next semester. One week of holiday will be given to the students for Sinhala and Tamil New year.

## 6.6.4. General Academic Calendar

First semester	Weeks	Second semester	Weeks
1 <sup>st</sup> half	08	1 <sup>st</sup> half	08
Mid semester break	01	Mid semester break	01
2 <sup>nd</sup> half	07	2 <sup>nd</sup> half	07
Study leave period	02	Study leave period	02
Exam period	06	Exam period	06
Vacation and Holidays	02	Vacation and Holidays	02
Total	26	Total	26

## 6.7. Course units offered by the Department for Pharmacy Honours degree

	Course unit code	Course unit	No. of credits
Semester	PH 1112	Pharmaceutical Chemistry I	2
1	PH 1123	-	2.5
		Biochemistry I	
	PH 1132	Pharmaceutics I A	2
	PH 1144	Human Biology I	3.5
	PH 1152	Mathematics	2
	PH 1163	Information Technology	3
Total			15
Year 1 –	PH 1213	Pharmaceutical Chemistry II	3
Semester	PH 1222	Pharmaceutical Chemistry III	2
2	PH 1232	Biochemistry II	2
	PH 1242	Pharmaceutics I B	2
	PH 1254	Human Biology II	3.5
	PH 1262	Biostatistics I	1.5
Total		-	14
Year 2 –	PH 2114	Pharmaceutics II A	4
semester	PH 2123	Pharmaceutics II B	3
1	PH 2134	Pathology and Pharmacology I	4
	PH 2143	Biostatistics II	3
	PH 2153	Pharmaceutical Microbiology	3
Total		·	17
Year 2 -	PH 2214	Pharmaceutics III	4
semester 2	PH 2223	Pharmacy Law & Ethics	3
	PH 2232	Pharmacology II	2
		Medicinal Chemistry and	4
	PH 2244	Pharmacognosy I A	

	PH 2254	Pharmacognosy I B	4
Total			17
Year 3 -	PH 3113	Analytical Chemistry	3
semester	PH 3125	Pharmacognosy II	5
1	PH 3134	Hospital & Clinical Pharmacy	4
	PH 3142	Community Pharmacy I	2
	PH 3153	Pharmacology III	3
Total			17
Year 3 -	PH 3212	Pharmacology IV & Toxicology	2
semester	PH 3223	Pharmacotherapeutics	3
2	PH 3233	Pharmaceutical Biotechnology	3
	PH 3242	Management and Economics	2
	PH 3253	Marketing and Accounting	3
Total			13
Year 4 -	Industrial Pharn	nacy stream	
semester	PH 4112	Advanced Medicinal Chemistry I	2
1**	PH 4123	Pharmaceutical Analysis	3
	PH 4134	Pharmaceutical Technology	4
	PH 4141	Cell Biology & Immunology	1
	PH RPI	Research I	2
	Total		12
	Hospital Comm	unity and Clinical Pharmacy strea	m
	PH 4112	Advanced Medicinal Chemistry I	2
	PH 4123	Pharmaceutical Analysis	3
	PH 4132	Applied Pharmacology	2
	PH 4143	Community Pharmacy II	3
	PH RPI	Research I	2
	Total		12
Year 4 -	Industrial Pharn	nacy stream	
semester		Advanced Medicinal Chemistry II	3
2**	PH 4213		
	PH 4223	Quality Control	3
	PH 4231	Molecular Genetics	1
	PH 4242	Biopharmaceutics	2
	PH RPII	Research II	6
	Total		15
	Hospital Comm		
	stream		
	PH 4212	Clinical Pharmacy	2
	PH 4223	Quality Control	3
	PH 4233	Hospital Pharmacy	3

Radiopharmacy	1
Research II	6
	15
Total credits for the degree	

Identification of course unit code

The code consists of four digits prefixed by a set of two letters denoting the subject as described below.

Two letters-PH (prefix)	degree programme (pharmacy)
First Digit	Academic year (1, 2, 3, 4)
Second Digit	Semester of each academic year (1, 2)
Third Digit	Course unit number of each semester
Fourth Digit	Allocated credit value of specific course unit
**Pharmacy students are	selected to follow one stream out of the two streams
	hospital community and clinical pharmacy) at the
beginning of the first se	emester of the final year based upon the academic
performances of the stude	ents during the first three years.

## 6.8. Course unit description for Pharmacy Honours degree

#### First year first semester

#### PH 1112 Pharmaceutical Chemistry I

Basic principles and concepts, stereochemistry, structure, nomenclature, preparations, and reactions and their mechanisms of groups of compounds, carbohydrates, fats and oils, proteins and amino acids, nucleic acid, inorganic pharmaceutical chemistry

#### PH 1123 Biochemistry I

Introduction to cell, cell membrane, cell organelles, cell division, metastasis, transport mechanisms, bioenergetics and biological oxidation, enzymes, vitamins and coenzymes, digestion and absorption of nutrients, carbohydrate metabolism, lipid metabolism

Practical: Familiarizing with the laboratory glassware, equipment and chemicals, properties of carbohydrates, properties of lipids, properties of proteins, enzymatic hydrolysis of starch by amylase and effect of temperature and pH on amylase activity, measurement of pH (pH meter) and preparation of standard buffers (citrate,phosphate and carbonate)
#### PH 1132 Pharmaceutics IA

Introduction to pharmacy, historical development of pharmacy, information resources in pharmacy, introduction to weights and measures, conversion of each system, pharmaceutical calculations, posology, physical properties of drug molecules, physicochemical principals of drug molecules, solubility phenomena, micrometrics

#### PH 1144 Human Biology I

Anatomy: The cell, basic introduction to tissue types & glands, skin, structure of the heart- normal & abnormal, vascular system-arteries, veins, capillaries and lymphatics, respiratory system, general & systemic embryology, formation of placenta & placenta circulation, structure of the gastrointestinal tract-macroscopy & microscopy, structure and arrangements of associated glands of the gastro intestinal tract

Practical: Histology of tissue types and glands, cardio vascular system, respiratory system, gastrointestinal system

Physiology: Functions of cell membrane, drug receptors, modes of transport, blood, haemostasis, anaemia, cardiovascular physiology, respiratory system, gastrointestinal system

Practical: Practical demonstrations on blood hemoglobin estimation, packed cell volume, osmotic fragility, erythrocyte sedimentation rate, white blood cell count and differential count peripheral blood film, blood grouping, bleeding time, clotting time and prothrombin time and anticoagulants.

#### PH 1152 Mathematics

Fundamental concepts in algebra, functions and graphs, exponential and logarithmic functions, trigonometric functions, differentiation, integration, differential equations and applications

# PH 1163 Information Technology

Introduction to computers, computer system organization, hardware, number systems, software, data communication, introduction to computer networks, internet applications, system analysis and designing, data processing, pharmacoinformatics

Practical: Introduction to Windows: Windows basics, working with windows, file manipulation, creating and maintaining directories, subdirectories and files, backup strategies and virus prevention, study of application software packages: word processing, spread sheets, data Base Management Systems, using a software package to solve mathematical and statistical problems, Using the internet:

browsing, searching databases of main biomedical journals (medicine, embbase etc.) and information retrieval using the www and the internet.

#### First year second semester

# PH 1213 Pharmaceutical Chemistry II

Theory of resonance, arenes and their reactions, amines and nitrogen bases, phenols and carboxylic acids, organic name reactions and their uses in drug synthesis, a study of the specific uses of the reagents in organic synthesis, chemistry of polycyclic aromatic compounds, chemistry of heterocyclic compounds, reactive intermediates, elimination reactions, electrophilic addition reactions, nucleophilic addition reactions, nucleophilic substitution reactions, polymers and macromolecules

# PH 1222 Pharmaceutical Chemistry III

Familiarizing with the laboratory glassware, equipment and chemicals, qualitative analysis of organic compounds, identification of functional groups of carbonyl groups (aldehydes, ketones), carboxylic acids, phenols, amides, esters and amines of known organic compounds, identification of functional groups of unknown organic compounds, preparation of derivates for the identification of functional groups, purification by recrystallization, melting point determination, separation of simple binary mixtures of organic compounds.

#### PH 1232 Biochemistry II

Haemoglobin and plasma proteins, amino acid metabolism, nucleic acids and protein synthesis, purine – pyrimidine metabolism

Practical: Qualitative analysis of normal urine, qualitative analysis of abnormal urine, estimation of total protein in serum, estimation of serum calcium, estimation of serum phosphate, estimation of cholesterol in serum and calculation of lipid profile, estimation of creatinine in serum, determination of blood glucose, estimation of serum bilirubin, estimation of blood urea, estimation of urine chloride, estimation of SGOT and SGPT in serum, estimation of Na<sup>+</sup> and K<sup>+</sup> (Flame photometry, ion selective electrodes), estimation of free and total acidity of gastric juice, separation of serum proteins by electrophoresis.

# PH 1242 Pharmaceutics IB

Dispersions-colloids, coarse dispersion, surface and interfacial phenomena, precipitation, distillation, miscellaneous processes, kinetic principles and stability testing, bulk characterization of ingredients, rheology and flow of fluid, heat, radio pharmacy

#### PH 1254 Human Biology II

Anatomy: Musculoskeletal system, special sense organs, endocrine system, nervous system, reproductive system, urinary system, lymph and reticuloendothelial system

Practical: Reproductive system–male/female, gastro intestinal tract, urinary, musculoskeletal system, special sense organs, endocrine, central nervous system

Physiology: Reproductive system, muscle, endocrine system, homeostasis and body fluids, renal system, neurophysiology

Practical - Respiratory system, renal system, cardiovascular system

#### PH 1262: Biostatistics I

Introduction to biostatistics, sources and methods of data collection, summarizing and presentation of data, descriptive statistics, introduction to probabilities

#### Second year first semester

#### PH 2114 Pharmaceutics II A

Introduction to dosage forms, powders and granules, biphasic dosage forms, ophthalmic, nasal and otic preparations, galenical preparations, suppositories and pessaries, monophasic dosage forms, transdermal drug delivery systems, surgical aids

Practical: Weighing an measuring, containers and closures, solvents used in pharmacy, labeling, Latin abbreviations, dispensing from hospital bulk pack, compounding and dispensing: the principles of compounding and dispensing of 30 extemporaneous preparations, hypertonic saline solution, ephedrine nasal drops, castor oil laxative emulsion, sodium bicarbonate mixture, liniment of turpentine, sulphamidine mixture for infants, calamine lotion, Lugol's iodine solution, methyl salicylate liniment

#### PH 2123 Pharmaceutics II B

Introduction to tablets, pharmaceutical incompatibilities, introduction to parenteral products, therapeutics aerosols, inhalations and sprays, introduction to capsules, biological products; blood products and plasma substitutes, sustained action dosage forms, implants, birth control devices, a brief introduction to oral hygiene products

Practical: Bases for semisolid pharmaceuticals, compound magnesium trisillicate powder, whitfield ointment, cetrimide cream, zinc and coal tar paste, flexible collodin/salicyclic in flexible collodion, menthol and eucalyptus oil inhalation British

Pharmaceutical Codex (BPC), sodium bicarbonate ear drops, Lassars paste, kaolin and morphine mixture

# PH 2134 Pathalogy & Pharmacology I

Introduction and definition, pharmacokinetics, routes of drug administration, pharmacodynamics, pharmacovigilance & adverse drug reactions, preclinical and clinical trials, drug interactions, drug designing and development, prescription reading and pharmacoeconomics, good manufacturing practice/good clinical practice/good storage practice, drugs used in pregnancy and lactation, peadiatric pharmacology, geriatric pharmacology, drug treatment in renal and liver impairments, introduction and autonomic nervous transmission, sympathomimetics, adrenergic receptor blockers – alfa and beta, cholinergic and anticholinergic drugs, neuromuscular blockers, introduction to cardiovascular pharmacology, drugs used in ischemic heart disease, angiotensin converting enzyme inhibitors, calcium channel blockers/ drugs used in dyslipidaemia, diuretics, antiarrhythmic drug, basic principles of cell injury and adaptor, inflammation, immunopathology, hypersensitivity, auto- immunity, neoplasia

# PH 2143 Biostatistics II

Population and sampling, estimation and hypothesis testing, regression analysis and correlation, nonparametric tests, medical statistics, design and analysis of experiments, statistical quality control, time series analysis

Practical: Use of software package to solve statistical problems

# PH 2153 Pharmaceutical Microbiology

Introduction to microbiology, virology, bacteriology, medical virology, mycology, parasitology, microbiological standardization, sterility testing of pharmaceutical products, sterilization methods and principles and disinfections and infection control, microbial spoilage and preservation of pharmaceutical products, control of microbial contamination during pharmaceutical manufacture, industrial microbiology

Practical: Various staining methods-simple staining, grams staining and acid fast staining, structural staining, preparation of various types of culture media, studying of different laboratory equipments and processing e.g. B.O.D. incubator, laminar flow, aseptic hood, autoclave, hot air sterilizer, deep freezer, refrigerator, microscopes etc, evaluation of sterilizing techniques, sub culturing of aerobic and anaerobic bacteria, fungus and yeast, nutrient stabs and slants preparations, isolation of pure culture of micro-organisms and identification of micro-organisms and antibiotic sensitivity test, microbial viable count in a pharmaceutical product, total count of bacteria thermal death time, microbiological assay of antibiotics and vitamin B<sub>12</sub>, standard analysis of water

#### Second year second semester

#### PH 2214 Pharmaceutics III

Healthcare system in Sri Lanka, national health policy, health care team, national drug policy, essential drug list: criteria for selection, usage and advantages, rational drug use, dispensing, prescription, research methodology, pharmacoepidemiology, health economics

Practical: Disintegration test, dissolution test, test for uniformity of weight, test for uniformity of diameter, hardness test and friability tests for tablets, disintegration and dissolution tests for capsules, determination of pouring and tapped densities of powders and powder blends and calculation of compressibility index, sieve analysis of powders and granules, prefabricated dosage forms and packaging designs

#### PH 2223 Pharmacy law and ethics

Introduction to pharmaceutical legislation and ethics, medical ordinance, National Medicines Regulatory Act, cosmetics devices & drug regulations, poisons, opium & dangerous drug ordinance, food act & consumer protection act/consumer affairs authority act, nutraceuticals and other healthcare products, patent laws, national medicinal drug policy, other related laws, ethics

# PH 2232 Pharmacology II

Introduction: Neurotransmission, general anaesthetics, local anaesthetics, sedative and hypnotic drugs, antianxiety, antiparkinsonism drugs, migraine, antiepileptics, narcotic analgesics, analgesics, non steroidal antiinflammatory drugs and other drugs used in arthritis, antipsychotics, antidepressants, antimanic and hallucinogens, central nervous system stimulants, drug dependence and drug abuse-opioids, nicotine, cocaine, abuse potential, tolerance and dependence

