

Students' Handbook for Postgraduate Studies (Revised Version 2024)

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MESSAGE BY VICE-CHANCELLOR

It is an honour for me to head National University of Medical Sciences (NUMS) which has already earned its place among the academia within a short span of its creation, the credit for which goes to senior management, the faculty and its staff who lived up to the huge task of building a national university through professionalism and an extraordinary commitment to achieve, what it has, in the past six years.

We all can take pride over our achievements in research, linkages with the renowned international universities and with local pharmaceutical industry to strengthen much needed cooperation between academia and the industry.

NUMS is destined to play a vanguard role in the field of medical science by pursuing academics and research by completing its mega projects like NUMS Institute of Advanced Studies and Research (NIASR) and Medical City in I-17 Sector of the Federal Capital. Once accomplished these projects will further elevate NUMS position at the national and international level besides inspiring others to emulate its example in the field of academics and research.

NUMS bears a heavy responsibility to ensure quality of its educational offerings and training, innovation and pertinence in its research to serve the country and humanity at large. All those who join NUMS will be provided equal opportunities to grow as rounded individuals, taking merit and transparency as our guiding principles. We intend to instill, in our staff and students, a passion to be of service to mankind while embarking on a challenging but satisfying career.

With our diversely experienced faculty at NUMS' constituent and affiliated institutes, our students will be trained to pay attention to detail with a view to becoming a reference point for healthcare related studies in the country.

At NUMS, we are working hard to push the boundary of knowledge, investing time and energy in creating a learning environment in all our fields of study and research. We intend to rise to the expectations of our society.

LT GEN WASIM ALAMGIR, HI (M), (RETD)

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CHAPTER I

THE UNIVERSITY

1. Introduction

This handbook is designed to provide students with general information and guidance on academic matters related to NUMS Postgraduate Programs and should be read in conjunction with the University's Policies and Regulations.

It is the responsibility of students to make themselves familiar with the contents of this handbook and also the University-wide policies and regulations. Information provided in this handbook may help them avoid unnecessary problems. Please do not hesitate to contact the Postgraduate Studies Office if you have any queries about this handbook.

2. About NUMS

National University of Medical Sciences (NUMS) was established as a Federal Public Sector University through an Act of Parliament on October 31st, 2015. The honorable President of Pakistan is the Chancellor of the University and the Chief of the Army Staff is the Pro-Chancellor.

NUMS was founded to promote and achieve excellence in advanced healthcare education, research and service delivery. The University is backed up by an extensive network of Military Hospitals, Single Specialty Institutes, Medical and Nursing Colleges making it the country's largest healthcare provider in terms of trajectory and patient volume.

This research-led institution provides opportunities in undergraduate and postgraduate education in diverse fields of Medicine, Dentistry, Nursing, Allied Health and Veterinary Sciences with a necessary add-on the Social Sciences and Liberal Arts.

NUMS envisages to achieve set goals by adopting best international standards and practices in medical education, training, and research along with modernization of medical infrastructure, whereas the benefits will have broad based socio-economic impact within the country and beyond.

As it grows, NUMS has the potential to become a force multiplier by supporting other service providers in this field, developing partnerships with the several advanced national and international universities, industrial, governmental and community based stakeholders in consonance with national vision and plan to develop knowledge based economy.

3. Vision of NUMS

National University of Medical Sciences envisions a world with a better quality of life for all by enhancing our contribution to healthcare, education, innovation and research.

4. Mission of NUMS

The University will endeavor to improve existing knowledge, and practices in the fields of medical and allied life sciences; both pure and applied, including fields

of biomedical engineering and technologies, veterinary, biogenetic, social and behavioral sciences through innovative and creative approaches in order to offer best possible services to the society and humanity at large.

5. NUMS Core Values

The guiding principles of NUMS are based upon the following three core values:

- a. Innovation
- b. Integrity
- c. Inclusivity

6. Constituent College/ Institute for Postgraduate Studies

NUMS offers its standardized postgraduate programs for the award of degrees at:

- a. Army Medical College (AM College), Rawalpindi
- b. Armed Forces Post Graduate Medical Institute (AFPGMI), Rawalpindi
- c. Army College of Veterinary Sciences, Sargodha
- d. NUMS Institute of Advanced Studies & Research (NIASR), Rawalpindi
- 7. Advance Studies and Research Office (ASRO). The University has established the Advance Studies and Research Office (ASRO) in the Academics Directorate to deal with affairs relating to the postgraduate academic programs in the light of instructions and guidelines of PM&DC, HEC and other regulatory authorities.

It shall be responsible for the quality of all the graduate degree programs being offered by the university as well as theresearch that shall be conducted under these programs. This office shall prepare a graduate Studies Prospectus, describing the complete process for award of a graduate degree and ensuring that thebooklet shall be available for guidance of all graduate students.

It shall monitor and ensure that thesis/dissertation is progressing in accordance with the time prescribed in the booklet. It includes, but is not limited to, the timely approval of the research synopsis, evaluation of the research thesis/dissertation in accordance with the HEC guidelines as well as its submission, and finally the conduct of open defense.

