CURRICULUM

Proficiency Certificate Level in Acupuncture, Acupressure and Moxibustion

(Three Year Program – Yearly System)

Council for Technical Education and Vocational Training

Curriculum Development and Equivalence Division

Sanothimi, Bhaktapur

2007

First Revision, 2021

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Introduction

The Government of Nepal has called for the provision of basic health service to all people by establishing and expanding a network of health services in all over Nepal. In this regard, the Council for Technical Education and Vocational Training (CTEVT) has been contributing nation through preparing different types of middle level health professionals.

The council for Technical Education and Vocational Training (CTEVT) has been developing and implementing different types of health science related diploma (certificate) level curricular programs. This Proficiency Certificate level in Acupuncture, Acupressure and Moxibustion (AAM) curricular program isdesigned to produce middle level Acupuncture, Acupressure and Moxibustion health professionals. Furthermore, after certification such graduates would provide quality health services in different levels of health service centers (hospitals, clinics, nursing homes, PHCCs and HPs) in the Nepal and aboard.

The use of acupuncture, acupressure and moxibustion is part of Traditional Chinese Medicine (TCM). TCM is a medical system that has been used for thousands of years to prevent, diagnose, and treat disease. National level documents in health sectors of Nepal have mentioned various traditional systems of medicine differently. Furthermore, the guideline prepared by the MoHP (2061) has recognized Acupuncture/Acupressure along with Ayurveda, Naturopathy, Homeopathy, and Unani as traditional systems of medicine ***(Source: Country Monographs on Traditional System of Medicine, 2007)***. In Nepal, Traditional and Complementary Medicine (T&CM) is implied as Ayurveda and Alternative medicine under the Department of Ayurveda and Alternative Medicine. National Health Policy 2074 defines other Alternative system as Yoga, Naturopathy, Sowa Rigpa, Homeopathy, Unani, Traditional Chinese Medicine, and other traditional medicine and practices(**Source: Mapping the Availability of Ayurveda and Other Complementary Medicine Services Centers in Nepal, 2018**).

In this context, the council for technical Education and Vocational training has been offering this Certificate level in Acupuncture Acupressure and Moxibustion curricular program.

Rationale of Revision

Certificate in acupuncture, acupressure and moxibustion curriculum was developed in 2007. This is the first revision after the implementation of its development. The rationales behind its revision are as follows:

- It crossed the 5 years maturity period of its implementation after its development and similarly the implementing agencies/college have requested to revise this curriculum based on their teaching experiences.
- The year-wise re-adjustments of the existing subjects are felt necessary.
- It is needed to revisit its weightage in both theory and practical marks contents to make it more practical oriented.
- The clinical practice in 3rd year seems less then requirement of NHPC and needs to be specified.
- The technologies invented in this field seems necessary to incorporated.

Furthermore, technicians are projected to grow faster than the average for all occupations. Jobs for AAM are projected to increase at a faster-than-average rate. With the advent in technology, the onset of multiple and complicated diseases growing in the world, and expansion of research works trained health professionals are needed throughout the world for providing quality health services in different levels of health service centers (hospitals, clinics, nursing homes, PHCCs and HPs).

To cope with the national and international demands, the knowledge and skills of this curricular program should be updated to make the skills relevant and pertinent to the related industries.

Curriculum Title

The tittle of this curricular program is PCL in Acupuncture, Acupressure and Moxibustion (AAM).

Program Aim

The program of program is to prepare middle level skilled health professionals having equipped with knowledge, skills and attitudes of Acupuncture, Acupressure and Moxibustion discipline with the perspectives to providing diagnostic, curative, preventive and promotive health care services to the individuals.

Program Objectives

The program has following objectives to:

1. Provide diagnostic, curative, preventive and promotive health care services to the individuals through acupuncture, acupressure and moxibustion technique;
2. Perform necessary diagnostic data compiling through accurate employment of the various examinations tools both of Chinese Medicine and Western Medicine;
3. Apply critical thinking for disease diagnosis and management during the service delivery;
4. Develop leadership quality for better health promotion and health programming;
5. Follow the quality standards set by the organization during the time of service providing;
6. Apply contemporary professional, ethical and legal standards in service delivery;
7. Recognize emergency situations and take appropriate action;
8. Develop the positive attitudes towards the professional career with greater initiative and self-confidence; and
9. Start up their own enterprises and create employment opportunities for others.

Program Description

This course is based on the job required to perform by the middle level acupuncture, acupressure and moxibustion health professional in different levels of health service centers (hospitals, clinics, nursing homes, PHCCs and HPs). This curricular program extends over three years. The first year focuses on core and academic courses. The acupuncture, acupressure and moxibustion related disciplinary courses are offered in second year. Similarly, the third comprises of some disciplinary courses along with application of learned skills and knowledge. Additionally, within the comprehensive clinical and community field practices based workplace learning program is offered in third year.

Duration

The total duration of this curricular program is three years. The program is based on yearly system. Moreover, one academic year consists of 40 academic weeks and one academic week consists of 40 hours excluding examinations period.

Target Group

The target group for this programme will be all interested individuals who passed School Education Examinations (SEE) with minimum of GPA 2.0 and C grade in Compulsory English, Mathematics and Science or School Leaving Certificate (SLC) with English, Science, and Mathematics or equivalent.

Group Size

The group size will be maximum of 40 (forty) in a batch.

Entry Qualification

Entry qualification of the applicants for Acupuncture, Acupressure and Moxibustion curricular program should be SEE or SLC pass. S/he should obtain minimum of GPA 2.0 and C grade in Compulsory English, Mathematics and Science or as per provisions mentioned in the admission guidelines of Office of the Controller of Examinations, CTEVT.

Entry Criteria

- Should submit SEE or SLC pass or certificates
- Should submit citizenship or birth registration certificate

- Should pass entrance examinations as administered by CTEVT

Selection

Applicants fulfilling the entry qualification and entry criteria will be selected for admission on the basis of merit list.

Medium of Instruction

The medium of instruction will be in English and/or Nepali.

Pattern of Attendance

Minimum of 90% attendance in each subject is required to appear in the respective final examination.

Teacher and Student Ratio

The ratio between teachers and students must be:

- Overall ratio of teacher and student must be 1:10 (at the institution level)
- 1:40 for theory and tutorial classes
- 1:10 for practical classes

Qualification of Teachers and Demonstrators

- The program coordinator should be a master's degree holder in the related subject area.
- The disciplinary subject related teachers and demonstrators should be a bachelor's degree holder in the related subject area.
- The foundational subject (core and academic course) related teacher should be master degree holder in the related subject area.

Instructional Media and Materials

The following instructional media and materials are suggested for the effective instruction and demonstration.

- ***Printed Media Materials*** (Assignment sheets, Hand-outs, Information sheets, Individual training packets, Procedure sheets, Performance Check lists, Textbooks etc.).
- ***Non-projected Media Materials*** (Display, Model, Flip chart, Poster, Writing board etc.).
- ***Projected Media Materials*** (Opaque projections, Overhead transparencies, Slides etc.).
- ***Audio-Visual Materials*** (Audiotapes, Films, Slide-tape programs, Videodiscs, Videotapes etc.).
- ***Computer-Based Instructional Materials*** (Computer-based training, Interactive video etc.)
- **Web-Based Instructional Materials** (Online learning)
- **Radio/Television/Telephone**
- **Education-focused social media platform**

Teaching Learning Methodologies

The methods of teachings for this curricular program will be a combination of several approaches such as; Illustrated Lecture, Panel Discussion, Demonstration, Simulation, Group work, Guided practice, Practical experiences, Fieldwork, Community practice, Hospital practice, Report writing, Term paper presentation, Case analysis, Tutoring/coaching, Role-playing, Assignment, Heuristic, Project work and other Independent learning.

Theory: Illustrated lecture Discussion, Seminar, Interaction, Assignment, and Group work.
Practical: Demonstration, Observation, Guided practice, Self-practice, Project work, Hospital practice and Community practice under supervision.

Mode of Education

There will be inductive, deductive and learner-centered approaches of education.

Examination and Marking Scheme

a. Internal assessment

- There will be a transparent/fair evaluation system for each subject both in theory and practical exposure.
- Each subject will have internal assessment at regular intervals and students will get the feedback about it.
- Weightage of theory and practical marks are mentioned in curriculum structure.
- Continuous assessment format will be developed and applied by the evaluators for evaluating student's performance in the subjects related to the practical experience.

b. Final examination

- Weightage of theory and practical marks are mentioned in structure.
- Students must pass in all subjects both in theory and practical for certification. If a student becomes unable to succeed in any subject s/he will appear in the re-examination administered by CTEVT.
- Students will be allowed to appear in the final examination only after completing the internal assessment requirements.

c. Requirement for final practical examination

- Professional of relevant subject instructor must evaluate final practical examinations.
- One evaluator in one setting can evaluate not more than 20 students.
- Practical examination should be administered in actual situation on relevant subject with the provision of at least one internal evaluator from the concerned constituent or affiliated institute led by external evaluator nominated by CTEVT.
- Provision of re-examination will be as per CTEVT policy.

d. Final practicum evaluation will be based on:

- Institutional practicum attendance - 10%
- Logbook/Practicum book update - 10%
- Spot performance (assigned task/practicum performance/identification/arrangement preparation/measurement) - 40%
- Viva voce :
    - Internal examiner - 20%
    - External examiner - 20%

e. Pass marks:

- The students must secure minimum 40% marks in theory and 50% marks in practical. Moreover, the students must secure minimum pass marks in the internal assessment and in the yearly final examination of each subject to pass the subject.

Provision of Back Paper

There will be the provision of back paper but a student must pass all the subjects of all year within six years from the enrollment date; however there should be provision of chance exam for final year students as per CTEVT rules.

Disciplinary and Ethical Requirements

- Intoxication, insubordination or rudeness to peers will result in immediate suspension followed by the review of the disciplinary review committee of the institute.
- Dishonesty in academic or practical activities will result in immediate suspension followed by administrative review, with possible expulsion.
- Illicit drug use, bearing arms in institute, threats or assaults to peers, faculty or staff will result in immediate suspension, followed by administrative review with possible expulsion.

Grading System

The following grading system will be adopted:

- Distinction: 80% and above
- First division: 65% to below 80%
- Second division: 50 % to below 65%
- Pass division: Pass marks to Below 50%

Certification and Degree Awards

- Students who have passed all the components of all subjects of all 3 years are considered to have successfully completed the course.
- Students who have successfully completed the curricular program will be awarded with a degree of **"Proficiency Certificate Level (PCL) in Acupuncture, Acupressure and Moxibustion."**

Career Path

The graduates will be eligible for the position equivalent to Non-gazette 1st class/Level 5 (technical) as prescribed by the Public Service Commission of Nepal and other related agencies. The graduate will be eligible for registration with the related Council in the grade as provisioned in the related Council Act (if any).

General Attitudes Required

A student should demonstrate following general attitudes for effective and active learning.

Acceptance, Affectionate, Ambitious, Aspiring, Candid, Caring, Change, Cheerful, Considerate, Cooperative, Courageous, Decisive, Determined, Devoted, Embraces, Endurance, Enthusiastic, Expansive, Faith, Flexible, Gloomy, Motivated, Perseverance, Thoughtful, Forgiving, Freedom, Friendly, Focused, Frugal, Generous, Goodwill, Grateful, Hardworking, Honest, Humble, Interested, Involved, Not jealous, Kind, Mature, Open minded, Tolerant, Optimistic, Positive, Practical, Punctual, Realistic, Reliable, Distant, Responsibility, Responsive, Responsible, Self-confident, Self-directed, Self-disciplined, Self-esteem, Self-giving, Self-reliant, Selfless, Sensitive, Serious, Sincere, Social independence, Sympathetic, Accepts others points of view, Thoughtful towards others, Trusting, Unpretentiousness, Unselfish, Willingness and Work-oriented.

Curriculum Structure of PCL AAM

First Year

S.N	Subjects	Mode		Hours/ Week	Distribution of Marks						Total Marks
					Theory			Practical			
		T	P		Internal	Final	Exam Hour	Internal	Final	Exam Hour	
1	English	3	-	3	20	80	3	-	-	-	100
2	Nepali	3	-	3	20	80	3	-	-	-	100
3	Social Studies	2	-	2	10	40	1.5	-	-	-	50
4	Anatomy & Physiology	4	1	5	20	60	3	10	10	3	100
5	Physics	4	2	6	20	60	3	10	10	3	100
6	Chemistry	4	2	6	20	60	3	10	10	3	100
7	Zoology	3	2	5	20	60	3	10	10	3	100
8	Botany	3	2	5	20	60	3	10	10	3	100
9	Mathematics & Statistics	4	1	5	20	60	3	10	10	3	100
	Total	**30**	**10**	**40**	**170**	**560**		**60**	**60**		**850**

Second Year

S.N	Subjects	Mode		Hours/ Week	Distribution of Marks						Total Marks
					Theory			Practical			
		T	P		Internal	Final	Exam Hour	Internal	Final	Exam Hour	
1	Concept of Moxibustion and Medicinal Plants	4	2	6	20	80	3	20	30	3	150
2	Basic Theory of Oriental Medicine	4	-	4	20	80	3	-	-	-	100
3	Meridians and Acupoints	4	2	6	20	80	3	20	30	3	150
4	Diagnosis in Acupuncture and Moxibustion	2	2	4	10	40	1.5	20	30	2	100
5	Acupressure and Therapeutic Massage	4	2	6	20	80	3	20	30	3	150
6	Acupuncture and Moxibustion Therapeutics I	4	2	6	20	80	3	20	30	3	150
7	Clinical Pathology	2	2	4	10	40	1.5	20	30	2	100
8	Concept of General Medicine	2	2	4	10	40	1.5	20	30	2	100
Total		**26**	**14**	**40**	**130**	**520**		**140**	**210**		**1000**

Third Year

S.N	Subjects	Mode		Hours/ Weekly	Distribution of Marks						Total Marks
					Theory			Practical			
		T	P		Internal	Final	Exam Hour	Internal	Final	Exam Hour	
A.	**In House Learning (20 Weeks*40 Hrs./Week)**										
1	Clinical Methods of Acupuncture and Moxibustion	4	4	8	10	40	1.5	20	30	2	100
2	Acupuncture and Moxibustion Therapeutics II	8	8	16	20	80	3	40	60	3	200
3	Health Care Systems and Management	6	2	8	20	60	3	10	10	2	100
4	Community Medicine	6	2	8	20	60	3	10	10	2	100
Total		**24**	**16**	**40**	**70**	**240**		**80**	**110**		**500**
B. Comprehensive Field Practice/ Workplace Learning (20 Weeks*40 Hrs./Week)		**Duration**		**Internal Supervision**			**Internal Exam**		**Final Exam**		**Total**
5	Comprehensive Community Field Practice	4 weeks		50			25		25		100
6	Comprehensive Clinical Practice	16 weeks		200			50		50		300
Total				**250**			**75**		**75**		**400**

First Year

Refer to Curriculum

Certificate/Diploma Level in Health Sciences

(General Medicine, Medical Laboratory Technology, Diagnostic Radiography, Homeopathy, Ayurveda, Amchi Science, Dental Science, Ophthalmic Science, Pharmacy, Physiotherapy, Acupuncture, Acupressure & Moxibustion, Yog and Naturopathy, Ayurveda Pharmacy and Dental Laboratory Technology)

First year all, 2016

Second Year

S.N	Subjects Offered
1	Concept of Moxibustion and Medicinal Plants
2	Basic Theory of Oriental Medicine
3	Meridians and Acupoints
4	Diagnosis in Acupuncture and Moxibustion
5	Acupressure and Therapeutic Massage
6	Acupuncture and Moxibustion Therapeutics I
7	Clinical Pathology
8	Concept of General Medicine

Concept of Moxibustion and Medicinal Plants

Total Hours: 240 (6 hrs/weeks)
Theory Hours: 160 (4 hrs/weeks)
Practical Hours: 80 (2 hrs/weeks)

Course Description:
This course is designed to introduce students the skills and knowledge about moxibustion and medicinal plants.

Course Objectives:
After completion of this course, students will be able to:

1. Explain the basic concept moxibustion;
2. Identify, collect, transport, process and store moxa;
3. Prepare and apply moxa for treatment; and
4. Explain the basic properties of herbs; herb interaction and toxicity; essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb.

Course Contents:

Theory

Unit 1: Introduction of Moxibustion	**Hrs. theory: 8**
Sub Unit 1: General Introduction and Actions of Moxibustion	**Hrs. theory: 8**
Objectives:	**Content:**
Explain the basic concept of Moxibustion and its actions	• **General introduction.** • **Brief History of Moxibustion.** • **Actions of Moxibustion** ➢ Warming channels and dispersing coldness. ➢ Supporting yang to resume collapse. ➢ Removing blood stasis and stagnation. ➢ Disease prevention and health maintenance.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Unit 2: Classifications	**Hrs. theory: 10**
Sub-Unit 2.1: Classifications of Moxibustion	**Hrs. theory: 10**
Objectives:	**Content:**
Classify the Moxibustion	• **On the basis of materials used** ➢ Moxibustion with moxa ➢ Alternative materials of Moxibustion • **On the basis of application** ➢ Direct ➢ Indirect
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.

Unit 3: Identification and Collection of Moxa Plant	**Hrs. theory: 10**
Sub-Unit 3.1: General identification and appropriate way of collection of moxa plant	**Hrs. theory: 10**
Objectives:	**Content:**
Identify and collect moxa plant.	• Identification and familiarization with the morphology. • Botanical name and characteristics. • Appropriate season for collection. • Identification of the parts of the plant to be collected and listing out the precaution while collecting the moxa plant.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Unit 4: Transport and Processing of moxa plant (Mugwort Plant)	**Hrs. theory:10**
Sub-Unit 4.1: Transportation of collected moxa plant (Mugwort Plant) and its processing	**Hrs. theory: 10**
Objectives:	**Content:**
Familiarize with Transportation and processing of moxa plant.	• Introduction, objectives and method of packing the collected moxa plant. • Precautions during packing. • Process of transportation. • Precautions during transportation. • Procedures of processing. • Precautions in processing.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Unit 5: Store processed moxa wool and prepare moxa stick for use	**Hrs. theory: 10**
Sub-Unit 5.1: Storing processed moxa wool and preparing moxa cone & moxa stick	**Hrs. theory: 10**
Objectives:	**Content:**
Store moxa wool Prepare moxa cone and moxa stick	• Methods of storing moxa wool • Storage of green (rough) moxa and refined moxa wool • Introduction of moxa cone and moxa stick. • Processes of preparing moxa cone and moxa stick. • Precautions during moxa stick preparation.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration return demonstration, models, videos, role play.

Unit 6: Methods and Precautions of Moxibustion	**Hrs. theory:8**
Sub-Unit 6.1 : Methods and Precautions Taken during Moxibustion	**Hrs. theory: 8**
Objectives:	**Content:**
Apply or use moxa for treatment.	• Sequence of Moxibustion. • Reinforcing and Reducing method of Moxibustion. • Contraindications of Moxibustion. • Precautions taken during moxibustion. • Management after Moxibustion.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration return demonstration, models, videos, role play.
Unit 7: Basic Theory of Chinese *Materia Medica*	**Hrs. theory: 20**
Unit 7.1: Properties of Herbs	**Hrs. theory: 10**
Objectives:	**Content:**
Familarize with the concept, classification and importance of herbs. Explain the properties of herbs.	• **Concept of herb.** • **Classification of herbs based on their use**: ➢ Culinary herbs ➢ Medicinal herbs ➢ Sacred herbs ➢ Cosmetic herbs ➢ Strewing herbs • **Importance of herbs.** • **Nature and Flavor** ➢ Introduction ➢ Relationship between nature and flavour ➢ Clinical significance of nature and flavour ➢ Lifting, Lowering, Floating and Sinking o General concept o Factors influencing Lifting, Lowering, Floating and Sinking. ➢ Meridian Affinity and how it affect the clinical application of herbs. ➢ Concept of Toxicity of herbs.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.

Sub-unit 7.2: Clinical Use of Herbs	**Hrs. theory: 10**
Objectives:	**Content:**
Describe the seven facets of herb interaction and explain their clinical significance. Explain the contraindications for prescribing herbs. Describe about dosage and administration of herbs and explain the factors that determine dosage.	• **Herb Interactions and its clinical significance** ➢ Single ➢ Mutual Reinforcement. ➢ Assistance. ➢ Restraint. ➢ Antidote. ➢ Mutual Inhibition. ➢ Antagonism. • **Contraindications** ➢ Incompatibility of Herbs ➢ Contraindication in Pregnancy ➢ Dietary Avoidance • **Dosage and Administration** ➢ Dosage-factor affecting dosage ➢ Administration - preparation of decoction and its administration.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Unit 8: Common Medicinal Herbs of TCM	**Hrs. theory: 84**
Sub-unit 8.1: Herbs That Release Exterior	**Hrs. theory: 8**
Objectives:	**Content:**
Describe herbs that release exterior. Familarize with the essential information on the Latin name / common name, parts used, nature / flavour, meridian affinity, actions and indications, dosages, cautions and contraindications in the use of each herb that release Exterior.	• General concept of herbs that release exterior and their characteristics. • Compare and contrast the actions, indications of warm-acrid and cool-acrid herbs for releasing exterior. • Essential information on the Latin name / common name, parts used nature / flavour, meridian affinity, actions and indications, dosages, cautions and contraindications in the use of each herb. • **Warm-Acrid Herbs That Release Exterior** ➢ Mahuang (*Ephedra sinica*) ➢ Guizhi (*Cinnamomum cassia*) (Cinnamon) ➢ Zisu(*Perilla frutescens*) ➢ Sheng jiang (Zingiber officinale) • **Cool-Acrid Herbs That Release Exterior** ➢ Bohe (*Mentha haplocalyx*) (Peppermint) ➢ Niubangzi (*Arctium lappa*) (Burdock Fruit) ➢ Sangye (*Morus alba*) (Mulberry) ➢ Juhua (*Chrysanthemum morifolium*) (Chrysanthemum)
Evaluation methods: written and viva exams, performance observation in real or simulated	Teaching/Learning Activities/Resources: classroom instruction and demonstration return

settings.	demonstration, models, videos, role play.
Sub-unit 8.2: Herbs That Cool Heat	**Hrs. theory: 14**
Objectives:	**Content:**
Describe herbs that cool heat. Familarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that cool heat cool heat.	• Characteristics of herbs. • Clinical conditions for use of herbs. • Compare and contrast the actions and indications of the main subcategories. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. • **Herbs That Cool Heat and Purge Fire** ➢ Shigao (Gypsum) ➢ Xiakucao (Prunella vulgaris) ➢ Jue Ming Zi (Cassia obtusifolia) • **Herbs That Cool Heat and Dry Dampness** ➢ Huangqin (Scutellaria baicalensis)(Baical Skullcap) ➢ Huanglian (Coptis chinensis) (Golden Thread) ➢ Huangbai (Phellodendron chinense, amurense) (Amur Cork-Tree) ➢ Longdancao (Gentiana scabra, triflora)(Chinese Gentian) ➢ Dang yao (Swertia chiraita) • **Herbs That Cool Heat and Detoxify Poison** ➢ Jinyinhua (Lonicera japonica) (Honeysuckle) ➢ Mao He Zi (Terminaliae Billericae) ➢ Pugongying (Taraxacum mongolicum) (Dandelion) • **Heat-Clearing and Blood-Cooling Herbs** ➢ Baitouweng (Pulsatilla chinensis and Other Species) (Nodding Anemone) ➢ Shengdihuang (Rehmannia glutinosa) ➢ Mudanpi (Paeonia suffruticosa) (Tree Peony) • **Endogenous Heat-Cooling Herbs** ➢ Qinghao (Artemisia annua, apiacea) (Wormwood) ➢ Hu Huang Lian (Picrorhiza serophulariiflora) • **Yu Gan Zi (Phyllanthus emblica)**
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.

Sub-unit 8.3: Herbs That Induce Catharsis	**Hrs. theory: 4**
Objectives:	**Content:**
Describe herbs that induce catharsis. Familarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that induce catharsis.	• Action, Indication, Characteristics of herbs. • Precautions when using. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Dahuang (*Rheum* palmatum, officinale) (Rhubarb) ➢ Mangxiao (*Mirabilite*) (Sodium Sulfate) ➢ Fanxieye (*Cassia* angustifolia) (Senna)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.4: Herbs That Dispel Wind–Dampness	**Hrs. theory: 5**
Objectives:	**Content:**
Describe herbs that dispel wind-dampness. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that dispel wind-dampness.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Duhuo (Angelica pubescens) ➢ Mugua (Chaenomeles speciosa, lagenaria) (Chinese Quince) ➢ Sangjisheng (Loranthus parasiticus) (Mulberry Mistletoe) ➢ Jia ju (Piperis Sarmentosi)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.5 : Herbs That Drain Water and Dampness	**Hrs. theory: 6**
Objectives:	**Content:**
Describe herbs that dispel wind-dampness. Familarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that dispel wind-dampness.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature / flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Fuling (*Poria cocos*) (Tuckahoe) ➢ Yiyiren (*Coix lachryma-jobi*) (Job's-Tears)

	➢ Zexie (*Alisma plantago-aquatica, orientale*) (Water Plantain) ➢ Cheqianzi (*Plantago asiatica*) (Plantain) ➢ Yinchenhao (*Artemisia capillaris*) (OrientalWormwood) ➢ Zhuling (*Polyporus umbellatus*)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.6 : Herbs That Warm Interior	**Hrs. theory: 4**
Objectives:	**Content:**
Describe herbs that warm interior. Familarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb That Warm Interior.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Fuzi (Aconitum carmichaeli) (Monkshood). ➢ Rougui (Cinnamomum cassia) (Cinnamon) ➢ Ganjiang (Zingiber officinale) (Dried Ginger) ➢ Dingxiang (Syzygium caryophyllata, aromaticum) (Clove)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.7: Herbs That Regulate Qi	**Hrs. theory: 5**
Objectives:	**Content:**
Describe herbs that regulate Qi. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that regulate Qi.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Chenpi (*Citrus tangerina, reticulata*) (Tangerine) ➢ Zhishi (*Citrus aurantium*) (Immature Orange) ➢ Muxiang (*Aucklandia lappa*) ➢ Xiangfu (*Cyperus rotundus*) (Nutgrass) ➢ Chuanlianzi (*Melia toosendan*) (Chinaberry) ➢ Xiebai (*Allium macrostemon*) (Long Stem Onion)
Evaluation methods: written and viva exams,	Teaching / Learning Activities/Resources:

performance observation in real or simulated settings.	classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.8: Herbs That Stimulate Blood Circulation and Remove Blood Stasis	**Hrs. theory: 6**
Objectives:	**Content:**
Describe herbs that stimulate blood circulation and remove blood stasis. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that stimulate blood circulation and remove blood stasis.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Chuanxiong (*Ligusticum chuanxiong, wallichii*) (Sichuan Lovage) ➢ Yujin (*Curcuma wenyujin, aromatica*) (Tumeric) ➢ Danshen (*Salvia miltiorrhiza*) (Red Sage) ➢ Taoren (*Prunus persica*) (Peach) ➢ Honghua (*Carthamus tinctorius*) (Safflower) ➢ Niuxi (*Achyranthes bidentata*)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.9:Herbs That Dissolve Phlegm or Stop Cough and Relieve Asthma	**Hrs. theory: 5**
Objectives:	**Content:**
Describe herbs that dissolve phlegm or stop cough and relieve asthma. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that dissolve phlegm or stop cough and relieve asthma.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Gualou (*Trichosanthes kirilowii*) (Snake-Gourd) ➢ Xingren (*Prunus armeniaca*) (Apricot) (*Also Known as Kuxingren*) ➢ Zisuzi (*Perilla frutescens*) ➢ Sangbaipi (*Morus alba*) (WhiteMulberry)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.10: Herbs That Restore (Tonics)	**Hrs. theory: 8**
Objectives:	**Content:**
Describe herbs that restores. Familiarize with the essential information on the properties, meridian affinity, actions and	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name /

indications, dosages and cautions and contraindications in the use of each herb that restores.	common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Renshen (*Panax ginseng*) (Ginseng) ➢ Dangshen (*Codonopsis pilosula*) (Asia Bell) ➢ Huangqi (*Astragalus membranaceus, monaholicus*) (Milkvetch) ➢ Shudihuang (*Rehmannia glutinosa*) ➢ Gancao (Glycyrrhiza *uralensis*) (Chinese Liquorice) ➢ Shanyao (*Dioscorea opposita*) (Chinese Yam) ➢ Dongchongxiacao (*Cordyceps sinensis*) (Chinese Caterpillar Fungus) ➢ Danggui (*Angelica sinensis*) ➢ Baihe (*Lilium brownii*) (Lily) ➢ Mohanlian (*Eclipta prostrata*) ➢ Hutaoren (*Juglans regia*) (Walnut)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.11:Herbs That Calm Mind	**Hrs. theory: 3**
Objectives:	**Content:**
Describe herbs that calm mind. Familarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that calm mind.	• Action, Indication, Characteristics of herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Suanzaoren (*Ziziphus jujuba Mill. var. spinosa*) (Chinese Jujube) ➢ Muli (*Ostrea gigas, rivularis*) (Oyster)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.