# PH 2244 Medicinal Chemistry & Pharmacognosy IA

Basic principles of medicinal chemistry, synthetic strategy in medicinal chemistry, structural features and pharmacological activity, drug design, general aspects of pharmacognosy, crude drugs, herbs and herbal foods, adulteration and substitution in traditional systems of medicine, drugs of animal origin, fibers, pharmaceutical botany and taxonomy

Practical- Taxonomic study of major families with medicinal plants, microscopical studies, basic tissues, anatomy of bark, stem (dicot, monocot), root (dicot, monocot), seed, leaf and fruit, trichomes, stomata, ergastic cell contents including calcium oxalate crystals

# PH 2254 Pharmacognosy I B

Drugs containing carbohydrates, fixed oils, fats and waxes, drugs containing volatile oil, monoterpenes, drugs containing resins, drugs containing alkaloids, drugs containing tannins, drugs containing glycosides, drugs containing steroids, drugs containing terpenoids, biosynthesis of plant constituents of pharmaceutical and medicinal interest

Practical- Study of surgical fibers and dressings, general chemical test for detection of carbohydrates, alkaloids, glycosides, tannins, steroids, saponins, resins, terpines, flavonoids and proteins, microscopic and chemical study of the following powdered drugs, leaf - *Senna, Datura,* stem – *Ephedra,* root – *Rauwolfia,* seed - *Strychnosnux-vomica Plantago,* bark - *Cinchona ,* fruit-*Foeniculum* 

#### Third year first semester

#### PH 3113 Analytical Chemistry

Quality control and test for purity, gravimetric analysis, pH, buffers and pharmaceutical solutions, titrimetric (volumetric) methods of analysis, acid-base titrations, complexometric titrations, oxidation-reduction titrations, precipitation titrations, diazotisation titrations, acid-base titrations in non-aqueous solvents

Practical: Identification of pharmaceutical dosage forms, assay of sodium chloride intravenous infusion, assay of hydrogen peroxide mouthwash, assay of total available iodine in povidone iodine solution British pharmacopeia, assay of lithium carbonate tablets as per British pharmacopeia, assay of aspirin tablets, standardization of a sodium thiosulphate solution, analysis of vitamin C using iodine by iodimetry, complexometric titration, a colourimetric method for the detection of iron content in iron capsules

#### PH 3125 Pharmacognosy II

Drugs containing enzymes, medicinal plant biotechnology, marine drugs, biologics, immunopharmacognosy, phytochemistry, chemotaxonomy, clinical pharmacognosy, plant drug analysis, the global background of the use of medicinal plants, nonmedical toxic plants and pesticides, natural products and drug development

Practical: Isolation of hyoscynamine from *Atropa belladonna*, isolation of piperine form *Piper nigrum*, isolation of stychinine, brucine from *Strychnosnux-vomica*, isolation of caffeine from *Camellia theasinensis*, extraction of clove oil by steam distillation, isolation of jalap resin, *i*solation of potato starch, *i*solation of fixed oil by colour reactions, *i*solation of trimyristicin and myristicin from *Myristic fragrans*, *i*solation of pectin

# PH 3134 Hospital and Clinical Pharmacy

Hospital pharmacy: Introduction to hospital pharmacy, hospital and its organization, hospital pharmacy and its organization, hospital drug policy, drug distribution systems in hospitals, dispensing to in-door patients and ambulatory patients, storage, aseptic dispensing, central sterile supply department, control substances, surgical consumables, surgical supplies, appliances & medical glasses, inspection of wards with reference to drug storage and administration, role of pharmacists in small hospitals, nursing homes etc., good pharmacy practices

Clinical Pharmacy: Introduction to clinical pharmacy, definition, scope, history and development of clinical pharmacy, professional activities of a clinical pharmacist, drugs and poisons information, utilization of clinical drug literature

Practical: Hospital and clinical pharmacy training

#### PH 3142 Community Pharmacy I

Introduction to community pharmacy, organization and structure of retail and wholesale pharmacy, community pharmacy management, over the counter drugs and prescription drugs, patient education and counseling, patient information leaflets, role of pharmacist in community

Practical: Community pharmacy training

#### PH 3153 Pharmacology III

Coagulants and anticoagulants, haemopoietics, fibrinoytic and antiplatelet agents, pharmacology of drug acting on renal systems, antimineralocorticoids, drugs affecting the AntiDiuretic Hormone system, drugs acting on the respiratory systembronchodilators, mucolytics, expectorants, antitussives, nasal decongestant, pituitary hormones, therapeutic application of pituitary hormones, thyroid hormones and antithyroid agents, insulin, insulin analogs, oral hypoglycemic agents, adrenal corticosteroids, gonadal hormones and their inhibitors, uterine stimulants, oral contraceptives, drugs for infertility, drugs regulating calcium homeostasis, drugs used in peptic ulcer disease, emetics, antiemetics and prokinetics, laxatives and purgatives, antidiarrhoeal agents and oral rehydration therapy, parenteral nutrition and intravenous therapy, dermatopharmacology, basic principles of chemotherapy resistance, sulfonamides and co-trimoxazole, penicillins and drug and cephalosprines, tetracycline and chloramphenicol, aminoglycosides, polyene and polypeptides antibiotics, quinolones and fluroquinolones- urinary antiseptics, macrolides, other miscellaneous agents

#### Third year second semester

# PH 3212 Pharmacology (IV) and Toxicology

Pharmacology: Autacoids (Histamines & Antihistamines), antiviral drugs, anticancer drugs, drugs for tuberculosis and leprosy, antifungal drugs, drugs for protozoal infections (malarial, amoebiasis, giardiasis), anthelmintics, immunopharmacology

Toxicology: Introduction, signs, symptoms and treatment of acute and chronic poisoning due to drugs, alcohol, insecticides, snake bites, heavy metals (iron, lead, mercury, arsenic) & chelators, food additives, solvents, therapeutics and toxic potentials of over the counter drugs; paracetamol, aspirin

#### PH 3223 Pharmacotherapeutics

Disorders of the cardiovascular system, respiratory disorders, renal disorders, endocrine disorders, neurological disease, psychological diseases, gastrointestinal diseases, peptic ulcers, hepatitis, alcohol liver disease, Infectious disease, skin disorders, musculoskeletal disease, auto immune disorders

Practical: Clinical oriented training

# PH 3233 Pharmaceutical Biotechnology

Introduction scope, fermentation technology, downstream processing, introduction to genetics and pharmaceutical biotechnology, introduction to DNA and extraction of DNA, recombinant DNA (r-DNA) technology, enzymes used in r-DNA technology and construction of r-DNA, in- vitro manipulation of r- DNA, polymerase chain reaction (PCR), gel electrophoresis and quantitation of DNA, human genome project and DNA sequencing, DNA based screening and diagnosis of human disease, animal biotechnology, plant biotechnology in pharmaceutical industries, application of immunological techniques in pharmaceutical industry, blood products and glandular products, enzyme biotechnology

Practical: DNA extraction, PCR, Gel electrophoresis, DNA transformation, hybridization, blotting techniques, cloning, restriction digestion, microbial assay of antibiotics and vitamins as per British Pharmacopiea

# PH 3242 Management and Economics

Introduction to management, functions of management –planning, organizing, leading, controlling, decision making, leadership, motivation, managing change and innovation, the organization, principles of economics, competitive practices in the pharmaceutical industry, brief study of insurance, procedure for importing and exporting pharmaceuticals

# PH 3253 Marketing and Accounting

Introduction to marketing, pharmaceutical product marketing, pricing, distribution, promotion, principles of accounting, journal entries and ledger posting, cash book, petty cash book, trial balance, profit & loss account, balance sheet, bank reconciliation, brief study of cheques, bills of exchange and promissory notes

#### Fourth year first semester

# PH 4112 Advanced Medicinal Chemistry I

Biological action, synthesis of compounds, structure activity relationship and therapeutic applications of the following classes of drugs

Central nervous system depressants, adrenergic agents, cholinergic agents, histamines and antihistamines, analgesics, prostaglandins and other eicosanoids, chemistry of vitamins, chemistry of local anesthetics, occurrence, properties, preparation and application of official inorganic compounds, bioassay technique for drug development

Practical: Preparation of lodoform, synthesis of acetanilide, synthesis of p¬nitroaniline, synthesis of 4-bromoaniline, synthesis of aspirin, synthesis of paracetamol, synthesis of sulphanilamide, synthesis of methyl salicylate, hydrolysis of methyl salicylate, synthesis of anthranilic acid

#### PH 4123 Pharmaceutical Analysis

Absorption spectroscopy, polarimetry, electrometric methods, chromatography, aquametry, turbidimetry, diffusion and dissolution

Practical: Instrumental analysis, column chromatography, spectroscopic analysis, uv-visible spectroscopic analysis

# PH 4132 Applied Pharmacology

Basic concepts of prescription, clinical trials, concepts of essential drug list, prescription in organ impairment, principles in prescription in neonates, principles in prescription in pregnancy and breast feeding, importance of evidence based medicine, principles of active pharmacovigilance, ethics in drug research, safe use of medication, therapeutic application of cytotoxic drugs

Practical: Study of devices and inhalation techniques, evaluation of advertisements, drug information, prescription reading, drug administration techniques, emergency tray

#### PH 4134 Pharmaceutical Technology

Unit operations, flow of fluids, flow of heat, evaporation, distillation, filtration and centrifugation, mixing, drying, communition, particle properties, particle size separation compression and compaction, tablet manufacturing, capsule manufacturing, safety methods in pharmaceutical industry, humidification, air conditioning, refrigeration and ventilation, manufacturing plant design, emulsions, suspensions, semisolids, sterile products, cosmetology

Practical: Operation of mills, operation of dryers, operation of mixers, operation of sieve shaker and sieve analysis of powders and granules, experiment to determine the leaching of contents from packaging materials: ampoule and vials, determination of angle of repose, measurement of the density of a liquid using an ostwald pycnometer, determination of the viscosity of a liquid using an ostwald viscometer, determination of the precept composition of a mixture of ethanol and water by viscometer method, determination of surface tension of a pure liquid by the drop size method

#### PH 4141 Cell Biology and Immunology

Cell biology, immunology

Practical: Immunological techniques: ELISA (enzyme-linked immunosorbent assay), immunodiffusion, ELIS spot assay, Antigen – Antibody reactions in diagnosis of diseases

# PH 4143 Community Pharmacy II

Patient compliance/adherence, communication skills, control of substance abuse and misuse, meeting the needs of specific client groups, alternative systems of medicines

Practical: Community pharmacy training

#### PH RP I Research

Each Pharmacy student is supposed to conduct an individual research project during the final year under the supervision of the academic staff members. Eight credits are allocated for the research project and it is evaluated by a project report and presentations.

PH RP I Research is based on research proposal writing, submission and presentation in the 1<sup>st</sup> semester of the final year.Research topic is given to each student at the beginning of the semester and the project principally involves pharmacy practice, pharmaceutical sciences and related fields. Research proposal is a short report comprising a short literature review and research proposal, prepared in the fourth year first semester for the second semester PH RP II research project.

#### Fourth year second semester

#### PH 4213 Advanced Medicinal Chemistry II

Antihypertensives, antiarrhythmic drugs, drugs used in hyperlipidemias, drugs used for therapy of congestive cardiac failure, diuretics, anticoagulants hormones and related drugs, thyroid hormones and antithyroid agents, hormones and related drugs, oral hypoglycaemic agents, drugs acting on the gastrointestinal tract, anti-ulcer drugs, anti-infectives, local anti-infective agents antibiotics & antibacterial agents, sulfonamides and co-trimoxazole, penicillins, cephalosporins, beta lactamase inhibitors, tetracyclins, chloramphenicol, aminoglycosides, quinolones and fluroquinolones, macrolides and other miscellaneous agents, drugs for tuberculosis, leprosy, antivirals, antifungals drugs for protozoal infections anthelmintics, anti-inflammatory drugs, anticancer drugs drugs of dependence, chelating agents, drugs acting on respiratory system

Practical: Synthesis of phenolpthaline, isolation of Ibuprofen from Ibuprofen tablets, synthesis of picric acid, preparation of derivatives of picric acid anthracene picrate and amine picrate,, synthesis of chlroramine T, synthesis of benzoic acid and benzyl alcohol from benzaldehyde, synthesis of benzoic acid from benzyl, isolation of tolbutamide from tolbutamide tablet, synthesis of derivatives (derivatives of carbohydrates and derivatives of nitrophenols), isolation of methyl salicylate from oil of wintergreen

#### PH 4242 Biopharmaceutics

Drug absorption, biological half-life and drug distribution, biotransformation, excretion, bioavailability and bioequivalence, rates and order of reaction, multiple dosage regimens, intravenous infusions, biopharmaceutical and pharmacokinetic aspects in developing a dosage form, applications of pharmacokinetics and bioavailability in clinical situations, compartment models

#### PH 4212 Clinical pharmacy

Introduction to clinical pharmacokinetics, clinical laboratory data, clinical trials, save intravenous therapy & hazards of intravenous therapy, general guidelines for prescribing drugs in peadiatrics, geriatrics, pregnancy and lactation, drug screening and toxicity testing, teratogenicity testing, vaccines and immunization schedule

#### Practical: Clinical pharmacy training

# PH 4233 Hospital Pharmacy

Budgeting, purchase and inventory control in hospital pharmacy department, hospital manufacturing: bulk and sterile, investigational/diagnostic drugs, health accessories, management of accident & emergency pharmacy

Practical: Hospital pharmacy training

# PH 4231 Molecular Genetics

Introduction to genetic diseases, classical genetics, microbial genetics, gene expression

#### PH 4223 Quality control

Standardization of pharmaceuticals and good manufacturing practice, quality control of solid dosage forms, quality control of syrups and elixirs, evaluation of sustained action products, quality control of suppositories, quality control of sterile products (parenterals), general knowledge of appendices attached to British phaermacopeia (B.P.), British pharmaceutical codex (B.P.C.), and United state pharmacopeia (U.S.P), Packing and packaging, materials of fabrication of pharmaceutical machinery

Practical: Analysis of packaging materials: corrugated box, carton, behavior of binding agents in water, weighing pharmaceutical ingredients for manufacture, effects of temperature and humidity on various moisture fractions in pharmaceutical raw materials, disintegration test, dissolution test, test for uniformity of weight, test for uniformity of diameter, test for uniformity of content, hardness test and friability tests for tablets, disintegration test and dissolution tests for capsules, prefabricated dosage forms and packaging design study, stability testing of all dosage forms, quality control of parenteral products, quality control of liquid preparations

# PH 4241 Radiopharmacy

Introduction to radio pharmacy, disintegration of unstable nuclei, radioactive decay, radiopharmaceuticals, design, stability, production, standardization and handling of radiopharmaceuticals, clinical application of radiopharmaceuticals, important radionuclei generators, radiation protection in radiopharmacy, diagnosis use of radio isotope

#### PH RPII Research II

Carry out research project on the given topic, submission of dissertation and presentation at the end of the second semester.