It has two sections:

a. Section I: This section, headed by Director Academics, is responsible for postgraduate programs related to Basic Medical Sciences and Clinical Disciplines as mentioned below:

NUMS Programs	Degree Nomenclature	
Basic Medical Sciences	• PhD	
	• MPhil	
	• MSc	
	• MSPH	
	• MHPE	
Clinical Programs	Clinical Fellowship	
	• MSc	
	Clinical Diploma	

b. Section II: This section, headed by Director Academics (Clinical), is responsible for postgraduate programs including Nursing, AHS, Biological, Social Sciences as

NUMS Programs	Degree Nomenclature
Nursing	MSN
Biological Sciences	PhD
Biological Sciences	MS
Social Sciences	MPhil

The Advance Studies and Research Office (ASRO) provides administrative support for all postgraduate programs, courses, faculty and students in the college/ institute. Each member of the ASRO Team is available to help and provide advice on all aspects of postgraduate programs to faculty and students in the University. This Office operates an open door policy and is available as a first line for students and faculty support; if you have any questions, please do not hesitate to visit the office during the office hours mentioned below. The NUMS Advance Studies and Research Office (ASRO) is situated in NUMS Secretariat, Rawalpindi.

Office Hours: 08:00 AM - 04:00 PM Tel: 051- 9270676 Email: acad.dte@numspak.edu.pk

8. Post Graduate Programs at NUMS

NUMS offers its standardized postgraduate programs for the award of degrees specified in the table below at Army Medical College (AM College) Rawalpindi, Armed Forces Post Graduate Medical Institute (AFPGMI) Rawalpindi, NIASR and any other constituent college/ institute as may be specified by the competent authority of the University from time to time.

S. #	Title of the Program	Institutes			
	PhD Programs				
1.	Doctor of Philosophy in Anatomy				
2.	Doctor of Philosophy in Biochemistry	chemistry			
3.	Doctor of Philosophy in Physiology	– AM College, Rawalpindi			
4.	Doctor of Philosophy in Molecular Medicine	Am concege, nawaipinai			
5.	Doctor of Philosophy in Pharmacology				
6.	Doctor of Philosophy in Science of Dental Materials				
7.	Doctor of Philosophy in Pathology	AFPGMI/AFIP Rawalpindi			
8.	Doctor of Philosophy in Biological Sciences	– NUMS Campus			
9.	Doctor of Philosophy in Clinical Phycology				
	MPhil/ Master Programs				
10.	Master of Philosophy in Anatomy	AM College, Rawalpindi			
11.	Master of Philosophy in Physiology				
12.	Master of Philosophy in Biochemistry				

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13.	Master of Philosophy in Molecular Medicine	
14.	Master of Philosophy in Pharmacology	
15.	Master of Philosophy in Community Medicine	
16.	Master of Philosophy in Science of Dental Materials	
17.	Master of Philosophy in Chemical Pathology	AM College, AFPGMI/AFIP Rawalpindi
18.	Master of Philosophy in Microbiology	Kawatpinui
19.	Master of Philosophy in Oral Pathology	AFPGMI/AFIP Rawalpindi
20.	Master of Philosophy in Psychology	NUMS Campus
21.	Master of Science in Transfusion Medicine	AFPGMI/AFIT Rawalpindi
22.	Master of Science in Nursing	AFPGMI/College of Nursing Rawalpindi
23.	Master of Science in Public Health	AFPGMI Rawalpindi
24.	Master of Science in Healthcare Administration	
25.	Master of Science in Prosthodontics	AFPGMI/AFID Rawalpindi
26.	Master of Science in Cardiac Anesthesia	AFPGMI/AFIC Rawalpindi
27.	Masters in Health Professions Education	NUMS Campus
28.	Master of Science in Human Genetics	
29.	Master of Science in Microbiology & Immunology	
30.	Master of Science in Biotechnology	
31.	Master of Science in Phytochemistry and Natural products	
32.	Maters of Science in Bioinformatics	
33.	Maters of Science in Nanomedicine	
34.	Master of Science in Clinical Psychology	
	Diploma Program	
35.	Diploma in Cardiology	AFPGMI/AFIC Rawalpindi
	Certificate Program	
36.	Certificate in Health Professions Education	NUMS Campus
37.	Clinical Certification In Hybrid Imaging (PET-CT Scan)	AFPGMI/ AFIRI
38.	Clinical Certification in General Body & Vascular Interventional Radiology	
39.	Clinical Fellowship in Otology & Audio-Vestibular Rehabilitation	AFPGMI/ CMH RWP

9. Program Specification

For all NUMS postgraduate academic programs, standardized scheme of studies with the course work requirements is tabulated below:

