Minimum Requirements

For the recognition of

Bachelor ⁱⁿ Physiotherapy

Nepal Health Professional Council Bansbari, Kathmandu, Nepal 2076 (2019)

Preface

The Nepal Health Professional Council is established under the Nepal Health Professional Council Act 2053 Bikram Era. Nepal Health Professional Council Act has paved the way to regulate the Health Professions (except doctors eligible to register in Nepal Medical Council, Nurses and Pharmacist). Its primary purpose is to protect the public by ensuring provision of quality health services.

As the statutory authority, NHPC registers name of health professional according to their level of education. The council has also issued level-wise code of ethics for its registered members which allow them legal rights to work in their respective field. The Act prohibits any Health Professional without being registered with Nepal Health Professional Council. The Nepal Health Professional Council maintains register and those who are registered are granted with practicing Bachelor Degree of the Physiotherapy.

The other important function of this Council is to prepare minimum requirement for the recognition of Bachelor level in Physiotherapy education program.

Nepal Health Professional Act 2053 and NHPC Regulation 2056 has mandated NHPC to make policies of terms and condition of admission, syllabus, examination system, teaching learning experience and method of evaluation of education programs.

Hence, in order to carry out these functions as mentioned in NHPC Act, NHPC had formed a committee to prepare the minimum requirement for the recognition of Physiotherapy (Bachelor degree) education. I would like to thank Mr Basant Adhikari, Registrar for initiation and coordination of the development process of this minimum requirement. I would like to thank members of the team led by Govinda Mani Paudel, members of Nepal Physiotherapy Association and other physiotherapy experts who were involved during the process of development of this document.

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> Ram Prasad Bhandari Chairman

Table of Contents

Table of Contents	3
Introduction	4
Student	4
Entry Requirement for Students	4
Admission Policies	4
Duration of Study	4
Attendance Requirements	4
Course Coverage	5
Student's Evaluation	5
Internship	5
Teaching Faculty	6
Number of Faculties	6
Teacher Student Ratio in Teaching Learning	6
Qualification of Teacher	7
Work Load	7
Clinical Education	7
Institution	8
Organizational Structure of the Constitutional or Affiliated Academic Institution	8
Principal or Campus Chief or Chief of Central Department or Director	9
Head of the Department (HoD) and/or Coordinator	9
Administrative Staffs	9
Teaching Facilities	9
Facilities for Other Activities	11
Facilities, Equipment and materials	11
Minimum Requirement for the Teaching Hospital (s)	15
Registration for Foreign Degree	16

Introduction

Nepal Health Professional Council has approved this requirement according to clause of 9 (Kha) of the Nepal Health Professional Council Act 2053. This requirement shall be called Minimum requirement for the recognition of Bachelor of Physiotherapy2076 (2019).

An institution that plans to start or conduct Bachelor of Physiotherapy (BPT)shall ensure the standard as specified in this minimum requirement in order to qualify for granting accreditation.

Student

Entry Requirement for Students

The entry requirement for a student in Bachelor of Physiotherapywill be Intermediate in Science (ISc) or Higher Secondary Level (10+2 Science streams) in biology stream or equivalent Proficiency Certificate level of Physiotherapy (CPT) (registered in NHPC) as recognized by concern University with at least 50% marks or equivalent. Besides the basic academic requirement, an entrance examination will be held for all applicants and should secure 50% marks to be eligible for admission.

Admission Policies

- Intake of student should be annual
- The maximum number for intake of students is 30 per academic year.
- The selection of the student should be in merit basis

Duration of Study

Duration for the completion of all the requirements for the Bachelor of Physiotherapyprogram as a full-time student is **4 Years** in annual system and 48 months (8 Semesters) in semester system and 6 months internship.

- a. First year Theory and practical simultaneously
- b. Second year Theory and practical simultaneously
- c. Third year Theory and practical simultaneously
- d. Fourth year Theory and practical simultaneously
- e. Six months compulsory internships after completing fourth year

Attendance Requirements

A student must attend every scheduled lecture, tutorial, seminar, field visit, lab work and practical classes. However, to accommodate for late registration, sickness and other contingencies, the attendance requirements will be a minimum of **80%** of the classes actually held.