#### Training programmes

# 1. Clinical orientation programmes (COP)

1.1. Clinical orientation programmes (COP) of course units of PH 3134 Hospital and Clinical pharmacy, PH 3142 Community pharmacy I, PH 3223 Pharmacotherapeutics, PH 4143 Community pharmacy II, PH 4212 Clinical pharmacy, PH 4233 Hospital pharmacy are scheduled in the relevant semester to enhance the student practical knowledge, skills and confidence in providing patient care in the Sri Lankan health care system. The students gain their relevant training in the following placements under the instructions given by the departmental clinical coordinator according to the given learning objectives.

- 1.2. During the community pharmacy practice, students are trained at Osusala in Galle and Karapitiya, Ruhunu Hospital pharmacy in Karapitiya and Asiri Hospital pharmacy in Galle on roster basis with given learning objectives under the supervision of the heads of the relevant community pharmacies.
- 1.3. During the hospital pharmacy practice, students are trained at indoor pharmacy, outdoor pharmacy, surgical and cancer wards stores, radiology unit and chief pharmacy of Karapitiya Teaching hospital on roster basis with given learning objectives under the supervision of the heads of the relevant units.
- 1.4. During the clinical pharmacy practice, students are trained at paediatric ward, medicine ward, surgical ward, gynecology and obstetrics ward and psychiatry ward of Karapitiya Teaching hospital on roster basis with given learning objectives under the supervision of the consultants and heads of the relevant units.
- 1.5. During the Pharmacotherapecutic practicals, students are trained at immunization clinic, emergency treatment unit (ETU), intensive care unit (ICU), eye ward, oncology ward, rheumatology ward of Teaching Hospital Karapitiya on roster basis with given learning objectives under the supervision of the consultants and heads of the relevant units.

#### 2.Industrial training programmes

The students gain their relevant industrial training in the following placements under the departmental industrial coordinator and industrial placement coordinator according to the given learning objectives.

Industrial Pharmacy training placements

State Pharmaceutical Manufacturing Corporation (SPMC) State Pharmaceuticals Corporation (SPC) National Medicines Regulatory Authority (NMRA) National Medicines Quality Assurance Laboratory (NMQAL) Medical Supplies Division (MSD) Astron private limited Nature's secrets Link natural

#### 6.9. By-laws of the Pharmacy Degree Programme

By-Laws for the Bachelor of Pharmacy (General/Special) Degree originally approved in its 269<sup>th</sup> meeting held on 31<sup>st</sup> October 2012 by the Senate of the University of Ruhuna were revised according to the special court order in 2014. Hereafter the term "Bachelor of Pharmacy (General/Special) Degree" is referred as

Bachelor of Pharmacy Honours Degree. These by-laws will be subjected further revision.

These by–laws may be cited as the Bachelor of Pharmacy honours (BPharm Hons) degree by–laws.

- 1. Subject to these by–laws a student may be admitted to the Degree of Bachelor of Pharmacy honours if he /she:
  - 1.1. has been admitted as an internal student of the University and
  - 1.2. has been registered as a student of the University for a period of 4 years
  - 1.3. has completed to the satisfaction of the Vice Chancellor, courses of study as prescribed by these By-Laws and Rules and Regulations made there under
  - 1.4. has passed all the Bachelor of Pharmacy end semester examinations and
  - 1.5. has fulfilled any other conditions or requirements as may be prescribed by the University
- 2. The examinations leading to the Degree of Bachelor Pharmacy honours shall be:
  - 2.1. The Bachelor of Pharmacy honours First BPharm consists of part I and part II examinations
  - 2.2. The Bachelor of Pharmacy honours Second BPharm consists of part I and part II examinations
  - 2.3. The Bachelor of Pharmacy honours Third BPharm consists of part I and part II examinations
  - 2.4. The Bachelor of Pharmacy honours –Fourth BPharm consists of part I and part II examinations
- 3. The course units/modules, courses of study and syllabi for the examinations leading to the degree of Bachelor of Pharmacy honours and the number of papers, oral examinations and other forms of evaluation in each subject shall be prescribed by the regulations recommended by Faculty of Medicine (herein after mentioned as Faculty Board) and approved by the Senate.
- 4. Each of the examinations prescribed by these by-laws and the regulations there under shall be conducted by a Board of Examiners constituted for the conduct of that examination. The examinations will be held at the end of the each semester.

- 5. A student shall present him/herself for each examination leading to the degree of Bachelor of Pharmacy honours on the first occasion at which he/she is required to do so provided that it shall be within the power of the Senate to declare that he/she is eligible to appear for that examination on a subsequent occasion.
  - A candidate of the Examination should have followed to the satisfaction of the Faculty Board the prescribed course of study in each component of the course unit/module by obtaining minimum requirement of credits by participating in lectures, tutorials, practicals and clinical appointments.
  - A candidate should satisfactorily complete all the required clinical attachments/appointments with at least 80% attendance in relevant semester and satisfactory completion of the assigned number of skills/ procedures.
- 6. A student may be granted permission to postpone a scheduled attempt on the basis of a valid excuse<sup>1</sup> submitted and accepted by the Faculty Board and the attempt at which he/she sits the examination after the postponement shall be regarded as the attempt for which he/she has submitted a valid excuse. Students who are unable to sit an examination due to ill health must ensure that a relevant medical certificate is submitted within one week to Assistant Registrar.
- 7. 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.
- 8. The student should be eligible to sit all course units/modules of an examination before the student is issued an admission card for that particular examination. Student will not be allowed to sit for a separate course unit/module in a particular examination if he/she has not been referred in that course unit.
- 9. A student who fails to have 80% attendance at tutorials, practicals or clinical attachments/appointments should complete the 80% attendance before he/she is eligible to sit that course unit, once the 80% attendance at tutorials, practicals or clinical attachments/appointments is completed, the student is eligible to sit the next examination.

10. If, absence for tutorials, practicals and clinical attachment/appointment is covered by a valid excuse, acceptable to the Faculty Board and to the Senate, the candidate will be eligible to sit the examination if she/he is achieved 65% of attendance. The student should be eligible to sit for all course units of an examination before he/she is admitted to that examination. If this scheduled examination is the student's first attempt and the valid excuse is acceptable, the student will be eligible for Distinctions and Honours.

#### <sup>1</sup>Valid excuses

- 1. Medical certificate acceptable to the Faculty Board. Person/ Institution entitled to issue valid medical certificates for the above purposes,
  - I. University Medical officer of the Faculty of Medicine.
  - II. A consultant in any government hospital.
  - III. A District Medical Officer (DMO) in a government hospital.
  - IV. A medical certificate issued by a Teaching/ General/ Base hospital.

Medical certificate from medical officers or institutions other than those listed will NOT BE ACCEPTED.

- 2. Death of an immediate family member (parents/ brother/ sister/ If married spouse, children) one week prior to the examination or during examination the death certificate should be submitted for the approval of the Senate.
- 3. Any acceptable reason for the Faculty Board and the Senate.
- 11. If the student fails to sit for a course unit/module without a valid excuse acceptable to the Faculty Board, the student will receive a zero mark for that course unit and will fail the whole examination. A student should take the entire examination next time as his/her second attempt. The student would not be eligible for distinctions and honors.
- 12. If the candidate fails to sit for a course unit/module with a valid excuse acceptable to the Faculty Board, the candidate should take the relevant course unit in the next available examination. If it is not the first attempt the candidate would not be eligible for Distinction and Honours. He/ she can complete the other course units/modules of the examination. The results of the course units that the student sat for would be withheld until the results of all the course units can be released.
- 13. When a student is unable to sit for a scheduled examination without a valid excuse and sits for an examination in the second of subsequent attempt.

- 14.
- 14.1. If a student is unable to sit for the examination at the first scheduled attempt due to his/her being repeated in a clinical attachment/appointment on account of a valid excuse he/she may be allowed to sit the next examination. If the missed examination is the student's first attempt he/she will be eligible for Honours and Distinctions at the next scheduled examination.
- 14.2. If a student is unable to sit for a scheduled examination due to his/her being repeated in a clinical placement or due to incomplete clinical attachment/ appointment records and not on account of a valid excuse student should complete it and will be eligible to sit the next scheduled examination but will not be eligible for Honours and Distinctions.
- 15. A student who has been successful at the First BPharm examination, Second BPharm examination, Third BPharm examination and Fourth BPharm examination for Bachelor of Pharmacy Honors may be awarded First Class Honours or Second Class Honours (Upper Division) or Second Class Honours (Lower Division) or a Pass, as the case may be.

16.

- 16.1. An overall average of 50% marks in a course unit/module shall be count as the pass mark in that subject, provided that a minimum of 50% practical marks and a minimum of 40% theory marks are obtained.
- 16.2. In clinical attachments/appointments, in addition to 40% theory a student should obtain a minimum of 50% marks in relevant appointment and an overall average of 40% shall be considered to have passed in that subject.

A student who has passed at least in one course unit of and has received 25% or more for each of the other course units will be referred in the latter course unit/ units. If a student receives less than 25% for any course unit he/she will be considered as having failed that whole examination.

- 17. For clinical attachments/ appointments, a student who obtains an overall average of 70% marks in a subject and 65% for the theory paper and 65% for the clinical experience shall be considered to have obtained a distinction in that course unit/module, provided that he/she is sitting that examination for the first time and that he/she passes the whole examination.
- 18. A student who fails any course unit/module in an examination can sit for the same course unit/module in two further occasions as a repeat candidate. The highest grade given to a repeat candidate is C. Repeat students can participate in the next scheduled lectures of the particular course unit after obtaining

permission from the relevant head of the department. But they are not entitled to attend practical classes in the course unit in which he/she has failed.

- 19. Special entrants: They enter the course from the beginning of the first year and entitled to all the regulations recommended by Faculty Board and approved by the Senate.
- 20. Final GPA of the student will be calculated according to the following equation,

 $GPA = \frac{\sum (Grade \ Point \ Scored \ for \ the \ Course \ Unit \times Credit \ Value \ of \ the \ Course \ Unit \ Followed)}{Cumulative \ Credit \ Value \ of \ all \ Course \ Units \ Followed}$ 

Final GPA of the students who are following BPharm Honours Degree will be calculated with contribution of 60% of the subjects from 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> year GPA and 40% of GPA from 4<sup>th</sup> year subjects and this will be applied for awarding classes.

21.

- 21.1. A candidate requires a Grade Point Average of not less than 2.0 and C or better for all course units to qualify for the BPharm Honours Degree.
- 21.2. A student requires a Grade Point Average of not less than 3.70 and grades of A or better in course units aggregating to a minimum of 45% of total credits to qualify for First Class (Honours).
- 21.3. A student requires a Grade Point Average of not less than 3.30 and grades of B or better in course units aggregating to a minimum of 45% of total credits to qualify for Second Class Upper Division (Honours).
- 21.4. A student requires a Grade Point Average of not less than 3.00 and grades of B or better in course units aggregating to a minimum of 45% of total credits to qualify for Second Class Lower Division (Honours).
- 22. A candidate shall be eligible for the conferment of the Bachelor of Pharmacy Honours Degree after successful completion of all the requirements within a maximum period of 7 academic years from the date of entry to the Faculty.

#### Bachelor of Pharmacy honors – End Semester Examinations

- 1. Each end semester examination for the B.Pharm honours degree consists of the course units that are offered in each semester.
- 2. The examination will be held after completion of the academic program in each semester.

#### First BPharm Examination:

First year examination for Bachelor of Pharmacy Honours consists of two end semester examinations in the following course units:.

First Semester- First BPharm Part I

- a) PH 1112 Pharmaceutical chemistry I
- b) PH 1123 Biochemistry I
- c) PH 1132 Pharmaceutics IA
- d) PH 1144 Human Biology I
- e) PH 1152 Mathematics
- f) PH 1163 Information Technology

Second Semester - First BPharm Part II

- a) PH 1213 Pharmaceutical chemistry II
- b) PH 1222 Pharmaceutical chemistry III
- c) PH 1232 Biochemistry II
- d) PH 1242 Pharmaceutics IB
- e) PH 1254 Human Biology II
- f) PH 1262 Biostatistics I
- 22.1. A student sitting for the examination should have followed to the satisfaction of the Vice-Chancellor the prescribed course of study in each component of these course units.
- 22.2. The examination immediately following the completion of the course shall be deemed to be the first due or scheduled attempt.
- 22.3. A student shall be deemed to have sat the first scheduled examination irrespective of whether it has been actually attempted or not, unless a valid excuse has been submitted and accepted by the Senate.
- 22.4.If the excuse has been accepted, the examination immediately following the expiry of the postponement recommended by the Senate shall be the students' first attempt.
- 22.5.In the absence of an accepted excuse, failure to sit any due or scheduled examination will be considered as an unsuccessful attempt at the examination.
- 22.6.A student must complete the Bachelor of Pharmacy First year examination in no more than four student attempts not counting validly excused attempts.

#### Second BPharm Examination:

Second year examination for Bachelor of Pharmacy Honours consists of two end semester examinations in the following course units:..

#### First Semester- Second BPharm Part I

- a) PH 2114 Pharmaceutics IIA
- b) PH 2123 Pharmaceutics IIB
- c) PH 2134 Pathology and Pharmacology I
- d) PH 2143 Biostatistics II
- e) PH 2153 Pharmaceutical Microbiology

#### Second semester- Second BPharm Part II

- a) PH 2214 Pharmaceutics III
- b) PH 2223 Pharmacy law and ethics
- c) PH 2232 Pharmacology II
- d) PH 2244 Medicinal Chemistry and Pharmacognosy IA
- e) PH 2254 Pharmacognosy IB
- 01. A student sitting for the examination should have followed to the satisfaction of the Vice-Chancellor the prescribed course of study in each component of these course units.

#### Third BPharm Examination:

Third year examination for Bachelor of Pharmacy Honours consists of two end semester examinations in the following course units.