S. No	Disciplines	NUMS Titles	Programs Requirements	Duration	
Doctoral Programs					
1.	Doctorate	Doctor of Philosophy	Total 48 credit hours consisting of 18 credit hours course work and 30 credit hours of research.	3-8 years	
Master	r Programs				
2.	Basic Medical Sciences	Master of Philosophy MSc Healthcare	Credit Hours: 34 • Course work: 24 • Research work: 10 Credit Hours: 36		
		Administration	Course work: 24Practicum/Seminar: 06Research: 06		
		MSPH	Credit Hours: 36 • Course work: 24 • Practicum: 02 • Research: 10	2-4 years	
		MHPE	Credit Hours: 34 • Course work: 24 • Internship: 04 • Research: 06		
3.	Clinical Disciplines	MSc Cardiac Anaesthesia	Credit Hours: 38 • Course work: 30 • Research: 06 • Internship: 02	2-4 years	
		MS Transfusion Medicine	Credit Hours: 34 • Course work: 28 • Research: 06	2-4 years	
		Diploma in Cardiology	Credit Hours: 33 • Course work: 27 • Internship: 06	2-3 years	
4.	Biological Sciences	MS in Human Genetics MS in Microbiology & Immunology MS in Biotechnology MS in Phytochemistry and Natural products Maters of Science in	Credit Hours: 36 • Course work: 26 • Research work: 10	1.5-4 years	
		Bioinformatics			

		Maters of Science Nanomedicine		
5.	Psychology	Master of Science in Clinical Psychology MPhil Psychology	Credit Hours: 46 • Course work: 24 • Internship: 16 • Research work: 06 Credit Hours: 33 • Course work: 27 • Research work: 06	2-4 years
6.	Clinical Fellowship	Clinical Fellowship in Otology & Audio- Vestibular Rehabilitation	Credit Hours: 36 • Course work: 30 • Research work: 06	02 years
7.	Clinical Certification	Clinical Certification In Hybrid Imaging (PET- CT Scan) Clinical Certification in General Body & Vascular Interventional Radiology Pallative Care	 Course work: 18 Research work: 06 Credit Hours: 24 Course work: 18 	01 year 06 Months
8.	Non Clinical Certification	Health care Administration Health Professional Education	Credit Hours: 12	06 Months

10. Faculties at NUMS

Following are the Academic faculties at NUMS:

- a. Basic medical sciences
- b. Medicine and allied sciences
- c. Surgery and allied sciences
- d. Dentistry (dental sciences)
- e. Health management sciences
- f. Pathology
- g. Cardiovascular sciences
- h. Radiology and imaging
- i. Education including health professions education
- j. Multi-disciplinary studies (including humanism and behavioral sciences).

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CHAPTER II

REGISTRATION AT NUMS

1. Registration of Student After Admission

- a. The College/ institute will send the duly filled registration form of each postgraduate student to the Registrar's Office (Form # PG-01).
- b. All admitted students will then be registered with NUMS and the relevant Regulatory Authority.
- c. For any unforeseen reason, when a student cannot continue with his/ her studies in the University, the student may send an official request through his HOD and Dean/ Head of institution to the Registrar for clearance and notification of release from the University
- d. HEC policy for enrollment in dual degree program shall be adhered to. However, permission for enrollment in dual degree program shall be taken from HOD and concerned Dean
- e. Foreign Students Under Student Exchange Programs They may be enrolled for any semester or for any single course and NUMS will issue transcript with letter grades at the end of the semester.
- f. Postgraduate students will be governed by NUMS regulations and policies after registration in the University.

2. Payment of Dues & Refund of Fees

- a. Fee structure of all PG programs are available on NUMS website.
- b. Each student is required to pay the dues as may be prescribed by the University/institutes from time to time.
- c. Admission fee is non-refundable.
- d. Post-graduate program tuition fee may be refunded as follows:
 - 1) Up to 7 days of the commencement of classes: 100%.
 - 2) Within 8-15 days of classes: 50%
 - 3) More than 15 days of classes: No refund of fee.

3. Courses at other HEC Recognized Universities

The students may take courses at other HEC recognized universities subject to approval by the student supervisor and the concerned Dean.

4. NUMS Semester System

- a. NUMS shall follow semester system for all postgraduate academic programs each having two regular semesters in the academic year, Spring semester from January till May and Fall semester from August till December. However, in special circumstances program can be started other than above mentioned time with approval from VC. Each regular semester shall be for 18 weeks' duration (including examination). There is additional summer semester of 09 weeks with weekly contact hours for a course being double of the regular semester
- b. Student may opt for deficient/ improvement courses in summer semester or whenever the course is offered. However, in deficient/ improvement courses, the student is required to complete all formalities applicable to repetition of a course, i.e., sessional, mid semester examination, project, assignments, quiz,

etc. and End Semester Examination

- c. **Course Credit.** A credit hour means teaching/ learning a theory course for one hour each week throughout the semester. One credit hour in laboratory or practical work/ project would require lab contact of three hours each week throughout the semester
- d. The credit hours are denoted by two digits within brackets with a plus in between. The first digit represents the theory part while the second digit represents the practical work like 3 (2+1) where 3 are total credit hours with 2 for theory and 1 for practical work
- e. Each department shall clearly define the details of credit hours of its academic program which shall be shared with all stakeholders along with curricula
- f. Course load per semester shall be maximum twelve credit hours
- g. Course credit values awarded must reflect the quality and standards of the University and comply with the requirements of the NUMS/ regulatory bodies' qualification frameworks for that academic level
- h. Credits assigned to a course and course description shall be approved first from Faculty Board of Studies before sending to the University.
- i. Credits are earned only when the course and assessment have been completed successfully