Course Coverage

A student must attend the core courses (Anatomy, physiology, biochemistry, pharmacology, microbiology, pathology, biomechanics and kinesiology, musculoskeletal sciences, neurological physiotherapy, cardio-respiratory physiotherapy, pediatric physiotherapy, research methodology and biostatistics, community physiotherapy, men's and women's health, gerontology and geriatric physiotherapy and sports physiotherapy).

Student's Evaluation

A student's academic performance in a course is evaluated in two phases as:

- Internally by the concerned faculty member through quizzes, tutorials, lab works, home assignments, class tests, class participation, term papers, internal exam etc.
- Externally by the Office of the Controller of Examinations of concern University through year/semester-end examinations.
- Laboratory work, project work, practical internship will be evaluated by external examiner through practical, demonstration, presentation (oral and poster) and oral exam.

Requirement for final practical examination

- There must be a provision for conducting practical examination by external and internal physiotherapy examiner with post graduate degree registered in Nepal Health Professional Council (NHPC) or relevant body.
- One examiner should examine not more than 10 students per day for the practical skill.
- There should be an external examiner of relevant subject appointed by the affiliating University/Institute.
- Final practical examination should be held on relevant labs

Internship

The Internship is a six months rotatory practical training/clinical experience in physiotherapy after completion of four academic years which is compulsory. There should be the provision of maintaining the attendance book and internship log book to record the patient details.

The internship program includes placements in various facilities within the hospital and within the scope of physiotherapy practice.

Discipline for internship

OPD	1 month
Cardiopulmonary	1 month
Orthopedics/Sports	1 month
Neurology	1 month
Pediatrics	15 days
	Cardiopulmonary Orthopedics/Sports Neurology

6.	Women's Health	15 days
7.	Community rehabilitation	15 days
8.	Elective*	15 days

*Elective area can be selected by the students based upon their area of interest or feasibility recognized by the academic institute (within or outside the country).

The internship certificate should clearly state the duration of internship program under each specialty.

Teaching Faculty

Number of Faculties

- Number of faculties per section should be maintained as follows:
 - Professor/Associate Professor: 2 Full time
 - Assistant Professor/Lecturer:4 Full time
 - Lecturer/Teaching Assistant:4 Full time

There should be at least 4 physiotherapy clinical instructors/educators (full time) in the hospital for practical purpose.

This number is for the full phased program. There should be at least one full time Professor/Assoc. Professor, two Assistant Professors and three lecturersat the beginning and the number should be increased before the new batch is enrolled.

Council will recognize the minimum qualification of a faculty as per the concerned university service commission eligibility.

- As per the curricular needs, additional part time teachers or teachers in course contract should be managed by Institution.
- Full time teachers should be from core subjects (cardio-respiratory, musculoskeletal, neurological, paediatrics, geriatrics/gerontology, women's health and community-based rehabilitation).

Requirements for a clinical instructor/educator

- Possesses minimum of Bachelor Degree in Physiotherapy. Should have a minimum of 2 years of clinical experience
- Should be **registered** in professional council

Teacher StudentRatio in Teaching Learning

There should be sufficient teachers to teach as per curriculum in a ratio as follows:

- Overall ratio of student and teacher must be 1:10 excluding Principal
- One teacher to all students for classroom teaching (1:30)

- One classroom should not be more than 30 students
- One teacher is to 5 students for bench work teaching in the hospital (1:5)
- One teacher is to 10 students for practical demonstration (1:10)

Qualification of Teacher

- Minimum academic qualification should be at least Master degree in relevant subject.
- Experience and other requirements for the academic positions shall be as per the requirement of concerned University.

Note: Faculties working as full timer at one institution can NOT be full timer at another institute.