#### First Semester- Third BPharm Part I

- a) PH 3113 Analytical Chemistry
- b) PH 3125 Pharmacognosy II
- c) PH 3134 Hospital and Clinical Pharmacy I
- d) PH 3142 Community Pharmacy I
- e) PH 3153 Pharmacology III

#### Second Semester- Third BPharm Part II

- a) PH 3212 Pharmacology IV and Toxicology
- b) PH 3223 Pharmacotherapeutics
- c) PH 3233 Pharmaceutical Biotechnology
- d) PH 3242 Management and Economics
- e) PH 3253 Marketing and Accounting

- 1.A student sitting for the examination should have followed to the satisfaction of the Vice-Chancellor the prescribed course of study in each component of these course units.
- 2. Should achieve all requirements for completion of each course unit/module.
- 3.A student shall be deemed to have passed the 3<sup>rd</sup> year examination for Bachelor of Pharmacy if he/she has, at one and the same examination, satisfied the board of examiners in each of the course units prescribed and successfully completed a qualifying examination in the English language.
- 4.A student who passed but who has been referred in one or more course units at the 3<sup>rd</sup> BPharm examination should pass at least one other subject within the next 3 scheduled attempts. Failing this, he/she will have to resit the whole examination.
- 5.A student may be granted permission to postpone a scheduled attempt on the basis of a valid excuse submitted to and accepted by the Senate. Each period of exemption granted will be considered by the Senate on the basis of individual merit.
- 6.
- (a) A student shall complete his/her 3<sup>rd</sup> BPharm examination either within 3 years or 6 scheduled attempts after the first scheduled attempt. All periods of exemption granted by the Senate are excluded when computing this 3 year period.
- (b) Not with standing above, a student should complete the Bachelor of Pharmacy 3<sup>rd</sup> year examination within 6 years of registration with or without a valid excuse.

#### Selection for special degree\*

Students who are eligible for Special BPharm Degree should fulfill following criteria.

- 1. Complete 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> B Pharm examinations.
- 2. Grade C or better for all subjects of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> BPharm examinations.
- 3. GPA should be 2.00 or more.
- 4. Grade B or better for following course units.

Analytical chemistry – Industrial Pharmacy Special Degree.

Hospital and Clinical Pharmacy – Hospital, community and Clinical Pharmacy Special Degree

5. Students will be chosen for special degrees on merit basis purely on marks of above mentioned two course units. If a student gets selected for both streams the position in the list will be considered for the selection of the stream. In any case if astudent gets same position for both course units student's choice will be considered as a special criteria.

#### **Special BPharm Examination:**

Special BPharm examination for Bachelor of Pharmacy (special degree) consists of two end semester examinations in the following course units.

#### First Semester- Special BPharm Part I

Common for both industrial pharmacy special degree and Hospital, community and Clinical Pharmacy Special Degree

Students will be divided into two streams as Hospital, Community & Clinical Pharmacy stream and Industrial Pharmacy Stream.

- a) PH 4113 Therapeutics
- b) PH 4123 Applied Medicinal Chemistry I
- c) PH 4134 Applied Medicinal Chemistry II
- d) PH 4144 Pharmaceutical Analysis

Research project will be started at the beginning of the special BPharm 1<sup>st</sup> semester and will be continued throughout the year.

#### Second Semester- Special BPharm Part II

Hospital, community and Clinical Pharmacy Special Degree

- a) HCCP 4213 Community Pharmacy II
- b) HCCP 4223 Hospital Pharmacy
- c) HCCP 4233 Clinical Pharmacy
- d) HCCP 4242 Applied Pharmacology
- e) HCCP 4252 Radio Pharmacy

Industrial Pharmacy Special Degree

- (a) PHIP 4214 Pharmaceutical Technology
- (b) PHIP 4223 Quality control
- (c) PHIP 4232 Biopharmaceutics
- (d) PHIP 4242 Molecular Genetics
- (e) PHIP 4252 Cell biology and Immunology

01. A student sitting for the special BPharm examination for Bachelor of Pharmacy (special) should have:

- a) Been registered as a pharmacy student for a period not less than 4 years.
- b) Passed the 1<sup>st</sup>, 2<sup>nd,</sup> and 3<sup>rd</sup> year examination for Bachelor of Pharmacy.

- c) Completed two semesters after passig the 3<sup>rd</sup> year examination of Bachelor of Pharmacy.
- d) Completed to the satisfaction of the Vice-Chancellor the prescribed course of study in each component of the subjects specified for the special BPharm examination.
- e) Completed all the clinical orientation programs and pharmacy log records to the satisfaction of the Faculty.
- f) Completed and submitted relevant progress reports of the Pharmacy research project.
- 02. The special BPharm examination immediately following the completion of the above requirements shall be deemed to be the first due or scheduled attempt.
- 03. Student should handover the Pharmacy research project report within three months after the last date of special BPharm part II examination.
- 04. Internship will be started within 1 month after special BPharm part II examination.
- 05. A student shall be deemed to have passed the special BPharm examination for Bachelor of Pharmacy if he/she has, at one and the same examination, satisfied the board of examiners in each of the course units/modules prescribed and successfully completed a qualifying examination in the English language.
- 06. A student who passsed but who has been refered in one or more course units at the special BPharm examination should pass at least one other subject within the next 3 scheduled attempts. Failing this, he/she will have to re sit the whole examination.
- 07. A student may be granted permission to postpone a scheduled attempt on the basis of a valid excuse submitted to and accepted by the Senate. Each period of exemption granted will be considered by the Senate on the basis of individual merit.
- 08. (a) A student shall complete his/her special BPharm examination either within 4 years or 8 scheduled attempts after the first scheduled attempt. All periods of excemptions granted by the Senate are excluded when computing this 4 year period.

(b) Not withstanding above, a student should complete the Bachelor of Pharmacy Special BPharm Examination within 7 years of registration with or without a valid excuse.

\* The special degree has been now converted to a four year degree with two streams as mentioned in the Chapter 06.

# 6.10 Code of Conduct for students at clinical or work placement for Pharmacy students

#### Clinical groups and appointments

No student shall change the COP group or the COP appointment allocated to him without the prior permission of the clinical coordinator.

#### Attendance and punctuality

Attendance at COP/ Practical work is compulsory. The student should obtain prior leave from the COP/ Practical instructor concerned before he/she absents himself /herself from COP/ Practical work. The student should spend the full amount of time scheduled on the time table in the wards. The clinical coordinator will specify the days when the student will be given leave from COP work.

#### Dress Code

Dress and appearance at all times should be appropriate and conform to the profession. It is strongly recommended that students should be clean, neat and tidy in their appearance. Males should wear longs with shirt and covered shoes. Hair should be neatly combed. Male students should shave their beard and mustache fully. Students should wear the appropriate name tags during their clinical work. Wearing of specially designed overcoats is desirable.

# Design for the overcoat

- Length of the overcoat should be up to the knee level.
- Length of the sleeve should be above the level of elbow.
- Length of the color band at the end of the sleeves should be 2 inches.
- Width of the collar should be 2 inches.
- Width of the back belt should be 2 inches.
- Size of the chest pocket; width 5 inches, height 6 inches.
- Size of the waist pockets; width 8 inches, height 8 inches.
- University emblem should be embedded on the chest pocket.





a) Front view

#### b) Back view

#### Conduct in the hospital

In the corridors and public areas of the hospital, the students should not talk loudly and should not block corridors. On entering the wards/ other areas of the hospital students should identify themselves to the hospital staff and obtain permission to deal with patients. Do not obstruct the working of hospital staff. The students should not smoke or chew betel in the hospital and other relevant premises and the breath should not smell of alcohol. Students should obtain consent of the patient/guardian before talking with patient. Do not disturb the patient if he/she is asleep, while having a meal or if he/she is uncomfortable. In the case of a patient of the opposite gender it is desirable to have a member of the same gender.

#### Conduct with the patients

(a) The student should introduce himself to the patient and address the patient suitably with respect. The student should be courteous and considerate to the patient.

- (b) No student should give any patient any treatment, medicine, tobacco, drug, alcohol, money or any article of food without the authority of the ward staff.
- (c) The student shall maintain strict professional secrecy with regard to information obtained from the patient.
- (d) The student should not discuss the patient's condition and prognosis in the presence of the patient.
- (e) The student should educate the patient about drug usage of the disease. The student should develop competence in giving such information.
- (f) The relationship of the students with patient's visitors should be at a professional level.

#### Hospital records

The student should not remove hospital records, X-rays, ECG or laboratory reports of patients. Strict confidentiality should be maintained with regard to information obtained from records.

#### Hospital/ Laboratory equipment

Students should use hospital/ Laboratory equipment with utmost care. Accidental breakages of such equipment should be brought to the immediate notice of ward/technical staff.

#### Out of bounds period

From time to time the laboratories and the departmental premises will be declared out of bounds to BPharm students on account of the BPharm examination or any other matter announced by the releavant authorities. During such periods students are expected to keep away from the laboratories and the departmental premises.

#### Communicable diseases

Students who are suffering from a communicable disease should not visit the wards. If in doubt they should consult the University Medical Officer or a person appointed by the Faculty to act in that capacity. In addition, they should inform the clinical coordinator.

#### Consulting specialists and other medical staff

The student should always obtain prior permission and make an appointment when he/she, a relative or a friend of the student wishes to consult a specialist or any other doctor in the hospital.

#### Treatment and advice by students

Students should refrain from advising and dispensing of drugs to patients until they are qualified.

#### Attendance

At attendance of 80% or 65% with medical certificate, is required for signing up student Record Books for the eligibility of sitting for the relevant examinations. The medical certificate has to conform to the regulations given under General Rules for Students.

#### **Clinical Orientation Programme**

Students doing clinical orientation programme (COP) are expected to work in wards/pharmacy during public holidays unless they have obtained prior leave from the consultant/instructor to whom they are attached.

Attendance at clinical work is compulsory. All students are expected to attend clinical attachments on time and 80% or 65% with medical certificate is required for signing up student Record Books for the eligibility of sitting for the relevant examinations. Student should be present in the allocated unit 5 minutes before the assigned time and should leave the unit 5 minutes after the allocated time. The attendance will be calculated at the end of each semester. Students who do not fulfill this requirement will not be allowed to sit for the relevant examination.

For COP, students are divided into small groups. Students are expected to follow the schedules drawn up for this purpose by the Office. Any unauthorized changes of appointments may result in the cancellation of the appointments with the possible consequences. Clinical orientation book is provided to record the clinical experiences and it should be completed by the students/relevant heads during their clinical placements.

COP appointments which are changed without written permission from the clinical coordinator and Head/ Dean will not be recognized for the course.

Students are reminded that they have to conform to the rules of the medical institutions they work in. Students should also be particularly mindful of the human rights of patients and be aware that students have no inherent right to interrogate or examine patients.

#### Eligibility to sit examinations

No student will be eligible to sit an examination of the Faculty if he/she has not obtained the signature of the relevant teachers/Head of the Department for satisfactory attendance at tutorials, practical classes, ward classes, demonstration and COP attachments. The signature should be obtained on the day of the respective classes of COP.

Students, who have defaulted in respect of University dues, even though they may have satisfied stipulated academic requirements, will not be permitted to sit any examination.

# CHAPTER 7 Examinations

#### 7.1. Examinations conducted by the Faculty

Three departments conduct their own examinations according to the examination by-laws set for each degree programme (Chapters 4, 5 and 6).

The degrees consist of examinations at the end of each semester or year. In addition, mid-semester examinations are also conducted by the Department of Pharmacy and end-term examinations by the Department of Medical Laboratory Science. Continuous assessments are held at the last week of the first and second terms of each academic year by the Department of Medical Laboratory Science.

Students' performance are assessed mainly by written examinations consisting of Multiple Choice Questions (MCQs), Single Best Response Questions (SBRQs), Extended Matching Items (EMI), Structured Essay Questions (SEQs), Essays, Objective Structured Practical Examinations (OSPE), Practical Examinations, Portfolio, Clinical long cases, Objective Structured Clinical Examinations (OSCE), Care studies and Assignments coupled with Viva-voce.

The research project is evaluated with final dissertation, presentation based on the final dissertation and a viva-voce based on presentation.

Student's performances at each subject/course unit is assessed and graded by one or more above mentioned components in the examinations. When there are multiple components in the examinations for a subject/course unit, marks obtained by the candidate is combined in a predetermined manner to obtain a final grade.

A student shall be eligible for the conferment of the relevant degree after the successful completion of all requirements (as specified under the by-laws) within a maximum period of eight years from the date of entry to the University of Ruhuna.

Furthermore, students should be aware about the examination Rules, Offences and Punishments of the University of Ruhuna before sit for the examinations (ANNEX 3).

# 7.2. Eligibility for examinations

#### 7.2.1. Attendance requirements for examinations

Attendance requirements to register for the examinations are included under the bylaws of each degree programme.

The students who submit the medical certificate to fulfil the attendance requirement should adhere to the regulations given under General Rules for students (ANNEX 1) to be eligible for examinations.

#### 7.2.2. Registration for examinations

Students are advised to register for examinations on or before the dead line announced by the faculty. Students can register only for examinations of course/subject units followed by handing over the duly completed registration application form to the relevant department office. Attendance requirements to register for the examinations are included under the by-laws of each degree programme. A student must maintain a minimum of 80% attendance or 65% attendance with medical certificates for classes (lectures, practical and tutorial) and 100% for clinical/work-based placements/clinical orientation programme in order to be eligible to sit for the examination of a course/subject unit.

The medical certificate has to conform to the regulations given under General Rules for students (ANNEX 1) to be eligible for examinations.

No examination fee levied from all undergraduates who sit for any examination for the first time. Students who re-sit for examinations as repeat students must pay an examination fee as follows:

Rs. 50.00 per credit in semester based subjects/course units

Rs. 100.00 per subject in term based subjects/course units

# 7.3. Examinations and Evaluation Structure of Medical Laboratory Science Degree subject units

All subject units in the degree programme will be assessed as a combination of year end examination and continuous assessments. The two continuous assessments will be held for all the subject units except transfusion medicine, genetics and molecular biology and all third year units in which there is one continuous assessment for each subject. All units are weighted in the ratio of 70% marks of the year end main examination (comprises 40% practical and 30% theory) and 30% from the continuous assessment/s.

The continuous assessment component is considered in the calculation of pass mark for each subject unit only at the first attempt. For the students sitting for the second or subsequent attempt examinations, final marks will be calculated by considering only the year end examination marks. For such examinations marks allocation will be 60% for practical and 40% for theory.