5. Transfer of Credit Hours

- a. 'Transfer credit' is the granting of credit for academic work completed at any other/ same HEC recognized institution
- b. Inward migration shall be allowed only from such institutions as have been approved or accredited by these authorities
- c. No credit hour of a course less than B-grade for post graduate programs shall be allowed. The student will have to cover the entire deficient course, if any
- d. A student desiring transfer of credits to NUMS shall file a formal application in the prescribed form along with no objection certificate (including character verification) for change of the University, copies of all previous transcripts/credit hours' transfers/course outline, HEC grant (if any) utilization and progress report. After verification of these documents by the Registrar, the concerned Dean shall, in consultation with the concerned heads of the department (HoDs) and supervisors, if any, determine the equivalency of the previous courses and furnish his/ her recommendations to the Vice Chancellor through the Registrar
- e. Only relevant/common courses shall be transferred with grades to the opted program.
- f. The credits transferred are counted towards the degree requirement and GPA of the transferred credits shall be counted towards the calculation of CGPA
- g. The transfer of research work is permissible, provided that the host university accepts the research conducted at the parent university prior to the credit transfer.
- h. For outward migrations from NUMS, no objection certificates, transcripts and other documents shall be issued by the Registrar

6. Change of Program:

- a. Program transfer facility shall only be for semester based Master programs only where eligibility criteria is same for both programs. This policy is not for PhD programs
- b. He/ She will apply to Registrar Dte with the approval of concerned HoDs within two weeks of initiation of first semester. Such a student shall be issued a registration number for new program by Registrar Directorate
- c. Transfer will depend on the availability of seat in the opted program.
- d. NUMS reserve the right to reject cases without assigning any reason

7. Freezing/ Deferment of academic session

- a. Freezing not exceeding two semesters shall be allowed only after successful completion of the first semester against filing of application in prescribed form (Form # PG-03). All applications in this regard shall be submitted before the commencement of the freezable semester(s) to the concerned head of department (HOD) who will send his/her recommendations for final approval through the concerned Dean to the Registrar.
- b. Freezing of first semester or deferment for one year may be requested in first semester under special circumstances, considered after approval of competent authority.
- c. For freezing of semester, student shall submit 25% of the monthly tuition fee in advance to maintain his/her registration. However, the student shall complete his/her degree requirement within the stipulated time (not exceeding the maximum limit)
- d. In case of deferment, student shall take up his / her studies in the following academic year. Subsequent requests for deferred admission will not be considered
- e. Students granted deferred admission to a program of study will be admitted in the next academic session and will not be required to reappear the admissions test, re-sit for an interview or pay a new application fee
- f. Students shall not seek admission to another course/ program at any institute without prior written approval from the concerned Dean
- g. Where a request for deferred admission is denied, the individual will be required to reapply for admission

GENERAL ACADEMIC GUIDELINES FOR NUMS POSTGRADUATE STUDENTS

1. Academic Activities

Our postgraduates are an important part of the community and students are strongly encouraged to participate in the various seminars, colloquia, workshops and conferences hosted by each subject area.

2. Core Courses

All core courses are compulsory.

3. Elective Courses

Elective courses may be selected according to the interests and with permission from the Academic Advisor/ Supervisor. Students will be assessed on these courses and the marks will be part of their overall coursework assessment.

4. Course Codes

All postgraduate courses have been allotted appropriate course code numbers preceded by suitable alphabets indicating the names of the respective course.

5. Description of Each Course

Course instructor will be responsible to provide his/ her students all the information regarding the course i.e. Course title, code and credit hours, objectives/ outcomes, course content, teaching methodology, assessment type and schedule.

- 6. Program Coordination. To facilitate the students and to ensure timely and trouble-free successful completion of the program, HoD of respective department will appoint following faculty members at least one month before the start of each semester.
 - a. **Program Coordinator**. He/she will be responsible for liaison & coordination with all concerned.
 - b. Academic Advisor. He/she is available as a first line of pastoral support and advice to the student. It is the responsibility of a student to inform the Academic Advisor immediately about any problem that are interfering with his/her coursework or progression through the program.
 - c. Course Instructors. He/she shall also be responsible for:
 - 1) Provision of all the information regarding the course to the students i.e. Course title, code and credit hours, objectives/ outcomes, course content, teaching methodology, assessment type and schedule
 - Conduct of classes as well as continuous assessment i.e quizzes, sessional, mid-semester examinations, practical examination, evaluation of written course related assignments
 - 3) Maintenance of course files
 - 4) Submission of assessment results after approval of HoD to the Examination Directorate.
 - 5) Submission of course file to the concerned HOD at the end of each semester/ academic year for record keeping purpose.

7. Supervisor Nomination. The Head of the relevant department shall, on approval from the Dean, nominate supervisor preferably within one month of the commencement of the first semester. Supervisor will give confirmation (Form # PG-05), for each student. Supervisor can be changed in case of exigencies or unavoidable circumstances (Form # PG-06).