Sub-unit 8.12: Herbs That Calm Liver and Extinguish Wind	**Hrs. theory: 6**
Objectives:	**Content:**
Describe herbs that calm liver and extinguish wind. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that calm liver and extinguish wind.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature / flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Tianma (Gastrodia elata) ➢ Gouteng (*Uncaria rhynchophylla*) ➢ Shijueming (*Haliotis diversicolor*) (Abalone) ➢ Dilong (*Pheretima aspergillum*) (Earthworm) ➢ Baijiangcan (*Bombyx mori*) (Silkworm) ➢ Quanxie (*Buthus martensii*) (Scorpion) ➢ Wugong (*Scolopendra subspinipes*) (Centipede)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.13:Herbs That Stabilize and Astringe	**Hrs. theory: 4**
Objectives:	**Content:**
Describe herbs that stabilize and astringe. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that stabilize and astringe.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Fuxiaomai (*Triticum aestivum*) (Wheat) ➢ Wumei (*Prunus mume*) (Plum) ➢ Lianzi (*Nelumbo nucifera*) (Lotus)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.
Sub-unit 8.14: Herbs That Stop Bleeding	**Hrs. theory: 6**
Objectives:	**Content:**
Describe herbs that stop bleeding. Familiarize with the essential information on the properties, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb that stop bleeding.	• Action, Indication, Characteristics of herbs. • Precautions when using herbs. • Clinical conditions for use of herbs. • Essential information on the Latin name / common name, parts used, nature /flavour, meridian affinity, actions and indications, dosages and cautions and contraindications in the use of each herb. ➢ Xiaoji (*Cephalanoplos segetum*) (Field

	Thistle) ➢ Aiye (*Artemisia argyi*) (ArgyWormwood) ➢ Sanqi (*Panax pseudoginseng, var. notojinseng* ➢ Qiancao (*Rubia cordifolia*) (IndiaMadder)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, models, videos, role play.

References:

1. Science of Chinese Materia Medica by Tang Decai (editor), Publishing house of Shanghai University of Traditional Chinese Medicine (2003).
2. Chinese Materia Medica by Teng Jialin (editor), People's Health Publishing House, 2007.
3. Chinese Materia Medica by Zhangfu Chang , Dexian Jia , James Bare, Peoples Medical Publishing House, 2011
4. Colored Atlas of Chinese Materia Medica specified in the Pharmacopeia of the People's Republic of China,Pharmacopia commission of the Ministry of Public Health, PR china, Guandong Science & Technlogy press, 1995
5. An Illustrated Chinese Materia Medica, by Jing-Nuan Wu, Oxford University Press, 2002
6. A Materia Medica for Chinese Medicine, by Carl-Hermann Hempen and Toni Fischer, Elsevier Limited, 2009
7. Chinese Herbal Medicine: Materia Medica, by Dan Bensky , Steve Clavey, Erich Stoger, Eastland Press; 3 edition, 2015

Concept of Moxibustion and Medicinal Plants
(Practical)

Practical Hours: 80 Hours (2 hrs/weeks)

Unit 1: Concept of Moxibustion and its Application

Sub Unit 1.1: General identification and appropriate way of collection of moxa plant (10 hrs)

- Visit nearby field**.**
- Identify the moxa plant based on its morphology and characteristics.
- Identify the parts of the plant to be collected.
- Collect Moxa plant with precautions.

Sub Unit 1.2: Process moxa plant (Mugwort Plant) (10 hrs)

- Dry and store mugwort leaves.
- Process the collected moxa plant by:
    - Drying
    - Grinding.
    - Sieving.
    - Filtration and purification.
- Collect processed moxa wool.

Sub Unit 1.3: Storing processed moxa wool and use it to prepare moxa stick and cone (6 hrs)

- Pack and Store moxa wool safely according to the quality.
- Prepare moxa stick and cone with precautions.
- Pack and Store prepared moxa stick for further use.

Sub Unit 1.4: Methods and Precautions Taken during Moxibustion (14 hrs)

- Perform sequence of Moxibustion.
- Perform method of Reinforcing and Reducing.
- Point out the precautions while applying moxa.
- Perform management after Moxibustion.

Unit 2: Common Medicinal Herbs of TCM

Observation and Drawing: (16 hrs)

Perform identification and drawing of following medicinal plants:

Aiye	Baihe	Baijiangcan	Bohe	Buguzhi	Chenpi
Danggui	Dangshen	Dilong	Dingxiang	Dongcongxiacao	Fangxie
Fuling	Fuxiaomai	FuziGancao	Gualou	Guizhi	Honghua
Huangbai	Huanglian	Huangqi	Huangqin	Jinyinhua	Juhua
Longgu	Mahuang	Mangxiao	Mohanlian	Muxiang	Niuxi
Cheqianzi	Pugongyuan	Renshen	Rougui	Sangye	Sanqi
Shanxiang	Shichangpu	Shigao	Suanzaoren	Taoren	Wumei
Xiangfu	Xiebai	Xingren	Yinchencao	Yiyiren	
Yujinzhuling					
Zisu					

Field trip and Herbarium Preparation: (24 hrs)

2.1: Perform field trip of minimum of 4 days visiting herbarium and herbal gardens or farms

2.2: Collect specimens of locally available medicinal plants and prepare herbarium sheets of minimum of 20 medicinal plants included in theory course.

Basic Theory of Oriental Medicine

Total Hours: 160 (4 hrs/week)
Theory Hours: 160 (4 hrs/week)
Practical Hours: 0 (0 hrs/week)

Course Description:
This course is designed to provide students about the skills and knowledge of basic theory of oriental medicine.

Course Objectives:
After completion of this course, students will be able to:

1. Explain acupuncture and moxibustion;
2. Explain yin, yang and five element;
3. Explain Zang and fu organs;
4. Explain essence, Qi, blood and body fluid;
5. Explain pathogenic factors; and
6. Explain pathogenesis.

Course Contents:

Theory

Unit 1: Introduction of Oriental Medicine	**Hrs. theory: 5**
subUnit 1: Introduction of Oriental Medicine	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the oriental medicine. Explain the History of oriental medicine	Oriental Medicine • Introduction • History and development
Unit 2: History of acupuncture and Moxibustion	**Hrs. theory: 10**
Objectives:	**Content:**
Explain brief history of acupuncture and Moxibustion. Describe dissemination of acupuncture and Moxibustion in brief. Describe academic accomplishment of ancient acupuncture and Moxibustion.	• Origin of acupuncture and moxibustion. • Spread to different countries. • Academic accomplishment of ancient acupuncture and moxibustion. ➢ Wei, Jin, Sui and Tang dynasties. ➢ Song, Jin and Yuan dynasties ➢ Ming and Qing dynasties ➢ Modern times • Philosophical basis, understanding of human physiology • Understanding of disease and its prevention and treatment.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Unit 3 : Yin- Yang and five elements	**Hrs. theory: 20**
Sub Unit 3.1: Yin and Yang	**Hrs. theory: 10**
Objectives:	**Contents:**
Define Yin and Yang Describe theory of Yin and Yang in oriental Medicine and its application	• Concept of yin and yang. • Duality of yin and yang. • Theory of yin and yang. • Yin- Yang properties of things. • Application of yin and yang

	• Relationship between yin and yang. • Diagnosis of disease on the basis of yin and yang. • Treatment of disease applying yin yang theory
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 3.2: Five elements	**Hrs. theory: 10**
Objectives:	**Content:**
Classify the phenomena according to five elements. Describe the law of movement of five elements Apply the theory of the five elements	• Concept of five elements. • Properties of five elements. • Five elements and their interrelationship. • Relationship between five elements and zang fu organs. • Laws of movement of five elements. • Application of theory of five elements
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Unit 4: Zang & fu organs	**Hrs. theory: 30**
Sub Unit 4.1: Zang Organs	**Hrs. theory: 12**
Objectives:	**Content:**
Identify the zang organs Explain anatomical location and physiological functions of zang organs. Explain the pathological changes of zang organs Explain the relationship among the zang organs.	• **Identification of following organs** ➢ The heart ➢ Pericardium ➢ Lung ➢ Spleen ➢ Liver ➢ Kidney • **Pathological Changes of** ➢ The heart ➢ Pericardium ➢ Lung ➢ Spleen ➢ Liver ➢ Kidney • **Relationships between** ➢ Heart and lung ➢ Heart and spleen ➢ Heart and liver ➢ Heart and kidneys ➢ Lung and spleen ➢ Lung and liver ➢ Lung and kidneys ➢ Liver and spleen ➢ Liver and kidney ➢ Spleen and kidneys
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 4.2: Fu Organs	**Hrs. theory: 12**
Objectives:	**Content:**

Identify fu organs Explain anatomical location and physiological functions of Fu organs Explain the pathological changes of fu organs. Explain the relationship among Fu organs.	• **Fu organs: Identification, function and pathological Changes of** ➢ Gall Bladder ➢ Stomach ➢ Small Intestine ➢ Large Intestine ➢ Urinary Bladder ➢ Triple Warmer (sanjiao) • **Relationships among fu organs**
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 4.3: Extra ordinary fu organs	**Hrs. theory: 3**
Objectives:	**Content:**
Describe the location and functions of brain and uterus.	• Location and functions of Brain. • Location and functions of uterus.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 4.4: Relationship between zang organs and fu organs	**Hrs. theory: 3**
Objectives:	**Content:**
Explain the relationship between zang organs and fu organs	• **Relationships between** ➢ Heart and small intestine ➢ Lung and large intestine ➢ Spleen and stomach ➢ Liver and gall bladder ➢ Kidney and bladder
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Unit 5:Essence, Qi, Blood & Body Fluid	**Hrs. theory: 20**
Sub Unit 5.1: Concept of essence	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the concept, generation and functions of essence	• Concept of essence and its characteristic • Innate and acquired essence • Functions of essence
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction, group discussion
Sub Unit 5.2: Classification, Production and movement of Qi	**Hrs. theory: 4**
Objectives:	**Content:**
Classify Qi with their functions Explain the generation and movement of Qi	• Classification of Qi according to its source, functions & distribution. • Generation of Qi • Movement of Qi • Types of Qi ➢ Yuan Qi(primary Qi) ➢ Zong Qi (Pectoral Qi) ➢ Ying Qi (Nutrient Qi) ➢ Wei Qi (Defensive/protective Qi • Functions of Qi
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction, group discussion

Sub Unit 5.3: Blood and body fluid	**Hrs. theory: 6**
Objectives:	**Content:**
Explain the formation, circulation and functions of blood. Explain formation, distribution and discharge of body fluid.	• Formation and circulation of blood. • Functions of blood. • Formation and distribution of body fluid. • Discharge of body fluids
Sub Unit 5.4: The relationship between essence, Qi, blood, and body fluid.	**Hrs. theory: 6**
Objectives:	**Content:**
Explain the relationship between essence, Qi, blood, body fluid.	• Relationship between essence and Qi. • Relationship between essence and blood. • Relationship between Qi and blood. • Relation between Qi and body fluid • Relationship between blood and body fluid.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Unit 6: Pathogenic Factors	**Hrs. theory: 42**
Sub Unit 6.1: Six exogenous Factors	**Hrs. theory: 12**
Objectives:	**Content:**
Discuss and explain the wind as primary pathogenic factor and yang pathogenic factor. Explain the characteristics of wind pathogen Explain cold as yin pathogenic factor and how it consumes yang. Explain summer heat as yang pathogenic factor and its characteristics. Explain dampness, its characteristics and how it acts as yin pathogenic factor. Explain the characteristics and pathogenic effects of dryness and fire.	• **Wind** ➢ Concept of wind pathogen ➢ Wind as a primary exogenous pathogenic factor that causes disease ➢ Wind is yang pathogenic factor & characterized by upward & downward dispersion. ➢ Wind is characterized by rapid change when pathogenic wind produces some disorder. • **Cold** ➢ Cold is Yin pathogenic factor & it consumes Yang Qi. • **Summer Heat** ➢ Characteristics and its manifestation. ➢ Yang pathogenic factor, • **Damp** ➢ Concept ➢ Characteristics ➢ Clinical manifestation • **Dryness** ➢ Concept ➢ Characteristics ➢ Clinical manifestation • **Fire (mild heat & heat)** ➢ Concept ➢ Characteristics ➢ Clinical manifestation
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction

Sub Unit 6.2: Epidemic pathogenic factor (pestilential Qi)	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss and explain the concept and characteristics of pestilential Qi.	• **Pestilential Qi** ➢ Concept ➢ Pathogenic characteristics ➢ Factors affecting the formation and epidemic of pestilential Qi.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instructions
Sub Unit 6.3: Inter-relationship between seven emotions and essential Qi of viscera	**Hrs. theory: 5**
Objectives:	**Content:**
Explain seven emotions. Explain how the viscera are affected by emotional factors. Explain how the normal function of the viscera is disturbed by emotional pathogenic factors. Explain how the emotional factors influence zang fu organs	• Seven emotions • Joy, anger, worry, anxiety, sadness, fear and fright. • Influence on viscera and body mechanisms by emotional factors • Pathological relationship between seven emotions and zang fu organs. • Pathogenic characteristics of internal injury due to seven emotions.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 6.4: Pathogenic characteristics of seven emotions	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the pathogenic characteristics of seven emotions and how they affect our body	• Influence of seven emotions to human body • Effects of pathological changes to our body due to seven emotions
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 6.5: Diet, work and rest	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the impacts of healthy and unhealthy diet habits Explain the impact of physical overstrain, mental overstrain and sexual overstrain. Explain how excessive rest influences the body. Discuss and explain the predilection of different type of food.	• Diet • Healthy diet habit • **Unhealthy diet habit** ➢ Improper diet ➢ Irregular diet ➢ Unhygenic diet ➢ Over eating ➢ Under eating • **Work** ➢ Physical overstrain ➢ Mental overstrain ➢ Sexual overstrain • **Rest** ➢ Influence of excess rest to the body. • **Diet predilection** ➢ Predilection of food for five tastes,

	cold or heat, for alcohol, for one type of food.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 6.6: Retention of phlegm and fluid, blood stasis	**Hrs. theory: 6**
Objectives:	**Content:**
Explain the concept and characteristic of phlegm, fluid retention, blood stagnant blood	• Definition of phlegm and blood stasis • Phlegm fluid retention • The role of phlegm, fluid & blood stasis resulting from disturbances of water metabolism & their pathological changes to the body. • Formation of stagnant blood • Pathogenic characteristics of stagnant blood.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 6.7 : Pathogenic mechanism	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the onset, mechanism, development and changes of disease Explain major factors influencing the onset of diseases	• Onset of disease, its mechanism. • Development process of disease after onset. • Changes after the onset of disease. • Struggle between healthy Qi and pathogenic Qi • Onset of disease by external environment like climatic factors, regional factors, living environment, social environment. • Onset of disease and internal environment.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 6.8: **Deficiency of vital Qi is the internal Basic cause of occurrence of disease.**	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the importance of vital Qi. Explain how pathogenic factor and pathogenic Qi play role in occurring disease.	• Importance of vital Qi to our body to live healthy. • Reasons for deficiency of vital Qi • Role of pathogenic factor and pathogenic Qi in occurring disease.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Unit 7: Pathogenesis	**Hrs. theory: 33**
Sub Unit 7.1: Basis pathogenesis	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the basic pathogenesis, anti pathogenic Qi and pathogenic Qi	• **Concept of** ➢ Basic pathogenesis. ➢ Anti pathogenic Qi. ➢ Pathogenic Qi
Evaluation methods: written exam	Teaching / Learning Activities / Resources:

	classroom instruction
Sub Unit 7.2: The invasion of pathogenic factor is external cause of the occurrence of disease.	**Hrs. theory: 4**
Objectives:	**Content:**
Explain six pathogenic factors as external causes of disease	• Role of six pathogenic factors causing external diseases
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 7.3: Conflict between anti pathogenic Qi and pathogenic Qi	**Hrs. theory: 4**
Objectives:	**Content:**
Explain preponderance and decline of pathogenic or healthy Qi. Explain how invasion of pathogenic Qi causes excess or deficiency of syndrome	• **Conflict between anti pathogenic Qi and pathogenic Qi.** ➢ Invasion of pathogenic Qi ➢ Excess of syndrome ➢ Deficiency of syndrome.
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 7.4: Disharmony of yin & yang	**Hrs. theory: 4**
Objectives:	**Content:**
Explain how cold syndrome and heat syndrome occurs by disharmony of yin-Yang.	• Disharmony of yin & yang. • Heat syndrome. • Cold syndrome
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 7.5: Abnormal ascending & descending of Qi	**Hrs. theory: 4**
Objectives:	**Content:**
Explain abnormal ascending & descending of Qi and disorders of Qi	• Abnormal ascending & descending of Qi. • Disorders of Qi
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 7.6: Disorders of blood	**Hrs. theory: 4**
Objectives:	**Content:**
Explain disorders of blood	• Blood deficiency • Blood stasis • Blood cold • Blood heat • Blood hemorrhage
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction
Sub Unit 7.7: Disharmony between Qi and blood	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the conditions due to disharmony between Qi and blood	• Qi stagnation and blood stasis • Qi deficiency and blood stasis • The failure of Qi to control blood • Deficiency of both Qi and blood
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction

Sub Unit 7.8: Conversion of the nature of disease	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the pathological course of mutual conversion of the disease nature	• Conversion of heat to cold and cold to heat • Conversion between excess and deficiency
Evaluation methods: written exam	Teaching / Learning Activities / Resources: classroom instruction

References:

1. Basic theory of Traditional Chinese medicine, chief editor Liu Zhaochun, National planned university textbooks for International Traditional Chinese Medicine, Higher education press.
2. Introduction to Acupuncture and moxibustion, Ren Zhong, Shanghai literature institute of traditional Chinese medicine, translated by Xuemin Wang, published by World Century Publishing Corporation.
3. Acupuncture and moxibustion, Shen Xue Yong and Wang Hua, Translated by Zhao Baixiao.
4. Acupuncture and moxibustion, Long , Zhixian, English-chinese collegiate Textbooks in Traditional Chinese medicine of higher learning, Edited by Beijing University of Traditional Chinese medicine, Published by Academic press (Xue Yuan).
5. Chinese Acupuncture and Moxibustion, Chief editor Cheng Xinnong, Foreign language press.

Meridians and Acupoints

Total Hours: 240 hrs (6 hrs/week)
Theory Hours: 160 hrs (4 hrs/week)
Practical Hours: 80 hrs (2 hrs/week)

Course Description:
This course is designed to provide students about the knowledge and skills of meridian and acupoints, in detail about the location and properties of different meridians and its acupoints.

Course Objectives:
After completion of this course, students will be able to:

1. Describe nomenclatures of meridians and collateral;
2. Explain basic concept of meridians and collateral;
3. Identify different meridians and their locations;
4. Explain properties of different meridians; and
5. List function of meridians and collateral.

Course Contents:

Unit 1: The Meridians & Collaterals	**Hrs. theory: 8**
Sub-unit 1.1: Nomenclatures of the meridians collaterals & types	**Hrs. theory: 1**
Objectives:	**Content:**
Discuss nomenclatures of main meridians & extra meridians and their relation to Yin & Yang, zang organs & fu organs, hand & foot.	• Nomenclatures of Twelve regular meridians and eight extra meridians. • Relations of meridians to: ➢ Yin & Yang ➢ Zang organs ➢ Fu organs ➢ Hand & foot.
Sub-unit 1.2: Basic concept of the meridians & collaterals	**Hrs. theory: 2**
Objectives:	**Contents:**
Discuss circulation of Qi & blood: interiorly & exteriorly distribution across the body.	• Circulation and distribution of Qi & blood: interiorly and exteriorly across the body.
Sub Unit 1.3: Functions of meridians & collaterals	**Hrs. theory: 2**
Objectives:	**Content:**
Explain transporting Qi & blood regulated by Yin & Yang. Discuss resisting pathogens & presenting signs and symptoms.	• Function of Qi & blood to regulate Yin & Yang. • Resisting pathogens & presenting signs and symptoms.
Sub Unit 1.4: Distribution of the fourteen meridians.	**Hrs. theory 2**
Objectives:	**Content:**
Discuss distribution of meridian in the limb, body & trunk, head, neck, and face.	• **Distribution of meridian in the basis of location in** ➢ Limb ➢ Body & trunk ➢ Head, neck, and face.

Sub Unit 1.5: Cyclical flow of Qi in twelve regular meridians	**Hrs. theory: 1**
Objectives:	**Content:**
Explain linkage of meridians pertaining communicating Exterior and interior relation	• Linkage of exterior and interior meridians via cyclic flow of Qi
Evaluation methods: written exam, viva, performance observation in clinical setting	**Teaching / Learning Activities / Resources:** classroom instruction, practice in a simulated setting, supervised clinical practice
Unit 2: Location of Acupoints	**Hrs. theory: 5**
Sub Unit 2.1: Classification & nomenclature of Acupoints	**Hrs. theory: 2**
Objectives:	**Content:**
Define Acupoints and explain their classification & nomenclature.	• **Acupoints;** ➢ Definition ➢ Classification ➢ Nomenclature
Sub Unit 2.2: Proportional measurement	**Hrs. theory: 1**
Objectives:	**Content:**
Discuss proportional measurement of human body. (heads, chest, abdomen, back, lateral side of chest, upper extremities, lower extremities)	• **Proportional measurement of human body including** ➢ Head and Face ➢ Chest and abdomen ➢ Lateral side of chest ➢ Back ➢ Upper extremities ➢ Lower extremities
Sub Unit 2.3: Anatomical landmarks	**Hrs. theory: 1**
Objectives:	**Content:**
Discuss fixed anatomical landmarks Discuss moving landmarks	• **Surface anatomy of** ➢ Fixed ➢ Moving landmarks
Sub Unit 2.4: Finger measurement	**Hrs. theory: 1**
Objectives:	**Content:**
Discuss middle finger measurement, thumb measurement, and four finger measurements & their utility.	• **Different Measurements and their uses:** ➢ Thumb ➢ Four fingers ➢ Middle finger • **Conversion in metrics and imperial systems of measurement.**
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 3: Twelve regular meridians	**Hrs. theory: 4**
Sub Unit 3.1: Define twelve regular meridians & Elaborate their types	**Hrs. theory: 4**
Objectives:	**Content:**
Discuss about introduction of 12 regular meridians & pathway of meridians.	• Basic concepts of 12 regular Meridian & their pathway.
Evaluation methods: written exam, spotting, viva,	Teaching / Learning Activities / Resources:

performance observation in clinical setting	classroom instruction, supervised clinical practice
Unit 4: Acupoints of lung meridian of hand TaiYin	**Hrs. theory: 8**
Sub Unit 4.1: Identification pathway of lung meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of lung meridians, origin, distribution & ending.	• Pathway of Lung Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Lung Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 5: Acupoints of large intestine meridian of hand YangMing	**Hrs. theory: 8**
Sub Unit 5.1: Identification pathway of Large Intestine meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of large intestine meridians, origin distribution & ending.	• Pathway of Large Intestine according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Large Intestine Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 6: Acupoints of Stomach meridian of foot YangMing	**Hrs. theory: 8**
Sub Unit 6.1: Identification pathway of stomach meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of stomach meridians, origin, distribution & ending.	• Pathway of Stomach meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Stomach Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical

	practice
Unit 7: Acupoints of Spleen meridian of foot TaiYin	**Hrs. theory: 8**
Sub Unit 7.1: Identification pathway of spleen meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of spleen meridians, origin, distribution & ending.	• Pathway of Spleen Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Spleen Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 8: Acupoints of Heart meridian of hand ShaoYin	**Hrs. theory: 7**
Sub Unit 8.1: Identification pathway of heart meridian	**Hrs. theory: 7**
Objectives:	**Content:**
Discuss pathway of heart meridians, origin distribution & ending.	• Pathway of Heart Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Heart Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 9: Acupoints of small intestine meridian of hand TaiYang	**Hrs. theory: 8**
Sub Unit 9.1: Identification pathway of small intestine meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of small intestine meridians, origin distribution & ending.	• Pathway of Small Intestine Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Small Intestine Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical

	practice
Unit 10: Acupoints of Urinary bladder meridian of foot TaiYang	**Hrs. theory: 10**
Sub Unit 10.1: Identification pathway of urinary bladder meridian	**Hrs. theory: 10**
Objectives:	**Content:**
Discuss pathway of urinary bladder meridians, origin distribution & ending.	• Pathway of Urinary Bladder Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Urinary Bladder Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 11: Acupoints of Kidney meridian of foot ShaoYin	**Hrs. theory: 8**
Sub Unit 11.1: Identification pathway of kidney meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of kidney meridians, origin distribution & ending.	• Pathway of Kidney Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Kidney Meridian and their properties
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 12: Acupoints of Pericardium meridian of hand TaiYang	**Hrs. theory: 8**
Sub Unit 12.1: Identification pathway of pericardium meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of pericardium meridians, origin distribution & ending.	• Pathway of Pericardium Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Pericardium Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice

Unit 13: Acupoints of triple energizer (San Jiao) meridian of hand ShaoYang	**Hrs. theory: 8**
Sub Unit 13.1: Identification pathway of San Jiao meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of San Jiao meridians, origin distribution & ending.	• Pathway of San Jiao Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of San Jiao Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 14: Acupoints of Gall bladder meridian of foot ShaoYang	**Hrs. theory: 8**
Sub Unit 14.1: Identification pathway of gall bladder meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of Gall bladder meridians, origin distribution & ending.	• Pathway of Gall bladder Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Gall bladder Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 15: Acupoints of Liver meridian of foot JueYin	**Hrs. theory: 8**
Sub Unit 15.1: Identification pathway of liver meridian	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of Liver meridians, origin distribution & ending.	• Pathway of Liver Meridian according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Liver Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical

	practice
Unit 16: The Eight extra meridians	**Hrs. theory: 8**
Sub Unit 16.1: General identification of extra meridians	**Hrs. theory: 8**
Objectives:	**Content:**
Define extra meridians List and explain the types of extra meridians	• **Extra meridians** ➢ Definition ➢ Types
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 17: The Du meridians	**Hrs. theory: 8**
Sub Unit 17.1: Identification of Du meridians	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of Du meridians (Governor Vessels), origin, distribution, ending and acupoints	• Pathway of Du Meridian (Governor Vessels) according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Du Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 18: The Ren meridians	**Hrs. theory: 8**
Sub Unit 18.1: Identification of Ren meridians	**Hrs. theory: 8**
Objectives:	**Content:**
Discuss pathway of Ren meridians(Conception Vessels), origin, distribution & ending.	• Pathway of Ren Meridian (Conception Vessels) according to ➢ Origin ➢ Distribution ➢ Ending • Acupoints of Ren Meridian along with their location, indications and depth and direction of insertion (Important Major Points) • Contraindication of acupoints (If any)
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 19: Identification pathway of twelve divergent meridians & fifteen collaterals	**Hrs. theory 8**
Sub Unit 19.1: The Three Yin collaterals of hand	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss pathway of three Yin collaterals of hand confluence distribution, mutual connection & ending.	• **Pathway of three Yin collaterals of hand according to** ➢ Origin ➢ Distribution

	➢ Mutual Connection ➢ Ending ➢ Properties
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub Unit 19.2: The Three Yang collaterals of hand	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss pathway of three Yang collaterals of hand confluence distribution, mutual connection & ending	• **Pathway of three Yang collaterals of hand according to** ➢ Origin ➢ Distribution ➢ Mutual Connection ➢ Ending ➢ Properties
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub Unit 19.3: The three Yin collaterals of Foot	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss pathway of three Yin collaterals of foot confluence distribution, mutual connection & ending.	• **Pathway of three Yin collaterals of foot according to** ➢ Origin ➢ Distribution ➢ Mutual Connection ➢ Ending ➢ Properties
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub Unit 19.4: The three Yang collaterals of Foot	**Hrs. theory: 2**
Objectives:	**Content:**
Identify pathway of three Yang collaterals of foot confluence distribution, mutual connection & ending.	• **Pathway of three Yang collaterals of foot according to** ➢ Origin ➢ Distribution ➢ Mutual Connection ➢ Ending ➢ Properties
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 20: Location of Specific points	**Hrs. theory: 10**
Sub Unit 20.1: Specific points on the limbs	**Hrs. theory: 5**
Objectives:	**Content:**
Discuss five shu points & their utility Discuss Yuan-primary points & their utility Discuss Luo-connecting points & their utility Discuss XI-cleft points & their utility Discuss eight confluent points & their utility	• **Introduction in brief along with their uses about:** ➢ Five shu points ➢ Yuan-primary points ➢ Luo-connecting points

Discuss eight influential points & their utility	➢ XI-cleft points ➢ Eight confluent points ➢ Eight Influential points
Sub Unit 20.2: Specific points on the Head& trunk	**Hrs. theory: 5**
Objectives:	**Content:**
Discuss back shu point & its importance Discuss front mu points & its importance Discuss crossing points & its importance	• **Introduction in brief along with their uses about** ➢ Back-shu points ➢ Front-mu points ➢ Crossing points
Unit 21: Precautions and Contraindications	**Hrs. theory: 4**
Objectives:	**Contents:**
Discuss about precautions and contraindication of some acupoints in different conditions	• Forbidden or cautious use during pregnancy • Forbidden or cautious use for Moxa • Caution for deep needling • Cautions for avoiding major arteries and nerves • Cautions for avoiding internal organ injury

References:

1. Maridions and acupoints Publiser China traditional Chineses Medicine, jan 2012
2. International Acupunture Textbooks Publiser Jessica Kingsley, Aug 2010
3. Meridions and Acupoints Bingzhu hongcai wang, 2011

Meridians and Acupoints (Practical)

Practical Hours: 80 (2 hrs/week)

Unit 1: The Meridian & Collateral's & collators 2 hrs

Sub Unit 1: Distribution of the fourteen meridians.

- Demonstrate distribution of meridian in the limb, in the body & trunk and in the head, neck, and face.

Sub Unit 2: Cyclical flow of Qi in twelve regular Meridian

- Demonstrate linkage of exterior and interior Meridian

Unit 2: Twelve regular meridians 2 hrs

- Demonstrate 12 regular Meridian & pathway of meridians.

Unit 3: Points of lung meridian of hand-tayin 2 hrs

- Demonstrate pathway of lung meridian origin distribution & ending.

Unit 4: Point of large intestine meridian of hand Yang Ming 2 hrs

- Demonstrate pathway of L.I. meridian origin distribution & ending.

Unit 5: Point of Stomach meridian of foot yang ming 2 hrs

- Demonstrate pathway of Stomach meridians, origin distribution & ending.

Unit 6: Point of Spleen meridian of foot tayin 2 hrs

- Demonstrate pathway of Spleen meridians, origin distribution & ending.

Unit 7: Point of Heart meridian of hand shaoyin 2 hrs

- Demontrate pathway of Heart meridians, origin distribution & ending.

Unit 8: Point of small intestine meridian of hand tai Yang 2 hrs

- Demonstrate pathway of small intestine meridian, origin distribution & ending.

Unit 9: Point of Urinary bladder meridian of hand tai Yang 3 hrs

- Demonstrate pathway of urinary bladder meridians, origin distribution & ending.

Unit 10: Point of Kidney meridian of foot shao Yin 2 hrs

- Demonstrate pathway of Kidney meridians, origin distribution & ending.

Unit 11: Point of Pericardium meridian of hand Jueyin 2 hrs

- Demonstrate pathway of pericardium meridians, origin distribution & ending.

Unit 12: Point of triple warmer (Sanjiao) meridian of hand shao yang 2 hrs

- Demontrate pathway of triple warmer (Sanjiao) meridians, origin distribution & ending.

Unit 13: Point of Gall bladder meridian of foot shao Yang 2 hrs

- Demonstrate pathway of Gall bladder meridian, origin distribution & ending.

Unit 14: Point of Liver meridian of foot jue yin 2 hrs

- Demontrate pathway of Leaver meridians, origin distribution & ending.

Unit 15: The DU Meridian 2 hrs

- Demonstrate pathway of DU meridians, origin, distribution & ending.

Unit 16: The Ren meridian 2 hrs

- Demonstrate pathway of Ren meridians, origin, distribution & ending.

Unit 17: The extra ordinary meridian 5 hrs

Sub Unit 1: Identification of Chong meridians

- Demonstrate pathway of Chong meridians, origin, distribution & ending.

Sub Unit 2: Identification of Dai Meridian

- Demonstrate pathway of Dai meridians, origin, distribution & ending.

Sub Unit 3: Identification of Yang Qiao meridians

- Demonstrate pathway of Yang Qiao meridians, origin, distribution & ending.

Sub Unit 4: Identification of Yin Qiao Meridian

- Demonstrate pathway of Yin Qiao meridians, origin, distribution & ending.

Sub Unit 5: Identification of Yang Wei Meridian

- Demonstrate pathway of Yang Wei meridians, origin, distribution & ending.

Sub Unit 6: Identification of Yin Wei Meridian

- Demonstrate pathway of Yin Wei meridians, origin, distribution & ending.

Unit 18: The Twelve divergent meridian & fifteen collaterals 3 hrs

- Demonstrate pathway of twelve divergent Meridian & fifteen collaterals

Unit 19: The first confluence 2 hrs

- Demonstrate pathway of First confluence distribution, mutual connection & ending.

Unit 20: The Second confluence 2 hrs

- Demonstrate pathway of Second confluence distribution, mutual connection & ending.

Unit 21: The Third confluence 2 hrs

- Demonstrate pathway of Third confluence distribution, mutual connection & ending.

Unit 22: The Fourth confluence 2 hrs

- Demonstrate pathway of fourth confluence distribution, mutual connection & ending.

Unit 23: The Fifth confluence 2 hrs

- Demonstrate pathway of Fifth confluence distribution, mutual connection & ending.

Unit 24: The Sixth confluence 2 hrs

- Demonstrate pathway of Sixth confluence distribution, mutual connection & ending.

Unit 25: The three Yin collaterals of hand 2 hrs

- Demonstrate pathway of three Yin collaterals of hand distribution, mutual connection & ending.

Unit 26: The three Yang collaterals of hand 2 hrs

- Demonstrate pathway of three Yang collaterals of hand distribution, mutual connection & ending.

Unit 27: The three Yin collaterals of Foot 2 hrs

Sub Unit 1: Identification pathway of twelve divergent Meridian & fifteen collaterals

- Demonstrate pathway of three Yin collaterals of foot distribution, mutual connection & ending.

Sub Unit 2: identification pathway of twelve divergent Meridian & fifteen collaterals

- Demonstrate pathway of three Yang collaterals of confluence distribution, mutual connection & ending.

Unit 28: The collaterals of Ren & DU Meridian & themajor collaterals of spleen 2 hrs

- Demonstrate pathway of collaterals of Ren & DU Meridian &major collaterals of spleen distribution, connection & ending.

Unit 29: The twelve muscle regions & twelve cutaneous regions 2 hrs

- Demonstrate pathway of twelve muscle region & cutaneous region, origin, distribution & ending.

Unit: 30 Location of Acupoints 4 hrs

Sub Unit 1: Proportional measurement

- Measure the proportional measurement of human body (heads, chest, abdomen, back, lateral side of chest, upper extremities and lower extremities.)

Sub Unit 2: Finger measurement

- Measure middle finger measurement & its conversion in metric system.
- Measure thumb measurement & its conversion in metric system.
- Measure four finger measurement& its conversion in metric system.

Unit 31: Location of Specific points 4 hrs

Sub Unit 1: Specific points on the limbs

- Demonstrate five shu points and its utility
- Demonstrate Yuan-primary points & its utility.
- Demonstrate Luo-connecting points & its utility.
- Demonstrate XI-cleft points and its utility
- Demonstrate eight confluent points & its utility.

Sub Unit 2: Specific points on the Head& trunk

- Demonstrate back shu point & its importance.
- Demonstrate front mu points & its importance
- Demonstrate crossing points & its importance.

Unit 32: Therapeutic properties of Acu points 3 hrs

Sub Unit 1: Local & adjacent therapeutic properties of points

- Demonstrate point on head, face, neck & its indications.
- Demonstrate points of chest & upper dorsal region and indications.
- Demonstrate points on upper abdomen and lower dorsal region and its indication
- Demonstrate point on lower abdomen and lumbosacral region and its indication.

Unit 33: Acu points of twelve regular Meridian 3 hrs

- Demonstrate location of the points from twelve regular Meridian methods of puncture and regional anatomy.

Unit 34: Acu points of DU & Ren Meridian & extra ordinary points 3 hrs

- Demonstrate number of Acu points of DU Ren Meridian and extraordinary point method of puncture and regional anatomy.

Diagnosis in Acupuncture and Moxibustion

Total Hours: 160 hrs (4 hrs/week)
Theory Hours: 80 hrs (2 hrs/week)
Practical Hours: 80 hrs (2 hrs/week)

Course Description:
This course is designed to provide students the knowledge and skills about diagnosis of patient by general inquiry, inspection, palpation, auscultation and olfaction. It also deals with identification and differentiation of major syndromes on the basis of pathological evils and meridians

Course Objective:
After completion of this course, students will be able to:

1. Diagnose the patient by general inquiry, inspection, palpation, auscultation and olfaction; and
2. Diagnose the patient on the basis of syndromes according to pathological evils and meridians.

Course Contents:

Theory

Course: Method of Diagnosis in Acupuncture and Moxibustion	**Hrs. theory 80 Hrs. lab/practical 80**
Unit 1: Basic principles of diagnosis	**Hrs. theory: 2**
Objectives	**Contents**
Explain the diagnosis of Chinese medicine Describe four methods of diagnosis	• Concept of diagnosis in Chinese medicine • Four methods of diagnosis ➢ Inspection ➢ Listening and smelling ➢ Inquiry ➢ Palpation
Unit 2: General inspection by observation	**Hrs. theory: 7**
Sub Unit 2.1: Observation of the appearance	**Hrs. theory: 1.5**
Objectives:	**Content:**
Describe importance of observation of the appearance, movement, posture.	• Diagnosis of the disease according to • Appearance • Movement and Posture
Sub Unit 2.2: Observation of the vitality/complexion/color	**Hrs. theory: 1.5**
Objectives:	**Content:**
Describe about different complexion, like normal and diseased complexion and its significance Explain five discolorations. eg. Blue, red, yellow, white and black Explain Lustrous & moist complexion	• **Diagnosis of the disease according to different complexion namely** ➢ Normal Complexion with permanent and temporary color ➢ Diseased complexion favorable or unfavorable to five colors • **Diagnosis of the disease according to five different diseased colors namely** ➢ Blue ➢ Red ➢ Yellow

	➢ White ➢ Black
Sub Unit 2.3: Observation of the mind	**Hrs. theory: 1.5**
Explain five diseased mind type	• **Different types of diseased mind and its significance namely** ➢ Getting of Mind ➢ Insufficient Mind ➢ Loss of Mind ➢ Pseudo Mind ➢ Mental Disorder
Sub Unit 2.4: Observation of the Tongue	**Hrs. theory: 2.5**
Objectives:	**Content:**
Discuss physiology of tongue Diagnosis according to inspection and different presentations of tongue Precaution during tongue diagnosis	• Physiology of the tongue according to TCM • Diagnosis of the disease on the basis of presentation by the tongue of any diseased person • Inspection of tongue proper according to ➢ Moisture of tongue ➢ Colors of tongue ➢ Shape of tongue ➢ Tongue movement • Inspection of tongue coating according to ➢ Color ➢ Coating Proper • Combination of tongue proper and coating • Precautions needed to be taken during tongue diagnosis.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 3: Auscultation and olfaction	**Hrs. theory: 4**
Sub Unit 3.1: Listening	**Hrs. theory: 2**
Objectives:	**Content:**
Explain importance of listening to speech. Explain importance of listening to respiration. Explain importance of listening to the cough.	• **Importance of listening to** ➢ Speech ➢ Respiration ➢ Cough • **Diagnosis method on the basis of listening to speech, respiration and cough.**
Sub Unit 3.2: Smelling	**Hrs. theory: 2**
Objectives:	**Content:**
Describe importance of smelling	• Explanation and diagnosis of the disease according to the smell (Secretion and excretion)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 4: General inquiry	**Hrs. theory: 9**
Sub Unit 4.1: Chills and fever	**Hrs. theory: 1**
Objectives:	**Content:**

Explain presentations of exogenous exterior syndrome, exterior heat syndrome, and interior cold syndrome during chill & fever.	• Different types of presentations during chills and fever • Exogenous exterior syndrome • Exterior heat syndrome • Interior cold syndrome
Sub Unit 4.2: Perspiration	**Hrs. theory: 1**
Objectives:	**Content:**
Explain indication of absence and presence of sweat, sweat during sleep and spontaneous sweating, profuse sweating.	• **Indications and Diagnosis of the disease according to** ➢ Absence or present of sweat ➢ Sweat during sleep ➢ Spontaneous sweating ➢ Profuse sweating.
Sub Unit 4.3: Appetite, thirst and taste	**Hrs. theory: 1**
Objectives:	**Content:**
Describe indications of: poor appetite, loss of, excessive appetite, lack of thirst, presence of thirst, bitter and sweet taste, Greasy taste, Sour taste and lack of taste. Appetite	• **Method of diagnosis of the disease according to** ➢ Poor appetite ➢ Loss of appetite ➢ Excessive appetite ➢ Lack of thirst ➢ Presence of thirst ➢ Bitter taste ➢ Sweetish taste ➢ Greasy taste ➢ Sour taste • Lack of taste.
Sub Unit 4.4: Defecation and urination	**Hrs. theory: 1**
Objectives:	**Content:**
Discuss different types of stool and urine and their indications.	• **Methods of diagnosis of the disease and their indications according to different types of Stool and urine based on** ➢ Frequency ➢ Consistency ➢ Sensation
Sub Unit 4.5: Pain	**Hrs. theory: 3**
Objectives:	**Content:**
Discuss about location and nature of pain with their indications.	• **Symptoms, indication and diagnosis based on location of** ➢ Headache ➢ Chest Pain ➢ Hypochondriac pain ➢ Abdominal pain ➢ Gastric Pain ➢ Lumbago ➢ Pain in the extremities ➢ Distending Pain ➢ Symptoms, indication and diagnosis based on nature of ➢ Stabbing pain ➢ Cold pain ➢ Burning pain

Sub Unit 4.6: Sleep	**Hrs. theory: 1**
Objectives:	**Content:**
Explain different types of sleep with their indications.	• **Diagnosis of the diseases according to different types and nature of sleep observed** ➢ Insomnia ➢ Lethargy
Sub Unit 4.7: Menses and leucorrhoea	**Hrs. theory: 1**
Objectives:	**Content:**
Explain about menstrual cycle, period, amount, color, quality of flow & accompanying symptoms and their indications. Discuss about dysmenorrhea and different types of it. Discuss about leucorrhoea, color amount quality smell, and indications.	• **Introduction of the menstruation cycle.** • **Normal and abnormal period based on** ➢ Interval ➢ Amount of blood ➢ Color or consistency of the blood. • **Abnormal period based on interval abnormalities of menses** ➢ Preceded Menses ➢ Delayed Menses • **Abnormal period based on amount abnormalities of menses** ➢ Profuse menses ➢ Scanty Menses • **Abnormal period based on color or consistency abnormalities of menses** ➢ Light red ➢ Deep red ➢ Purplish Dim • **Dysmenorrhea due to** ➢ Qi or blood stagnation ➢ Qi or blood deficiency ➢ Cold retention • **Leucorrhoea and its causes depending on different colors observed** ➢ White leucorrhoea ➢ Yellow leucorrhoea with greasy and fetid odour ➢ Reddish leucorrhoea with fetid odour
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 5: Feeling of pulse & palpation at different parts of body	**Hrs. theory: 6**
Sub Unit 5.1: Feeling of pulse & palpation of different parts of body	**Hrs. theory: 6**
Objectives:	**Content:**
Explain about the features of normal and abnormal pulse Explain methods of feeling of pulse at different locations. Explain about mechanism and methods of pulse	• **Features of normal pulse and abnormal pulse** ➢ Rate ➢ Force ➢ Shape ➢ Rhythm • **Explanation about pulse and feeling of**

taking at Cun-Kou Discuss abnormal pulse reading with their indications. Explain palpation of epigastrium and abdomen with their abnormal signs & symptoms and indications.	**pulsation at different locations** ➢ General pulse taking ➢ Pulse taking on two regions ➢ Pulse taking on three regions ➢ Pulse taking on Cun-Kou • **Pulse taking on Cun-Kou** ➢ Mechanism ➢ Method • **Abnormal pulse reading (diseased pulse) and their indications.** ➢ Floating ➢ Deep ➢ Slow ➢ Rapid ➢ Deficient ➢ Excess ➢ Wiry ➢ Moderate ➢ Knotted ➢ Intermittent • Explanation of palpation on epigastrium and abdomen with their abnormal signs & symptoms and indications.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 6: Differentiation of syndromes	**Hrs. theory: 5**
Sub Unit 6.1: Eight principles of Exterior & interior	**Hrs. theory: 5**
Objectives:	**Content:**
Discuss exterior and interior syndrome with manifestation. Differentiate cold and heat, deficiency & excess in exterior syndrome. Explain relationship between exterior and interior syndrome. Differentiate exterior and interior syndrome.	• Diagnosis of the disease in exterior and interior syndromes according to ➢ Cold & heat ➢ Deficiency & excess • The relationship and differences between exterior and interior syndrome.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 7: Syndromes according to eight principles	**Hrs. theory: 5**
Sub Unit 7.1: Deficiency and excess	**Hrs. theory: 2**
Objectives:	**Content:**
Explain about differentiation of syndromes according to eight principles Explain about syndrome differentiation according to cold, heat, deficiency and excess in exterior syndrome. Describe the relationship and differentiate	• **Explanation of eight principles referring to 8 basic categories of syndromes namely** ➢ Exterior and Interior ➢ Deficiency and Excess ➢ Cold and Heat ➢ Yin and Yang

between syndromes of cold & heat and deficiency type & syndromes of excess type.	• **Differentiation in exterior syndromes with common and distinguishing signs and symptoms of** ➢ Exterior cold ➢ Exterior Heat ➢ Exterior deficiency ➢ Exterior excess • **Explain about the clinical manifestation of syndromes according to** ➢ Cold & heat ➢ Deficiency & excess type
Sub Unit7. 2: Yin and yang	**Hrs. theory: 3**
Objectives:	**Content:**
Explain yin and yang syndromes. Explain the features of deficiency of yin and deficiency of yang, along with collapse of yin and yang.	• Syndromes according to Yin and Yang type along with their clinical manifestations. • Features and differentiate between ➢ Deficiency of Yin and deficiency of Yang ➢ Collapse of Yin and Collapse of yang
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 8: Syndromes according to the theory of Qi and blood.	**Hrs. theory: 5**
Sub Unit 8.1: Syndromes of Qi	**Hrs. theory: 3**
Objectives:	**Content:**
Describe yin & yang syndromes. Describe syndrome of sinking of Qi. Describe syndrome of stagnation of Qi. Describe syndrome of perversion of Qi.	• **Syndromes of** ➢ Yin and Yang ➢ Sinking of Qi. ➢ Stagnation of Qi ➢ Perversion of Qi
Sub Unit 8.2: Syndromes of blood	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss syndrome of deficiency of blood. Discuss syndrome of stagnation of blood. Discuss syndrome of heat in the blood	• **Different types of syndromes of blood** • **Diagnose the disease according to** syndromes related to either ➢ Deficiency of blood ➢ Stagnation of blood ➢ Heat in the blood.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 9: Syndromes according to the theory of Zang Fu organs	**Hrs. theory: 25**
Sub Unit 9.1: Syndromes of heart & small intestine	**Hrs. theory: 5**
Objectives:	**Content:**
Describe clinical manifestations, etiology &	• Introduction, clinical manifestations,

pathology of different types of syndromes of heart and small intestine	etiology & pathology of the different types of syndromes of heart and small intestine. • Methods of diagnosis of the diseases on the basis of: ➢ Deficiency of the heart Qi and deficiency of the heart Yang. ➢ Deficiency of the heart, blood and deficiency of the heart Yin ➢ Stagnation of the heart and blood and deficiency of the heart Yin ➢ Hyperactivity of the heart fire. ➢ Derangement of the mind ➢ Pain due to disturbance of the Qi of the small intestine
Sub Unit 9.2: Syndromes of lung & large Intestine	**Hrs. theory: 5**
Objectives:	**Content:**
Describe clinical manifestations, etiology & pathology of different types of syndromes of lung and large intestine	• Introduction and discussion on clinical manifestation, etiology & pathology of the different types of syndromes of lung & large Intestine. • Methods of diagnosis of the diseases on the basis of: ➢ Invasion of the lung pathogenic wind ➢ Retention of phlegm damp in the lung. ➢ Retention of phlegm heat in the lung ➢ Insufficiency of lung Yin ➢ Damp heat in the large intestine ➢ Consumption of the fluid of the large intestine. ➢ Deficiency of the lung Qi
Sub Unit 9.3: Complicated syndrome of the spleen & stomach:	**Hrs. theory: 5**
Objectives:	**Content:**
Describe clinical manifestations, etiology & pathology of different types of syndromes of spleen and stomach	• Introduction and discussion on clinical manifestations, etiology & pathology of the different types of syndromes of spleen & stomach. • Methods of diagnosis of the diseases on the basis of: ➢ Deficiency of the spleen. ➢ Deficiency of the spleen controlling Blood. ➢ Deficiency of the spleen Yang. ➢ Deficiency of spleen & Stomach. ➢ Retention of Fluid in the stomach due to cold ➢ Hyperactivity for fire in the stomach. ➢ Insufficiency of the stomach. ➢ Invasion of the spleen by cold & damp. ➢ Damp heat in the spleen & stomach.
Sub Unit 9.4: Syndromes of Liver and bladder	**Hrs. theory: 5**

Objectives:	**Content:**
Describe clinical manifestations, etiology &pathology of different types of syndromes of liver and gall bladder	• Introduction and discussion on clinical manifestations, etiology & pathology of the different types of syndromes of Liver and bladder. • Methods of diagnosis of the diseases on the basis of: ➢ Stagnation of the liver QI. ➢ Etiology and pathology of the liver Qi ➢ Stagnation of the rising of the liver Yang ➢ Stirring of liver wind in the interior ➢ Stagnation of the rising of the retention of cold in the liver. ➢ Stagnation of the rising of the insufficiency of the liver blood. ➢ Stagnation of damp heat in the liver and gall bladder ➢ Stagnation of the rising of the damp heat in the liver
Sub Unit 9.5: Syndrome of Kidney and bladder	**Hrs. theory: 5**
Objectives:	**Content:**
Describe clinical manifestations, etiology & pathology of different types of syndromes of kidney and urinary bladder.	• Introduction and discussion on clinical manifestations, etiology & pathology of the different types of syndromes of Kidney and urinary bladder. • Methods of diagnosis of the diseases on the basis of: ➢ Deficiency of kidney Qi ➢ Insufficiency of kidney yang ➢ Insufficiency of kidney yin ➢ Damp heat in the bladder
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.
Unit 10: Syndromes according to the theory of meridian & collaterals	**Hrs. theory: 12**
Sub Unit 10.1: Pathological manifestation of the twelve meridians.	**Hrs. theory: 12**
Objectives:	**Content:**
Describe pathological manifestation of the 12 regular meridians Describe diagnosis according to pathological manifestation of the 12 regular meridians.	• Pathological manifestation of the twelve meridians. • Methods of diagnosis according to the pathological manifestation of the: ➢ Lung meridian of Hand (TaiYin) ➢ Large intestine meridian of Hand (YangMing) ➢ Stomach meridian of foot (YangMing) ➢ Spleen meridian of foot (TaiYin) ➢ Heart meridian of Hand (Shaoyin)

	➢ Small intestine meridian of Hand (TaiYang) ➢ Urinary Bladder meridian of foot (TaiYang) ➢ Kidney meridian of foot (ShaoYin) ➢ P pericardium meridian of Hand (JueYin) ➢ Sanjiao meridian of hand (Shaoyang) ➢ Gall Bladder meridian of foot (ShaoYang) ➢ Liver meridian of foot (JueYin)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and demonstration, return demonstration, anatomical models, videos, supervised clinical practice.