Work Load

For taking the theory and practical classes as well as field practices

- Principal/Chief: **8 hours**/week (maximum)
- Professor: **12 hours**/week (maximum)
- Associate professor: **14 hours**/week (maximum)
- Assistant Professor/Lecturer: **16 hours**/week (maximum)

One research supervisor can supervise only **5** students maximum per academic year.

Clinical Education and Practice

A minimum of 1000 hours must take place in clinical educationduring first to fourth year of Bachelor of Physiotherapy. There should be an additional six months internship after completing fourth year.

Areas of Clinical Practice

Each student must acquire significant clinical experience in each of the following essential areas of practice.

- Musculoskeletal conditions
- Neurological conditions
- Cardiovascular and Respiratory conditions
- Pediatric conditions
- Women's health
- Community physiotherapy

Important: A minimum of 200 hours each in Musculoskeletal, Neurological and Cardiopulmonary subjects and minimum of 100 hours in each of the other areas should be completed.

Facilities for clinical field experience

Affiliated hospitals and institutions must have Departments and Units such as Neurology, Neurosurgery, Cardiology, Cardiac surgery, Orthopedics, Pediatrics, burns, leprosy, Intensive Care Unit, Women's health and Community health programs. If the teaching hospital does not have specialized units such as neurology, neurosurgery, cardiac surgery etc., the institution should establish a Memorandum of Understanding (MOU) with other specialized centers for student placements.

Institution

Organizational Structure of the Constitutional or Affiliated Academic Institution

Concern constitutional or affiliated academic institution should establish the following committees/sections

- Departments/Instruction committees
- Examination section
- Student welfare committee
- Student counseling section
- Research Management Committee (RMC)

A separate organizational financial system should include:

- Financial viability plan
- Annual budget for program
- Source of income
- Audit system

Council recommends residential placement to the students for practical exposure. If the residential placement is not available, distance between Institutes and Hospital should be less than 20 kilometers (travel duration not exceeding 30 minutes). Council will follow the rule according to MOU with nominated hospital by respective institutes according to NHPC rules and regulations.

Principal or Campus Chief or Chief of Central Department or Director

- <u>Sole Physiotherapy College</u>: S/He should have at leastBPT and Masters in Physiotherapy (MPT) and 7 years of academic/teaching experience. S/He should be registered in NHPC.
- <u>Multidisciplinary Health Science College</u>: S/He should have at least Master's Degree in any related subjects teaching in the college and 7 years of academic/teaching experience. S/He should be registered in concern council.

Head of the Department (HoD) and/or Coordinator

- S/He should have at least MPTand 5 years of academic/teaching experience.
- S/He should be registered in NHPC.

Administrative Staffs

Administrative staff should sufficient in number to facilitate the educational/ administrative works. The required staffs are as follows:

- Administrative Officer: S/He should have passed minimum Bachelor degree or equivalent in any subject.
- Finance Officer:S/He should have passed minimum Bachelor degree in Commerce/ Business Studies/Administration or equivalent.
- Account/Administrative Assistants:Accountant and Administrative Assistants should have passed 10+2 or equivalent.
- Librarian:The Head of the Library should have University Degree and must have sufficient training in library science.
- Computer Technician: S/He should have passed minimum Diploma/ Bachelor in computer sciences and should be command both in English and Nepali languages writings and reporting.
- Laboratory Assistant:S/He should have passed University Degree in Laboratory Science or 10+2 (science) with training and or demonstrating laboratory work of Laboratory Assistant in concerning Faculty or Department of particular organization.
- Any Office Assistants (helper/peon/cleaner/driver) should be a Nepali citizen and should be literate in Nepali (Command in both Nepali and English languages is preferable).