Subject	Subject		Components							
Code		Theory	Practical	Viva						
	Year End Examination – Year 1									
MLS 1101	Basic Sciences- Chemistry	SEQ	OSPE	-						
1101	Basic Sciences- Physics	SEQ & Essay	Practical	-						
MLS 1102	Cell Biology & Biochemistry	SEQ	OSPE	-						
MLS 1103	Human Biology	MCQ, SBRQ & SEQ	OSPE	-						
MLS 1104	Medical Laboratory Practice	SEQ	OSPE	-						
MLS 1105	<b>Basic Statistics</b>	MCQ & SEQ	-	-						
	Year End	d Examination – Y								
MLS 2101	Medical Microbiology & Immunology	SBRQ & SEQ	Practical (3 days)	-						
MLS 2102	Statistics, Epidemiology & Research Methods	MCQ & SEQ	-	-						
MLS 2201	Basic Genetics & Molecular Biology	SBRQ & SEQ	-	-						
MLS 2103	Haematology*	MCQ, SBRQ, EMI, Essay & SEQ	OSPE	Structured Viva						
MLS 2104	Medical Parasitology	MCQ, SBRQ & Essay	OSPE	-						
MLS 2202	Transfusion Medicine	SBRQ & SEQ	OSPE	-						
	Year End Examination – Year 3									

MLS	Histopathology &	Essay	OSPE	-		
3101	Cytopathology	Locay	0012			
MLS	Clinical	SEQ	Practical			
3102	Biochemistry					
MLS	Laboratory	SBRQ/MCQ,	Practical	-		
3103	management	Essay				
MLS	Biotechnology	MCQ	-	-		
3104	Biotechnology	Assignment				
	Andrology ,	MCQ & Essay	OSPE	-		
MLS	subfertility &	/SEQ				
3201	reproductive					
	Health					
MLS	Animal Research	MCQ &	-	-		
3202		Essay/SEQ				
	Year End	d Examination – Y	'ear 4			
MLS	Practical Training (Haematology, Clinical Biochemistry,	Practical examination followed by viva voce examination in Haematology and Histopathology & Cytopathology.				
3301	Microbiology, Histopathology & Cytopathology)	Practical examination in Clinical Biochemi and Microbiology.				

During the second vacation of the second academic year, the student will spend one month in a selected laboratory [of their convenience] and submit a report based on a set of guidelines given by the department. This report is used to teach, discuss and assess the laboratory management component at the third academic year.

During the practical training in the 3<sup>rd</sup> and 4<sup>th</sup> years, the student is required to write and submit an Assessment Portfolio. The Assessment Portfolio is used to assess practical performance of the student and will ensure satisfactory completion of the practical training.

The Year 4 examination will be the final examination to award the BSc Honours in Medical Laboratory Science degree.

# 7.4. Examination and Evaluation Structure of Nursing Degree subject units

Subject	MCQ (%)	SEQ (%)	OSPE (%)	OSCE (%)	Viva (%)	Clinical long case (%)
NUR 1112	30	50	10	-	10	
NUR 1122	30	50	10	-	10	
NUR 1131	40	60	-	-	-	
NUR 1143	30	50	10	10	-	
NUR 1151	-	60	20	20	-	
NUR 1161	-	-	-	-	-	100

#### Year 1 – Semester 1

# Year 1 – Semester 2

Subject	MCQ (%)	SEQ (%)	OSPE (%)	Viva (%)	Clinical long case (%)
NUR 1211	30	50	10	10	
NUR 1222	30	50	10	10	
NUR 1232	30	60	10	-	
NUR 1242	20	60	20	-	
NUR 1252	20	60	20	-	
NUR 1261	40	60	-	-	
NUR 1274	-	-	-	-	100

# Year 2 – Semester 1

Subject	MCQ (%)	SEQ (%)	OSPE (%)	OSC E (%)	Viva (%)	Clinical long case (%)	Care studies (%)
NUR 2111	20	60	20	-	-	-	-
NUR 2123	40	60	-	-	-	-	-
NUR 2133	40	60	-	-	-	-	-
NUR 2143	40	40	-	-	20	-	-
NUR 2150	-	-		100	-	-	-
NUR 2161	25	50	10	-	15	-	-
NUR 2175	-	-	-	-	-	90	10

#### Year 2 – Semester 2

Subject	MCQ (%)	SEQ (%)	OSPE (%)	Viva (%)	Clinical long case (%)	Care studies (%)
NUR 2212	30	50	-	20	-	-
NUR 2221	30	50	20	-	-	-

NUR 2232	40	60	-	-	-	-
NUR 2242	40	60	-	-	-	-
NUR 2252	20	60	20	-	-	-
NUR 2266	-	-	-	-	90	10

# Year 3 – Semester 1

Subject	MCQ (%)	SEQ (%)	OSPE (%)	Prese ntatio n (%)	Ass ign men t (%)	Viva (%)	Clinica I long case (%)	Care studi es (%)
NUR 3112	30	50	-	-		20	-	-
NUR 3124	40	60	-	-		-	-	-
NUR 3134	40	60	-	-		-	-	-
NUR 3142	20	30	10	20	10	10	-	-
NUR 3157	-	-	-	-	-	-	90	10

# Year 3 – Semester 2

Subject	MCQ (%)	SEQ (%)	Assignm ent (%)	Viva (%)	Clinical long case (%)	Care studies (%)
NUR 3213	40	60	-	-	-	-
NUR 3223	40	60	-	-	-	-
NUR 3231	-	80	-	20	-	-
NUR 3247	-	-	-	-	90	10

# Year 4 – Semester 1

Subject	MCQ (%)	SEQ (%)	Assig nmen t (%)	Viva (%)	Clinical long case (%)	Care studies (%)	Prese ntatio n (%)
NUR 4112	20	50	10	20	-	-	
NUR 4123	30	50	-	20	-	-	
NUR 4136	-	-	Resear ch disserta tion 80	-	-	-	20
NUR 4145	-	-	Case historie s 20	20	-	40	20

Year 4 – Semester 2

Subject	OSPE (%)	OSCE (%)	Clinical long case (%)	Care studies (%)
NUR 4214	15	15	60	10
NUR 4224	15	15	60	10
NUR 4234	15	15	60	10
NUR 4244	15	15	60	10

# 7.5. Examination and Evaluation Structure of Pharmacy Degree course units

Year 1 – Semester 1

Course unit code.	Course unit title	Theor y	Practic al/ Hospita I Practic e	OSP E	VIV A	Assignm ent/Class test
PH 1112	Pharmaceutical chemistry I	80%	-	-	-	20%
PH 1123	Biochemistry I	60%	-	30%	-	10%
PH 1132	Pharmaceutics IA	80%	-	10%	10%	-
PH 1144	Human Biology I	60%	-	30%	10%	-
PH 1152	Mathematics	80%	-	-	-	20%
PH 1163	Information Technology	50%	40%	-	-	10%

#### Year 1- Semester 2

Course unit code.	Course unit title	Theor y	Practic al/ Hospita I	OSP E	VIV A	Assignm ent/Class test
PH 1213	Pharmaceutical chemistry II	80%	-	-	-	20%
PH 1222	Pharmaceutical chemistry III	-	100%	-	-	-
PH 1232	Biochemistry II	60%	-	30%	-	10%

PH 1242	Pharmaceutics IB	80%	-	10%	10%	-
PH 1254	Human Biology II	60%	-	30%	10%	-
PH 1262	Biostatistics I	80%	-	-	-	20%

# Year 2- Semester 1

Course unit code.	Course unit title	Theor y	Practic al/ Hospita I Practic e	OSP E	VIV A	Assignm ent/Class test
PH 2114	Pharmaceutics II A	60%	30%	-	10%	-
PH 2123	Pharmaceutics II B	60%	30%	-	10%	-
PH 2134	Pathology and Pharmacology I	70%	-	20%	10%	-
PH 2143	Biostatistics II	80%	-	-	-	20%
PH 2153	Pharmaceutical Microbiology	60%	30%	-	10%	-

# Year 2 - Semester 2

Course unit code.	Course unit title	Theor y	Practic als/ Hospita I Practic e	OSP E	VIV A	Assignm ent/Class test
PH 2214	Pharmaceutics III	60%	30%	-	10%	-
PH 2223	Pharmacy Law and Ethics	80%	-	-	10%	10%
PH 2232	Pharmacology II	70%	-	20%	10%	-
PH 2244	Medicinal Chemistry & Pharmacognosy I A	65%	35%	-	-	-
PH 2254	Pharmacognosy I B	60%	40%	-	-	-

# Year 3 – Semester 1

Course unit code.	Course unit title	Theor y	Practic al/ Hospita I Practic e	OS PE	VIVA/ Mini Clinical Examinati on	Assignme nt/ Class test/ Observati onal assessme nt
PH 3113	Analytical Chemistry	60%	30%	-	-	10%
PH 3125	Pharmacognos y II	50%	30%	-	10%	10%
PH 3134	Hospital & Clinical Pharmacy	50%	20%	10%	20%	-
PH 3142	Community Pharmacy I	50%	20%	20%	10%	-
PH 3153	Pharmacology III	70%	-	20%	10%	-

# Year 3 – Semester 2

Course unit code.	Course unit title	Theo ry	Practic als/ Hospita I Practic e	OS PE	VIVA/ Mini Clinical Examinat ion	Assignme nt/ Class test/ Observati onal assessme nt
PH 3212	Pharmacology IV & Toxicology	70%	-	20 %	10%	-
PH 3223	Pharmacother apeutics	50%	20%	20 %	10%	-
PH 3233	Pharmaceutica I Biotechnology	70%	-	20 %	10%	-
PH 3242	Management and Economics	80%	-	-	10%	10%
PH 3253	Marketing and Accounting	80%	-	-	10%	10%
---------	--------------------------	-----	---	---	-----	-----
---------	--------------------------	-----	---	---	-----	-----

# Year 4 - Semester 1 Industrial Pharmacy Stream

Course unit code.	Course unit title	Theor y/ Repor t	Practic al/ Hospita I Practic e	OS PE	VIVA/ Mini Clinical Examinati on	Assignme nt/ Class test
PH 4112	Advanced Medicinal Chemistry I	60%	30%	-	-	10%
PH 4123	Pharmaceutical Analysis	60%	30%	-	-	10%
PH 4134	Pharmaceutical Technology	60%	30%	-	10%	-
PH 4141	Cell Biology & Immunology	70%	-	20%	-	10%
PH RPI	Research I	60%	-	-	40%	-

Course unit code.	Course unit title	Theor y/ Repor t	Practic al/ Hospita I Practic e	OSP E	VIVA/ Mini Clinical Examinati on	Assignm ent/ Class test
PH 4213	Advanced Medicinal Chemistry II	60%	30%	-	-	10%
PH 4223	Quality Control	60%	30%	-	10%	-
PH 4231	Molecular Genetics	70%	-	20%	-	10%
PH 4242	Biopharmaceutic s	80%	-	10%	10%	-
PH RPII	Research II	70%	-	-	30%	-

# Year 4 - Semester 1 Industrial Pharmacy Stream

# Year 4 - Semester 1 Hospital, Community & Clinical Pharmacy Stream

Course unit code.	Course unit title	Theor y/ Repor t	Practic al/ Hospita I Practic e	OSP E	VIVA/ Mini Clinical Examinati on	Assignme nt/ Class test
PH 4112	Advanced Medicinal	60%	30%	-	-	10%
PH 4123	Pharmaceutical Analysis	60%	30%	-	-	10%
PH 4132	Applied Pharmacology	70%	-	20%	-	10%
PH 4143	Community Pharmacy II	60%	20%	10%	10%	-
PH RPI	Research I	60%	-	-	40%	-

Course unit code.	Course unit title	Theor y/Rep ort	Practic als/ Hospit al Practic e	OSP E	VIVA/ Mini Clinical Examina tion	Assignme nt/ Class test
PH 4212	Clinical Pharmacy	60%	10%	10%	20%	-
PH 4223	Quality Control	60%	30%	-	10%	-
PH 4233	Hospital Pharmacy	60%	20%	10%	10%	-
PH 4241	Radiopharmacy	60%	-	10%	10%	20%
PH RPII	Research II	70%	-	-	30%	-

#### Year 4 - Semester 2 Hospital, Community & Clinical Pharmacy Stream

## 7.6. Examination Criteria

#### 7.6.1. Grades allocated for subjects/course units

Grades given at subject/course unit examinations and grade point values (GPV) attributed to each grade are given below as per University Grant Commission circular (Commission circular No 901 dated 25<sup>th</sup> November 2008), following common credit and qualification framework are implemented.

#### Medical Laboratory Science and Nursing Degrees

Marks (%)	Grades	GPV
90 - 100	A+	4.0
80 - 89	A	4.0
75 - 79	A <sup>-</sup>	3.7
70 - 74	B+	3.3
65 - 69	В	3.0
60 - 64	B⁻	2.7
55 - 59	C+	2.3
50 - 54	C	2.0
45 - 49	C-	1.7
40 - 44	D+	1.3
30 - 39	D	1.0
00 - 29	E	0.0

#### Pharmacy Degree

Marks (%)	Grades	GPV
90-100	A+	4.0
80-89	A	4.0
75-79	A-	3.7
70-74	B+	3.3
65-69	В	3.0
60-64	B-	2.7
55-59	C+	2.3
50-54	С	2.0
45-49	C-	1.7
40-44	D+	1.3
35-39	D	1.0
0-34	E	0

## 7.7. Pass in a subject/course unit

A candidate who obtains grade "C" or better for a subject/course unit will be considered to have passed in that course unit.

A student who obtains grades of C-, D+, D or E, need to sit for the relevant subject in next available attempt, for this purpose, three more attempts will be granted and the highest grade given for such subject/course units shall be the grade "C".

## 7.8. Awarding classes

GPA score (using the results of the all 4 years) will be considered when awarding the degrees.

First Class (Honours)	GPA	3.70 and above
Upper second Class (Honours)	GPA	3.30 – 3.69
Lower Second Class (Honours)	GPA	3.00 – 3.29
Pass	GPA	2.00 - 2.99

In addition, refer the By-laws of each Degree Programme for other requirements of awarding classes.

# 7.9. Release of results

Results will be released within three months after examination is held. The results board comprise of the Dean, Assistant registrar, Head of the department and two academic staff members of each degree programme. Following the results board, the results will be sent to the Vice-chancellors for the senate approval.

# 7.10. Verification of grades

Students are given the opportunity for the verification of grades after releasing results of subject/course units within two weeks by submitting an application along with the receipt of payment of the prescribed fee. Further details of the process of the verification of marks are available at the faculty office. The final recommendation made by the committee appointed for the verification of grades will be submitted for the approval of the Senate of the University of Ruhuna. To request for the verification of grades, students must pay Rs. 500.00 per subject/course unit and if there is any change of the grades, the paid amount would be refunded.

# CHAPTER 8 Medals and Awards for students

#### 8.1. Annual student awards

Vice-Chancellor's and Dean's awards shall be awarded annually to the students with the best overall performance in each faculty under the approved marking scheme. These awards are funded by the University and administered by the office of the Deputy Vice-Chancellor with the collaboration of Faculties and assistance of the Examinations and the Student Affairs branches.