References:

1. Diagnosis of Traditional Chinese Medicine (International Acupuncture) Textbook
2. International conference of world Federation of Acupuncture Publisher The art of Acupuncture and moxibution, 2016
3. Fundamental of Acupuncture and Moxibution Publisher Liu Gongwang and Akira Hyodo
4. Introduction to Diagnosis in Traditional Chinese Medicine Publisher Chou Ping Hon

Diagnosis in Acupuncture and Moxibustion (Practical)

Practical Hours: 80 hrs (2 hrs/week)

Unit: 1 Basic principles of diagnosis 2 hrs

- Diagnose the disease according to four methods of diagnosis (Inspection, Listening and smelling, Inquiry, Palpation)

Unit 2: General inspection by observation 7 hrs

Sub Unit 2.1: Observation of the appearance

- Diagnose the disease according to the appearance (Red, Pale, Yellow, Blue, Dark gray, lustrous and Moist complexion), movement (gait) and posture.

Sub Unit 2.2: Observation of the vitality/complexion/color

- Diagnosis of the disease according to different complexion (namely- normal complxion with permanent and temporary color, Diseased complexion favorable or unfavorable to five colors)
- Diagnosis of the disease according to five different diseased colors (namely- Blue, Red, Yellow, White, black)
- Diagnosis of disease according to luster and moistness of skin.

Sub Unit 2.3: Observation of the mind

- Diagnose the disease according to the different stages of diseased mind and its significance (namely- Getting of Mind, Insufficient Mind, Loss of Mind, Pseudo Mind, mental disorder)

Sub Unit 2.4: Observation of the Tongue

- Diagnose the disease according to the observation of the tongue according to moisture, color, shape, movement and coating of tongue.

Unit 3: Auscultation and olfaction 4 hrs

Sub Unit 3.1: Listening

- Diagnose the disease according to the listening (Speech, respiration, and cough)

Sub Unit 3.2: Smelling

- Diagnose the disease according to the smelling (Secretion and excretion)

Unit 4: General inquiry 9 hrs

Sub Unit 4.1: Chills and fever

- List the exterior and interior symptoms during chills & fever

Sub Unit 4.2: Perspiration

- Diagnose the disease according to absence or present of sweat, sweat during sleep, spontaneous sweating and profuse sweating.

Sub Unit 4.3: Appetite, thirst and taste

- Diagnose the disease according to indications of poor appetite, loss of appetite, excessive appetite, lack of thirst, presence of thirst, bitter taste, sweet taste, greasy taste, sour taste in mouth, lack of taste in mouth.

Sub Unit 4.4: Defecation and urination

- Diagnose the disease according to different types of stool and urine and their frequency, consistency and sensation.

Sub Unit 4.5: Pain

- Diagnose diseases according to presentation of different types of pain, namely- headache, chest pain, hypochondriac pain, abdominal pain, gastric pain, lumbago and pain in extremities.
- Diagnose the disease according to nature of pain (distending pain, stabbing pain, cold pain and burning pain), location of pain with their indications.

Sub Unit 4.6: Sleep

- Diagnose the disease according to types and nature of sleep observed. Including insomnia and lethargy.

Sub Unit 4.7: Menses and leucorrhoea

- Diagnose the disease according to the amount (profuse, scanty), color (Light red, Deep red and Purplish Dim), interval (preceded, delayed), dysmenorrhea (Qi or blood stagnation, qi or blood deficiency and cold retention) and leucorrhoea (white leucorrhoea, yellow leucorrhoea, reddish leucorrhoea).

Unit 5: Feeling of pulse & palpation at different parts of body 6 hrs

Sub Unit 5.1: Feeling of pulse & palpation of different parts of body

- Palpate and differentiate normal and abnormal pulse in rate, force, shape and rhythm.
- Palpate pulse on two regions, three regions and cun-kou.
- Palpate different abnormal pulses namely- floating, deep, slow, rapid, deficient, excess, wiry, moderate, knotted and intermittent pulse)
- List abnormalities related with palpation of pulse on epigastrium and abdomen.

Unit 6: Differentiation of syndromes 5 hrs

Sub Unit 6.1: Eight principles of Exterior & interior

- Diagnose the diseases by differentiating the syndromes according to exterior & interior manifestations of cold, heat, deficiency and excess types.

Unit 7: Syndromes according to eight principles 5 hrs

Sub Unit 7.1: Deficiency and excess

- Diagnose the diseases by differentiating the syndromes according to exterior-interior, deficiency-excess, cold-heat and yin-yang categories.
- Differentiate syndromes according to symptoms of exterior syndromes including exterior cold, exterior heat, exterior deficiency and exterior excess.
- Diagnose the disease according to cold & heat and deficiency & excess type

Sub Unit 7.2: Yin and yang

- Diagnose the disease according to yin and yang and deficiency and collapse of yin and yang.

Unit 8: Syndromes according to the theory of Qi and blood 5 hrs

Sub Unit 8.1: Syndromes of Qi

- Diagnose the disease according to deficiency of qi, sinking of qi, stagnation of qi and perversion of qi.

Sub Unit 8.2: Syndromes of blood

- Diagnose the disease according to deficiency of blood, stagnation of blood and heat in the blood.

Unit 9: Syndromes according to the theory of Zang Fu organs 25 hrs

Sub Unit 9.1: Syndromes of heart & small intestine 5 hrs

- Diagnose the disease according to deficiency of the heart qi and deficiency of the heart Yang.
- Diagnose the disease according to deficiency of the heart blood and deficiency of the heart Yin.
- Diagnose the disease according to stagnation of the heart blood and deficiency of heart yin.
- Diagnose the disease according to hyperactivity of the heart fire.
- Diagnose the disease according to derangement of the mind
- Diagnose the disease according to pain due to disturbance of the qi of the small intestine

Sub Unit 9.2: Syndromes of lung & large Intestine 5 hrs

- Diagnose the disease according to the lung pathogenic wind.
- Diagnose the disease according to phlegm damp in the lung.
- Diagnose the disease according to phlegm heat in the lung.
- Diagnose the disease according to insufficiency of lung Yin.
- Diagnose the disease according to damp heat in the large intensine.

- Diagnose the disease according to the consumption of fluid of the large intestine.
- Diagnose the disease according to deficiency of the lung Qi

Sub Unit 9.3: Complicated syndrome of the spleen & stomach. 5 hrs

- Diagnose the disease according to the deficiency of the spleen.
- Diagnose the disease according to the deficiency of the spleen controlling Blood.
- Diagnose the disease according to the deficiency of the spleen Yang.
- Diagnose the disease according to the deficiency of spleen & Stomach.
- Diagnose the disease according to retention of Fluid in the stomach due to cold
- Diagnose the disease according to hyperactivity for fire in the stomach.
- Diagnose the disease according to insufficiency of the stomach.
- Diagnose the disease according to invasion of the spleen by cold & damp.
- Diagnose the disease according to damp heat in the spleen & stomach.

Sub Unit 9.4: Syndromes of Liver and bladder 5 hrs

- Diagnose the disease according to the stagnation of the liver qi.
- Diagnose the disease according to etiology and pathology of the liver qi.
- Diagnose the disease according to rising of the liver Yang
- Diagnose the disease according to the stirring of liver wind in the interior
- Diagnose the disease according to retention of cold in the lever.
- Diagnose the disease according to the insufficiency of the liver blood.
- Diagnose the disease according to the damp heat in the liver and gall bladder

Sub Unit 9.5: Syndrome of Kidney and bladder 5 hrs

- Diagnose the disease according to deficiency of kidney qi
- Diagnose the disease according to insufficiency of kidney yang
- Diagnose the disease according to insufficiency of kidney yin
- Diagnose the disease according to damp heat in the bladder

Unit 10: Syndromes according to the theory of meridian & collaterals (12 hrs)

Sub Unit 10.1: Pathological manifestation of the twelve meridians.

- Diagnose the disease according to pathological manifestation of the lung meridian of Hand (Tai Yin)
- Diagnose the disease according to pathological manifestation of the large intestine meridian of Hand (Yang Ming)
- Diagnose the disease according to pathological manifestation of the stomach meridian of foot (Yang Ming)
- Diagnose the disease according to pathological manifestation of the spleen meridian of foot (Tai Yin)
- Diagnose the disease according to pathological manifestation of Heart meridian of Hand (Shaoyin)
- Diagnose the disease according to pathological manifestation of small intestine meridian of Hand (Tai Yang)
- Diagnose the disease according to pathological manifestation of Urinary Bladder meridian of foot (Tai Yang)
- Diagnose the disease according to pathological manifestation of Kidney meridian of foot (Shao Yin)
- Diagnose the disease according to pathological manifestation of pericardium meridian of Hand (Jue Yin)
- Diagnose the disease according to pathological manifestation of Sanjiao meridian of hand (Shaoyang)
- Diagnose the disease according to pathological manifestation of Gall Bladder meridian of foot (Shao Yang)

- Diagnose the disease according to pathological manifestation of Liver meridian of foot (Jue Yin)

Acupressure and Therapeutic Massage

Total Hours: 240 hrs (6 hrs/week)
Theory Hours: 160 hrs (4 hrs/week)
Practical Hours: 80 hrs (2 hrs/week)

Course Description:
This course is designed to provide comprehensive understanding of the science of Acupressure and Therapeutic massage and modes of applications in preventive, curative and rehabilitative therapy. The entire course intends to explain the practice, procedures, and precautions & to develop essential skill of different applications of acupressure and therapeutic massages.

Course Objectives:
After completion of this course, students will be able to:

1. Explain the principles and historical highlights of acupressure and therapeutic massage;
2. Demonstrate the procedures of acupressure and therapeutic massage;
3. Explain physiological effects, indications, and contraindications of acupressure and therapeutic massage; and
4. Perform acupressure and massage to different parts and in different medical conditions.

Course Contents:

Theory

Course : Acupressure and Therapeutic Massage	**Hrs. theory:**
Unit 1: Acupressure	**Hrs. theory: 30**
Objectives:	**Content:**
Explain the acupressure with principle, importance, manipulation and application.	• **Acupressure** ➢ Definition ➢ Origin ➢ Principle ➢ Importance ➢ Manipulation ➢ Application ➢ General indications and contraindications ➢ Precautions
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, Acupressure Charts, models, videos, role play
Unit 2: Therapeutic massage	**Hrs. theory: 40**
Sub unit 2.1: Introduction and Classification of therapeutic massages	**Hrs. theory: 10**
Objectives:	**Content:**
Define Massage and explain brief history of massage in different culture Classify and define different massage types Explain and differentiate different massages techniques	• Introduction, Brief history, Definition, Classification • Depending on Origin and Principle – Tuina, Ayurvedic, Swedish, Kerali, Thai, Siatshu, • Classification of Massage according to medium – Oil, Salt, Powder, Dry, Stone, Water, Vibro massage

	• Classification of Massage according to Culture: Newari, Tharu. • Classification of massage according to age & conditions: baby massage, antenatal and postnatal massage: geriatric massages, trekkers massage, sport massages. • Classification of Massage according body parts : Head massage, facial massage, Neck & shoulder massage, back massage, foot massage, • Classification of Massage according to Purpose : Therapeutic and relaxing Massage
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, models, videos, role play
Sub-unit 2. 2: Basic Techniques	**Hrs. theory: 15**
Objectives:	**Content:**
Define Therapeutic massage and basic Techniques Procedures of basic technique of therapeutic massage Explain and demonstrate basic techniques Explain the principle and physiological effect of basic techniques	• Define Basic Techniques & Procedures of massage ➢ Touching ➢ Stroking ➢ Friction ➢ Vibration ➢ Kneading ➢ Percussion ➢ Joint movements • Application of Basic Techniques of massage on different parts of the body • Understanding of principles and Physiological effects of different techniques of massage
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, models, videos, role play
Sub-unit 2. 3: Operation procedure of Acupressure and Massage Therapy	**Hrs. theory:15**
Objectives:	**Content:**
Demonstrate and perform safe and effective massage therapy.	• **Pre Procedure** ➢ Preparation of massage rooms ➢ Examination of patient ➢ Position of patient • **Procedure** ➢ Position of therapist ➢ Appropriate Massage Technique ➢ Safety precaution • Post Procedure • Monitoring and Counseling of patient
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, models, videos, role play

Unit 3: Acu-diagnosis	**Hrs. theory:10**
Sub-unit 3 1: Taking case history and general examination	**Hrs. theory: 5**
Objectives:	**Content:**
Explain importance of case history. Explain method of taking case history. Demonstratemethod of general examination	• History taking • Methods of general examination
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, models, videos, role play
Sub-unit 3.2: Diagnosis methods	**Hrs. theory: 5**
Objectives:	**Content:**
Give brief description about importance of diagnosis. Demonstrate method of acu-diagnosis.	• Principal and importance of acu-diagnosis • Method of acu-diagnosis.
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, models, videos, role play
Unit 4: Musculoskeletal Disorders	**Hrs. theory: 40**
Sub-unit 4.1: Osteoarthritis, Rheumatic arthritis, Gout	**Hrs. theory: 5**
Objectives:	**Content:**
Define osteoarthritis and rheumatoid arthritis and gout. Describe clinical features. Explain the indications for referral to a higher level facility. Explain the role of Acupressure and massage. Perform acupressure and massage for the management of osteoarthritis, rheumatoid arthritis and Gout.	• Definition, etiologies, classifications, clinical features, complications and referral indications of osteoarthritis, rheumatoid arthritis and gout. • Treatments prevention, control through Massage and Acupressure
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 4.2 Back and Neck Pain	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications ofBack and Neck Pain. Explain the role of Acupressure and massage for the management of acute and chronic back and neck pain. Perform acupressure and massage for acute and chronic back and neck pain.	• Definition, etiologies, classifications, clinical features, complications and referral indications of Back and Neck Pain. • Treatments prevention, control through Massage and Acupressure
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 4.3: Problems of ligaments , tendons, Fascia and muscles	**Hrs. theory: 30**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical	• Definition, etiologies, classifications,

features, complications and referral indications Explain the role of Acupressure and massage for the management of acute and chronic back and neck pain. Perform acupressure and massage for acute and chronic back and neck pain.	clinical features, complications and referral indications of : ➢ De Quervain's Diseases ➢ Carpal Tunnel Syndrome ➢ Golfer's Elbow ➢ Tennis Elbow ➢ Frozen Shoulder ➢ Planter Fascitis ➢ Torlicollis ➢ Costochondritis ➢ Fibromyalgia ➢ Sprain, Strain ➢ Bursitis • Treatments prevention, control through Massage and Acupressure
Evaluation methods: written and viva exams, performance observation in real or simulated setting.	Teaching/Learning Activities/Resources: classroom instruction and demonstration, flip chart, models, videos, role play
Unit 5: Disorders of Nervous System	**Hrs. theory: 15**
Sub-unit 5.1: Bell's Palsy	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications ofBell's Palsy. Explain the role of Acupressure and massage for the management of Bell's Palsy. Perform acupressure and massage for Bell's Palsy.	• Definition, etiologies, classifications, clinical features, complications and referral indications of Bell's palsy. • Treatments prevention, control through Massage and Acupressure
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 5.2: Paralysis	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Paralysis. Explain the role of Acupressure and massage for the management of Paralysis. Perform acupressure and massage for Paralysis.	• Definition, etiologies, classifications, clinical features, complications and referral indications of Paralysis. • Treatments prevention, control through Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 5.3: Cerebro-vascular accident (CVA)	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Cerebro-vascular accident (CVA). Explain the role of Acupressure and massage for the management of Cerebro-vascular	• Definition, etiologies, classifications, clinical features, complications and referral indications of Cerebro-vascular accident (CVA). • Treatments prevention, control through

accident (CVA). Perform acupressure and massage for Cerebro-vascular accident (CVA).	Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 6: Psychological Disorders	**Hrs. theory: 25**
Sub-unit 6.1: Depression	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications ofDepression Explain the role of Acupressure and massage for the management of Depression Perform acupressure and massage for Depression.	• Definition, etiologies, classifications, clinical features, complications and referral indications of Depression. • Treatments prevention, control through Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.2: Anxiety Disorder	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Anxiety Disorder Explain the role of Acupressure and massage for the management of Anxiety Disorder Perform acupressure and massage for Anxiety Disorder.	• Definition, etiologies, classifications,clinical features, complications and referral indications of Anxiety Disorder. • Treatments prevention, control through Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.3: Mood Disorder	**Hrs. theory 4 Hrs. lab/practical**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Mood Disorder Explain the role of Acupressure and massage for the management of Mood Disorder Perform acupressure and massage for Mood Disorder	• Definition, etiologies, classifications, clinical features, complications and referral indications of Mood Disorder. • Treatments prevention, control through Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.4: Sleep disorders	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Sleep disorders Explain the role of Acupressure and massage for the management of Sleep disorders Perform acupressure and massage for Sleep disorders	• Definition, etiologies, classifications, clinical features, complications and referral indications of Sleep disorders. • Treatments prevention, control through Massage and Acupressure.

Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.5: Chronic Fatigue Syndrome	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Chronic Fatigue Syndrome Explain the role of Acupressure and massage for the management of Chronic Fatigue Syndrome Perform acupressure and massage for Chronic Fatigue Syndrome	• Definition, etiologies, classifications, clinical features, complications and referral indications of Chronic Fatigue Syndrome • Treatments prevention, control through Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.6: Psychosomatic Disorders	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the etiologies, classifications, clinical features, complications and referral indications of Psychosomatic Disorders Explain the role of Acupressure and massage for the management of Psychosomatic Disorders Perform acupressure and massage for Psychosomatic Disorders	• Definition, etiologies, classifications, clinical features, complications and referral indications of Psychosomatic Disorders • Treatments prevention, control through Massage and Acupressure.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice ? hours 160

References:

1. Chris Jarmey and John Tindall
2. John Harvey Kellogg, The Art of Massage

Acupressure and Therapeutic Massage
(Practical)

Practical: 80 hrs (2hrs/week)

Perform the followings:

Unit 1: Basic Techniques of Acupressure & amp; Massage: 20 hrs

- Basic Techniques & amp; Procedures of massage
- Touching
- Stroking
- Friction
- Vibration
- Kneading
- Percussion
- Joint movements
- Application of Basic Techniques of massage on different parts of the body

Unit 2: Operation procedure of Acupressure and Massage Therapy: 10 hrs

- Pre Procedure
- Preparation of massage rooms
- Examination of patient
- Position of patient
- Procedure
- Position of therapist
- Appropriate Massage Technique
- Safety precaution
- Post Procedure
- Monitoring and Counseling of patient

Unit 3: Taking case history and general examination: 2 hrs

- History taking
- Methods of general examination

Unit 4: Diagnosis methods: 2 hrs

- Method of acu-diagnosis.

Unit 5: Musculoskeletal Disorders: 8 hrs

Sub-unit 5.1: Acupressure and oriental massage

Osteoarthritis

- Rheumatoid Arthritis
- Gout
- Back Pain
- Neck Pain

Sub-unit 5.2: Problems of ligaments, tendons, Fascia and muscles: 12 hrs

- De Quervain's Diseases
- Carpal Tunnel Syndrome
- Golfer's Elbow
- Tennis Elbow
- Frozen Shoulder
- Planter Fascitis
- Torlicollis

- Costochondritis
- Fibromyalgia
- Sprain, Strain
- Bursitis

Unit 6: Disorders of Nervous System: **6 hrs**

- Bell's Palsy
- Paralysis
- Cerebro-vascular accident (CVA)

Unit 7: Psychological Disorders: **20 hrs**

- Depression
- Anxiety Disorder
- Mood Disorder
- Sleep disorders
- Chronic Fatigue Syndrome
- Psychosomatic Disorders

Acupuncture and Moxibustion Therapeutics I

Total Hours: 240 hrs (6 hrs/week)
Theory Hours: 160 hrs (4 hrs/week)
Practical Hours: 80 hrs (2 hrs/week)

Course Description:
This course is designed to impart knowledge and skills about therapeutics of acupuncture and moxibustion.

Course Objectives:
After completion of this course, students will be able to:

1. Diagnose the disease;
2. Select point and acupuncture prescription;
3. Treat disease according to basic principles; and
4. Perform therapeutic method.

Course Contents:

Theory

Course: Acupuncture and Moxibustion Therapeutics I	**Hrs. theory: 160**
Unit 1: General Principles of Acupuncture Treatment	**Hrs. theory: 15**
Objectives:	**Content:**
Explain yin and yang Describe the general principles of treatment	• Importance of regulation of yin and yang. • Strengthening the body resistance & eliminating the pathogenic factors. • Distinguishing the primary from secondary • Treatment of disease according to climatic & seasonal condition, geographical location & the individual conditions.
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 2: Therapeutic Methods	**Hrs. theory:15**
Objectives:	**Content:**

Describe the common therapeutic methods used in acupuncture treatment	• Indications and contraindications of following therapeutic methods: ➢ Reinforcing ➢ Reducing ➢ Warming ➢ Clearing ➢ Ascending ➢ Descending
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 3: Basic Principle Governing Prescription and Combination of Points	**Hrs. theory: 20**
Sub-unit 3.1: Selection of Points	**Hrs. theory: 10**
Objectives:	**Content:**
Describe the ways for selecting points in clinical practice Explain indications of point selection according to the course of channel.	• Concept and indications of point selection based on: ➢ Selection of Remote Points ➢ Selection of Local Points ➢ Selection of Adjacent Points ➢ Distant Points
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Sub-unit 3.2: Application of Specific Points	**Hrs. theory 10Hrs. lab/practical 10**
Objectives:	**Content:**

Describe the ways of applying specific points as per disease conditions. Explain the use of specific points of four extremities Describe the specific points on the head and trunk Explain about the method of combination of the specific points	• Indications and contraindications of following specific points: • Specific points on four extremities ➢ Five Shu Points ➢ Lower He Sea Points of six fu organs ➢ The Yuan Points ➢ The Luo Connecting Points ➢ The Xi-Cleft Points ➢ The Confluent Points • Specific Points on Head and Trunk ➢ Back Shu Points ➢ Front-Mu Points ➢ The Influential Points ➢ The Crossing Points
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, supervised, observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 4: Treatment of Common Conditions with Acupuncture and Moxibustion	**Hrs. theory:110**
Sub unit 4.1.: Emergency Conditions	**Hrs. theory: 15**
Objectives:	**Content:**
Explain in detail about common emergency conditions, their diagnosis and management	• Definition,Etiopathology,ClinicalManifestations,Syndrome Differentiation and Management of: ➢ Windstroke ➢ Syncope
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Sub-unit 4.2.: Diseases of Respiratory System	**Hrs. theory: 20**
Objectives:	**Content:**
Explain respiratory system Describe respiratory disorder Diagnose and manage respiratory disorders	• Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of: ➢ Cough ➢ Common Cold/Rhinitis ➢ Asthma ➢ Hoarseness of voice

Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Sub-unit 4.3: Diseases of Digestive System	**Hrs. theory 30 Hrs. lab/practical 15**
Objectives:	**Content:**
Explain digestive system Describe digestive disorders Diagnose and manage digestive disorders	• Definition, Etiopathology, Clinical Manifestations,Syndrome Differentiation and Management of: ➢ Hiccup ➢ Epigastric Pain ➢ Abdominal Pain ➢ Diarrhoea ➢ Constipation ➢ Jaundice ➢ Toothache ➢ Vomiting
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Sub-unit 4.4.: Diseases of Central Nervous System (CNS)	**Hrs. theory: 45**
Objectives:	**Content:**
Explain central nervous system (CNS) Describe CNS disorder Diagnose and manage CNS disorders .	• Definition, Etiopathology, Clinical Manifestations,Syndrome Differentiation and Management of: ➢ Headache ➢ Insomnia ➢ Epilepsy ➢ Dizziness ➢ Facial Pain ➢ Facial Paralysis ➢ Wei syndrome ➢ Manic Depressive Disorder
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, supervised, observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.

References:

1. A Patients guide to acupunture Publiser Altheapress Aug 2019
2. Acupuncture Points Hand books Publiser Darycott LLC march 2017
3. The Concise Books of Acupoints Publisher Blue River Press Januery 2014
4. A Manual of Acupuncture 2nd edition Publisher Journal of Chines Medicine June 2007

Acupuncture and Moxibustion Therapeutics I (Practical)

Practical: 80 hrs (2 hrs/week)

Perform the followings:

Unit I: Clinical practice of the common therapeutic methods 20 hrs

History & Physical

1. Take history:
   a. Establish trust with the patient/family
   b. Elicit complete data related to chief complaint, social/personal/demographic data, immunization/diseases, surgical, family history.
2. Perform physical examination:
   a. Vital signs / tongue and pulse diagnosis as per TCM diagnostic methods
   b. Assess Jaundice, Anemia, Lymph node enlargement, Clubbing, Cyanosis, Oedema and Dehydration (JALCCOD)
   c. Evaluate mental status/cognition/mood
   e. Examine the condition of the body systems through inspection, auscultation, inquiring and palpation
3. Syndrome differentiation as per the basic concept of TCM.
4. Select appropriate treatment principle and therapeutic method and acupoints as per the syndrome differentiation

Unit II: Application of Specific Points 10 hrs

1. Use of specific points on head and trunk and four extremities as per the syndrome diagnosed by TCM concept

Unit III: Treatment of Common Diseases with Acupuncture and Moxibustion 50 hrs

1. Use TCM methods of diagnosis to differentiate syndrome and treatment of following diseases and conditions
   A. Emergency Conditions:
      I. Windstroke
      II. Syncope
   B. Respiratory System Diseases and conditions:
      I. Common Cold
      II. Cough
      III. Asthma
      IV. Hoarseness of voice
   C. Digestive System Diseases and conditions:
      I. Hiccup
      II. Epigastric Pain
      III. Vomiting
      IV. Abdominal Pain
      V. Diarrhoea
      VI. Constipation
      VII. Jaundice
      VIII. Toothache
   D. Central Nervous System Diseases and conditions
      I. Headache
      II. Insomnia
      III. Epilepsy
      IV. Dizziness
      V. Facial pain
      VI. Facial paralysis
      VII. Wei syndrome
      VIII. Manic-depressive Disorder

Clinical Pathology

Total Hours: 160 hrs (4 hrs/week)
Theory Hours: 80 hrs (2 hrs/week)
Practical Hours: 80 hrs (2 hrs/week)

Course Description:
This intends to provide knowledge and skills about basic **Microbiology, Parasitology, Hematology, Biochemistry** (clinical pathology) in general.

Course Objectives:
After completion of this course, students will be able to:

1. Describe different kinds of microorganisms related to human diseases;
2. Describe different kinds of parasites and their pathogenic effects to a human body;
3. Describe the formation and functions of different components of blood;
4. Describe the biochemical processes of different kinds of foods in our body;
5. Identify the role of vitamins & enzymes in our body; and
6. Perform basic microbiological, biochemical and haematological tests in the laboratory setting.