Teaching Facilities

Building and physical facilities requirements are as follows:

- a. Training building should be owned by self (College/university) or in lease for at least 20 years.
- b. The entrance of the academic block should include the detailed list of academic faculties including full-name, designation and council registration number.
- c. Four well ventilated Classrooms (for first, second, third & fourth year) with a minimum capacity of 30 students (Square meter as per council requirement) in each class room with each having one fixed projector with screen, computer set, and speakers for audio visual aids.
- d. A separate office room for the Principal with enough space for computer, desk and chair(s), a printer, photocopy machine with a scanner, telephone, cupboards for files and lockers for important documents etc.
- e. A separate office room/Cubicle for the Deputy Principal and various coordinators of the program with enough space and accessories (E.g. computer, desk and chair(s), a printer, photocopy machine with a telephone, cupboards for files and lockers for important documents etc.
- f. Separate office room space for the administration work within the physiotherapy school building to manage administrative work of the physiotherapy school.
- g. Four Physiotherapy demonstration or practical or skills lab (different disciplines of physiotherapy including exercise therapy, cardiopulmonary, neurology and pediatrics etc) for practice for each batch of students. The capacity of this hall should be a minimum of 30 students.

- a. It should accommodate at least 10 treatment beds in each hall so that there is a maximum of 4 students practice to one treatment bed.
- b. A minimum of 20 chairs or sitting tools during the practice.
- c. Each room should have one fixed projector with screen, computer set, and speakers for audio visual aids.
- d. Adequate practice models, tools, resources for different areas of physiotherapy.
- e. One central library should be available for all the students with enough space for book-keeping & spaces for student and faculty for reading.
- f. A minimum of 80% of the printed copy of recommended course books must be available (Recommended text books in annex)
- g. Adequate number of reference books on each subject for teachers and students should be available.
- h. One reference book must be available for 5 students.
- i. Recent physiotherapy and other related specialty journals must be available and should be subscribed to receive newer journals when published.
- j. Library should keep a record of all the recent and old questions of all the subjects in the form of a question bank for reference of the students.
- k. Other related books, BPT minimum requirement, code of ethics for regulation of Physiotherapy, magazines and newspapers should be available
- 1. Bachelor of Physiotherapy Degree curriculum must be available
- m. Adequate number of racks and cabinets must be present to accommodate all the required books and journals.
- n. Tables and chairs are required in adequate number to accommodate at least 120 students at a single time.
- o. Computer room for e-learning with necessary equipment. At least 20 computers should be available for the access to online resources. Online access to journals should be available for evidence-based practice for the students and faculties.
- h. Teacher's room: Enough space for all Faculty members. Each Faculty member should have:
 - a. A computer, table and desk, cupboard and lockers.
 - b. Internet connections should be available.
 - c. Rooms of Assistant Professors and above should have a printer.
- i. A faculty library should also be available.
- j. Room for general store and audio-visual aid equipment
- k. Separate toilets for Faculty members and students must be available
 - a. A minimum of 1 toilet for 5 teaching faculty.
 - b. A minimum of 1 toilet for 10 students.
 - c. Separate toilets for male and female students
 - d. Changing spaces should be allocated for the students separately.
- l. Anatomy and physiology practical room
- m. A multi-purpose hall to accommodate at least 160 students.

Facilities for Other Activities

• An outdoors athletic ground

- Indoor games
- Provision of vehicles for field activities
- Space for student welfare with counseling services
- Canteen with safe drinking water, hygienic kitchen and dining hall
- Adequate parking lot for vehicles of the faculty, staff, students and visitors.

Facilities, Equipment and materials

Physiotherapy Skills Lab

Physiotherapy skills lab should be a minimum of **4 (3 labs and 1 fitness center)** in number. The skills lab should be equipped and furnished to train the students for all the following areas:

- 1. Neurological interventional training
- 2. Manual therapy or musculoskeletal skills training
- 3. Cardiopulmonary interventional training and exercise testing
- 4. Electrotherapy training
- 5. General exercise training
- 6. Fitness lab

One additional research lab is required for the student and faculty research.