Co supervisor: Must be PhD/ FCPS/ Masters qualified and appointed with consent of supervisor, after approval from FBS. However, MPhil degree holders can be appointed as a Co-Supervisor in Master Program. He/she must have expertise relevant to the project and provide support to the student. While the main-supervisor is the team-leader and has overall responsibility, the co-supervisors add additional expertise. Together they have complementary expertise.

8. Graduate Supervisory Committee for PhD Students (PhD- GSC)

- a. This shall be appointed for each student up to second semester. This Committee must consist of at least four PhD degree holders in the relevant field. The Committee shall have one internal members from department other than supervisor, and two external members from any other institution/research organization. In case of multidisciplinary research, more than two external members may be appointed
- b. Members of the **PhD- GSC** and even the Supervisor can be changed in case of exigencies or unavoidable circumstances. However, in case of any change of supervisor, co-supervisor or any committee members, HoD shall incorporate change in the prescribed form (Form # PG-06) accordingly and send it to the Academics Directorate after approval from the Dean
- c. The **PhD- GSC** meetings shall be held at least once in six months during the research phase of the PhD scholar in the department or by conference call for external members. The proceedings of SC meetings shall be recorded and its meetings shall be chaired by the supervisor
- d. Supervisor through the concerned HoD shall send six monthly (bi-annual) report of each PhD scholar, after completion of course work, in prescribed form to the Academics Directorate
- 9. Graduate Supervisory Committee for Master Programs (MP GSC).
 - a. This shall be appointed for all students during the first quarter of the second semester.
 - b. For medical programs to fulfill PM&DC requirement, there shall be four faculty members comprising of two internal from the department of the constituent institute including student's supervisor and two external from other institute/ university/ research organization. However, in other Master programs, two internal from the department of the constituent institute including student's supervisor and one external members will constitute the MP GSC.
 - c. Members qualification should be PhD with 3 years post PhD experience or FCPS/MPhil/Master's degree holders in the relevant subject with 4 years post qualification experience.

10. Course Enrolments and Academic Activities

- a. Student will be required to submit coursework, attend an examination or a combination of both for assessment normally. In addition to the formal assessment he/ she may be expected to carry out other assignments, such as class presentations. Details of requirements for particular assessment will be provided in detail during lectures by the concerned faculty
- b. Students are solely responsible for ensuring that their course choices do not clash and that they are fully aware of when and where each course will take place.

11. Educational Strategy and Information Transfer

For all postgraduate academic programs, curriculum will allow the students to work collaboratively through collective involvement/ participation. The curriculum has been made more systematic with clear focus on predefined learning objectives. Problem- based learning will be used through most of the curriculum by using real world scenarios. Student will have to complete core curriculum comprehensively meanwhile covering extra topics or subjects of their own choice in electives.

12. Modes of Information Transfer (MIT)

Modes of information transfer (MIT) includes structured lectures (SL), small group discussions (SGD), workshops/ seminars/ conferences, journal club meetings (JCM), clinic-pathological conferences (CPC), laboratory work/ skill session, clinical rotation, on the job training (OJT)/ practical/ internship, study tours, and self-directed learning, depending upon the course taken. In case of unforeseen circumstances, online technology may be used for the continuation of academic program

13. Award of Degree

All postgraduate students must fulfil all such requirements for the award of degrees as have been prescribed by the University in respective chapters.

1. Preamble

Doctor of Philosophy (PhD) programs are being offered in basic medical sciences and pathology with a view to impart focused research training to scholars and to prepare skilled personnel with innovative research capabilities to make meaningful and productive contribution towards the socio-economic development of the society.

2. Program Duration

Total duration of PhD program is 3-8 years. However, under unforeseen circumstances it may be extended to maximum 10 years after approval from AS&RB. Period for the completion of PhD will be counted from the date of admission to the final submission of thesis

3. General Information

Following is the approved scheme of study

Semester Duration	18 weeks
Regular Semesters	06
Advance Course work	18 Credit Hours
Research	30 Credit Hours
Total	48 Credit Hours

4. Conduct of the Program (Annex-B)

- a. The Dean/ Head of Institute shall be responsible for proper implementation of program curriculum and periodical monitoring of students' progress through the HoD and program coordinator.
- b. Head of concerned Department is responsible for overall supervision of the program and proper compliance of NUMS policy for the conduct, assessment and timely submission of semester assessments results to the Academic and Examination Directorates. He/she shall also assign the courses to the faculty members at the commencement of academic session.
- c. Scholars shall be required to submit duly filled PG forms, wherever required, in time for smooth running of the program. Guidelines for the timely submission of PG forms, given in hand books shall be followed. Postgraduate (PG) forms (Annex-C) downloadable from NUMS website

https://numspak.edu.pk/upload/media/RevisedPGForms20201603945999.pdf

5. Degree Requirement

- a. **Residency**. There shall be a residency requirement for a period of one year. **Course Work**. The 18 credit-hours coursework for this program consists of;
 - 1) Advanced Courses- Level 8 (09 Credit Hours) These post graduate-level courses provide depth in the candidate's area of specialization as well as prepare him/her for research.