Weightages:
(Microbiology: 25%, Parasitology: 25%, Hematology:20%, Biochemistry: 30%)

Course Contents:

Theory

Course: Clinical Pathology	**Hrs. theory: 80 Hrs. lab/practical: 80**
Unit 1: Medical microbiology	**Hrs. theory: 20**
Sub unit 1.1: General Introduction to Microbiology	**Hrs. theory 8**
Objectives:	**Content:**
Describe the classification of microorganisms Describe the morphology of bacteria. Describe the morphology of virus Describe the morphology of fungi Describe the morphology of parasitic protozoa/helminthes in general.	• Classification of microorganisms: bacteria, viruses, fungi, protozoans and helminths • Morphology of different kinds of microorganisms- cocci, bacilli, vibrio, spiral, and spirochaetes. • Morphology of virus: polyhedral, hellical, hexagonal and spherical. • Morphology of fungi: yeasts and molds. • Morphology of parasitic protozoa/helminthes in general. • Name the corresponding causative organisms of each of the following diseases. ➢ At least 20 different bacterial diseases. ➢ At least 10 viral diseases. ➢ At least 10 fungal diseases. ➢ At least 5 protozoan diseases. ➢ At least 10 helminthes diseases.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice, appropriate visual means for morphology of different microorganisms.

Sub unit 1.2: Basic bacteriological investigations	**Hrs. theory: 5**
Objectives:	**Content:**
Explain the theory & principle of Gram staining. Perform Gram staining according to guidelines. Explain the theory & principle of acid fast bacillus (AFB) staining. Perform AFB staining according to guidelines. Define culture and culture media. List culture media for bacteria, viruses, and fungi. Describe methods for antibiotic susceptibility testing.	• Theory, principles and procedure for Gram staining. • The theory, principle and procedure of acid fast bacillus (AFB) staining. • Concept of culture and culture media. • Cultivation techniques of bacteria, viruses and fungi. • Methods for antibiotic susceptibility testing: ➢ Tube dilution technique. ➢ Paper diffusion technique.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Sub unit 1.3: Bacterial growth and sterilization	**Hrs. theory: 7**
Objectives:	**Content:**
Define bacterial growth and generation time. Describe factors influencing bacterial growth. Define sterilization. Describe physical methods of sterilization. Describe chemical methods of sterilization.	• Definition of Bacterial growth • Characteristics, generation time and factors influencing bacterial growth. • Sterilization. • Physical methods of sterilization. ➢ Moist heat (steam under pressure and fractional sterilization) ➢ Dry heat (hot air sterilization, incineration) ➢ Radiation (x- rays, gamma rays, cathode rays,) ➢ Filtration. • Chemical methods of sterilization (formaldehyde, gluteraldehyde, ethylene oxide, β– propiolactone,)
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Unit 2: Medical parasitology	**Hrs. theory: 20**
Sub Unit2.1: Intestinal Parasites	**Hrs. theory: 10**
Objectives:	**Content:**
Describe mode of infection, pathogenicity, laboratory diagnosis and preventive measures of intestinal parasites.	• Mode of infection, pathogenicity, laboratory diagnosis and prevention of intestinal parasites. ➢ Ascaris ➢ Hookworm ➢ Trichuris ➢ Enterobius ➢ Taenia ➢ Echinococus

	➢ Hymenolepis ➢ Entamoeba ➢ Giardia ➢ Trichomouas.
Evaluation methods:	Teaching / Learning Activities:
- Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice, slides
Unit: 2 Medical parasitology	**Hrs. theory 20 Hrs. lab/Practical8**
Sub Unit2.2: Blood and tissue parasites	Hrs. theory 6 Hrs. lab/practical
Objectives:	**Content:**
Describe modes of infection, pathogenicity, laboratory diagnosis and preventive measures for blood and tissue parasites.	• Modes of infection, pathogenicity, laboratory diagnosis and prevention of blood and tissue parasites of body. ➢ Plasmodium ➢ Leishmania ➢ Wuchereria
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice, slides
Sub Unit2.3: Defense mechanisms of the body	**Hrs. theory: 4**
Objectives:	**Content:**
Describe the defense mechanisms of body (individually, specific and non-specific). Identify external defense mechanisms of body. Describe non-specific defense mechanisms of body (interferon, phagocytosis, complement and proprederin, Natural Killer (NK) cells). Describe specific defense mechanisms of body (active and passive immunity and their types). Define antigens and antibodies and give examples of each. Describe the types of antibodies (immunoglobulins).	• Definition of Defense mechanism • Different kinds of defense mechanisms of body. • External defense mechanisms of body. • Skin, mucous membranes and other mechanical barriers. • Coughing, sneezing, perspiring and related processes. • Non-specific defense mechanisms of body (interferon, phagocytosis, complement and proprederin, Natural Killer (NK) cells). • Specific defense mechanisms of body (active and passive immunity and their types). • Antigens and antibodies with examples, types of antibodies (immunoglobulins) . • Terminology related to defense mechanisms of body. ➢ Immunology ➢ Rh factor Gammaglobulia ➢ Immune System ➢ Active Immunity ➢ Phagocyte ➢ Passive Immunity ➢ Chemotaxis ➢ Histamine ➢ Chemoattractant ➢ Opsin ➢ Complement ➢ Antigen

	➢ B-lymphocyte ➢ T-lymphocyte ➢ Natural Killer cells ➢ Antibody ➢ Immunoglobulin ➢ Oncogene ➢ Memory Cell
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Unit 3: Hematology	**Hrs. theory: 15**
Sub Unit3.1: Blood and anticoagulants.	**Hrs. theory: 15**
Objectives:	**Content:**
Describe the general composition of blood. Describe the formation mechanism of RBC, WBC, Platelets and plasma. List functions of WBC, RBC, and plasma cells. Describe the structure, function, estimation (Shali's method) and normal values of hemoglobin. Describe methods of blood collection. Define anticoagulants, their types and use. Describe test method (Bulk dilution and Pipette dilution) for WBC total count, test-method for WBC differential count with their normal values Describe test methods (Wintrobe method) and normal value of erythrocyte sedimentation rate (ESR) of blood.	• Definition of blood, General composition. • Formation mechanism of RBC, WBC, Platelets and plasma • Functions of WBC, RBC, and plasma cells. • Structure, function, estimation (Shali's method) and normal values of hemoglobin. • Methods of blood collection for: ➢ Hematological investigations. ➢ Biochemical investigations. ➢ Microbiological investigations. • Anticoagulants, their types and use • Test method (Bulk dilution and Pipette dilution) for WBC total count, test-method for WBC differential count with their normal values. • Test methods (Wintrobe method) and normal value of erythrocyte sedimentation rate (ESR) of blood.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Unit 4: Clinical Biochemistry	**Hrs. theory: 25**
Sub Unit4.1: Carbohydrates	**Hrs. theory: 4**
Objectives:	**Content:**
Define carbohydrates. Classify carbohydrates. Describe digestion and absorption of carbohydrates. Describe functions of carbohydrates	• Definition • Classification ➢ Monosaccharides o Depending upon number of carbon atoms o Depending upon aldehyde or ketone group ➢ Disaccharides ➢ Oligosaccharides ➢ Polyasaccharides o Homopolysaccharides o Heteropolysaccharides. • Digestion and absorption of carbohydrates • Functions of carbohydrates
Evaluation methods:	Teaching / Learning Activities:

Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Sub Unit4.2: Proteins	**Hrs. theory: 5**
Objectives:	**Content:**
Define proteins Explan the Classify proteins Write down the reactions involved during digestion of proteins. Describe function of protein.	• Definition of proteins • Classification of proteins ➢ on the basis of shape and size (fibrous and globular proteins) ➢ On the basis of functional properties (defense, contractile, respiratory, structural, enzymes, hormones). ➢ On the basis of solubility and physical properties. o Simple proteins – protamines, histones albumins, globulins, gliadines (prolamines), glutelins, scleroproteins or albuminoids, etc. o Conjugated proteins – nucleoproteins, mucoproteins, glycoproteins, phosphoproteins, chromoproteins (hemo-, flavo and visual purple proteim), lipoproteins, metalloproteins, etc. o Derived proteins (from simple and conjugated proteins) - coagulated proteins cooked meat, cooked egg albumin and alcohol precipitated proteins, proteoses, peptones, peptides. • Reactions involved during digestion of proteins. • Functions of Protein.
Evaluation methods:	Teaching / Learning Activities:
Sub Unit4.3: Lipids	**Hrs. theory: 5**
Objectives:	**Content:**
Define lipids Describe the Classify lipids List chemical properties of lipids . Describe digestion (biochemical reactions) and absorption of lipids. Define cholesterol and list its physiological roles.	• Definition of lipids • Classification of lipids ➢ Simple lipids – neutral fats, waxes ➢ Compound lipids- phospholipids, glycolipids, sulfolipids, aminolipids and lipoproteins. ➢ Derived lipids- several fatty acids, mono and di – glycerides, alcohols, etc. ➢ Miscellaneous – carotenoids, squalene, Vitamins E and K, etc. • Chemical properties of lipids. • Digestion (biochemical reactions) and absorption of lipids. • Cholesterol and list its physiological roles.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of	Classroom instruction, textbook/reference book

performance in lab	self-study, journals, laboratory practice
Sub Unit4.4: Enzymes	**Hrs. theory: 4**
Objectives:	**Content:**
Define enzymes. Classify enzymes . Define isoenzymes with examples.	• Definition of enzymes. • Classification of enzymes into the six basic types – oxidoreductases, hydrolases, ligases (synthetases), transferases, lyases, isomerases. • Definition of isoenzymes with examples.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Sub Unit4.5: Vitamins	**Hrs. theory: 4**
Objectives:	**Content:**
Define vitamins. List general properties of vitamins. Classify vitamins – fat-soluble and water-soluble. List sources of each of the vitamins. Describe importance of all vitamins.	• Definition of vitamins. • General properties of vitamins. • Classification vitamins – fat-soluble and water-soluble. • Sources of each vitamin. • Importance of each vitamin.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice
Sub Unit4.6: Hormones	**Hrs. theory: 3**
Objectives:	**Content:**
Define hormones. Describe the Classify Hormones Describe functions of hormones.	• Definition. • Classification. • Functions ofhormones.
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, observation of performance in lab	Classroom instruction, textbook/reference book self-study, journals, laboratory practice

Recommended Texts:

1. Dr. Bharatmani Pokhrel. A Hand book of clinical microbiology, Gorakhnath Desktop printing and Support, Kathmandu.
2. Gupta, Rajesh K. and Yadav Binod K., A Text book of Medical Laboratory Technology (Volume I and II), Samikshaya Books, Bagbazar, Kathmandu.
3. Chatterjee, K.D. 1981. Parasitology.Chatterjee Medical Publishers, Calcutta, India.
4. Chatterjea, M.N. and Shinde, R. 1998. Textbook of Medical Biochemistry.Jaypee Brothers Medical Publishers (P) Ltd., India.
5. Chevalking, H., Tuladhar T. & Shrestha U. 1992. Integrated Sciences.Health Learning Materials Centre, P.O. Box 2533, Ktm., Nepal.

References:

1. Paniker, C.K. 1993. Textbook of Medical Parasitology. Jaypee Brothers Medical Publishers (P) Ltd., New Delhi, India.

Clinical Pathology (Practical)

Practical Hours: 80 hrs (2 hrs/week)

Perform the followings:

1. Identify handling techniques of different laboratory goods.
2. Perform gram stain and AFB stain.
3. Perform stool examination for ova, cyst and parasites.
4. Perform microscopic examination of urine for urinary deposits.
5. Perform chemical examination of urine for sugar, albumin and pregnancy test.
6. Demonstrate urine test for ketone bodies and bile pigment.
7. Demonstrate urine test for bile salt and urobilinogen.
8. Demonstrate blood glucose determination.
9. Demonstrate urea estimation.
10. Perform preparation, staining and examination of thick and thin blood smears.
11. Estimate hemoglobin level.
12. Demonstrate TLC, DLC and ESR of blood.
13. Perform Blood grouping.
14. Perform Reference ranges of mention parameters:
    - Blood Sugar (Fasting, random & Post Prandial)
    - Renal Function Test (RFT): Urea, Creatinine, sodium, potassium, calcium, uric acid
    - Liver Function Test (LFT): Bilirubin total and direct, SGPT, SGOT, Alkaline Phosphatase, Total Protein, albumin, Globulin and A:G Ratio
    - Lipid Profile: Total Cholesterol, Triglycerides, HDL Cholesterol, LDL Cholesterol, VLDL Cholesterol.
    - Cardiac profile: CPKMB, LDH, SGOT, CPK-NAC.
    - Serum amylase
    - Thyroid Function Test (TFT): T3, T4 and TSH

Concept of General Medicine

Total Hours: 160 hrs (4 hrs/week)
Theory Hours: 80 hrs (2 hrs/week)
Practical Hours: 80 hrs (2 hrs/week)

Course Description:
This course begins with an in-depth presentation on the diagnostic process applied to the history and physical examination of the patient, and includes assessments specific to each system. Medicine I presents a basic review of selected conditions and disorders from areas of internal medicine, including: hematological, cardiovascular, respiratory, gastrointestinal, endocrine, hepatic, nervous, and genitourinary systems. Additionally, communicable diseases common to Nepal are individually discussed. For each disease or condition this course examines etiologies, clinical features, differential diagnosis, management at the health post level, indications for referral, and preventive education.

Course Objectives:
After completion of this course, students will be able to:

1. Perform a thorough history and physical examination, and analyze and interpret the findings to make a rational provisional diagnosis;
2. Identify the etiologies, pathology and clinical features of common systemic disorders and communicable diseases;
3. Describe the management and counseling for common systemic disorders and communicable diseases;
4. Identify indications that a case requires referral to a higher level or specialty facility; and
5. Identify and implement opportunities for health education, prevention measures, or rehabilitation.

Course Contents:

Theory

Course: Concept of General Medicine	**Hrs. theory: 80 Hrs. lab/practical: 80**
Unit 1: Clinical Methods	**Hrs. theory:2**
Sub-unit 1.1: History taking & Physical Examination	**Hrs. theory:2**
Objectives:	**Content:**
Establish trust with the client/family by making introductions, showing respect, listening attentively, and remaining non-judgmental. Perform history taking and clinical examination Explain why it is essential to ask about and examine all systems of the subject, rather than only the system. Use a diagnostic decision diagram to develop a provisional diagnosis. Explain the purpose of investigations in differentiating diagnosis. Discuss the meaning and implication of "false positive" and "false negative" findings.	• History taking & Physical Examination • Principles and procedures for collecting and interpreting clinical data. • Procedure of general physical examination and systemic examinations in regard to all systems. • Bedside history and clinical examination practice. ➢ Medical, ➢ Surgical, ➢ Obstetrics, ➢ Gynecology, ➢ Psychiatrics, ➢ Pediatrics ➢ Dental ➢ Eye ➢ Ear, Nose and Throat

Perform a minimum of 10 history taking and physical examinations with provisional diagnosis and case management details.	➢ Dermatology • Explanation regarding instruments and apparatus (Stethoscope, Sphygmomanometer, Tuning-fork, Hammer) used while performing general physical examination.
Evaluation methods: written exam, viva, performance observation in clinical setting	**Teaching/Learning Activities/Resources:** classroom instruction, practice in a simulated setting, supervised clinical practice
Unit 2: Hematological & Cardiovascular Conditions	**Hrs. theory: 16**
Sub-unit 2.1: Anaemia	**Hrs. theory: 4**
Objectives:	**Content:**
Define anaemia and tell the cardinal signs of anaemia. Discuss the incidence of anaemia. Discuss the causes, symptoms and clinical features of common forms of anaemia: o Iron deficiency anaemia. o Megaloblastic anaemia o Aplastic anaemia o Haemolyticanaemia o Thalassemia o Sickle cell anemia o Heamophilia A and B o Anemia of chronic disease Identify investigations for diagnosing anaemia Identify complications of anaemia. Describe the management and prevention of common types of anaemia.	**Anaemia** • Incidence of anaemia in Nepal and the socio-cultural factors which contribute to anaemia. • Classifications of anemia. • Definition, types, courses clinical features, investigation, complications, management and prevention of different types of anaemia: ➢ Iron deficiency anaemia. ➢ Megaloblastic anaemia. ➢ Haemolyticanaemia. ➢ Thalassemia ➢ Sickle cell anemia ➢ Heamophilia A and B ➢ Anemia of chronic disease • Normal value of hemoglobin.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 2.2: Haemostatic& atherosclerotic disorders	**Hrs. theory: 4**
Objectives:	**Content:**
Describe the incidence and pathology of common haemostatic disorders and atherosclerotic occlusive disorders. Discuss Major Modifiable risk factors and Non Modifiable risk factors for Heart diseases. Describe the clinical features Discuss the treatment and complications of haemostatic disorders and atherosclerotic occlusive disorders. Identify indications for referral to a higher level facility.	**Haemostatic& atherosclerotic disorders** • Etiologies, incidence, complications, management, and referral of haemostatic disorders and atherosclerotic occlusive disorders.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice

Sub-unit 2.4: Cardiac disorders – angina, infarction, arrhythmia, valvular diseases	**Hrs. theory:4**
Objectives:	**Content:**
Discuss the etiologies and incidence of each: 1. Angina 2. Myocardial infarction 3. Cardiac arrhythmia 4. Valvular disorders Describe the pathology, cardinal signs and clinical features of each of the above. Discuss differential diagnosis of above conditions. Causes of Myocardial infarction(M.I.) without coronary atherosclerosis. Identify indications for immediate referral to a higher level facility. Describe measures to stabilize a patient experiencing M.I. before referral. Describe the advice and emergency management of these conditions	**Angina, Infarction, Arrhythmia, Valvular diseases** • Etiologies, diagnosis,emergency management, referral, stabilization in cases of: ➢ Angina ➢ Myocardial infarction ➢ Cardiac arrhythmia ➢ Valvular disorders • Perform physical examination of the cardiovascular system.
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 2.5: Cardiovascular disorders – Hypertension	**Hrs. theory: 2**
Objectives:	Content:
Define hypertension, tell the cardinal signs, and explain the different classifications. Discuss the incidence of hypertension and complications of untreated hypertension. Identify the etiologies and clinical features of common forms of hypertension. 1. Identify investigations necessary for differential diagnosis. 2. Discuss common drugs used in the management of the chronic hypertension and their side effects in brief. 3. Tell how to manage hypertensive emergencies. 4. Describe how to manage the uncomplicated case of hypertension. 5. Explain the role of life style & yoga in prevention and control of hypertension. 6. Identify indications for referral. 7. Identify and manage hypertensive crisis.	**Hypertension** • Definition, incidence, etiologies, classifications, clinical features, investigations, complications, hypertensive emergency management, general management of hypertension and referral indications. • Measurement of the blood pressure in mid- upper arm and interpretation. • Show X-ray chest-cardiomegaly. • Role of life style & yoga in prevention and control of hypertension. • Hypertensive crisis.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice

Sub-unit 2.6: Cardiovascular disorders - Congestive cardiac failure	**Hrs. theory 2**
Objectives:	**Content:**
Review the anatomy and physiology of the heart and related organs Describe the development and condition of congestive cardiac failure (CCF). Identify the cardinal signs, etiologies, clinical features and pathology of CCF. Identify/Physical findings & signs in Heart failure. Identify the investigations necessary for differential diagnosis. Describe the complications of CCF. Describe the management of simple cases of CCF. Explain non pharmacologic approach in the management of Congestive heart failure. Identify indications for prompt stabilization and referral to a higher level facility.	**Congestive cardiac failure** • Anatomy and physiology of heart and related organs. • Definition, etiology, pathology, clinical features, investigation, complication, differential diagnosis, and management of CCF. • Show the x-ray film of chest (Cardiomegaly). • Non pharmacologic approach in the management of congestive heart failure. • X-ray & ECG of patient.
Evaluation methods: written exam, spotting, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 3: Respiratory Disorders	**Hrs. theory: 12**
Sub-unit 3.1: Bronchitis	**Hrs. theory: 2**
Objectives:	**Content:**
Define bronchitis, tell the cardinal signs and discuss the incidence. Identify etiology, pathology and clinical features of bronchitis. Identify investigations necessary for differential diagnosis. Identify complications of bronchitis. Explain how the incidence of chronic bronchitis can be reduced by preventive measures. Describe the management of diagnosed cases of acute bronchitis and indications for referral to a higher level facility.	**Bronchitis** • Definition, incidence, etiology, pathology, clinical features, differential diagnosis, complication and management of bronchitis. • Investigations for acute bronchitis: ➢ Complete Blood Count (CBC) ➢ TLC (Total leucocytes count) ➢ DLC (Differential leucocytes count) ➢ Sputum for culture and sensitivity • Preventative measures: ➢ reduction of environmental air pollution • good nutrition containment of respiratory mucus wastes (not spitting phlegm into the environment)
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 3.2: Chronic Obstructive Pulmonary Disease (COPD)	**Hrs. theory: 2**
Objectives:	**Content:**
Define COPD and discuss the incidence of this condition. Identify the aetiology, pathology, cardinal signs	• Definition, aetiology, clinical features, differential diagnosis, investigations, management, complications and

and clinical features of COPD. Identify the investigations necessary for differential diagnosis. Describe how to manage a case of COPD with available resources. Identify complications of COPD. Identify indications for referral. List community actions or health education aimed at reducing the incidence of COPD.	indications for referral of the case of COPD. • Component disorders: ➢ chronic bronchitis ➢ emphysema ➢ asthma • Complications of COPD ➢ corpulmonale • Describe how to prevent COPD.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 3.3: Pleural effusion	**Hrs. theory: 1**
Objectives:	Content:
Define pleural effusion and tell the cardinal signs. State the aetiology, pathology and clinical features of pleural effusion. Differentiate between exudates and transudate. Identify the investigations necessary for differential diagnosis. Manage pleural effusion caused by Tuberculosis. Identify complications of pleural effusion and the treatment for these. Describe how to stabilize the patient and refer.	**Pleural effusion** • Definition, aetiology, pathology, clinical features, investigations, differential diagnosis, complications. • Demonstration of positive X-ray film of pleural effusion.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 3.4: Respiratory disorders – Pneumonia	**Hrs. theory: 2**
Objectives:	**Content:**
Define pneumonia and discuss the incidence. Explain why pneumonia is a serious problem, and identify the populations most at risk. Identify the etiologies, pathology, cardinal signs and clinical features of different types of pneumonia. Identify complications of pneumonia. List the investigations necessary for differential diagnosis of pneumonia. Describe the management of pneumonia. Identify indications for referral. Prevention and control of pneumonia including vaccine.	**Pneumonia** • Definition, etiology, sign and symptoms, investigation, complications, management and epidemiology of pneumonia. • Types of pneumonia: • Prevention of pneumonia: • Demonstration of chest x-ray of pneumonia.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 3.5: Asthma	**Hrs. theory: 2**
Objectives:	**Content:**
Define bronchial asthma and tell the cardinal signs. Identify the etiology, pathology and clinical	**Asthma** • Definition, aetiology, pathology, clinical features, differential diagnosis, diagnosis,

features of bronchial asthma. Discuss the relationship between extrinsic and intrinsic asthma. Identify the investigations necessary for differential diagnosis. List complications of asthma. Manage bronchial asthma. Identify indications for referral. Identify methods of symptom control Role of vaccine to prevention of bronchial asthama.	complication, &management of bronchial asthma. • Show the X-ray of chest of bronicalasthama. • Prevention and control of asthama.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 3.6: Pulmonary tuberculosis	**Hrs. theory: 3**
Objectives:	**Content:**
Define pulmonary tuberculosis (PTB). State the aetiology, pathology, cardinal signs and clinical features of PTB. Identify the investigations necessary for differential diagnosis of PTB. Describe complications of PTB. Describe the procedures for managing smear positive cases according the DOTS concept with special reference to Multi Drug Resistance (MDR) and XDR (SCC). Summarize the teaching points for pulmonary positive cases. Identify methods of prevention and control.	**Pulmonary tuberculosis** • Definition, aetiology, pathology, clinical features, differential diagnosis, classification of Tuberculosis, investigation, complications, management and prevention of PTB. • DOTS therapy in PTB according to National Guidelines with special reference to MDR and XDR. • Follow up care as per National Guidelines. • Definition of relatse, drug resistant and treatment failure case. • Prevention and control of PTB ➢ reporting ➢ patient/family education ➢ vaccination ➢ good nutrition for healthy immune system ➢ containment of sputum (not spitting phlegm into the environment) • Show the sputum smear and X- ray chest of pulmonary tuberculosis.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice, field visit to DOTS clinic
Unit 4: Gastrointestinal Disorders	**Hrs. theory: 6**
Sub-unit 4.1: Peptic Ulcer Diseases	**Hrs. theory: 3**
Objectives:	**Content:**
Define peptic ulcer (PUD) diseases and discuss the incidence. Distinguish between gastritis, gastric ulcer, duodenal ulcer and esophageal ulcer.	**Pulmonary tuberculosis** • Revision of anatomy and physiology of stomach and duodenum. • Describe physical examination of the gastrointestinal system. • Definition, aetiology, pathology, clinical

Identify the aetiologies, pathology, cardinal signs and clinical features of PUD. Explain the relationship of Helicobacter pylori to peptic ulcers. Identify investigations necessary for differential diagnosis. Describe integrated comprehensive treatment for PUD. Identify complications of untreated PUD. Identify indications for referral.	features, differential diagnosis, complication and management. • Investigations for differential diagnosis: ➢ GI endoscopy, ➢ barium meal X-ray stomach, ➢ gastric acid estimation, ➢ stool for occult blood, ➢ USG abdomen. • Integrated comprehensive treatment of PUD: **Antacids** ➢ gastric acid secretion inhibitors ➢ antibiotic therapy ➢ dietary modification ➢ alcohol/smoking cessation ➢ stress management
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 4.2: Diarrhea, Constipation and Vomiting	**Hrs. theory: 3**
Objectives:	**Content:**
Define Vomiting, Constipation and Diarrhea. Explain the types of Diarrhea. Discuss the causes of Vomiting, Constipation and Diarrhea. Explain the management of Vomiting, Constipation and Diarrhea. Discuss the importance of fiber diet in Constipation. Explain the food habits to precipitate Constipation. Discuss complication of Vomiting, Constipation and Diarrhea.	**Diarrhea, Constipation and Vomiting** • Anatomy and Physiology of oral cavity esophagus, stomach, duodenum, billary tract, small intestine. • Definition ofVomiting, Constipation and Diarrhea. • Types of Diarrhea. • Acute and chronic causes of Vomiting, Constipation and Diarrhea. • Management of Vomiting, Constipation and Diarrhea. • Importance of fiber diet in Constipation. • Food habits to precipitate Constipation. • Complication of Vomiting, Constipation and Diarrhea.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 5: Endocrine System Disorders	**Hrs. theory: 6**
Sub-unit 5.1: Type 1 & 2 Diabetes Mellitus	**Hrs. theory: 3**
Objectives:	**Content:**
Identify the cardinal signs for type 1 and type 2 diabetes mellitus. Describe the patho-physiology of diabetes mellitus. Differentiate between type 1 and type 2 diabetes. Explain the production and action of insulin. Identify the signs and symptoms of each type of diabetes mellitus. Discuss the incidence and contributing factors	**Type 1 & 2 Diabetes Mellitus** • Anatomy & physiology of the pancreas(review) • Patho physiology of the different types of diabetes • Pharmacologic effects of oral/insulin hypoglycemic medicines • Methods for assessing hyperglycemia

for type 1 & 2 diabetes mellitus in Nepal. Give the rationale for administering insulin versus oral hypoglycemic medications. Describe the health consequences of chronic hyperglycemia. Explain the health teaching points for a diabetic patient including the role of diet & exercises in preventing and controlling diabetes. Describe the signs and symptoms of ketoacidosis. Relate the chief treatments for stabilizing a patient with ketoacidosis. Explain complications of diabetes mellitus.	• Treatment for ketoacidosis and hypoglycemia • Preventive health care for diabetics • Demonstrate the blood glucose level of diabetic subjects. • Drugs used in diabetes, their contraindications and side effects.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 5.2: Thyroid disorders	**Hrs. theory: 3**
Objectives:	**Content:**
Discuss the incidence and causes of hypo- and hyper-thyroidism in Nepal. Identify the cardinal signs and clinical features of each of these disorders Describe the management and complications of hypo and hyper-thyroidism. Explain the clinical features of thyroid cancers. Identify health education programs for the prevention of thyroid disorder.	**Type 1 & 2 Diabetes Mellitus** • Incidence, etiologies, diagnosis, management and prevention of hypo- and hyper-thyroidism. • Clinical features of thyroid cancers.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 6: Hepatic Disorders	**Hrs. theory: 6**
Sub-unit 6.1: Cirrhosis of the liver	**Hrs. theory: 2**
Objectives:	**Content:**
Describe the anatomy and physiology of the liver. Describe the different types of cirrhosis of liver. Discuss the incidence and aetiology of cirrhosis of the liver. Describe the pathology cardinal signs and clinical features of different types of cirrhosis of the liver. Identify investigations necessary for differential diagnosis. Identify complications of cirrhosis of the liver. Describe how to manage diagnosed cases or stabilize and refer provisionally diagnosed cases of cirrhosis of the liver. Discuss methods of prevention of cirrhosis of the liver.	**Cirrhosis of the liver** • Anatomy and physiology of the liver • Definition, types, aetiology, pathology, clinical features, differential diagnosis, investigations, complications, management and prevention. • Correlate cirrhosis of liver with alcohol and hepatotoxic drug.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.2: Ascites	**Hrs. theory: 1**