Room/ Facility for skills lab

- Good lighting
- Windows screened for privacy
- Access to sink and clean water supply
- White board and pens
- Shelving and secure storage space for equipment
- Projector and screen

General Furniture or equipment requirement for skills lab

 Regular height plinths 	30
 Height adjustable treatment tables 	10
 Height adjustable rehabilitation table (6' X 6') 	1
 Locker for each student 	1 per student
 Low height (16") mat, approximately (6' X 6') 	2
• Pillows	2 per plinth
 Sufficient sheets, pillow cases, towels, blankets 	As per requirement
• Chairs/ low stools	1 per student

For Health Education

٠	Projectors with screen for classes	1 for each class
٠	Computer	1
٠	T.V.	1
٠	Notice boards (large)	2
•	Speakers and microphone	1 for each class

Recommendations for Equipment

For General Physiotherapy Practice

Stethoscope	10
Sphygmomanometer	5
Clinical thermometer	1:5 student
Weighing machine	1
Measuring tape	1:1 student
Hammer /reflex hammer	As per requirement
Oscilloscope	As per requirement
Incentive spirometry	3
Pulse oximeter	2
Nebulizer	1
Suction apparatus	1

Anatomy and physiology lab

 Cadaver Full size skeleton model Access to actual human bones and specimens Models and chart for eye, ear, heart, lungs, joints, 	2 3 3 sets all bones
 kidney, brain, uterus, skin etc. Anatomical chart of circulatory, urinary, reproductive, muscular, nervous, respiratory, digestive, skeletal & 	1each
endocrine systems.Model of fetal development according to fundal heightInfant and child development chart/model	1each 1 1
Model of infant and adult (female)Model of female pelvisModel for each major Joints	1each 1each 3 each
Equipment for exercise lab	
 For Aerobic exercises Bicycle ergometer Treadmill Elliptical trainer Arm ergometer 	2 2 1 1
 For Balance and proprioception Balance board or Equilibrium boards Wobble board Balance and core- training domes Trampoline 	2 2 2 1

For strength training		
• Quadriceps table	1	
• Stepper (different height)	4	
• Leg press machine	1	
• Cuff weights (0.5kg-5kg)	1 set	
• Dumb bells (0.5kg-5kg) with mobile trolley	1 set	
• Gym/therapy balls- different sizes	1 each	
 Thera-band different colors 	5 sets	
 Exercise tubing bands 	1 set	
 Medicine balls(different weights) 	2	
<u>Equipment for neurology and pediatric rehabilitation lab</u>		
• Floor /exercise mats (Regular)	10	
• Exercise mat (6 X 6 feet)	1	
Overhead pulley set/ wall-pulley system	1 each	
 Tilt table 	1	
Transfer belts	2	
Walking aids	2 each	
0 Crutches: axillary, Elbow, Gutter		
0 walking frames		
• Canes/ walking sticks – Tripod, Quadripod		
Pediatric walking aids	1 each	
0 Crutch: Axillary	1 04011	
0 Rollator		
Neuro kit	2 sets	
 Sensory rehabilitation / integration unit 	2 sets	
 Rehab wedges, rolls and bolster 	5	
Wheelchairs	3	
Custom made push up bars	3 pairs	
• Hand, wrist and forearm and finger exerciser unit	1 set	
Spring hand exerciser	3 sets	
• Pull bars	1	
 Roller/ skate for upper extremity training 	1	
CPM apparatus	1	
• Standing frame (adult and pediatric)	1each	
Compression bandages/ stockings	5 sets	
 Splints e.g., AFO, wrist, soft collars, knee immobilizer, 		
Spinal braces	1 of each	
Knee hammer	5	
• 2 point discriminator	2	
• Tape for taping (different types)	5	
Sliding board	5	
 Suspension frame + sling suspension equipment 		1
Postural mirrors	2 se	ets

•	Stair case	1 set
•	Shoulder wheel	1
•	Wall ladder	1
•	Low step/ boxes 6"-12" height	6
•	Parallel bars with mirror	1 set
•	Sensory toys	1 sets
•	Pediatric doll	5 sets

Equipment for the Research lab

Goniometer	10 sets
Inclinometer	2 pairs
Hand held dynamometer	1
Pressure biofeedback unit	2 sets
Cervical range of motion device	1
Back range of motion device	1
EMG biofeedback	1 set
Pressure biofeedback	1
 Pressure Pain threshold device (pain algometer) 	1
Air conditioner	1
<u> Thermo - Electrophysiological equipment</u>	

Ideally these should be available in the training centre; otherwise easy access in another area is essential.