- 2) Elective Courses Level 8 (09 Credit Hours) These post graduate-level courses allow the candidates to broaden his/her knowledge of the general discipline that they are working in. These courses will be covered in second semester. Students will select elective courses and intimate Academics Directorate with the approval of his/ her supervisor one month before the second semester.
- 3) Detail of courses are mentioned in the curriculum
- 4) After completion of course work of 18 CHs with CGPA \geq 3.00, scholar shall appear in the doctoral comprehensive examination.

6. Comprehensive Examination

- a. Following the completion of coursework with CGPA \geq 3.00, every PhD student shall be required to pass a comprehensive examination (\geq 65% marks) in order to be granted candidacy as PhD researcher; provided that if he student fails to pass the comprehensive test, he or she shall be allowed one more attempt to take the test within three years.
- b. It will test the scholar's ability to integrate and assimilate the knowledge obtained relevant to their field of research. Concerned Graduate Supervisory Committee will be responsible for PhD comprehensive examination in collaboration with NUMS Examination Directorate
- c. The examination will be conducted in two parts in the following manner:
 - 1) Part A- Written Comprehensive Examination
 - a) Panel of examiners from GSC- PhD approved by AS&RB will prepare the written paper. A comprehensive examination consists of 100 marks written paper of 03 hours' duration. Assessment blueprint of Comprehensive Examination is as under:

S No		Topics			Marks
1.	04 examination questions, all in the student's subjec distributed as follows			t area, will b	e
	A	Core Courses	To demonstrate the understanding of advanced research methods and techniques used in the relevant filed	03	03x15
	В	Elective Courses		03	03x15
2.	Res	search proposal	To check the adequacy of the candidate's background preparation to pursue the proposed research	01	01×10
	Total 07 100			100	

The student result will be notified by the Controller of the Examination

2) Oral Examination

- a. It shall be conducted only after the scholar has qualified Part A of the Comprehensive examination.
- b. Scholar shall submit a research proposal on prescribed format. After approval of synopsis by supervisor and afterwards by committee, student

will submit two hard copies of the synopsis shall be submitted to the concerned Dean's Office for synopsis defense

- c. The scholars shall present their synopsis before the PhD- GSC with Dean being a Chair. The approval of synopsis shall be done by using the prescribed evaluation score form
- d. The scholar has to defend his/ her synopsis as a part of this oral examination. The Oral Examination Committee shall determine by majority vote. The examination will be graded as Pass/ Fail. Only pass scholar will be allowed to proceed for the doctoral research.
- e. PhD- GSC may recommend changes in the synopsis and scholar shall repeat presentation within stipulated time. The approval of synopsis shall be finalized by a majority vote
- f. If any observation/ revision in research title/ project is needed, student will resubmit the title/ project through concerned institute with all above formalities after approval from FBS
- g. Upon failure in oral part, each committee members will submit a duly signed comment's page, which would clearly document reasons for failure, to Academic and Examination Directorates of NUMS through the concerned Dean. A duplicate copy of these shall also be provided to the student
- h. IRB approval shall be taken wherever required
- i. A scholar who has passed the comprehensive examination shall be deemed to have become a candidate for PhD degree

7. Research.

- a. Every PhD scholar shall start research work under his/her supervisor and keep the Graduate Supervisory Committee members updated about the research work progress. He/she is required to complete 30 credits of PhD research within stipulated time
- b. All candidates must produce a PhD dissertation consisting of original research of high-impact. He/she shall write the dissertation in the NUMS prescribed format. He/ She will submit the draft to his/her supervisor who will review it thoroughly. Plagiarism test must be conducted by the supervisor on the dissertation before its submission for evaluation. Supervisor shall check the similarity index by using Turnitin software which should be <19% as per HEC's guidelines</p>
- c. If satisfied, the Supervisor will recommend the thesis to be submitted for evaluation. The scholar will then submit prescribed dissertation verification form (Form #PG-13) with two copies of soft bound draft dissertation to the concerned Dean Office through HOD. NUMS Academic Directorate will be intimated through acknowledgment receipt through Dean office.
- d. PhD- GSC shall evaluate the PhD dissertation. Dissertation Evaluation Report shall be sent in the prescribed form to Dean within four weeks
- e. If any amendment is suggested by any member of PhD- GSC, the supervisor shall ensure that necessary alterations are properly made in the dissertation
- f. After the evaluation of dissertation by PhD Graduate Supervisory Committee, dissertation shall be evaluated by external experts, as approved by Advanced