Objectives:	**Content:**
Describe ascites and cardinal signs. Identify the aetiologies, pathology and clinical features of different types of ascites. Identify investigations necessary for differential diagnosis. Identify complications of ascites. Describe how to manage the diagnosed case of ascites. Identify indications for stabilization and referral.	**Ascites** • Definition, aetiology, pathology, clinical features, complications, investigations, differential diagnosis, management and referral of cases of ascites.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 6.3: Hepatitis	**Hrs. theory: 3**
Objectives:	Content:
Define hepatitis and discuss the incidence of hepatitis. Identify the aetiology, pathology, cardinal signs and clinical features of the different types of hepatitis. Identify the investigations necessary for differential diagnosis. Identify complications of hepatitis. Describe how to manage the diagnosed case using local resources. Identify indications for referral. Describe the modes of transmission of infectious hepatitis, the methods of prevention and control for each type.	**Hepatitis** • Definition, incidence, aetiology, pathology, clinical features, differential diagnosis, investigation, complication, management. • Prevention of infectious and non-infectious hepatitis. • Vaccinations for hepatitis.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 7: Central Nervous System Disorders	**Hrs. theory: 14**
Sub-unit 7.1: Tetanus	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss the incidence of tetanus. Explain the cause, pathology, cardinal signs and clinical features of tetanus. Describe the investigations and differential diagnosis of tetanus. Describe the immediate management and referral procedure for cases of tetanus. Discuss the socio-cultural factors which result in the high incidence of tetanus. Describe community education and prevention measures for tetanus.	**Tetanus** • Tetanus bacilli, pathology and clinical features of tetanus. • Investigations, differential diagnosis, management and referral of tetanus. • Incidence and causative factors, preventive measures, immunization schedules.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice

Sub-unit 7.2: Poisoning	**Hrs. theory: 2**
Objectives:	**Content:**
Identify commonly found poisons from chemical, plant, and snake sources. Identify the effect of selected poisons locally and systemically. Describe the appropriate treatments for commonly found poisons and snakebite. Describe how to remove poisons by emesis and gastric lavage; tell exceptions for removal by emesis. Describe symptomatic treatment of poisoning effects. Identify indications for immediate referral.	**Poisoning** • Accidental and intentional causes of poisoning • Common poison sources • Symptoms and signs of poisoning • Emergency management. • Recognition of poisoning as medico legal case.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 7.3: Meningitis and encephalitis	**Hrs. theory: 2**
Objectives:	**Content:**
Differentiate between the pathology, cardinal signs and clinical features of meningitis and encephalitis. Discuss the causes of meningitis and encephalitis. Compare the cerebrospinal fluid findings of bacterial, tubercular and viral meningitis. Explain the indications of Lumbar puncture and cerebrospinal fluid examination in diagnosing meningitis Explain common site lumbar puncture. Describe complication & contraindication of lumbar puncture. Describe the complications, health post management, and indications for immediate referral of meningitis and encephalitis. Discuss the management and follow up care for meningitis and encephalitis. Identify components of preventive education for early diagnosis and treatment of meningitis and encephalitis.	**Meningitis and encephalitis** • Etiology, diagnosis, treatment, complications, rehabilitation, and prevention of meningitis and encephalitis. • Comparison of the cerebrospinal fluid findings of bacterial, tubercular and viral meningitis. • Indications of Lumbar puncture and cerebrospinal fluid examination in diagnosing meningitis • Common site Lumbar puncture. • Complication & contraindication of performing Lumbar Puncture. • Vaccination of meningitis and encephalitis.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 7.4: Cerebro-vascular accident (CVA)	**Hrs. theory: 4**
Objectives	**Content:**
Identify the causes and incidence of cerebral vascular accidents. Describe the classifications of CVA based on pathology. Describe the cardinal signs and clinical features of mild, moderate and severe CVA. Discuss the differential diagnosis of CVA.	**Cerebro-vascular accident (CVA)** • Etiology, classifications, diagnosis, treatment, prognosis. • Rehabilitation, counseling and prevention of cerebro-vascular accidents. • Difference between ischaemic and hemorrhagic stroke.

Describe the treatment and expected outcomes for each type of CVA. Discuss advice and counseling for the family of this patient, to promote rehabilitation. State the risk behaviors for CVA which you would include in preventive education. Identify indications for referral of a CVA patient for higher level or specialty care.	
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Sub-unit 7.5: Other disorders of CNS	**Hrs. theory: 4**
Objectives:	**Content:**
Identify chronic central nervous system disorders seen in Nepal, their etiologies and incidence. Discuss the cardinal signs and clinical features of each. Identify recommended treatment and prognosis for each. Discuss family counseling for each diagnosis. Describe strategies to prevent or give early treatment for these disorders.	**Other disorders of CNS** • Etiology, classifications, diagnosis, treatment, prognosis, rehabilitation, counseling and prevention of central nervous system disorders: ➢ Multiple sclerosis ➢ Cerebral palsy ➢ Muscular dystrophy ➢ Trigeminal neuralgia ➢ Bells palsy ➢ Mental Retardation
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 8: Musculoskeletal Disorders	**Hrs. theory: 3**
Sub-unit 8.1: Arthritis	**Hrs. theory: 3**
Objectives:	**Content:**
Identify the incidence of osteoarthritis and rheumatoid arthritis. Explain septic arthritis and gout. Describe the cardinal signs, clinical features and pathology of each. Explain the investigations for differential diagnosis. Describe the advice and management for osteoarthritis and rheumatoid arthritis. Identify indications for referral to a higher level facility. Discuss contributing factors in the development of these types of arthritis. Discuss the components of education programs to reduce the incidence of arthritis.	• Incidence, pathology, diagnosis and management. • Prevention of osteoarthritis and rheumatoid arthritis. • Septic arthritis and gout. • Use of NSAID and its complication • Dietary habits. • Kyphosis • Scoliosis • Ankylosis disorder • Spondylolisthessis • 10 kyphoscoliosis
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice

Unit 9: Urinary System Disorders	**Hrs. theory: 2**
Sub-unit 9.1: Renal disease	**Hrs. theory: 2**
Objectives:	**Content:**
Review the anatomy and physiology of the renal and urinary system in males and females. Discuss physical examination of the abdomen. Discuss the causes cardinal signs and clinical features of acute and chronic renal failure. Identify indications for referral. Describe the management of acute and chronic renal failure. Identify important components of counseling for the patient with renal failure.	**Renal disease** • Incidence, pathology, diagnosis and management. • Prevention of acute and chronic renal failure. • Role of water and fluid intake. • Diet factors and drug toxicity. • Indication of dialysis.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 10: Other Disorders	**Hrs. theory: 2**
Sub-unit 10.1: Acute Rheumatic fever	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss the incidence of Rheumatic fever and explain the cardinal signs. Identify the aetiology, and pathology of Rheumatic fever. Identify the clinical features and investigations for making a differential diagnosis. Explain Jone's diagnostic criteria to diagnose Rheumatic fever. List the complications of Rheumatic fever if early diagnosis and treatment are not given. Describe how to manage the case after diagnosis. State the methods of prevention of Rheumatic fever. Identify aetiology, pathology, clinical features, investigation and management of infective endocarditis Identify indications that the patient should be referral.	**Other Disorders** • Definition, aetiology, pathology. • Clinical features and differential diagnosis. • Investigations, early diagnosis, management, complications and referral. • Prevention and control. • Jone's diagnostic criteria to diagnose Rheumatic fever. • Aetiology and pathology, clinical features, investigation and management of infective endocarditis.
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 11: Infectious Disorders	**Hrs. theory: 6**
Sub-unit 11.1: Common communicable diseases	**Hrs. theory: 6**
Objectives:	**Content:**
Discuss the morbidity and mortality rates of commonly prevalent communicable diseases in Nepal. State the general principles of communicable disease control. Define selected terms relating to the study of communicable disease. Identify the following for selected	• Definition, cause, clinical features and management regarding following disease ➢ Malaria ➢ Kala-azar ➢ Filariasis ➢ Dengue fever ➢ Enteric fever ➢ Dysentery (Amoebic & Bacillary) ➢ Cholera

communicable diseases: - Modes of transmission - Incubation periods - Cardinal signs & Clinical features - Investigations - Differential diagnosis - Management - Complications - Prevention Discuss how to diagnose, treat and prevent prevalence of communicable diseases.	➢ Giardiasis ➢ Brucellosis ➢ Rabies ➢ Food poisoning ➢ Influenza ➢ Swine flu (H1N1) ➢ SARS ➢ Bird flu ➢ Typhus fever ➢ Worm infestations ➢ Hook worm ➢ Round worm ➢ Trichuristrichiura ➢ Tape worm (Tenia solium, Tania, saginata, H. nana)
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice
Unit 12 First Aid	**Hrs. theory: 5**
UNIT 12-First Aid Management	**Hrs. theory: 5**
Objectives:	**Content:**
Describe first aid management of following conditions: - RTA (road traffic accident) - Burn - Chocking - Drowning - Poisoning - Fall injury - Myocardial Infaction - High altitude sickness - Fainting - Homeostasis	• **Introduction and management for the following condition** ➢ RTA (road traffic accident) ➢ Burn ➢ Chocking ➢ Drowning ➢ Poisoning ➢ Fall injury ➢ Myocardial Infaction ➢ High altitude sickness ➢ Fainting ➢ Homeostasis
Evaluation methods: written exam, viva, performance observation in clinical setting	Teaching / Learning Activities / Resources: classroom instruction, supervised clinical practice

Recommended Texts:

1. Kafle, K. K., &Pinniger, R.G. Diagnostic and Treatment Manual for Primary Health Care in the District, distributed by Health Learning Materials Center, Tribhuvan University, Nepal.
2. Dhungel S., & Pathak, U., Textbook of Medicine.Educational Enterprises, Kathmandu.Current edition.
3. Dhungel S., & Pathak, U., Communicable Disease.Educational Enterprises, Kathmandu.Current edition.
4. Pathak, U., Differential Diagnosis.Educational Enterprises, Kathmandu.Current edition.
5. Dhungel S., & Pathak, U., Textbook of Medicine.Educational Enterprises, Kathmandu.Current edition.
6. Sayami, P., Medical Problems for Health Post Workers.HLMC Kathmandu.
7. Edwards, C.R.W. and Bouchier, I.A.D., Davidson's Principles and Practice of Medicine. Churchill Livingstone, London. Current edition.

References:

1. L.M. Tierney, L.M. et al., Current Medical Diagnosis and Treatment.Appleton & Lange, Stamford, Conn.Current edition.
2. Michael Swash, Hutchison's Clinical Methods, W.B. Saunders, Edenburg, London, New York, Philadelphia, St Louis, Sydney, Toronto, Recent Editi

Concept of General Medicine (Practical)

Practical Hours: 80 hrs (2 hrs/week)

Unit 1: History Taking and Physical Examination **2 hrs**

- Take history of 10 patient with different disease

Unit 2: Anemia **3 hr**

- Classify anemia
- Identify parts to be elicited in anemia
- Find out the Anemia

Unit 3: Hematological and Atheroclerosclerotic Disorder **4 hrs**

- Perform Management of haemostatic disorder

Unit 4: Cardiovascular System **6 hrs**

- Diagnose angina, myocardial infarction
- Perform physical examination
- Brief ECG reading
- Perform X-Ray interpretation

Unit 5: Respiratory System **10 hrs**

- Demonstration of chest x-xay of pleural effusion
- Take history of pneumonia patient
- Perform systemic examination
- Perform investigation of pneumonia
- Perform examination of tuberculosis patient
- Conduct DOTS program
- Perform clinical examination of astha patient

Unit 6: Gastrointestinal System **5 hrs**

- Perform Gastrointestinal system examination
- Perform History taking and diagnosis of diarrohoe, AGE, dysentry,
- Perform ORS Component
- Manage diarrhoea in house

Unit 7: Endocrine System **5 hrs**

- Elicit diabetic patient
- Measures can be applied to diagnose diabetis
- Use glucometer

Unit 8: Hepatic Disorder **5 hrs**

- Perform evaluation of ascities
- Perform findings of hepatitis
- Perform vaccination

Unit 9: Central Nervous System **10 hrs**

- Perform examination of
  - Tetanus,
  - Bells palsy,
  - Stroke,

- Paraplegia,
- Poisoning
- CVA
- Cerebral palsy,
- Mental retardation
- Muscular dystrophy

Unit 10: Musculoskeletal Disorder **8 hrs**

- Perform examination on
  - Kyphosis,
  - Scoliosis,
  - Arthrities,
  - Gout,
  - Rheumatoid arthrities

Unit 11: Renal System and Other **3 hrs**

- Perform Examination on UTI, CKD,
- Perform Examination Of communicable disease and laboratory findings

Unit 12: Acute Rheumatic fever **3 hrs**

- Identify the aetiology, and pathology of Rheumatic fever.

Unit 13: First Aid Management **16 hrs**

Perform first aid management of

- RTA, (Road Traffic Accident)
- Burn,
- Chocking,
- Drowning,
- Poisoning,
- Fall injury,
- Fainting,
- Homeostasis

Third Year

S.N	Subjects Offered
1	Clinical Methods of Acupuncture and Moxibustion
2	Acupuncture and Moxibustion Therapeutics II
3	Health Care Systems and Management
4	Community Medicine
5	Comprehensive Community Field Practice
6	Comprehensive Clinical Practice

Clinical Methods of Acupuncture and Moxibustion

Total Hours: 160 hrs(8 hrs/week)
Theory Hours: 80 hrs (4 hrs /week)
Practical Hours: 80 hrs (4 hrs/week)

Course Description:
This course is designed to provide students the skill and knowledge about clinical methods of acupuncture and moxibustion.

Course Objectives:
After completion of this course, students will be able to:

1. Sterilize the equipments and manage the accidents of needle;
2. Identify different types of needles;
3. Apply needling method;
4. Perform different types of acupunture methods;
5. Identify the materials and function of moxibustion;
6. Classify the moxibustion;
7. Apply moxibustion; and
8. Perform cupping methods.

Course Contents:

Theory

Unit 1: Sterilize the equipment and manage the possible accidents of needle	**Hrs. theory: 6**
Sub Unit 1.1: Sterilization and management of possible accidents	**Hrs. theory: 6**
Objectives:	**Content:**
Perform sterilization methods Manage the possible accidents of acupuncture	• Sterilization and its methods • Cause, manifestations & management of possible accidents of acupuncture. ➢ Fainting ➢ Stuck needle ➢ Bent needle ➢ Broken needle ➢ Hematoma ➢ After effects
Examination methods: Viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play

Unit 2: Filiform Needle	**Hrs. theory: 17**
Sub-unit 2.1: The structure and specification of Filiform Needle	**Hrs. theory: 15**
Objectives:	**Content:**
Explain the structure of filiform needle. Explain the methods of needling practice Find the angle and depth of insertion Perform manipulating techniques Prepare the patient and equipments for acupuncture therapy Perform the reinforcing and reducing methods	• Structure and specification of filiform needle • Method and essential things for needling practice • Angle and depth of insertion ➢ Perpendicular ➢ Oblique ➢ Horizontal • Manipulating techniques and arrival of Qi and direction of needle ➢ Fundamental manipulating techniques ➢ Auxillary manipulating techniques ➢ Signs of arrival of Qi ➢ Factors influencing arrival of Qi • Retaining and withdrawing the needle • Preparation prior to treatment ➢ Inspection of the instrument ➢ Posture of the patient ➢ Sterilization of needle &disinfect the body part. • Inspection of instrument and manage the posture of patient. • Basic & comprehensive reinforcing & reducing Methods.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Sub-unit 2.2: Precaution and contraindication	**Hrs. theory: 2**
Objectives:	**Content:**
Explain about precautions and contraindications of acupuncture treatment	• Precaution of acupuncture treatment. • Contraindication of acupuncture treatment.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 3: Three edged needle	**Hrs. theory: 3**
Sub Unit 3.1: Introduction of three edged needle	**Hrs. theory: 3**
Objectives:	**Content:**
Explain the structure andmanipulating techniques of three edged needle	• Description of three edged needle • Indications and manipulation of three edged needles. • Precautions during treatment with three edged needle.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play

Unit 4: Cutaneous needle	**Hrs. theory: 3**
Sub Unit 4.1: Introduction of cutaneous needle	**Hrs. theory: 3**
Objectives:	**Content:**
Explain the structure and manipulating techniques of cutaneous needle.	• Structure and specification of the cutaneous needle • Indications and manipulation of cutaneous needle. • Precautions during treatment.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 5: Intradermal needle	**Hrs. theory: 3**
Sub Unit 5.1: Introduction of intradermal needle	**Hrs. theory: 3**
Objectives:	**Content:**
Explain the structure and manipulating techniques of intradermal needle	• Structure & specification of intradermal needle • Indication & manipulation of intradermal needle • Precautionsduring treatment
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 6: Apply needling methods	**Hrs. theory: 3**
Sub Unit 6.1: Needling methods	**Hrs. theory: 3**
Objectives:	**Content:**
Perform different needling techniques	Different needling methods based on: • Methods of insertion of needle • Angle and depth of insertion • Manipulation and arrival of Qi
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 7: Ear acupuncture	**Hrs. theory: 10**
Sub Unit7. 1: Basics of ear acupuncture	**Hrs. theory: 10**
Objectives:	**Content:**
Explain the ear acupuncture and anatomy of auricle surface.	• Definition of ear acupuncture. • Anatomy of the auricle surface. • Distribution of auricular points. • Location and indication of commonly used auricular points.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 8: Electro-acupuncture	**Hrs. theory: 5**
Sub Unit 8.1: General introduction	**Hrs. theory: 5**
Objectives:	**Content:**
Describe electro-acupuncture and explain its indication and importance	• Definition of electro-acupuncture • Indication and importance • Structure of electro stimulator. • Manipulation of electro-acupuncture • Contraindications and precautions of electro acupuncture

Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 9: Scalp acupuncture	**Hrs. theory: 10**
Sub Unit 9.1: Basics of scalp acupuncture	**Hrs. theory: 10**
Objectives:	**Content:**
Find out the areas of scalp acupuncture Explain Jiao's protocol and stimulation areas. Explain manipulation, indications and precautions.	• Definition and importance. • Standard areas of stimulation(Jiao's protocol) • Manipulation, indications and precautions.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 10:Application of moxibustion	**Hrs. theory: 6**
Sub Unit 10.1: Applications of different types of moxa	**Hrs. theory: 6**
Objectives:	**Content:**
Identify and use different forms of moxa.	• Classification of different types of moxibustion in details. • Definition of moxa cone • Method of making moxa cones. • Difference between moxa cones & moxa sticks. • Definition of moxa stick. • Functions, indications& contraindications of moxa stick.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 11: Apply moxibustion	**Hrs. theory: 8**
Sub Unit 11.1: Moxibustion methods	**Hrs. theory: 8**
Objectives:	**Content:**
Explain about different application methods of moxibustion. Explain about the management of accidents caused by moxibustion	• Process & volume for moxibustion. • Different application methods of moxibustion. • Management after moxibustion.
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play
Unit 12: Cupping	**Hrs. theory: 6**
Sub Unit 12.1: Introduction &cupping	**Hrs. theory: 6**
Objectives:	**Content:**
• Define cupping. • Identify different cups and perform cupping.	• Definition of cupping • History of cupping • Types of cupping. ➢ Dry cupping ➢ Wet cupping ➢ Moving cupping • Identification of types of cupping jars. ➢ Bamboo jars ➢ Glass cups ➢ Plastic jars ➢ Rubber cups • Importance of cupping

	• Functions of cupping • Manipulation techniques • Precautions
Examination methods: written exams, viva, performance observation	Teaching / Learning Activities: class room instructions, demonstration, role play

References:

- Introduction to Acupuncture and moxibustion, Ren Zhong, Shanghai literature institute of traditional Chinese medicine, translated by Xuemin Wang, published by World Century Publishing Corporation.
- Acupuncture and moxibustion, Shen Xue Yong and Wang Hua, Translated by Zhao Baixiao.
- Acupuncture and moxibustion, Long, Zhixian, English-chinese collegiate Textbooks in Traditional Chinese medicine of higher learning, Edited by Beijing University of Traditional Chinese medicine, Published by Academic press (Xue Yuan).
- Chinese Acupuncture and Moxibustion, Chief editor Cheng Xinnong, Foreign language press.

Clinical Methods of Acupuncture and Moxibustion

(Practical)

Practical: 80 hrs (4 hrs/week)

Perform the followings:

Unit 1: Sterilize the equipment and manage the possible accidents of needle 10 hrs

Sub Unit 1: Sterilization and management of possible accidents

- Sterilize the instruments
- Demonstrate and simulate the management of possible accidents during acupuncture treatment
  - Fainting
  - Bent needle
  - Broken needle
  - Stuck needle
  - Hematoma
  - After effects

Unit 2: Filiform needle 20 hrs

Sub Unit 1: The structure and specification of filiform needle

- Demonstrate the structure and specification of filiform needle
- Perform needling practice with sheet of paper, cotton cushion and on your own body
- Perform different angles and depth of insertion with filiform needle
- Perform different needle directions applying some commonly used acu-points
- Perform the manipulating techniques and feel Qi sensation
- Perform reinforcing and reducing methods

Unit 3: Three edged needle 5 hrs

Sub-unit 1: Introduction of three edged needle

- Demonstrate the structure and specification of three edged needle
- Perform needling practice with three edged needle

Unit 4: Cutaneous needle 5 hrs

Sub-Unit 1: Introduction of cutaneous needle

- Demonstrate the structure and specification of cutaneous needle
- Perform needling practice with cutaneous needle
- Manipulate the cutaneous needle

Unit 5: Intradermal needle 5 hrs

Sub Unit 1: Introduction of intradermal needle

- Demonstrate the structure and specification of intradermal needle
- Perform needling practice with intradermal needle
- Manipulate intradermal needle

Unit 6: Apply needling methods 5 hrs

***S*ub Unit 1: Needling methods**

- Perform different needling techniques

Unit 7: Ear acupuncture **5 hrs**

Sub Unit 1: Basics of ear acupuncture

- Draw anatomy of auricle with distribution of auricular surface
- Locate the common auricular points
- Perform ear acupuncture.

Unit 8: Electro-acupuncture **5 hrs**

Sub Unit 1: General introduction

- Demonstrate electro-stimulator
- Perform electro acupuncture

Unit 9: Scalp acupuncture **5 hrs**

Sub Unit 1: Basics of scalp acupuncture

- Locate the standard lines of scalp acupuncture
- Locate the major areas of scalp acupuncture
- Perform scalp acupuncture
- Manipulate of scalp acupuncture

Unit 10: Application of moxibustion **5 hrs**

Sub Unit 1: Applications of different types of moxa

- Prepare moxa cones
- Demonstrate the moxibustion therapy according to its classification

Unit 11: Apply moxibustion **5hrs**

Sub Unit 1: Moxibustion methods

- Perform direct moxibustion withMoxa cones
- Perform indirect moxibustion with moxa cones
- Perform moxibustion with moxa stick
- Perform moxibustion with applying warming needle
- Simulate the possible accidents of moxibustion

Unit 12: Cupping **5 hrs**

Sub Unit 1: Introduction &cupping

- Perform dry cupping
- Perform wet cupping
- Perform moving cupping

Acupuncture and Moxibustion Therapeutics II

Total Hours: 320 hrs (16 hrs/week)
Theory Hours: 160 hrs (8 hrs/week)
Practical Hours: 160 hrs (8 hrs/week)

Course Description:
This course is designed to provide students the skill and knowledge about therapeutics of acupuncture and moxibustion.

Course Objectives:
After completion of this course, students will be able to:

1. Diagnose and manage cardiovascular disorder;
2. Explain in detail about common musculoskeletal disorders, their diagnosis and management;
3. Explain in detail about common pediatric diseases, their diagnosis and management;
4. Explain in detail about common endocrine disorders, their diagnosis and management;
5. Explain in detail about common urogenital disorders, their diagnosis and management;
6. Explain in detail about common ENT disorders and their diagnosis and management;
7. Explain in detail about common eye diseases, their diagnosis and management; and
8. Describe in detail about the common addictions, diagnosis and management.

Course Contents:

Theory

Course: Acupuncture and Moxibustion Therapeutics II	**Hrs. theory: 160**
Unit 1: Diseases of Cardiovascular System	**Hrs. theory: 15**
Objectives:	**Contents:**
Explain cardiovascular system Describe cardiovascular disorders Diagnose and manage cardiovascular disorder	**Diseases of CardiovascularSystem** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Palpitation ➢ High Blood Pressure ➢ Low Blood Pressure
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 2: Diseases of Musculoskeletal System	**Hrs. theory: 20**
Objectives:	**Content:**
Give a brief description of musculoskeletal system Explain in detail about common musculoskeletal disorders, their diagnosis and management	**Diseases of Musculoskeletal System** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Bi Syndrome/Arthritis related diseases ➢ Torticollis

	➢ Periarthritis shoulder ➢ Back and Neck Pain
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 3: Gynecological disorders	**Hrs. theory: 20**
Objectives:	**Content:**
Give a brief description of female reproductive system Explain in detail about common gynecological disorders, their diagnosis and management	**Gynecological disorders** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Dysmenorrhoea ➢ Irregular Menstruation ➢ Amenorrhoea ➢ Leucorrhoea ➢ Morning sickness ➢ Post-menopausal Syndrome
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 4: Pediatric Diseases	**Hrs. theory: 20**
Objectives:	**Content:**
Give a brief description of common pediatric diseases Explain in detail about common pediatricdiseases, their diagnosis and management	**Pediatric Diseases** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Infantile Paralysis ➢ Nocturnal Enuresis ➢ Mumps ➢ Attentional Hyperactive Defecit Disorder
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, supervised, observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.