## 8.2. Dean's awards and Dean's list for overall performance

Best five students in each batch from each faculty shall be selected under the approved marking scheme. Dean's awards shall be awarded to the best student in each batch under following categories at an award ceremony held at the faculty annually. A certificate of achievement (and a cash prize of Rs.10,000.00) will be awarded.

## For non-medical students

- Best 1<sup>st</sup> year student
- Best 2<sup>nd</sup> year student
- Best 3<sup>rd</sup> year student (including both general and special students)
- Best 4<sup>th</sup> year student (for special students of Faculties of Science and Humanities & Social Sciences, and students from Faculties of Agriculture, Engineering, FMST, Management & Finance and Allied Health Science)

## For medical students

- Best 2<sup>nd</sup> MBBS student
- Best 3<sup>rd</sup> MBBS student
- Best Final MBBS student

Next four students in each batch who top the list under the approved marking scheme shall be included in the Dean's list and announced at the relevant Faculty Board. A certificate of achievement will be awarded to each student at an awards ceremony held at the Faculty.

# 8.3. The Vice Chancellor's award and Vice Chancellor's list for overall performance

Best overall student who completed the degree from each faculty shall be selected under the approved marking scheme. Next two best students from each faculty shall be included in the Vice Chancellor's list.

A Gold Medal and a Certificate of Achievement shall be awarded. Students of graduating batch will be eligible for the Vice Chancellor's Award. The Gold Medal and the Certificate of Achievement will be awarded at the General Convocation.

Vice Chancellor's List for Overall Performance Next two students who top the list under the approved marking scheme from each faculty shall be included in the Vice Chancellor's list and announced at relevant Faculty Board. A certificate of achievement will be awarded at an award ceremony held at the Faculty.

# 8.3.1. Application procedure

Students shall apply for the awards using an application form issued by the University. Application forms shall be available at Dean's office and can be downloaded from university website. Students shall submit certified copies of all the documentary evidence with the application.

Students shall submit their applications through their Mentors/Academic Advisors who shall certify the contents of the applications. Students shall be prepared for and participate in an interview if the selection panel requests.

## 8.3.2. Eligibility requirements

## 8.3.2.1. Academic requirements

## For Non-Medical students

The students obtaining an average GPA required for a 2<sup>nd</sup> Class Upper Division or above in the first attempt of the relevant examination of the courses of study in each academic year will be eligible for an award.

## For Medical students

Students obtaining 2<sup>nd</sup> Class Upper division or above in the first attempt of the relevant examination of the courses of study will be eligible for an award.

# 8.3.2.2. Other requirements

- i. Any student who has been punished by the University and/or warned (in writing) by the Vice Chancellor or Deputy Vice Chancellor as found guilty for any misconduct shall not be eligible for an award.
- ii. The overall score achieved by the applicant shall be 70 marks or above for the Vice Chancellor's Award/List and 65 marks or above for the Dean's Award/List.

# 8.3.3. Selection criteria

# 8.3.3.1. Academic achievements (maximum 60 marks)

#### For non-medical students

Case 1: If the applicant has the highest GPA above the required GPA for 1<sup>st</sup> class or the required GPA for the 1<sup>st</sup> class which is higher shall be given 60 marks and other student shall be given marks which are scaled down according their GPA.

Case 2: If there no applicant having highest GPA above the required GPA for 1<sup>st</sup> class or the required GPA for the 1<sup>st</sup> class, 60 marks shall be given for the required GPA for the 1<sup>st</sup> class and the other eligible students shall be given marks which are scaled down according to their GPA.

The average of the GPA obtained at each examination of relevant academic year shall be considered separately for the Dean's Award. The overall GPA obtained for all examinations shall be considered for the Vice Chancellor's Award.

## For medical students

Case 1: The applicant with the highest total aggregate above the required marks for the 1<sup>st</sup> class or the required marks for the 1<sup>st</sup> class which is higher shall be given 60 marks. The other eligible students shall be given marks which are scaled down according to their total aggregate.

Case2: If there no applicant having highest aggregate above the required marks for first class or the required marks for the 1<sup>st</sup> class, 60 marks shall be given for the required total aggregate for the 1<sup>st</sup> class and the other eligible students shall be given marks which are scaled down according to their total aggregate.

The total aggregate obtained at each examination of relevant academic year shall be considered separately for the Dean's award, the total aggregate obtained for all examinations (2<sup>nd</sup> MBBS, 3<sup>rd</sup> MBBS and Final MBBS) shall be considered for the Vice Chancellor's award.

#### 8.3.3.2. Sports achievements

Maximum twenty marks shall be allocated for sports achievements as follows:

Description	Marks
World University Games/National Games	
First Place	20
Second Place	15
Third Place	10
Participation for an event (maximum up to 10 marks)	5
International Sports event representing the University	
First Place	10
Second Place	8
Third Place	6
Participation for an event	3
Inter University Events	
First Place	6
Second Place	5
Third Place	4
Participation for an event (Maximum up to 04 Marks)	2
Inter Faculty Events	
First Place	1.5
Second Place	1
Third Place	0.5
University Colors/ Best Athlete/ Player of the year	3
Post of President, Vice President, Secretary,	
Junior Treasurer, Editor of Sports Council	1/position/year

## 8.3.3.3. Other achievements

Maximum twenty marks shall be allocated for extra-curricular activities other than sports.

Description	Marks
Post of President, Vice President, Secretary, Junior	1 position
Treasure and Editor	for year

of Student Unions/Societies/Associations			
Participation at the "Kavitha" Talent	First Place	10	
Show	Second Place	8	
or Equivalent event	Third Place	6	
	Final Round	4	
Participation for an Event			
University approved event	•		
/competition/Orator/Singing/Dancing etc.) (Solo or Group)	/Poetry Writing/Scrip	Writing	
University	First Place	5	
Level	Second Place	4	
	Third Place	3	
Faculty	First Place	2	
Level	Second Place	1.5	
	Third Place	0.5	
Recipient of Patent	•	8	
University approved Event Organizing		0.5	
Inter University Level	First Place/Best	6	
Competition/Awards	Award	5	
	Second	4	
	Place		
	Third		
	Place		
Approved University representation	n at International	5	
Forum/Event			
Paper accepted/presented at any	3		
Conference/Symposia			
Publication of Books / Holding of Inc	2		
(Paintings/Arts/Hand crafts/etc.)			
Contribution to official function of the l	Jniversity	0.5	

# Special Note:

If the overall score achieved by two or more candidates for the Vice Chancellor's Award is equal, special panel consisting Vice Chancellor, Deputy Vice Chancellor and Dean of the relevant Faculty shall re-evaluate the candidates to select the best student.

# CHAPTER 9 Library facilities

#### 9.1. Introduction

The Library of University of Ruhuna being a central research library in the southern region of Sri Lanka caters for vast variety of communities in the country. The Ruhuna University Library has five branch libraries in addition to the Main Library, which serve the Faculty of Agriculture at Mapalana, Faculty of Engineering at Hapugala, Faculty of Medicine at Karapitiya, Faculty of Technology at Kambrupitiya and Faculty of Allied Health Sciences at Mahamodara and Uluvitike.

Main Library located in the Wellamadama university premises serve the communities of five faculties; Faculty of Humanities and Social Science, Faculty of Fisheries and Marine Science& Technology, Faculty of Science, Faculty of Management and Finance and Faculty of Graduate Studies. In addition, services are provided for outside communities too.

The Allied Health Science Library is located in the ground floor of the Department of Nursing at Mahamodara and first floor of the Department of Medical Laboratory Science at Uluwitike. The library contains approximately 4,000 books in the two locations for reference and lending.

#### 9.2. Staff of the Library

Staff of the Allied Health Sciences Library of University of Ruhuna consists of one Academic staff member and four Nonacademic staff members.

Academic Staff Members Librarian (University of Ruhuna):	Mr. N Hettiarachchi BSc (Hon) (RUH) MSSc (Lib & Inf Sci) (KLN)
Senior Assistant Librarian:	Mr. P.G. Nishantha
(Faculty of Allied Health Sciences):	B.Sc. (Hons) (SJP), MLS (Colombo)

Supportive staff members of the Library service (Faculty of Allied Health Sciences)

Library information Assistant: Mrs. W.D.H.P. Guruge Library information Assistant: Mrs. V.S.D. Gamage Library Attendant: Mr. D.N.R. Kalahewaththa Library work aid: Mr. R.L. Gihan Maduranga

#### 9.3. Library Opening Hours

Opening hours of the library are as follows:

Weekdays - 8.30 a.m. - 6.00 p.m. Saturdays - 8.30 a.m. - 5.00 p.m. Public holidays - Closed

Note - Opening hours of library may be revised during the examination period.

## 9.4. Library Collections

The library has a collection of permanent reference, schedule reference, lending books, journals, magazines, thesis and dissertations. Permanent reference materials such as encyclopedias, dictionaries, glossaries, Color Atlas and other valuable books are intended strictly for reference within the library. These materials are labeled as "**R**" in red color on the spine.

Schedule reference collection materials are issued for overnight use. These materials are labeled as "**R**" in blue color on the spine. Schedule reference collection materials could be borrowed and should be returned on next working day of the library. The lending collection contains library books that can be borrowed.

## 9.5. Library Resource Classification

The library materials in the University of Ruhuna Library are organized according to the Dewey Decimal Classification (DDC) system. DDC helps to arrange library materials by subject discipline.

The main classes of DDC are as follows:

DDC number	Subject Discipline	Allied Health Sciences student most related subject discipline DDC numbers		
000	Computer science and general works	540 Chemistry and Allied Sciences	610 Medical Sciences	
100	Philosophy and psychology	541 Physical and theoretical chemistry	611 Human anatomy, Cytology, Tissue Biology	
200	Religion	542 Chemical laboratories, equipment	612 Human Physiology	
300	Social Sciences	543 Analytical chemistry	613 Health education	
400	Language	544 Qualitative chemistry	614 Public health and related topics	
500	Natural sciences and mathematics	545 Quantitative chemistry	615 Pharmacology and therapeutics	
600	Technology (Applied science)	546 Inorganic chemistry	616 Diseases	
700	Arts; Fine arts and decorative arts	547 Organic chemistry	617 Surgery and related topics	
800	Literature and rhetoric	548 Crystallography	618 Gynecology and obstetrics	
900	Geography and history	549 Mineralogy	619 Experimental medicine	

# 9.6. Library Catalogue

An Online Public Access Catalogue (OPAC) is a computerized online database of all the resources held in the library. Users can use OPAC to search library materials available in the library. It can be accessed from URL: isuru.lib.ruh.ac.lk. OPAC provides facilities to search library materials using keywords, title, author, subject, ISBN, series and call number.

# 9.7. Library Services

## 9.7.1. Ask a Librarian Service

Senior Assistant Librarians and Assistant Librarians of the University of Ruhuna provide reference services to the users with direction to library materials, assistances on library collections and searching multiple kind of information from various sources.

# 9.7.2. Inter-Library Loans (ILL)

Any book or research articles in journals that are not available in the University of Ruhuna Library, but available elsewhere, could be obtained via inter-library loan. Readers who want to obtain this facility can use the application available at the Library Office.

## 9.8. Library Membership

Full membership of the library is available to all registered undergraduate and postgraduate students of University of Ruhuna. All students are required to register at the library by using the application form provided.

## 9.9. Borrowing Library Resources

With the exception of certain categories (i.e. Permanent reference materials, dictionaries, Atlases, books under special collections etc.) all other books may be borrowed. The university record book or identity card must be produced when borrowing books. Books should be borrowed before 5.00 p.m. Lending collection books are issued for a period of one week for students. However, it can be extended for another week through the online student library account of the "ISURU" database.

Details about the number of books that can be borrowed are given in following table.

Number of books can be borrowed by students

Undergraduate Year	Lending books	Reference books	Total books
First year	02	01	03
Second Year	03	01	04
Third Year	03	02	05
Final Year	04	02	06

## 9.10. Returning Library Resources

Borrowed books must be returned by before 5.00 p.m. on the due date. Borrowers remain responsible for books that are issued to them. If an issued book is lost or damaged, the matter should be reported to the library immediately. Borrower has to replace it with a new copy of the same edition or subsequent edition within due date. If the book is not available in the market, the borrower will be charged for the replacement cost of the book and a processing fee of 25% of the value of the book.

All library resources borrowed must be returned and all outstanding fines must be paid when a student leaves the university. The degree certificate will be withheld for the students until they return the borrowed resources and pay the fine.

## 9.11. Fines and Payments

User library fines are calculated by the library system. User account is automatically restricted for book issuing when the fine reaches Rs. 100.00. Student should settle the fines for activation of the restricted account. Only library working days are considered for calculation of library fines. A fine of Rs. 5.00 per day will be charged in respect of each book borrowed from lending collection, if not returned by the due date. A fine of Rs. 24.00 per day will be charged in respect of each book borrowed from the returned by the due date. A fine of Rs. 24.00 per day will be charged in respect of each book borrowed from schedule reference collection if not returned by the due date. All payments should be made to the Shroff of the Faculty.

# CHAPTER 10 Learning Resources

#### 10.1. The cultural center

This center functions in collaboration with the Ministry of Cultural Affairs. It consists of an Aesthetic Unit and a Research Unit.

Aesthetic unit helps to promote aesthetic sensitivity, creative skills among the university population. The unit conducts classes on oriental music, western music, violin, dancing, cinematic study, literacy efficiency, drawing and sculpting from 4.00 p.m. to 6.00 p.m. on weekdays and from 9.00 a.m. to 4.00 p.m. at weekends. Research Unit researches and conserves the regional cultural features and heritage of national importance. It is further expected to undertake activities to conserve the regional folk arts and folklore, to collect and conserve the cultural features endemic to this region, to publish classical articles and make documentary films on the traditional performing arts of the South and the artists of the South.

Mr. Jayantha Amarasinghe officiates as the coordinator of the center and Mr.Mahinda K.Udawela who has been appointed by the Cultural Ministry functions as Cultural Officer.

## 10.2. Resource Centre for Modern Languages

Resource Centre for Modern Languages was established in April 2002 with the aim to provide students with opportunities to study various languages other than "Sinhala" and "English".

The activities of this center are coordinated and looked after by a committee of academics, which includes a Coordinator (Mr. N.A.D. Jayasinghe) and one representative from each Faculty of the University. Presently, the Language center conducts classes and the languages of French, German, Japanese, Tamil and Swedish for students with the help of resource persons available in the University academic community.

These learning resources can be utilized by the all the students of University of Ruhuna.

# CHAPTER 11 Sports and Recreation

#### 11.1. Physical education

Students have opportunity to engage in physical education activities conducted by the Department of Physical Education, University of Ruhuna. There is a physical education instructor in the Faculty of Allied Health Sciences to get further assistance for students' physical education activities. Students can use all the sports facilities available in the FAHS, Faculty of Medicine/Engineering and University of Ruhuna.