Studies and Research Board (AS&RB), who may be either

- PhD faculty member from the world top 500 universities ranked by the Times Higher Education or QS World Ranking in the year corresponding to dissertation evaluation year OR
- Pakistan-based Distinguished National Professors, Meritorious Professors from any national university; or professors from top universities ranked by HEC; or professors from any Pakistani University having a minimum H-Index 30 for Sciences, 15 for Social Sciences or 8 for Art & Humanities as determined by Web of Science. OR
- At least one external expert qualifying any one of the conditions mentioned above if the PhD candidate have two W category papers from their dissertation research in a peer-reviewed journal that is classified by the HEC in category W for Sciences and X or above for Social Sciences
- g. Supervisors of all PhD programs shall send names of at least two/ three external experts during the research phase of their PhD students to Academics Directorate. The following general guidelines shall, at least, be observed while selecting external evaluator:
 - Relevance of Expertise: in the same or related fields as in the dissertation.
 - No Conflict of Interest: in personal, financial, or professional stakes in a particular decision or outcome.
 - Objectivity: capable of making unbiased evaluations.
 - Diversity: in terms of geography, culture, professional backgrounds etc.
 - Reputation: must be good in the field, with a track record of fair and thorough evaluations.
 - Availability: should have the time and availability to review the dissertation.
 - Professionalism: capable of conducting themselves in a professional and respectful manner throughout the evaluation and defense process (if applicable).
 - Communication: capable of providing clear and constructive feedback on the dissertation.
 - Confidentiality: capable of maintaining confidentiality and protecting the intellectual property of the dissertation.
 - Compatibility: well-versed with the research methodology, approach, and theories used in the dissertation.
- h. Dissertation will be sent through Dean's office to Academics Directorate which in turn will send it to external expert/s approved by AS&RB
- i. If any amendment is suggested by external expert/s, the supervisor shall ensure that necessary alterations are properly made in the dissertation. If satisfactory report is given by external expert/s, it will be considered approved. However, if report is not received from external expert/s within two months, dissertation shall be sent to second/ third external expert from the approved list
- j. The Dean shall review and send the external expert/s report through Academics Directorate for approval by Advanced Studies & Research Board
- k. The candidate shall present a research paper in seminar/ national/international conference and publish abstract in the conference proceeding. Candidate shall submit evidence of participation to Academics Directorate

8. Dissertation/Thesis defense:

- a. There shall be open defense of PhD dissertation
- b. Public Announcement shall be made on the university website so that anyone interested can participate.
- c. Final defense of the dissertation shall be in presence of the Dean and PhD- GSC
- d. The grading of dissertation shall be done using prescribed evaluation score form. However, its scoring shall not be considered for CGPA calculation.
- e. The PhD- GSC may approve the dissertation as such, recommend minor or major changes in the dissertation, not approve and repeat the presentation if required
- f. The finally approved bound copies shall be submitted to the HoD through the supervisor within one month after dissertation/thesis defense. The date of notification of defense will be taken as degree award date.
- g. Two hard copy along with soft copy shall be shared with Acad Dte. Acad Dte in turn will send, after scrutiny, one hard copy to the Exam directorate for award of degree and other copy to library
- **9. Research Publication**. For award of PhD degree, a PhD researcher shall be required to publish research articles meeting the following criteria:
 - a. At least: Sciences; One research article in W category journal. In Social Science; One research article in X category journal or two research articles in Y category journals
 - b. The PhD researcher shall be the first author of these publications.
 - c. The research article shall be relevant to the PhD research work of the PhD researcher.
 - d. The article shall be published after approval of the research synopsis.
 - e. The article shall be published in a relevant research journal.
- **10. Guidelines for Synopsis & Dissertation/Thesis Writing.** (Available on NUMS website). Each PhD researcher shall write a doctoral dissertation reflecting relevance, credibility, effectiveness, and legitimacy of the research. Word count of dissertation shall be min. 30000. The dissertation must be an original and innovative contribution to knowledge that contributes to solving socioeconomic problems. To improve the quality of a doctoral dissertation, some regulations have been suggested in the following areas:
 - a. Selection of Research Area. The research area of the PhD researcher shall:
 - 1) Correspond to the community needs at regional and local levels and comply with the priority national research agenda.
 - 2) Reflect the basic and pure research.
 - 3) Signify emerging areas of research that coincide preferably with sustainable development goals (SDGs)
 - **b.** Quality in Reporting. The quality of presentation and reporting in dissertation shall reflect the following characteristics:
 - 1) The document is well written.
 - 2) The contents are balanced, well organized, appropriately styled; clearly structured, and well cohered; and
 - 3) The document is free from grammatical and spelling errors and flawed

terminology.

- 4) Minor shortcomings such as inaccurate use of acronyms and clumsy looking sentence structure have been addressed.
- 5) Quantitative research proposals must include a valid statistical design for data analysis.
- 6) Formatting shall be compatible with international standards.
- **c. Methodological Quality.** To produce PhD researchers capable of conducting research independently, ensuring the technical soundness of their PhD dissertations is integral. The following guidelines shall be useful in making the PhD research methodologically sound:
 - 1) Guidelines ensuring the quality of Qualitative Research: A PhD research dissertation, based on the Qualitative Research methods should satisfy, at least, the following questions
 - a) "Does the research, as reported, illuminate the subjective meaning, actions and contexts of those being researched?"
 - b) "Is there evidence of the adaption and responsiveness of the research design to the circumstances and issues of real-life social settings met during the course of the study?"
 - c) "Does the sample produce the type of knowledge necessary to understand the structures and processes within which the individuals or situations are located?"
 - d) "Is the description provided detailed enough to allow the researcher or reader to interpret the meaning and context of what is being researched?'
 - e) "How are the different sources of knowledge about the same issue compared and contrasted?"
 - f) "Are subjective perceptions and experiences treated as knowledge in their own right?"
 - g) "How does the research move from a description of the data through quotation or examples to an analysis and interpretation of the meaning and significance of it?"
 - 2) Guidelines ensuring the quality of Quantitative Research: A PhD dissertation with Quantitative Research methods should satisfy, at least, the following questions
 - a) Reliability are the results repeatable?
 - b) Validity does it measure what it says?
 - c) Internal validity do the research results indicate what they appear to be?
 - d) External validity can the results be generalized to other settings (ecological validity) and to other populations (population validity?
 - e) Replicability are the results of the study reproducible?