Unit 5: Endocrine Disorders	**Hrs. theory: 20**
Objectives:	**Content:**
Give a brief description of endocrine system Explain in detail about common endocrine disorders, their diagnosis and management	**Endocrine Disorders** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Diabetes Mellitus ➢ Thyroid Disorders ➢ Obesity ➢ PCOS (Polycystic Ovarian Syndrome)
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 6: Urinogenital System	**Hrs. theory: 15**
Objectives:	**Content:**
Give a brief description of urogenital system Explain in detail about common urogenital disorders, their diagnosis and management	**Urinogenital System** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Edema ➢ Impotence ➢ Urinary Incontinence ➢ Neurogenic Bladder
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Unit 7: ENT Diseases	**Hrs. theory: 20**
Objectives:	**Content:**
Give a general introduction of common ENT diseases Explain in detail about common ENT disorders and their diagnosis and management	**ENT Diseases** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Tinnitus ➢ Rhinitis ➢ Otalgia ➢ Sinusitis
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.

Unit 8: Eye Diseases	**Hrs. theory: 15**
Objectives:	**Content:**
Give a general introduction of common eye diseases Explain in detail about common eye diseases, their diagnosis and management	**Eye Diseases** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Optic Atrophy ➢ Dropping of Eyelids
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, supervised, observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.
Course :Therapeutics of Acupuncture and Moxibustion-II	**Hrs. theory 160 Hrs. lab/practical 240**
Unit 9: Addictions	**Hrs. theory: 15 Hrs. lab/practical:25**
Objectives:	**Content:**
General introduction of several addictions Describe in detail about the common addictions, diagnosis and management.	**Addiction** • Definition, Etiopathology, Clinical Manifestations, Syndrome Differentiation and Management of following diseases: ➢ Drug Addiction ➢ Alcohol Addiction ➢ Smoking Addiction
Evaluation methods: written and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction, textbooks, self-study, and supervised observation in clinical settings, case discussion and demonstration, return demonstration, models, videos, role play.

Referances:

1. A Patients guide to acupunture Publiser Altheapress Aug 2019
2. Acupuncture Points Hand books Publiser Darycott LLC march 2017
3. The Concise Books of Acupoints Publisher Blue River Press Januery 2014
4. A Manual of Acupuncture 2nd edition Publisher Journal of Chines Medicine June 2007

Acupuncture and Moxibustion Therapeutics II (Practical)

Practical Hours: 160 hrs (8 hrs/week)

Treatment of Common Diseases with Acupuncture and Moxibustion

Use TCM methods of diagnosis to differentiate the syndrome and treatment of following diseases:

Unit 1: Cardiovascular Diseases: **15 hrs**

- Palpitation
- High Blood Pressure
- Low Blood Pressure

Unit 2: Musculoskeletal System Diseases: **20 hrs**

- Bi Syndrome
- Torticollis
- Periarthritis of shoulder
- Lumbar Pain

Unit 3: Gynecological Diseases: **20 hrs**

- Dysmenorrhoea
- Irregular Menstruation
- Amenorrhoea
- Leucorrhoea
- Prolonged Labour
- Malposition of fetus
- Morning Sickness

Unit 4: Pediatric Diseases **20 hrs**

- Infantile Convulsion
- Infantile Paralysis
- Nocturnal Enuresis
- Mumps

Unit 5: Endocrine Disease **20 hrs**

- Diabetes Mellitus
- Thyroid Disorders
- Obesity

Unit 6: Urinogenital System **15 hrs**

- Edema
- Impotence
- Retention of urine
- Nocturnal Eneuresis

Unit 7: ENT Diseases **20 hrs**

- Tinnitus
- Rhinitis
- Sinusitis
- Otalgia
- Epistaxis

Unit 8: Eye Diseases **15 hrs**

- Myopia
- Dropping of eyelids

Unit 9: Addictions **15 hrs**

- Drug addiction
- Alcohol addiction
- Smoking addiction

Health Care Systems and Health Management

Total Hours: 160 hrs (8 hrs/week)
Theory Hours: 120 hrs (6 hrs/week)
Practical Hours: 40 hrs (2 hrs/week)

Course Description:
This course is designed to provide the knowledge and skill about the health care systems and health management in Nepal. It deals about the prevalent health care systems, health policies and programs in Nepal, fundamental principles of management, management of health related organizations, logistic management, personnel management, health issues and professional practice.

Course Objectives:
After completion of this course, students will be able to:

1. Define health care system, identify prevalent health care systems in Nepal, explain the theories, principles & components of health care systems and develop managerial skill in health care;
2. Identify current national and international health issues; describe the national health policy, its philosophy, strengths and weaknesses;
3. Explain various health programs of the Departments of AAM and Health Services;
4. Apply the principles of logistics management, human resource management and supervision, provide quality health service at AAM dispensaries and manage AAM dispensaries/health center in the real setting;
5. Identify, generate and use information (service information, logistic information, human resource information and financial information) in health management, planning and decision making process;
6. Identify different levels of health manpower and describe the functions of prevalent teaching/learning institutions in Nepal;
7. Describe goals and functions of the health related governmental organizations, non-governmental organizations (NGO's), international non-governmental organizations (INGO's) and international agencies in Nepal; and
8. Define decentralization and local governance; explain the code of ethics of the certificate level manpower of Ayurveda, Naturaopathy &Yogic Science and Health Assistant of AAM.

Course Contents:

Theory

Unit 1: Health Care System in Nepal	**Hrs theory: 5**
Objectives:	**Content:**
Define health care system. Describe the history of the development of health services in Nepal. Describe naturopathic, yogic, acupuncture, ayurvedic, homeopathic and allopathic approaches to health care. Identify situations when the most appropriate type of treatment might be any one or the combination of two or more of the above systems.	• Definition, characteristics, and purpose of a health care system. • History of health system in Nepal. • Health care approaches: ➢ Ayurveda ➢ Homeopathy ➢ Allopathy ➢ Naturopathy ➢ Acupuncture ➢ Sowarigpa ➢ Unani • Philosophy, origin, strengths and weaknesses of these health care approaches.

Examination methods: Written exams (short answer questions)	Teaching / Learning Activities: Textbook self-study, classroom instruction.
Unit 2: Fundamentals of Health Care Management	**Hrs. theory 30**
Sub-unit 2.1: Introduction to Health Care Management	**Hrs. theory 2**
Objectives:	**Content:**
Explain the concept of Management and the principles of Management Differentiate between management & administration. Define health care management Explain the POSDCORB function of management in AAM.	• Concept and Principles of Management, • Differentiation between management & administration. • Definition and principles of health care management • The POSDCORB function of management in AAM.
Examination methods: Written exams (short answer questions)	Teaching / Learning Activities:textbook self-study - Instructor led discussion, reference study assignment
Sub-unit 2.2: Planning of Health service	**Hrs. theory: 3**
Objectives:	**Content:**
Define planning and purpose of planning. Explain the planning cycle. Describe different types and steps of planning. Explain the current health planning system in Nepal.	• Definition and purpose of planning. • Planning cycle (PIE cycle) • Types & steps of planning. • Current health planning system of Nepal.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study - classroom instruction
Sub-unit 2.3: Organizing of Health Service	**Hrs. theory: 3**
Objectives:	**Content:**
Define organization. Describe the process and purpose of organization. Describe different types of organization and organograms of Ministry of Health, Department of Ayurveda and Alternative Medicine, Primary Health care centre and Health Post.	• Definition of organization. • The process and purpose of organization • Types of organizations and their organograms. • Organograms of MoH, DoAA, DAHC, PHCC, Ayurveda dispensary and HP.
Examination methods: Written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit
Sub-unit 2.4: Leadership in an Organization	**Hrs. theory: 4**
Objectives:	**Content:**
Define leadership. Describe the types of leadership. Discuss the characteristics, advantages and disadvantages of autocratic, democratic and laissez faire leadership. Describe the responsibility of leadership as role model. Explain why an autocratic leadership style has historically been most commonly used in Nepal.	• Definition of Leadership. • Types of leadership. • Characteristics, benefits, advantage and disadvantages of styles of leadership. • Responsibility of the leader as role model; ways to demonstrate consistency, transparency, integrity and fairness. • An autocratic leadership style has historically been most commonly used in Nepal

Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, discussion, field visit
Sub-unit 2.5: Staffing in an Organization	**Hrs. theory: 3**
Objectives:	**Content:**
Explain staffing and process of staffing. Identify the staffing patterns of different health institutions Nepal Identify the elements of an effective job description.	• Staffing ➢ Definition ➢ Purpose ➢ Process • Staffing patterns of a Primary Health Care Center and Health Post. • Essential elements of a job description.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit
Sub-unit 2.6: Directing	**Hrs. theory: 2**
Objectives:	**Content:**
Explain the meaning and purpose of directing. Describe the ways of directing in organization.	• Definition of directing. • Purpose of directing. • Ways of directing.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit
Sub-unit 2.7: Supervision, monitoring and Evaluation	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the principles of supervision. Describe the techniques of supervision. Describe the steps of monitoring. Describe the meaning and purpose of evaluation. Describe the differences among supervision, monitoring and evaluation.	• **Supervision** ➢ Definition ➢ Purpose ➢ Importance ➢ Techniques, Tools ➢ Principles. • **Monitoring** ➢ Definition ➢ Purpose ➢ Importance ➢ Process ➢ Tools ➢ Steps • **Evaluation** ➢ Meaning ➢ Purpose ➢ Types • **Differences among supervision, monitoring and evaluation.**
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit

Sub-unit 2.8: Coordination of Health Management	**Hrs. theory: 2**
Objectives:	**Content:**
Describe coordination in terms of health care management. Identify the techniques of coordination. Explain the different types of coordination.	• **Definition of coordination.** • **Types of coordination** ➢ External and internal ➢ Horizontal and vertical • **Techniques of coordination.**
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit
Sub-unit 2.9: Disaster	**Hrs. theory: 5**
Objectives:	**Content:**
Define disaster. Describe the types of disaster. Describe the effects of man-made and natural disaster. Identity the basic elements of disaster planning. Identify the health risks created by earthquake, flooding, landslide Describe the role of governmental, non-government, regional, local and civil society in disaster management and post disaster issues.	• Definition of disaster. • Types of disaster. • Effects of man-made and natural disaster. • Basic elements of disaster planning. • Health risks created by earthquake, flooding, landslide etc. • The role of governmental, non-government, regional, local and civil society in disaster management and post disaster issues.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study - Classroom instruction, field visit
Sub-unit 2.10: Budgeting	**Hrs. theory: 2**
Objectives:	**Content**:
Define budgeting and Identify different types of budgets. Discuss the components of budget sheet.	• Definition of budgeting. • Types of budgets (capital and recurrent) and characteristics of various budgets. • Components of budget sheet • Tools (voucher, ledger, daybook, audit)
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Classroom instruction, textbook self-study.
Sub-unit 2.11: Reporting and recording	**Hrs. theory: 2**
Objectives:	**Content:**
Define reporting and recording. Describe the techniques of report writing. Explain the reporting process of Nepal's Health Care Delivery System.	• Definition of reporting and recording. • Techniques of report writing. • Reporting process of Nepal's Health Care Delivery System.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit
Unit 3: AAM Centre Management/ Health	**Hrs. theory 30**

Post Management	
Sub-unit 3.1: Staff meeting	**Hrs. theory: 2**
Objectives:	**Content:**
Define staff meeting and its importance. Describe planning and organizing for an effective meeting.	• Definition of staff meeting. • Planning and organizing a meeting.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Samples of meeting minutes/invitation letters, practice writing minutes from a simulated meeting Classroom instruction, Demonstration / Practicum
Sub-unit 3.2: Training	**Hrs. theory: 3**
Objectives:	**Content:**
Define training and purpose of training. Describe the types of training with its advantages and disadvantages. Describe the process for assessing the need for training (TNA) Describe planning, conduction & evaluation of training program.	• Definition of training. • Different types of training. • Training Need Assessment (TNA). • Training plan, training conduction & training evaluation.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, field visit
Sub-unit 3.3: Financial Management	**Hrs. theory: 5**
Objectives:	**Content:**
Describe the purpose and procedures for financial management. Explain the records of income and expenditure annual budget bank accounts. Prepare the monthly/ quarterly and annual financial statements.	• Purpose procedures of financial management • Records of income and expenditure annual budget bank accounts. • Preparation of Monthly/ quarterly and annual financial statements.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Classroom instruction, group discussion, Resources: booklets for process of filling logistics related forms, actual logistic forms.
Sub-unit 3.4: Logistic Management	**Hrs. theory: 5**
Objectives:	**Content:**
Define logistic management Explain logistic cycle. Explain the six rights of logistic management. Explain the purpose and functions of logistics management. Explain the Components and procedures of Nepal's LMIS. Describe the logistic management information system (LMIS) of Nepal.	• Definition of logistic management. • Logistic cycle (Serving customer, product selection forecasting and procurement and inventory management). • Six rights of logistic management. • Purpose and functions of logistics management. • Components and procedures of Nepal's LMIS. • Logistic management information system (LMIS) of Nepal.
Examination methods:	Teaching / Learning Activities:

written exams (short answer questions)	Classroom instruction, group discussion, Resources: booklets for process of filling logistics related forms, actual logistic forms.
Sub-unit 3.5: Time Management	**Hrs. theory: 2**
Objectives:	**Content:**
Define time management. Describe the concept and meaning of time management. Prepare the program chart with weekly, monthly quarterly and yearly time table for various activities.	• Definition of time management. • Concept and meaning of time management. • Program chart with weekly, monthly quarterly and yearly time table for various activities.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Text book self-study, Classroom instruction, Practicum, visit institution, Classroom practice.
Sub-unit 3.6: Quality assurance	**Hrs. theory: 3**
Objectives:	**Content:**
Define quality assurance in Health Care. Explain the concepts and components of quality health assurance. Define standards and give some examples of health care standards. Explain the importance of quality assurance. Explain the main characteristics of a quality assurance programme. Explain the ways to improve patient satisfaction with services. List the 4 focus areas of quality assurance principles.	• Definition of quality assurance in Health Care. • Components and concepts of quality health assurance. • Definition standards and some examples of health care standards. • Importance of quality assurance. • Main characteristics of a quality assurance programme. • Ways to improve patient satisfaction with services. • The focus of quality assurance principles: ➢ Focus on patient/staff needs ➢ Focus on how things are done (process/systems) – do not blame the individual. ➢ Focus on facts (don't make assumptions or guesses). ➢ Focus on team approach to problem solving.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: textbook self-study, Classroom instruction, group discussion, practice exercises.
Sub-unit 3.7: Problem Solving	**Hrs. theory: 2**
Objectives:	**Content:**
Define problem and problem solving. Describe the steps of problem solving.	• Definition of problem solving. • Steps of problem solving.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Text book self-study, Classroom instruction, classroom practice, field visit to relevant health institutions
Sub-unit 3.8: Health Management	**Hrs. theory: 4**

Information System (HMIS)	
Objectives:	**Content:**
Define Health Management Information System (HMIS). Explain the purpose & process of HMIS. Demonstrate how to prepare monthly, quarterly, and annual HMIS reports. Explain the important benefits of HMIS. Explain the use of the different types of HMIS forms.	• Definition of Health Management Information System (HMIS) • Purpose & process of HMIS. • Preparation of monthly, quarterly, and annual HMIS reports. • Important benefits of HMIS. • Use of the different types of HMIS forms.
Examination methods: Written exams (short answer questions)	Teaching / Learning Activities: Text book self-study, Classroom instruction, classroom practice, field visit to relevant health institutions.
Sub-unit 3.9: Letter Writing	**Hrs. theory: 2**
Objectives:	**Content:**
Identify the different types of letters. Describe the characteristics of correct and effective letters.	• Types of letter. • Characteristics of letters.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Text book self-study, Classroom instruction, classroom practice.
Unit 4: Health related organization	**Hrs. theory: 8**
Sub-unit 4.1: International Non-Governmental Organizations (INGO's)	**Hrs. theory: 4**
Objectives:	**Content:**
Describe & Identify International Non-governmental Organizations. (INGO's) like SCF (U.S.) CARE Nepal, PLAN Nepal Describe the role and activities of INGO's for promoting health care in Nepal. Identify WHO, UNDP, World Bank, DFID and UNFPA. Describe role and activities of different bilateral and multilateral agencies in health sectors of Nepal.	• Concept of INGO's: SCF (U.S.) CARE Nepal, PLAN Nepal etc. • Role and activities of INGO's for promoting health care in Nepal. • Identification WHO, UNDP, World Bank, DFID, UNFPA. • Role and activities of different bilateral and multilateral agencies in health sectors of Nepal.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Classroom instruction, filed visit to concerned organization
Sub-unit 4.2: National Non-Governmental Organizations (NGO's)	**Hrs. theory: 4**
Objectives:	**Content:**
Describe & Identify national NGO's like FPAN, Nepal Netrajyoti Sangh, Leprosy Relief Association and others describe roles and activities of national non-governmental organization for promoting health care. Describe the role and activities of NGO's for promoting health care in Nepal. Describe role and activities of different bilateral	• Description & Identification of national NGO's like FPAN, Nepal Netrsajyoti Sangh, Leprosy Relief Association and others describe roles and activities of national non-governmental organization for promoting health care. • Role and activities of NGO's for promoting health care in Nepal. • Role and activities of different

and multilateral agencies in health sectors of Nepal.	bilateral and multilateral agencies in health sectors of Nepal.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Classroom instruction, filed visit to concerned organization
Unit 5: National Health Policy	**Hrs. theory: 25**
Sub-unit 5.1: National Health Policy (NHP)	**Hrs. theory: 5**
Objectives:	**Content:**
Describe the aims and components of National Health Policy. Describe aim of National Ayurveda Health Policy 2052. Describe the aim of current 5 years plan and long term health plan.	• National Health Policy ➢ Objective ➢ Targets ➢ Components. • Aim of National Ayurveda Health Policy 2052. • Description of aim of current 5 years plan and long term health plan.
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Classroom instruction, field visit, annual report of DOHS
Sub-unit 5.2: National Health Programmes	**Hrs. theory: 20**
Objectives:	**Content:**
Explain the activities of the following national health programs: Malaria control, Tuberculosis Control, Leprosy control, Kala-azar, STD/HIV/AIDS, Community Drug (CDP), PHC Outreach Clinic, Nutrition, Training and others. Explain the activities of National Health Program . Describe the role of the Health Post Manager in National Health Programs.	• Activities of the national health programs: • Malaria control, Tuberculosis Control, Leprosy control, Kala-azar, STD/HIV/AIDS, Community Drug (CDP), PHC Outreach Clinic, Nutrition, Training and others. • National health programs including: ➢ Child health Program - Immunization - CB-IMNCI - Nutrition Program ➢ Family Health Program - Safe Motherhood - Family Planning - Adolescent Sexual and Reproductive Health (ASRH) ➢ Disease Control - Malaria - Kalaazar - Dengue - Tuberculosis - HIV/AIDS ➢ Supportive Programs - National Health Education, Information and communication(NHEICC) • Role of the Health Post Manager in National Health Programs.
Examination methods:	Teaching/Learning Activities: Text book

written exams (short answer questions)	self-study, classroom instruction, field visit to selected divisions of D.H.S., DOHS annual report, National Planning System in Health Section.
Unit 6: Health Manpower in Nepal	**Hrs. theory: 8**
Unit 6:1 Health Manpower in Nepal	**Hrs. theory: 8**
Objectives:	**Content:**
Describe the brief introduction of the various institutions involved in human resources development in health sector. Describe the formation and responsibilities of Nepal Health Professional Council (NHPC)	• **Various institution involved in HRH development like,** ➢ Tribhuvan University: Institute of Medicine ➢ Council for Technical Education and Vocational Training (CTEVT) ➢ Kathmandu University ➢ B.P. Koirala Institute for Health Sciences ➢ National Health Training Center (NHTC) ➢ Pokhara University ➢ Purvanchal University ➢ National Academy of Medical Sciences (NAMS) ➢ Patan Academy of Health Science ➢ Karnali Academy of Heath Sciences (KAHS) ➢ Nepal Sanskrit University ➢ Lumbini Boudha University • Formation and responsibilities of Nepal Health Professional Council (NHPC)
Examination methods: written exams (short answer questions)	Teaching / Learning Activities: Classroom instruction, relevant literature and brochures of concerned institutions, field visit to selected divisions of D.H.S.
Unit 7: Health Issues and Professional Practice	**Hrs. theory: 8**
Sub-unit 7.1: Global Health Issues	**Hrs. theory: 8**
Objectives:	**Content:**
Identify current global health issues. Explain mortality from infectious disease and nutritional problems in developing nations. Describe the barriers to the development of global health throughout the world. Explain the global efforts to improve the health nutrition of developing nations. Identify the most important health issues of Nepal.	• Current Global health issues. • Infectious disease and nutritional problems in developing nations. • Barriers to development of global health throughout the world. • Global efforts to improve the health nutrition of developing nations. • Important health issues of Nepal.

Unit 8: Health Professional Councils	Hrs. theory: 6
Objectives:	**Contents**
Students will be able to	
List the different professional council in health sector Explain the role, objective and function of NHPC Describe professional ethics and code of conduct of a AAM Health Assistant	• Listing different professional councils in health sector • Role, objective and function of NHPC • Professional ethics and code of conduct of a AAM Health Assistant

Recommended Texts:

1. Macmohan, R. et al. On Being In Charge, A guide to Management in Primary Health Care.WHO.Current edition.
2. Dixit, H.The Quest for Health. Educational Enterprise, (P) Ltd., Kathmandu. 1999.
3. Pradhananga, Y. Health Management. Council for Technical Education and Vocational Training, Bhaktapur, Nepal.2055B.S.-
4. Kamala, T. &Bishnu, R. Leadership and Management for Nurses. Health Learning Materials Centre, TribuvanUniversity, Kathmandu. 1990
5. Sapkota, Shiba Prasad, Health Management and Community Health, VidhyartheePustakPrakasan, Bhotahity

References:

1. Shrestha, B.M. Basic Principles of Management, Akshyulak Publication, Nepal.2039B.S.
2. Modern Management Methods and the Organization of Health Services, Public Health Papers #55.WHO. 1974.
3. Inventory Control and Basic Logistics Procedure Manual on Store Management for PHC/HP and SHP Personnel.HMG/JSI.2054B.S.
4. Park, K. Textbook of Preventive and Social Medicine, BhandrasidasBhanot, Jabalpur, India. 2000.
5. Health Logistics Procedure Manual, NHTC/LMD/USAID JSI, Nepal 2057
6. Health Statistics and EPI Cold Chain Management Procedure Manual, NHTC/LMD/USAID, JSI, Nepal

Health Care Systems and Health Management
(Practical)

Practical Hours: 40 hrs (2 hrs/week)

Students will perform at least following performance in class room settings.

1. Conduct meeting and write a minute in simulative situation
2. Write an official letter (invitation, demand for commodity, leave and submission letter).
3. Prepare a duty roster
4. Prepare a weekly/monthly report of HP
5. Prepare the tools for supervision,
6. Prepare a monitoring tool
7. Prepare a evaluation tool
8. Demonstrate journal voucher
9. Prepare simple budget sheet
10. Prepare a sample job description
11. Make a goods register(JinsiKhata)
12. Formation of Health Facility Operation and Management Committee.
13. Process of having leave at HP level

Community Medicine

Total Hours: 160 hrs (8 hrs/week)
Theory Hours: 120 hrs (6 hrs/week)
Practical Hours: 40 hrs (2 hrs/week)

Course Description:
This foundational course of community health practice is designed to develop the competencies and attitudes for application of epidemiological principles in community health diagnosis and health care practices.

Course Objectives:
After completion of this course, students will be able to:

1. Describe disease causation and modes of transmission, identifying the agent, host, and environmental factors, as the basis for environmental health of the community;
2. Use epidemiology to identify health problems of the community;
3. Investigate and manage an epidemic outbreak in the community;
4. Conduct a community diagnosis on geriatric disease and most prevalent disease of community; and
5. Describe the various health practices among the diverse ethnic groups of Nepal.