#### 11.2. Facilities for sports

Currently Physical Education Department provides facilities for following indoor and outdoor sports. These are made available free of charge to all students.

Indoor sports

- 1. Basketball (men and women)
- 2. Badminton (men and women)
- 3. Table tennis (men and women)
- 4. Weight lifting (men and women)
- 5. Volleyball (men and women)
- 6. Chess (men and women)
- 7. Taekwondo (men and women)
- 8. Carrom (men and women)
- 9. Netball (women)
- 10. Wrestling (men)
- 11. Karate (men and women)

#### Outdoor sports

- 1. Athletics (men and women)
- 2. Hockey (men and women)
- 3. Elle (men and women)
- 4. Cricket (men)
- 5. Football (men)
- 6. Rugger (men)
- 7. Swimming (men and women)
- 8. Tennis (men and women)
- 9. Baseball (men)

# 11.3. Sports events

There are annual sports events such as Inter-Faculty and Inter-University tournaments. In addition, Sri Lanka University Games (SLUG) is held at a selected University once in three years. Students are also having opportunities to participate in the world University Games and Asian University Championships, which are held once in two years.

## 11.4. Recreational activities

The university annually organizes events and competitions for talented students in different extra-curricular fields to enhance the entertainment and soft skills of the students. Events are organized under following categories,

- 1. Orator
- 2. Dancing
- 3. Literature
- 4. Vocal and instrumental music

Students can apply for these competitions once they are advertised. The winners will be awarded.

Students have freedom to organize sports events, social gatherings, religious and cultural events and etc. with permission from the Dean of the Faculty.

Pool of musical instruments and sound accessories are available with the Faculty to enhance the entertainment activities of the students.

# CHAPTER 12 Student Service Facilities

## 12.1. Student Affairs Branch at the university

There is a Student Affairs Branch with a Senior Assistant Registrar at the university to look after the needs of the students outside their courses. Many services such as registration of the students, Mahapola scholarships, bursaries, student hostels and cafeterias are operated by the Student Affairs Branch. In addition, this branch provides other important services namely, student courseling and health service.

## 12.2. Student counseling service

The mission of the counseling service is to provide services and programmes, which promote the personal development and psychological well-being of students, and to encourage a university atmosphere conducive to growth and which maximizes students' educational attainments. The students have the opportunity to discuss their various mental, economic, social matters, or any other matters which they face during their University education.

Counselors, who are senior academics, offer their assistance, advice and guidance to those students in need. Each faculty has its own group of student counselors. In addition, students also have the opportunity to discuss their problems with other academics.

Senior Student Counselor of the University Dr. Amila Buddhika

Deputy Senior Student Counselor of the FAHS Dr. Sujeewa K. Hettihewa

Student Counselors of the FAHS Dr. Thushari Bandara (Department of Medical Laboratory Science) Ms. K.K.P.M.K. de Silva (Department of Nursing)

## 12.3. Mentoring services

Every student is allocated to a personal tutor/mentor who is an Academic staff member of the FAHS. Students personally can make appointments and meet them when they need the support.

# 12.4. Health services

Students can obtain health services from the Faculty Medical Centre free of charge. The medical center and the Dental Clinic are located in a building close to the Department of Physics. There is an also ayurvedic medical center located near Bachelors Quarters. These centers provide health care to staff and students.

During the academic year, the medical centre is open for treatment from 8.00 am to 5.00 pm on weekdays. All drugs are free of charge. If a prescribed drug is not available in the clinic, the University will reimburse the expenses.

The students at FAHS can easily obtain the medical services from the Out Patients' Department (OPD) of Teaching Hospital Karapitiya and Teaching Hospital Mahamodara free of charge.

Every student of the university at the first enrollment must face a medical test. The aim of this test is to determine whether the student has suitable health condition to continue the academic career without difficulties. If a student is found to be suffering from a severe decease, he/she is directed to special clinics in the hospital for treatments.

If a student is unable to sit for the exam due to an illness he/she should inform the University medical officer and examination branch immediately. The medical certificates obtained from outside medical officers should be submitted to the examinations branch within three days with the approval of the University medical officer. Whenever necessary, students should follow the above procedure in producing medical certificate for smooth functioning of their education during stipulated period of study.

## 12.5. Hostel facilities and policy

The 1<sup>st</sup> and final year students are eligible for hostel facilities. Separate accommodations are available for girls and boys. Students are selected for the hostels based on their annual family income, distance, disability and number of educating siblings in the family.

# 12.6. Bursary policy and other scholarships

The 'Mahapola' scholarship is awarded by the Mahapola Trust Fund, and students are selected primarily based on their merit order and the parental income. The

bursary scheme is provided for the students with low parental income. The recipients are selected according to University selection criteria.

# CHAPTER 13 Carrier Guidance Unit

#### 13.1. Introduction

Career guidance for undergraduates in universities has been recognized as a matter of policy by the Government of Sri Lanka. At the University of Ruhuna, the Career Guidance Unit was set up in March 2000 to provide career guidance services to the undergraduates. Since then, the unit has organized various types of events including workshops and training sessions to develop the attitudes and skills of the undergraduates to motivate them perform smart and manage their academic life and personal life.

Meanwhile, many training sessions are being regularly conducted to make them ready for the industry and be best suited to capitalize the career opportunities in the industry. The unit has developed a wide range of network and industry links with many private sector organizations and government institutions to facilitate productive interaction between the undergraduates and such institutions with the purpose of providing industrial training and career opportunities for the benefits of the undergraduates.

# 13.2. Staff of Career Guidance Unit

This unit compromises of a Director, Faculty Career Advisors and Career Guidance Counselors as mentioned below.

Director	Dr. Nandasiri Keembiyahetti, Senior Lecturer
	Tel. Office: 041-2222681, Ext: 2132, Mobile: 071 5359388
	E-mail: nandasiri2007@gmail.com
Faculty career	Dr. Sujeewa K. Hettihewa / Senior Lecturer
advisor,	Department of Pharmacy
FAHS	Faculty of Allied Health Sciences
	Tel: 091 2232896
	Mobile: 071 1943078
	E-mail: krishanthi2001@yahoo.com
Career	Mrs. Sujeewa Dilrukshi Vidanagamage
Guidance	BA (Hons), MA (Sociology), PGD (Counseling), Dip. In
Counselor	Coun.(IPC). MPC
	Tel. Office: 041-2222681, Ext: 2132, Mobile: 071 4475666
	E-mail: sujeewapt@gmail.com
	Mrs. Pubudu Mallawarachchi
	B.Sc.(Hons) (Ruhuna), Dip in Counseling (Ruhuna)
	Industrial Training (Korea)

	Tel. Office: 041-2222681, Ext: 2132, Mobile: 071 8359365	
	E-mail: bpkcgu@gmail.com	
	Ms. R.M.A.S. Rathnayaka	
	BA (Image Art), Dip. In Career Guidance, Dip. In	
	Photography	
	Tel. Office: 041-2222681, Ext: 2132, Mobile: 071-0473119	
	E-mail: anushshamali@gmail.com	
	Mr. W.P. Nilanka Srinath	
	Mobile: 071 4395787	
	Email: wpnilankasrinath@gmail.com	
Computer	Mr. N.B.R. Madhushanka	
Application		
Assistant		
Office Assistant	Mr. R. Wasantha	

Special programmes conducted by the Career Guidance Unit for the students is catering to the students with many interesting and worthwhile programmes to groom students as well demanded citizens by the corporate sector. There are different programs offered time to time as:

- Certificate Course in Soft Skills development
- Outbound and leadership training sessions
- Table etiquettes and etiquette training sessions
- Art/drama therapies and photography for personal development
- Personal branding and business etiquettes sessions
- Career Fair in supporting students' internships and employment opportunities
- Industry forums
- Workshops for professional CV writing and mock interview rounds
- Career related personalized counseling
- Various Corporate Social Responsibility (CSR) projects

Despite of the above, there are many more attractive opportunities for the students who wish to work with the University Career Guidance Unit. The students are warmly welcome to the unit or contact faculty coordinator to get frequent updates about the on-going programs

# CHAPTER 14 Student Union and Societies

According to the amended University act of 1988, Section 26, students of each Faculty can form a Faculty Union comprised of all students of the Faculty. The main objective of this union is to promote academic actions, to safeguard the rights of the students, to work for the advancement and welfare of the students and the faculty.

## 14.1. Student Union of Faculty of Allied Health Sciences

The Allied Health Science Students Union (AHSSU) comprises of eight student representatives and an academic staff member as the senior treasurer. The committee meets monthly and provides a forum for students to raise any issues related to student welfare. It is an organization functioning under the norms and regulations of the University of Ruhuna. The Student Union involves in student welfare issues and organize charitable programmes such as blood donation camps in the faculty and the community, and promotes cultural and creative activities among the students.

# 14.2. Student Societies

Since the faculty was formed recently, constitutions are being developed to form the following societies to enhance soft-skills, recreational activities, and professional and leadership skills of students of FAHS. The students will be able to obtain the membership of these societies once they are established.

- 1. Sports Association
- 2. Art circle

ANNEXURE

# ANNEX 1 General Rules and Regulations for University students

General rules applicable to undergraduates are given below. A more comprehensive list of rules issued by the University of Ruhuna is given separately.

- 1. Any change of your permanent address must be immediately brought to the notice of the Dean/Assistant registrar.
- 2. Students should inform the Dean/ Assistant registrar of any change in their registered address, as early as possible.
- 3. No student is permitted to be absent from work for more than one week without informing the Dean/Head of the department.
- 4. In case of illness
- a. Illness during the academic term/at examinations

If a student has fallen ill during the academic term or just before or during any part of an examination, he/she should inform the Head of the Department or the Dean in writing by registered post as early as possible, AND submit within ONE WEEK of falling ill, a valid medical certificate issued by one of the persons listed under (b) below.

- b. Persons/institutions entitled to issue valid medical certificates for the above purposes
  - (i) University Medical Officer of the Faculty of Medicine.
  - (ii) A consultant in any government hospital.
  - (iii) A District Medical Officer (DMO) in a government hospital.
  - (iv) A medical certificate issued by a Teaching/General/Base hospital

Medical certificates from medical officers or institutions other than those listed will NOT BE ACCEPTED.

- c. A medical certificate is not valid unless it has been submitted within ONE WEEK following the completion of leave.
- d. Medical certificates should be submitted to the Senior Assistant/Assistant Registrar of the faculty.
- 5. Students are expected at all times to dress neatly. They should behave well within and outside the university. Talking in loud tones within the university premises, hospital and other training centres should always be avoided. Smoking and consuming alcohol are prohibited within the university premises, hospitals or other training centres and the student hostels. Students should not enter any of the institutions/premises mentioned above following consumption of alcohol.

- 6. No student(s) or student body shall collect monies or goods for any purpose without written permission from the Dean and the Vice Chancellor. Accounts of all such monies collected should be submitted to the Dean within two weeks.
- 7. Batches of students or student bodies who plan to go on trips must obtain permission to do so from the Deputy Senior Student Counsellor and Dean.
- 8. Students or student bodies who intend to hold meetings or socials in the faculty premises should obtain permission from the Deputy Senior Student Counsellor and the Dean. If students plan to do such activities outside the faculty premises as the students of the University of Ruhuna, they should seek permission from the Dean.

9. Students will not be permitted to use mobile phones or other electronic communication devices during academic work.

## ANNEX 2

#### Prohibition of Ragging and other forms of Violence in Educational Institutions

AN ACT TO ELIMINATE RAGGING AND OTHER FORMS OF VIOLENCE, AND CRUEL, INHUMAN AND DEGRADING TREATMENT, FROM EDUCATIONAL INSTITUTIONS

BE it enacted by the Parliament of the Democratic, Socialist Republic of Sri Lanka as follows :" [29<sup>th</sup> April, 1998 ]

1. This Act may be cited as the Prohibition of Ragging and Other Forms of Violence in Educational Institutions Act, No. 20 of 1998.

## Ragging

2. (1) Any person who commits, or participates in; ragging, within or outside an educational institution, shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate be liable, to rigorous imprisonment for a term not exceeding two years and may also be ordered to pay compensation of an amount determined by court, to the person in respect of whom the offence was committed for the injuries caused to such person.

(2) A person who, whilst committing ragging causes sexual harassment or grievous hurt to any student or a member of the staff, of an educational institution shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate be liable to imprisonment for a term not exceeding ten years and may -also be ordered to pay compensation of an amount determined by court, to the person in respect of whom the offence was committed for the injuries caused to such person.

Criminal intimidation

3. Any person who, within or outside an educational institution, threatens, verbally or in writing, to cause injury to the person, reputation or property of any student or a member of the staff, of ah educational institution (in this section referred to as "the victim") or to the person, reputation or property of some other person in whom the victim is interested, with the intention of causing fear in the victim or of compelling the victim to do any act which the victim is entitled to do, shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate be liable to rigorous imprisonment for a term not exceeding five years.

## Hostage taking

4. Any person who does any act by which the personal liberty and the freedom of movement of any student or a member of the staff of an educational institution or other person within such educational institution or any

premises under the management and control of such educational institution, is restrained without lawful justification and for the purpose of forcing such student, member of the staff or person to take a particular course of action, shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate, be liable to rigorous imprisonment for a term not exceeding seven years.

Wrongful restraint

2. Any person who unlawfully obstructs any student or a member of the staff of an educational institution, in such a manner as to prevent such student or member of the staff from proceeding in any direction in which such student or member of the staff, has a right to proceed, shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate be liable to rigorous imprisonment for a term not exceeding seven years.

Unlawful confinement

3. Any person who unlawfully restrains any student or a member of the staff of an educational institution in such a manner as to prevent such student or member of the staff from proceeding beyond certain circumscribing limits, shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate be liable to imprisonment for a term not exceeding seven years.

Forcible occupation and damage to property of an educational institution

4. (1) Any person who, without lawful excuse, occupies, by force, any premises of, or under the management or control of, an educational institution shall be guilty of an offence under this Act, and shall on conviction after summary trial before a Magistrate be liable to imprisonment for a term not exceeding ten years or to a fine not exceeding ten thousand rupees or to both such imprisonment and fine.

(2) Any person who causes mischief in respect of any property of, or under the management or control of, an educational institution shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate he liable to imprisonment for a term to not exceeding twenty years and a fine of five thousand rupees or three times the amount of the loss or damage caused to such property, which ever amount is higher.