 Hydrocollator or Hot pack unit and Heating Pads Ice machine/refrigerator and cold gel packs Paraffin wax bath Therapeutic ultrasound with Gels Diagnostic and therapeutic Muscle stimulators Interferential Therapy Laser Transcutaneous Electrical nerve stimulator (TENS) Lumbar and cervical traction units (Electronic) 	1 each 1 unit 1 unit 5 sets 5 5 1 5 2 sets
 <u>Hydrotherapy</u> Contrast baths Buckets, towels 	1 set Adequate
Miscellaneous • Bed pan • Sputum cup • Refrigerator	1 5 1

Minimum Requirement for the Teaching Hospital (s)

The minimum requirement of the teaching hospital is as follows:

- 1. A minimum of 150 beds own hospital that includes different units or wards for orthopedics, medicine and surgery, neurology, pediatric, OBG and Gynaecology.
- 2. The hospital should preferably be in the same premises of the teaching institution.
- 3. An Intensive Care Unit (ICU) with a minimum of 15 beds.
- 4. The Physiotherapy Department at the Hospital should be led by a separate in-charge who has a Master of Physiotherapy degree
- 5. Attached community-training centers with adequate facilities. If the affiliated hospital does not have this, they need to connect with other community centers.
- 6. Classroom and/or tutorial rooms for the students for the self-directed learning activities.
- 7. The physiotherapy OPD should include a library to ensure the presence of basic reference text books of clinical subjects for students.

Requirement for Physiotherapy out-patient department:

- 1. The Physiotherapy out-patient department (OPD) should receive variety of patients.
- 2. Physiotherapy OPD should have adequate space to treat at least 30 patients every day for an intake of 30 students.
- 3. Staff a minimum of 2 physiotherapists should be assigned
- 4. Physiotherapy OPD should have adequate equipment for learning opportunities and evidence-based physiotherapy practice (e.g.: access to computers with internet and databases).
- 5. Equipment requirement:
 - a. A minimum of 5 treatment tables
 - b. Adequate space for exercise therapy with equipment for aerobic activities, resisted training, balance and proprioceptive training, stair case, parallel bar, mirror etc.
 - c. Adequate number of evidence based thermo electrophysiological agents including TENS, IFT, ultrasound, Traction unit, hydro collateral pack, cold pack etc.
 - d. Newer evidence-based treatment equipment should be available, example, pressure biofeedback, EMG biofeedback, mirror box etc.
 - e. System of good documentation of the patient's details including demographics, patient history, examination, patient-reported outcome measures, treatment plan and intervention.

Teaching hospital physiotherapist requirement

SN	Department	Physiotherapists
1	Physiotherapy OPD	1

2	Orthopedic department	
3	Intensive care unit, Medicine and surgery Department	1
4	Neurology and Neurosurgery department	1
5	Pediatrics ward and neonatal, pediatric ICU	1
6	Women's health/community physiotherapy etc.	
Total		4

Registration for Foreign Degree

- Must have Bachelor Degree in Physiotherapy
- Duration must be at least **four years or 240 ECTS** equivalent
- Should submit a valid supporting document to prove a regular student (College letter of regular student, passport, visa, immigration documents).
- Must submit permission letter issued by NHPC.
- Should have equivalence from concern authority of Nepal.
- Should have passed the entrance of a University of Nepal before enrollment in foreign university
- A valid log book signed by registered person should be submitted at the time of registration
- Six-month internship in physiotherapy center or hospitalissued by hospital and signed by a Medical person with Name and Designation