Course Contents:

Theory

Unit 1: Basic Epidemiology	**Hrs. theory: 50**
Sub-unit 1.1: Concepts of Disease	**Hrs. theory: 12**
Objectives:	**Content:**
Define disease. Explain the natural history of disease. Describe the spectrum of disease. Explain "iceberg phenomenon" of disease and its application of prevention and prognosis of disease Explain the concepts of disease epidemiology. State in brief concept of disease control, elimination, eradications & surveillance on the community basis Describe epidemiological triad and its related factors. Describe the concept of disease causation. Describe risk factor and risk group. List the names of diseases/health problems that are under the control, elimination, eradication	• Definition of disease, concept of disease. • Natural history of disease • Spectrum of disease • Concept of "iceberg phenomenon" of disease and its application of prevention and prognosis of disease. • Concepts of disease epidemiology. • Brief concept of disease control, elimination, eradications & surveillance on the community basis. • Epidemiological triad ➢ Agent ➢ Host ➢ Environment • Terminology with example: infection and infectious disease, epidemic, endemic, sporadic, pandemic, exotic, opportunistic infection, source of infection, reservoir of infection, iatrogenic infection, rate, ratio and proportion, surveillance, control, eradication, elimination. • Concepts of disease causation ➢ Germ theory ➢ Epidemiological triad ➢ Multifactorial causation ➢ Web of causation

and surveillance of current health program in Nepal.	• Definition and concept of risk factors &risk groups. ➢ Illustrate risk factors & risk groups in relation with particular diseases. • Names of diseases/health problems that are under the control, elimination, eradication and surveillance of current health program in Nepal.
Evaluation methods: Written examination, Performance, observation, oral test.	Teaching / Learning Activities: Demonstration and practice in handling of microscope.
Sub-unit 1.2: Concepts and method of epidemiology	**Hrs. theory: 8**
Objectives:	**Content:**
Explain the concept of epidemiology. Describe scope of epidemiology State purpose/aim of epidemiology. Describe principles, purposes and methodologies of screening.	• Purpose and function of epidemiology. • Methods of epidemiological measurements. • Principles purposes and methodology of descriptive epidemiology. • Common characteristics and attributes of descriptive epidemiology: time, place & person distribution. • Principles, purposes and methodologies of screening.
Evaluation methods: Written examination, Performance, observation, oral test.	Teaching / Learning Activities: Demonstration and practice in handling of microscope.
Sub-unit 1.3: Infectious disease epidemiology	**Hrs. theory: 10**
Objectives:	**Content:**
Explain the principles and applications of the chain of infection. Describe application of concepts of infectious disease study. Discuss principles and methodology of the prevention of infectious diseases.	• **Dynamics of disease transmission.** ➢ Outline the transmission cycle of disease (chain of infection) ➢ "Reservoir" in terms of human reservoir in non-living things. ➢ Direct and indirect modes of transmission ➢ Incubation period" and "period of communicability" in relation to a susceptible host. • **Infectious disease prevention and control:** ➢ Methods for controlling the reservoir, interruption of transmission and protecting the susceptible host. ➢ Method of control with relationship to a specific disease.
Sub-unit 1.4: Investigation and management of an epidemic	**Hrs. theory: 20**
Objectives:	**Content:**
Describe introduction, causes, clinical features, investigations, complications, management of	• Introduction, epidemiology, causes, clinical features, investigations,

different disease.	complications, management of following disease: ➢ Enteric fever, ➢ Sholera, ➢ Malaria, ➢ Rabies, ➢ Mumps, ➢ Measles, ➢ Meningitis , ➢ SARS, ➢ Filariasis, ➢ Infectious hepatitis, ➢ Kala-azar, ➢ Japanese encephalitis, ➢ Influenza, ➢ Tetanus, dengue fever, ➢ Scrub typhus, ➢ HIV/Aids ➢ Food poisoning ➢ Tuberculosis ➢ Bird flu ➢ Worm infestation ➢ Poliomyelitis ➢ Leprosy ➢ Chicken pox ➢ Diphtheria ➢ Alzheimer's disease ➢ Parkinson's disease ➢ Sexually transmitted disease
Evaluation methods: Written examination, Performance, observation, oral test.	Teaching / Learning Activities: Demonstration and practice in handling of microscope.
Unit 2: Non communicable disease	**Hrs. theory: 3**
Sub-Unit 2.1: Genetic relation diseases and effect of environmental factor	**Hrs. theory: 3**
Objectives:	**Content:**
Describe the genetic relation diseases and effect of environmental factor, Hypertension, semi cardiac disease , cancer, diabetes and obesity	**Epidemiology, its environmental factor, genetic relation disease** ➢ Hypertension, ➢ Semi cardiac disease , ➢ Cancer, ➢ Diabetes ➢ Obesity
Evaluation methods: Written examination, Performance, observation, oral test.	Teaching / Learning Activities: Demonstration and practice in handling of microscope.
Unit 3: Mental health and drug abuse	**Hrs. theory: 5**
Sub-Unit 3.1: Mental health and drug	**Hrs. theory: 5**
Objectives:	**Content:**
Define mental health , correlate with illness, describe the common mental problems in Nepal and its management	• Definition of mental health, correlation with illness. • Common mental problems in Nepal and

Define drug, its abuse with examples , describe the diagnosis and management of drug abuse in Nepal Explain the concept and importance of rehabilitation center.	its management. • Drug, its abuse with examples , diagnosis and management of drug abuse in Nepal • Commonly abused drugs • Concept and importance of Rehabilitation center.
Evaluation methods: Written examination, Performance, observation, oral test.	Teaching / Learning Activities: Demonstration and practice in handling of microscope.
Unit 4: Culture and Health	**Hrs. theory: 6**
Sub-unit 4.1: Concepts of culture and health	**Hrs. theory: 2**
Objectives:	**Content:**
Define culture. Illustrate examples of elements of culture and their effects on health.	• Definitions and meanings of culture. • Elements of culture ➢ Beliefs ➢ Norms ➢ Taboos ➢ Traditions ➢ Customs ➢ Superstitions ➢ Religious practices ➢ Social boundaries • Relationship between health, illness, behavior and culture.
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Sub-unit 4.2: Culture of ethnic groups in Nepal	**Hrs. theory: 2**
Objectives:	**Content:**
List the main ethnic groups of Nepal and describe the chief cultural habits of each. Identify and evaluate traditional medical practices in Nepal.	• Definition of ethnic group. • Ethnic groups living in Nepal and their main cultural features. • Traditional medical practices in Nepal.
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Sub-unit 4.3: Effects of culture on health	**Hrs. theory: 2**
Objectives:	Content:
Discuss cultural habits that affect the health of an ethnic group on both positive and negative aspects.	• Nepalese cultural practices and their effects on health: ➢ Personal hygiene ➢ Food selections ➢ Preparation and storage of food ➢ Food taboos ➢ Sexual taboos
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study

Unit 5: Community Diagnosis	**Hrs. theory: 24**
Sub-unit 5.1: Introduction to Community Diagnosis	**Hrs. theory: 7**
Objectives:	**Content:**
Define community diagnosis. Describe the benefits of using the community diagnosis process. Explain the objectives of performing a community diagnosis. Identify the steps of the community diagnosis process. Describe the components of a community diagnosis, using a realistic example. Differentiate between community diagnosis and clinical diagnosis.	• Definition, aims and benefits of the community diagnosis process. • Steps of the community diagnosis process: ➢ Preparation of tools, techniques and work plan. ➢ Pre-testing of instruments ➢ Rapport building ➢ Data collection ➢ Data processing, analysis and interpretation ➢ Community presentation ➢ Planning and implementation of the Managed Health Project (MHP) ➢ Evaluation • Components of community diagnosis ➢ Demographic characteristics ➢ Social, economic and geographic characteristics ➢ Environmental health and sanitation ➢ Knowledge, attitude and practice (KAP) on health and health issue ➢ Maternal and child health ➢ Morbidity and disability ➢ Availability of health services and its utilization. ➢ Community resources ➢ Community leaders ➢ Culture and tradition • Differences between community diagnosis and clinical diagnosis.
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Sub-unit 5.2: Data collection	**Hrs. theory: 5**
Objectives:	**Content:**
Differentiate between primary and secondary data and their sources. Give examples of primary and secondary sources. Differentiate between quantitative and qualitative data, using examples. Identify the purposes of census and sample surveys.	• Functions and characteristics of primary and secondary data. • Functions and characteristics of qualitative and quantitative data. • Purposes and characteristics of census and sample surveys. • methods of sampling: ➢ Sampling - Probability - Simple random sampling - Systematic (random) sampling - Stratified sampling - Cluster sampling

List sampling methods and explain the significance of sample size. Describe methods of sampling. Prepare, pre-test and rewrite a survey instrument.	- Multistage sampling ➢ Non-probability sampling • Methods of data collection: ➢ Use of questionnaire ➢ Observation with check list ➢ Interview ➢ Focal group discussion ➢ Participatory Rural Appraisal (PRA) ➢ Rapid Rural Appraisal (RRA) • Ethical issues in community diagnosis
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Sub-unit 5.3: Data processing	**Hrs. theory: 2**
Objectives:	**Content:**
Explain each step of data processing. Apply data processing to a community diagnosis project in your field practice.	• Application of data processing steps: ➢ Data editing ➢ Data coding ➢ Data tabulation ➢ Data analysis and interpretation ➢ Data presentation
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Sub-unit 5.4: Community presentation	**Hrs. theory: 2**
Objectives:	**Content:**
Explain the aims and goals of the community presentation of a community diagnosis. Conduct a community presentation. Identify the steps of a community presentation.	• Important functions of a community presentation: ➢ To inform ➢ To motivate for action ➢ To involve community members • Steps of community presentation.
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Sub-unit 5.5: Micro Health Project	**Hrs. theory: 4**
Objectives:	**Content:**
List the three types of community health needs and give examples of each. Describe how to prioritize the various health needs of a community. Explain the concept of micro health project (MHP). Plan, implement and evaluate a micro health project in your field practice.	• Health needs assessment: ➢ Felt health needs ➢ Observed health needs ➢ Real health needs • Principles of needs assessment • Introductions of a micro health project. • Steps of a MHP: ➢ Planning of the MHP ➢ Implementation of the MHP ➢ Evaluation of the MHP
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study

Sub-unit 5.6: Report writing	**Hrs. theory: 4**
Objectives:	**Content:**
Explain the aims and benefits of project reports. Describe the components of a project report. Prepare a project report based on findings.	• Important benefits of report writing. • Components of project report writing: ➢ Title/title page ➢ Acknowledgement ➢ Preface/forward ➢ Abstract/summary ➢ Contents ➢ Map (study area) ➢ Project summary: o Introduction o Findings and discussion o Conclusion o Recommendations ➢ references / bibliography ➢ annex
Evaluation methods: written exams and viva exams, performance observation in real or simulated settings.	Teaching / Learning Activities/Resources: classroom instruction and discussion, models, charts, textbook self-study
Unit 6: Environmental Health Concepts	**Hrs. theory: 2**
Sub-unit 6.1: Environmental health, hazards and effects	**Hrs. theory: 2**
Objectives:	**Content:**
Define environment, environmental health, environmental sanitation and environmental pollution. Define environmental hazards. Describe types and effects of environmental hazards	• Definition of environment, environmental health, environmental sanitation and environmental pollution. • Definition of environmental hazards • Types and effects of environmental hazards
Evaluation methods:	Teaching / Learning Activities:
Written examination, viva, practical	Classroom instruction, teacher led discussion, textbook, hand-outs, Case Study
Unit 7: Water	**Hrs. theory: 6**
Sub-unit 7.1: Water	**Hrs. theory: 2**
Objectives:	**Content:**
State the sources of water State the daily requirement, nature and cycle of water Define safe and wholesome water	• Sources of water ➢ Rain ➢ Surface water ➢ Ground water ➢ Shallow wells ➢ Deep wells ➢ Springs • Daily requirement, nature and water cycle. • Safe and wholesome water.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion

Sub-unit 7. 2: Water pollution	**Hrs. theory: 2**
Objectives:	**Content:**
Define water pollution Describe causes of water pollution Identify important water borne diseases.	• Definition of water pollution • Cases of water pollution and different types of pollutants. ➢ Physical ➢ Chemical ➢ Biological • Name of water borne diseases. • Arsenic water pollution in Nepal:- Affected area and problem.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion, field visit
Sub-unit 7.3: Purification of water	**Hrs. theory: 2**
Objectives:	**Content:**
Describe different methods of water purification at the household level. Describe how to disinfect well water. Mention the methods of water purification on a large scale. Describe the features of a sanitary well	• Water purification in large scale & small scale • Household water purification ➢ Boiling ➢ House hold water purifier:- Filtration, Reverse osmosis, total dissolve substance reduction(TDSR) and UV. ➢ Chemical ➢ Filtration ➢ SODISH • Disinfection of well • Large scale water purification ➢ Slow sand filtration ➢ Rapid sand filtration • Features of sanitary well
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion, field visit, practical
Unit 8: Waste	**Hrs. theory: 14**
Sub-unit 8.1: Introduction of waste	**Hrs. theory: 1**
Objectives:	**Content:**
Define waste Illustrate solid waste and identify their sources. Illustrate liquid wastes and identify their sources. Illustrate hazardous wastes and identify their sources.	• Definition of waste • Types and sources of waste with examples ➢ Solid waste ➢ Liquid waste ➢ Hazardous waste
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion, field visit, practical

Sub-unit 8.2: Solid waste	**Hrs. theory: 6**
Objectives:	**Content:**
Explain biodegradable and non-biodegradable solid wastes. Describe about solid waste management. Explain the 3R concept of minimizing waste Describe the disposal of waste in rural areas. Describe liquid waste management and its hazards.	• Biodegradable and non-biodegradable solid wastes. • Solid waste management • Minimizing waste 3R concept: ➢ Reduce waste ➢ Reuse waste ➢ Recycle waste • Hazards of solid waste. • Disposal of waste in rural area ➢ Burial ➢ Manure pit • Liquid waste management :at the household/institution level ➢ Bio gas plant with structure ➢ Septic tank. ➢ Others: - Soakage pit - Soak well - Seepage pit - Kitchen garden - Dispersion trench • waste water treatment plant • Hazards of liquid waste.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion, field visit, practical
Sub-unit 8.3: Hospital waste management	**Hrs. theory: 2**
Objectives:	**Content:**
Identify different kinds of hospital waste. Describe Hazards of hospital waste Describe Management of hospital waste Explain Hospital waste management guideline according to WHO	• Definition of Hospital waste • Hazards of hospital waste • Management of hospital was • Separation of waste • Using incineration • Hospital waste management guideline according to WHO
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion, field visit, practical

Sub-unit 8.4: Excreta disposal in the community	**Hrs. theory: 5**
Objectives:	**Content:**
Describe about excreta disposal in community List name of fecal borne dieses. Describe sanitary barrier. Describe methods of excreta disposal. Describe Components, structure and function of Water seal latrine. Describe excreta disposal in public places and transportation.	• Excreta disposal in community. • Fecal borne dieses. • Sanitary barrier. • Methods of excreta disposal ➢ Unsewered areas ➢ Sewered areas • Components, structure and function of Water seal latrine (with diagram) • Excreta disposal in public places and transportation.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, teacher led discussion, textbook, hand-outs, group discussion, field visit, practical
Unit 9: Pollution	**Hrs. theory: 4**
Sub-unit 9.1: Air pollution.	**Hrs. theory: 2**
Objectives:	**Content:**
Define air pollution. Describe effects of air pollution on health and society. Describe sources of air pollution. Describe measures for the prevention and control of air pollution.	• Definition of air pollution • Effects of air pollution ➢ Health aspect ➢ Social and economic aspects • Sources of air pollution ➢ Automobiles ➢ Industries ➢ Domestic sources ➢ Tobacco smoking • Measures of air pollution control and prevention.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, group discussion, field visit, practical
Sub-unit 9.2: Noise and radiation pollution	**Hrs. theory: 2**
Objectives:	**Content:**
Discuss causes, effects, and control of noise pollution. Describe the types, sources and effects of radiation exposure.	• Definition, cause, effects and control of noise pollution, • Sources, types, effects, and protection from radiation exposure.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, group discussion, field visit, practical
Unit 10: Occupational Health	**Hrs. theory: 6**
Sub-unit 10.1: Occupational health	**Hrs. theory: 6**
Objectives:	**Content:**
Define occupational health. List the common occupational diseases.	• Definition of occupational health • Occupational diseases ➢ Diseases due to physical agents. ➢ Diseases due to chemical agents.

Describe the protection of health in occupational settings	➢ Diseases due to biological agents ➢ Occupational dermatitis ➢ Diseases of psychological origin. • Protection of health in occupational settings by: ➢ Medical measures ➢ Engineering measures ➢ Legislation.
Evaluation methods:	Teaching / Learning Activities:
Written examination, Viva, Practical	Classroom instruction, group discussion, field visit

References:

1. Park, K. Park's Textbook of Preventive and Social Medicine. M/S BanarasidasBhanot, Jabalpur, India. Current edition.
2. Parker, D.J.P., Practical Epidemiology. ELBS Publications. Current edition.
3. Essential Preventive Medicine, by O.P. Ghai, Piyush Gupta. Vikas Publishing House, India. Current edition.
4. Basic Epidemiology. WHO publication

Community Medicine
(Practical)

Practical Hours: 40 hrs (2 hrs/week)

Perform the followings: 40 hrs.

1. Sketch a diagram showing Spectrum of health and disease.
2. Sketch a diagram showing Ice berg phenomenon of diseases.
3. Sketch a diagram showing natural history of disease.
4. Calculate different epidemiological indicators.
5. Calculate sensitivity and specificity of a screening test
6. Prepare a Social map by visiting a community.
7. Perform at least three home visits and fill up the community diagnosis tools.
8. Proceed the data processing steps in group settings.
9. Prepare at least five dummy table by using filled up tools.
10. Prepare at least five frequency table by using filled up forms.
11. Prepare pie charts and Bar charts by using computer.
12. List any five cultural practices of own ethnic group having health impact.
13. Disinfect well using bleaching powder.
14. Chlorinate water by using chlorine solution and chlorine tablets.
15. Demonstrate chlorine test in a sample of water.
16. Observe household water purification by candle filter/Ceramic filter.
17. Draw the structural diagram of sanitary latrines and biogas plant.
18. Visit water treatment plant at municipal level, prepare report and submit.
19. Observation municipal waste disposal system, prepare report and submit.
20. Observe dumping, burial and burning of solid waste.
21. Observe a slaughter house or a meat shop at local community, prepare report and submit.

Comprehensive Community Field Practice

(HP/PHCC attachment & community health diagnosis)

Course Description:
This course is designed to provide hands on practical skills on acupuncture, acupressure and moxibustion in a community setup. In this program students will be placed at Health Posts and Primary Health Care Centers under the closed supervision of supervisor. Furthermore, the students will be eligible for Community Field Practice only after the completion of all the institute based theory and practical subjects included in the curriculum.

Course Objectives:
After completion of this course, students will be able to:

1. Diagnose the diseases;
2. Conduct community environmental health realted activities;
3. Give school and community based health education;
4. Perform general examination;
5. Perform injecting, dressing and dispensing activities; and
6. Provide MCH, family planning and nutrition services.

Placement schedule:

Community Health Diagnosis and HP/PHCC attachment –4 weeks/28 days	
Community Health Diagnosis	**- 14 days**
a. Epidemiology, Community health diagnosis and Micro Health Project	- 8 days
b. Community environmental health related activities	- 3 days
c. School and community health education	- 3 days
PHC/Health Post Attachment	**- 14 days**
a. Client assessment	-5 days
b. Injection, dressing and dispensing	- 3 days
c. MCH/FP/Nutrition	- 3 days
d. Recording and reporting (Monthly and annual), logistic, meeting	- 3 days

The student performs self-study/problem base learning on case studies and recording and reporting. The ratio of theory and practical and case study recording and reporting is 2:3.

On completion of this course the student will be able to:

Primary Health Care Services

1. Provide competent middle-level health care: diagnosis and treatment for uncomplicated mental & physical, acute & chronic health care problems.
2. Perform a complete history taking and physical exam on children and adults, to identify abnormal conditions.
3. Make home visits to fully assess the health care needs of the family situation.
4. Direct community outreach services.
5. Identify and respond to the needs of vulnerable populations (children, the poor persons without family, mentally disturbed, retarded, homeless, aged & infirm).
6. Intervene with the trafficking of vulnerable persons.
7. Identify the constraints, limitations and potentials of the health post situation when giving primary health care.

8. Use problem solving and adaptation to meet the health care needs of individuals or families.
9. Identify indications for referral to a higher level health care facility.

Note: Minimum 5 cases in each sub-topics and maintain appropriate records according to heading.

Community Diagnosis

1. Develop a project timetable which sets the schedule for a community diagnosis project.
2. Develop and pretest a community survey questionnaire for the Community Diagnosis project.
3. Establish good rapport with the community members of the target population.
4. Create a geographic map of the selected community.
5. Collect data using a representative sample and appropriate techniques (questionnaire, interview, observation, others).
6. Process the data and perform an interpretation and needs assessment.
7. Present the community with an analysis of the problem.
8. Design and implement solutions in partnership with the community (Micro Health Project).
9. Evaluate the effectiveness of the solutions.

Community Environmental Health related activities

1. Promote public responsibility for environmental sanitation through health education.
2. Identify and resolve contamination of drinking water within the community.
3. Promote the construction of pit latrines.
4. Counsel individuals and community to promote personal hygiene habits.
5. Identify and advise individuals and community about hygienic methods for maintaining domestic animals.
6. Identify occurrences of threats to the eco-system of the community and promote public support for sound environmental management.
7. Apply environmental sanitation principles in controlling communicable disease.

Note: Minimum 1 case in each sub-topics implementation and maintain records.

Health Education

1. Identify and prioritize community health needs based on data collection.
2. Plan and implement health education programs that promote wellness, prevent illness, and teach curative and rehabilitative health care.
3. Use health education methods and media appropriately, creatively and effectively.
4. Monitor the implementation of health education programs.
5. Evaluate the effectiveness of health education programs and modify them as needed.

Family Health

1. Implement motivational strategies for selection of suitable family planning methods by individuals and couples.
2. Provide family planning materials, education and follow-up care.
3. Implement national guidelines for the care of mothers and children.
4. Provide for antenatal, perinatal, postnatal care to mothers and infants.
5. Promote and provide the recommended immunizations for children and mothers.
6. Execute and manage EPI and PHC outreach clinics.
7. Promote healthy nutrition among all family members.
8. Identify treat and resolve the problem of childhood malnutrition among community children.
9. Identify treat and prevent the common diseases of young children.

10. Maintain records of family planning methods, ANC and relevant forms
11. Demonstrate Balanced and mixed diet
12. Demonstratepreparation of jeevan jal and weaning foods

School Health

1. Identify and analyze the occurrence of health problems among school age children.
2. Identify and analyze environmental health problems of the schools.
3. Present a data based needs analysis of school health problems to school authorities.
4. Implement solutions to school health problems.
5. Provide health instruction to students including nutrition, sex education and prevention of communicable disease.
6. Provide regular health checkups to school children.

Health Post Management

1. Describe the functions of the national public health care agencies, public health NGO's and INGO's and tell how the health post cooperates with each.
2. Analyze and describe community dynamics as they relate to community health.
3. Promote community partnership in health post activities.
4. Take appropriate measures to prevent/control communicable disease.
5. Maintain accurate records of health post activities.
6. Prepare monthly reports accurately and promptly and maintain records.
7. Supervise and direct the health post staff.
8. Maintain communications with all coordinating agencies,
9. Maintain health post supplies, inventories and logistics according to LMIS.
10. Promote quality assurance principles in health post activities.
11. Maintain a safe and pleasant health post environment.

Note: Develop a community diagnosis and community healt practicum written report and give an oral presentation.

Evaluation Scheme

Under this scheme students will have to perform a prescribed number of cases in each department.

The assigned teacher or supervisor countinously evaluates their performances for accuracy and precision according to the evaluation sheet proposed. Furthermore, there will be a final practical examination after at the end of community practice.

Distribution of marks for evaluation

S.N.	Evaluator/Paper	Distribution of marks			Total Marks
		Internal	Final	Exam Time	
1	Related HP/PHCC supervisor (continuous evaluation)	**50**			**50**
	Related Teacher of the institute (continuous evaluation)/Internal exam	**25**			**25**
2	External examiner appointed by CTEVT (at the end)/Final exam		**25**	**1 Hr**	**25**
Total		**75**	**25**		**100**

Important note: *Each student must pass in each of the section of the evaluation as presented above with a minimum of 50% marks.*

Internal Evaluation Scheme for Community Field Practice

Attendance:	25%
Participation in PHCC/HP activities:	25%
Participation in community activities:	25%
Report preparation and presentation:	25%
Total:	**100%**

Comprehensive Clinical Practice

(Hospital Setting)

Total Hours: 640 hrs (16 weeks - 40 hrs/week)
Practical Hours: 640 hrs (16 weeks-40 hrs/week)

Course Description:

This program is designed to develop practical skills in students about acupuncture, acupressure and moxibustion in a hospital setup. In this program, students will be placed at Acupuncture clinics, Ayurveda Hospitals, Naturopathic hospitals and Western Medicine Hospitals under supervision of supervisors. Furthermore, the students will be eligible for Clinical Practice only after the completion of all the institute based theory and practical subjects included in the curriculum.

Course Objectives:

After completion of this course, students will be able to:

1. Perform general examination;
2. Diagnose the disease;
3. Locate and apply relevant acupoints and acupressure points for treatment of disorders;
4. Apply moxa cone/stick for treatment of different disorders; and
5. Apply massage technique for treatment of different disorders.

Subject/Department	Duration
Acupuncture, acupressure and Moxibustion Department	12 weeks
Massage and Pachakarma department	4 weeks

Perform history taking including general examination, diagnosis (Syndrome differentiation as well as modern diagnosis), acupuncture and acupressure point selection, moxibustion and management of following:

(Student have to submit minimum 20 varieties cases and must present minimum 2 Cases).

1. Take precaution while collecting the moxa plant
2. Performs moxa packing and transportation
3. Take precaution during packing and transportation of Moxa
4. Identify the location of the point from twelve regular Meridian methods of puncture
5. and regional anatomy
6. Identify the location of DU, Ren Meridian and extraordinary point methods of
7. puncture and regional anatomy
7. Identify the location of five shu points and its utility
8. Identify the location of Yuan-primarpoints & its utility
9. Identify the location of Luo-connecting points & its utility
10. Identify the location of XI-cleft points and its utility
11. Identify the location of back shu point & its importance
12. Identify the location of front mu points & its importance
13. Diagnose the disease according to the color (Red, pale, yellow, blue, dark gray, iustrous and moist complexion)
14. Diagnose the disease according to the appearance
15. Diagnose the disease according to the observation of the tongue
16. Diagnose the disease according to the absence or presence of sweat, sweat during sleep, spotaneous sweating and profuse sweating.
17. Diagnose the disease according to indication of poor appetite, loss of appetite, excessive appetite, lack of thirst, presence of thirst, bitter taste sweetish and greasy taste, sour taste in mouth, lack of taste in mouth.

18. Diagnose of diseases according to nature of pain, location with pain with their indications.
19. Palpate and differentiate normal and abnormal pulse in depth, speech, strength, shape and rhythm.
20. Diagnose the disease according to deficiency and excess syndrome.
21. Diagnose the disease according to yin and yang.
22. Diagnose the disease according to deficiency of blood, stagenation of blood, heat in the blood.
23. Take case history and perform acupressure and oriental massage of body.
24. Ckeck patient, find out sign and symptoms of different disease.
25. Treat disease using acupoints with reinforcing, reducing, warming, clearing, ascending and descending methods.
26. Handle microscope.
27. Observe slides.
28. Carry out urine test/sugar test.
29. Determine blood group.
30. Take blood sample.
31. Perform routing examination of blood.
32. Take case history of patient.
33. Perform general examination.
34. Perform systemetic examination of the sense organs (eye, ear, nose and skin).
35. Diagnose and treat communicable diseases.
36. Diagnose and treat non commjnicable diseases.
37. Process moxa.
38. Make moxa stick.
39. List out the method of applying or using moxa.
40. Point out the precaution during applying method.
41. Manage possible accidents of acupuncture.
42. Perform needling practices.
43. Sterilize instruments and needles.
44. Apply moxa on point.
45. Manage possible accidents of moxibustion.
46. Perform cupping on proper part of body.

Evaluation Scheme

Under this scheme students will have to perform a prescribed number of cases in each department. The related supervisor and assigned teacher continuously evaluate their performances for accuracy and precision according to the evaluation sheet proposed. Furthermore, there will be a final practical examination at the end of community practice.

Distribution of marks for evaluation

S.N.	Evaluator/Paper	Distribution of marks			Total Marks
		Internal	Final	Exam Hour	
1	Related Hospital supervisor (continuous evaluation)	**200**			**200**
2	Related Teacher of the institute (continuous evaluation)/Internal exam	**50**			**50**
3	External Examiner appointed by CTEVT (at the end)/External exam		**50**	**2 Hrs**	**50**
Total		**250**	**50**		**300**

Total		**200**	**100**		**300**

Important note: *Each student must pass in each of the section of the evaluation as presented above with a minimum of 50% marks.*

Experts Involved in Curriculum Revision Process

1.	Dr. Jhularam Adhikari	Naradevi Ayuveda Hospital
2.	Dr. Prashanna Tiwari	Naradevi Ayuveda Hospital
3.	Dr, Janak Basnet	wellness hospital
4.	Dr, Manju Dahal	Accupuneture Collage (R.H.E.S.C.)
5.	Dr, Radheshyam Silpakar	Naradevi Ayuveda Hospital
6.	Dr, Ishwar Gyawali	Suvgavs Ayuveda
7.	Dr, Sharad Panthi	Dep,of Ayuveda and Act, Medicine
8.	Dr. Prashidha Khadgi	Blue Lotus Hospital
9.	Dr, Kasi Khatiwada	Singhadurbar baidhyakhana
10.	Dr, Manoj Kumar Thapa	Skevin Nature care Hospital
11.	Dr, Pukar Lohani	Himalyan Ayuveda Hospital