Orders of expulsion or dismissal

- 5. Where a person is convicted of an offence under this Act, the court may, having regard to the gravity of the offence"
  - (a) in any case where the person convicted is a student of an educational institution, order that such person be expelled from such institution ;

- (b) (b) in any case where the person convicted is a member of the staff of an educational institution, order that such person be dismissed from such educational institution.
- Bail
  - 6.
- (1) A person suspected or accused of committing an offence under subsection (2) of section 2 or section 4 of this Act shall not be released on bail except by the judge of a High Court established by Article 154P of the Constitution. In exercising his discretion to grant bail such Judge shall have regard to the provisions of section 14 of the Bail Act, No. 30 of 1997.
- (2) Where a person is convicted of an offence under subsection (2) of section 2 or section 4 of this Act, and an appeal is preferred against such conviction, the Court convicting such person may, taking into consideration the gravity of the offence and the antecedents of the person convicted, either release or refuse to release, such person on bail.

Certain Provisions of the Code of Criminal Procedure Act not to apply to persons convicted or found guilty of an offence under this Act

- Notwithstanding anything in the Code of Criminal Procedure Act, No, 15 of 1979"
  - (a) the provisions of section 303 of that Act shall not apply in the case of any person who is convicted,
  - (b) the provisions of section 306 of that Act shall not apply in the case of any person who pleads or is found guilty, by or before any court of any offence under subsection (2) of section 2 or section 4 of this Act.

Offences under this Act deemed to be cognizable offences

8. All offences under this Act shall be deemed to be cognizable Offences for the purposes of the application of the provisions of the Code of Criminal Procedure Act, No. 15 of 1979, notwithstanding anything contained in the First Schedule to that Act.

Certificate

9. Where in any prosecution for an offence under this Act, a question arises whether any person is a student or a member of the staff of an educational institution or whether any premises or property is the property of, or is under the management and control of, an educational institution a certificate purporting to be under the hand of the head or other officer of such educational institution to the effect that the person named therein is a student or a member of the staff of such educational institution, or that the

premises or property specified therein is the property of, or is under the management and control of, such educational institution, shall be admissible in evidence without proof of signature and shall be prima facie evidence of the facts stated therein.

Admissibility of statement in evidence

10.

(1) If in the course, of a trial for an offence under this Act, any witness shall on any material point contradict either expressly or by necessary implication a statement previously given by him in the course of any investigation into such offence, it shall be lawful for the Magistrate if, after due inquiry into the circumstances in which the statement was inside, he considers it safe and just "

> (a) to act upon the statement given by the witness in the course of the investigation, if such statement is corroborated in material particulars by evidence from an independent source; and

> (b) to have such witness at the conclusion of such trial, tried before such court upon a charge for intentionally giving false evidence in a stage of a judicial proceeding,

(2) At any trial under paragraph (b) of subsection (1) it shall be sufficient to prove that the accused made the contradictory statements alleged in the charge and it shall not by necessary to prove which of such statements is false.

Provisions of this Act to be in addition to and not in derogation of the provisions of the 14. Penal Code & c

11. The provisions of this Act shall be in addition to and not in derogation of, the provisions of the Penal Code, the Convention Against Torture and Oilier Cruel, Inhuman or Degrading Treatment or Punishment Act, No. 22 of 1994 or any other law.

Priority for trials and appeals under this Act

12. Every Court shall give priority to the trial of any person charged with any offence under this Act and to the bearing of any appeal from the conviction of any person for appeals under any such offence and any sentence imposed on such conviction.

Sinhala text to Prevail in case of inconsistency

"criminal force", "fear", "force", "grievous hurt", "hurt" and "mischief shall have the respective meanings assigned to them in the Penal Code;

"educational institution" means –

(a) a Higher Educational Institution;

(b) any other Institution recognized under Chapter IV of the Universities Act, No, 16 of 1978;

(c) the Buddhist and Pali University established by the Buddhist and Pali University of Sri Lanka Act, No. 74 of 1981;

(d) the Buddha Sravaka Bhikku University, established by the Buddha Sravaka Bhikku University Act, No. 26 of 1996;

(e) any Institute registered under section 14 of the Tertiary and Vocational Education Act, No. 20 of 1990;

(f) any Advanced Technical Institute established under the Sri Lanka Institute- of Technical Education Act, No. 29 of 1995;

(g) a Pirivena registered under the Pirivena Education Act, No. 64 of 1979 and receiving grants from State funds and includes a Pirivena Training Institute established under that Act;

(h) the Sri Lanka Law College;

(i) the National Institute of Education established; by the National Institute of Education Act, No.

(j)a College of Education established by the: Colleges of Education Act, No. 30 of 1986, or a Training College;

(k) a Government school or an assisted school or an unaided school, within the meaning of the Education Ordinance (Chapter 185);

and includes any other institution established for the purpose of providing education, instruction or training;

"head of an educational institution" means the Vice- Canceller, Mahopadyaya, Director, President, Principal or any other person howsoever designated charged with the administration and management of the affairs of such educational institution;

"Higher Educational institution" has the meaning assigned to it in the Universities Act, No. 16 of 1978;

"ragging" means any act which causes or is likely to cause physical or psychological injury or mental pain or : fear to a student or a member of the staff of an educational institution;

"student" means a student of an educational institution;

"sexual harassment" means the use of criminal force, words or actions to cause sexual annoyance or harassment to a student or a member of the staff, of an educational institution;

# ANNEX 3 Examination Rules, Offences and Punishments

# These examination rules, offences and punishments are extracted from the "Manual of procedures for conduct of examinations" of University of Ruhuna; Chapter 8 and 9

#### **Examination Rules**

#### 8.1. Attendance

Candidates shall be in attendance outside the examination hall at least 15 minutes before the commencement of examination, but shall not enter the hall until they are requested to do so by the Supervisor.

Presence of candidates

#### 8.2. Seating

On admission to the hall a candidate shall occupy the seat allotted to him and shall not change it except on the specific instructions of the Supervisor.

#### 8.3 Admission to Hall

8.3.1 No candidate shall be admitted to the examination hall for whatever reason after the expiry of half-an-hour from the commencement of the examination.

8.3.2 No candidate shall be allowed to leave the hall until an hour has lapsed from the commencement of the examination or during the last 15 minutes of the paper.

#### 8.4 Identity verification

8.4.1 Candidate shall have his student ID Card/ Record Book and the admission card with him on every occasion he presents himself for an examination.

8.4.2 His candidature is liable to be cancelled if he does not produce the student ID Card/ Record Book. If he fails to bring the student ID Card/ Record Book on any occasion, he shall, sign a declaration in respect of the paper for which he had not produced the student ID Card/ Record Book in the form Ex 26, and produce the student ID Card/ Record Book on the next occasion when he appears for the examination. If it is the last paper or the only paper he is sitting, he shall produce the student ID Card/ Record Book to the Registrar within one working day.

8.4.3 If a candidate loses his student ID Card/ Record Book in the course of the Examination, he shall obtain a duplicate Record Book /Identity Card from the Registrar in order to take part in the rest of the examination.

#### 8.5 Documents etc. which Candidates should not Bring

8.5.1 No candidate shall have in his possession, (e.g. in his clothes, on the admission card, Time Tables, Record Book or any other object he is permitted to bring into the examination hall), any Materials not allowed notes, signs and formula or any other unauthorized material. Books, notes, parcels, handbags, mobile phones etc. which a candidate has brought with him should be kept at a place indicated by the Supervisor/Invigilator.

#### 8.6 Declaration of Articles in Possession

A candidate may be required by the Supervisor to declare any item in his possession or person.

#### 8.7 Copying

8.7.1 No candidate shall copy or attempt to copy from any book, paper, notes, mobile phone, electronic devices, similar material or from the scripts of another candidate. Candidate shall neither help another candidate nor obtain help from another candidate or any other person.

8.7.2 Candidate neither shall conduct himself so negligently that an opportunity is given to other candidates to read anything written by him nor to watch any practical examination conducted by him.

8.7.3 Candidate neither shall use any other unfair means nor seek/ obtain / render improper assistance at the Examination.

## 8.8 Cheating

No candidate shall submit a practical or field book, dissertation, project study or answer scripts which have been done entirely or partly by anyone other than the candidate himself.

#### 8.9 Articles Candidate may Bring

Candidates shall bring their own pens, ink, mathematical instruments, erasers, pencils, or any other equipment or stationery which the candidates have been instructed to bring.

#### 8.10 Use of Examination Stationary

8.10.1 Examination stationery (i.e. writing paper, graph paper, drawing paper, ledger paper, precis paper etc.) will be supplied whenever necessary. No sheet, paper or answer book supplied to a candidate may be torn, crumpled, folded or otherwise mutilated.

8.10.2 No papers other than those supplied to him by the Supervisor or Invigilator shall be used by candidates. All materials supplied whether used

or unused, shall be left on the desk and not removed from the examination hall.

#### 8.11 Index Number

8.11.1 Every candidate shall enter his Index Number on the answer book and on every continuation paper. He shall also enter all necessary particulars as indicated in the cover of the answer book. A candidate who inserts on his script an Index Number other than his own is liable to be considered as having attempted to cheat.

8.11.2 A script that bears no Index Number or an Index Number which cannot be identified or verified, is liable to be rejected. No candidate shall write his name or any other identifying marks on the answer scripts.

#### 8.12 Rough Work to be Cancelled

8.12.1 All calculations and rough work shall be done only on papers supplied for the examination, and shall be cancelled and attached to the answer script.

8.12.2 Such work should not be done on admission cards, time-tables, question papers, Record Book or on any other paper. Any candidate who disregards these instructions will be considered as having written notes or outline of answer with the intention of copying.

#### 8.13 Unwanted Parts of Answers to Crossed Out

Any answer or part of an answer which is not to be considered for the purpose of assessment shall be neatly crossed off. If the same question has been attempted in more than one place the answer or answers that are not to be counted shall be neatly crossed off.

Unwanted parts of answers

#### 8.14 Under Supervisor's Authority

Candidates are under the authority of the Supervisor and shall assist him by carrying out his instructions and those of his Invigilators, during the examination and immediately before and after it.

#### 8.15 Conduct

Every candidate shall conduct himself in the examination hall and its precincts so as not to cause disturbance or inconvenience to the Supervisor or his staff or to other candidates. In entering and leaving the hall, he shall conduct himself as quietly as possible. A candidate is liable to be excluded from the examination hall for disorderly conduct.

#### 8.16 Stopping Work

Candidates shall stop work promptly when ordered by the Supervisor/Invigilator to do so.

#### 8.17 Maintenance of Silence

8.17.1 Absolute silence shall be maintained in the examination hall and its precincts. A candidate is not permitted for any reason whatsoever to communicate or have any dealings with any person other than the Supervisor or Invigilator.

8.17.2 In case of urgent necessity, the candidate may communicate with the Supervisor or Invigilator. The attention of the Supervisor or Invigilator shall be drawn by raising hand from where he is seated.

#### 8.18 Leaving the Hall

During the course of answering a paper no candidate shall be permitted to leave the examination hall temporally. In case of emergency, permission will be granted but the candidate will be under surveillance of the Supervisor or Invigilator.

#### 8.19 Impersonation

No person shall impersonate a candidate whether in the examination hall or before or after the Examination, nor shall any candidate allow himself to be impersonated by another person.

#### 8.20 Dishonesty

Serious notice will be taken of any dishonest assistance given to a candidate, by any person.

#### 8.22 Cancellation or Postponement

If circumstances arise which in the opinion of the Supervisor in consultation of the Controller Chief, render the cancellation or postponement of the examination necessary, he shall stop the Examination, collect the scripts already written and then report the matter in writing to the Dean of the Faculty.

#### 8.23 Making of Statements

The Supervisor/Invigilator is empowered to require any candidate to make a statement in writing on any matter which may have arisen during the course of the examination and such statement shall be signed by the candidate. No candidate shall refuse to make such a statement or sign it.

#### 8.24 Whom to Contact in Examination Matters

No candidate shall contact any person other than the Dean, Head of the Department or the Registrar, regarding any matter concerning the examination.

#### 8.25 Handing Over of Answer Scripts

Candidates shall hand over the answer scripts personally to the Supervisor or Invigilator or remain in the seat until it is collected. On no account shall a candidate handover his answer scripts to the hall attendant, or another candidate.

#### 8.26 Absence from Examination

When a candidate is unable to present himself for any part/section of an Examination, he shall notify or make arrangements to notify this fact to the Registrar immediately. This should be followed up by a letter with supporting documents sent by registered post, within one week of the incident. Candidates those who did not attend the examination for medical reason shall submit the medical certificates following the instructions by using Ex 27.

#### 8.27 Eligibility to Continue to Sit

No student shall sit for an Examination, if he has exhausted the number of attempts that he is allowed to sit that particular Examination, unless he has been granted special permission to do so by the Senate.

#### Examination Offences and Punishments

9.1.1. A candidate who violates any of the requirements or conditions stipulated in Examination Rules shall be considered as having committed an examination offence. Examination offense Examination offences are classified as follows: Classification of offences

(a) Possession of unauthorized documents or removal of examination stationery

(b) Possession of telecommunication or transmitting devises

- (c) Plagiarism from internet or any other sources
- (d) Disorderly conduct
- (e) Copying (even detected while marking the answer scripts)

(f) Obtaining or attempting to obtain improper assistance or cheating or attempting to cheat

- (g) Impersonation
- (h) Aiding and abetting the commission of any of these offences

(i) Violation of any of the requirements or conditions stipulated from 8.6 -8.10.

- 9.1.2 There shall be an Examination Disciplinary Committee appointed by the Senate to investigate into and make recommendations (including punishments) regarding examination offences referred to it. The recommendations of the Examination Disciplinary Committee shall be submitted to the Senate for the final decision.
- 9.1.3 In all cases of commission of examination offences detected (even detected while marking the answer scripts), the Supervisor/Examiner shall take

action as outlined below and forward his report to the Registrar for further action.

- 9.1.4 The Registrar shall place all reports of examination offences submitted by the Supervisors, through Dean, for the consideration of the Vice-Chancellor who shall decide whether they shall be referred to the Examination Disciplinary Committee for further action.
- 9.1.5 Any examiner, Head of Department, Dean of Faculty or any other official of the University who detects an examination offence, shall report the matter in writing to the Registrar, who shall submit the same to the Vice-Chancellor for necessary action.
- 9.1.6 A candidate who is found guilty of an examination offence is liable to one or more of the following punishments.

(a) Removal of his/her name from the pass list

(b) Cancellation of his/her candidature from whole or part of the examination,

(c) Suspension from University examinations indefinitely or for a period as the Senate may decides

(d) Ban participation in the Convocation

(e) Suspension from the University indefinitely or for a period as the Senate may decide.

- 9.1.7 Any candidate found aiding and abetting the commission of any examination offence shall be liable to the same punishment as that applicable to the offence.
- 9.1.8 Any appeal against the decision of the Senate shall be made to the Council within one month of the receipt of the notification