3) Appropriateness of the Methods to the Aims of the Study

a) To achieve the research objectives, the alignment of the research approach and methods is necessary. Therefore, a PhD dissertation, at

least, shall:

- b) Reflect a fair proportion of latest knowledge of contemporary techniques and methods in relation to study objectives.
- c) Contain detailed and easily comprehensible discussions regarding the applied methods and techniques.
- d) Justify the use of methods and techniques to achieve study objectives.
- e) Show evaluation of obtained results in relation with study objectives. And:
 - (1) The methods and techniques used should justify the results obtained.
 - (2) The obtained results should support the study objectives.
- 4) **Relevance to the Policy and Practice.** The research should have significantly answered questions related to policy and practice in that area, establishing its usefulness and usability. Accordingly, a PhD dissertation, at least, shall:
 - a) Reflect judicious evaluation of study results in relation with policy related aims and goals undertaken while starting the research.
 - b) Discuss the practical implications of the study results in association with the developing practices in that area.
 - c) Establish usefulness of the study results for devising policy as stated in the beginning.
 - d) Discuss how the resulting policy would be useful for the organization/society. And:
 - e) The study output should be significant enough to be published or patented.
 - f) The assessment of the results performed by the author must not be superficial and lacking substance.
- 11. Award of MS/MPhil Degree During PhD Studies A student who successfully completes coursework and passes the comprehensive examination but is unable to defend a PhD synopsis/research proposal or does not complete the required research for obtaining a PhD degree within the specified timeframe, may be granted a graduate level diploma/certificate/transcripts or another MS/MPhil upon completion of regulatory authority requirements.

12. Award of Doctoral Degree: A PhD scholar must fulfill all of the following requirements for award of PhD degree:

- a. Completed advanced course work of 18 CHs with CGPA \geq 3.00
- b. Passed comprehensive examination
- c. Research work of 30 CHs
- d. Research paper(s) as its first author during his or her doctoral studies in an HEC approved W category in all disciplines except social sciences (1X or 2Y category) in HEC Journal Recognition System (HJRS)
- e. Satisfactory dissertation evaluation report/s from external expert/s
- f. Successful open defense of dissertation
- 13. Reporting Requirements. The following documents shall be submitted to the HEC

after the completion of studies:

- a. A soft copy of PhD Dissertation for inclusion in PhD Country Directory and attestation of degree by the HEC.
- b. PhD Country Directory Proforma, signed by the Principal Supervisor, Controller of Examination and the Vice Chancellor.

MASTER PROGRAMS

1. Preamble

NUMS offers Master programs in different disciplines of basic medical, clinical, biological and social sciences at its constituent institutions with aim to create high quality human resource in the country

Students shall be required to submit duly filled PG forms, wherever required, in time for smooth running of the program. Guidelines for the timely submission of PG forms, given in hand books shall be followed. Postgraduate (PG) forms (Annex-C) downloadable from NUMS website

https://numspak.edu.pk/upload/media/RevisedPGForms20201603945999.pdf

Supervisor through the concerned HoD shall send six monthly (bi-annual) report of each student, after completion of course work, in prescribed form to the Academics Directorate

2. Program Duration

The duration of all Master programs is 2-4 years The period will be counted from the date of commencement of classes to the final submission of thesis.

3. Graduate Supervisory Committee for Masters Programs

This shall be appointed for all students up to semester. This shall consist of four members (two internal from department including student's supervisor and two external members from other institution/research organization) for medical programs to fulfill PM&DC requirement. However, in other Master programs, one external and two internal members will constitute the MP - GSC.

In case of multidisciplinary research, more than one external supervisor may be approved by the Pro Vice Chancellor (Academics)

4. Conduct of Program

- a. The Dean/ Head of Institute shall be responsible for proper implementation of program curriculum and periodical monitoring of students' progress through the HoD and program coordinator. Head of concerned Department is responsible for overall supervision of the program and proper compliance of NUMS policy for the conduct, assessment and timely submission of semester assessments results to the Academic and Examination Directorates. He/she shall also assign the courses to the faculty members at the commencement of academic session.
- b. Students shall be required to submit duly filled postgraduate forms (Annex-A) downloadable from NUMS website
 <u>https://numspak.edu.pk/upload/media/RevisedPGForms20201603945999.pdf</u>
 to be used for postgraduate studies
- c. Students will submit their feedback at the end of each semester.
- d. The course-related assignments shall be given to the students by the faculty members and quizzes, sessional and mid semester examinations shall be conducted internally by the HODs through faculty members. Proper course file

shall be maintained. Internal assessment results shall be compiled in this regard and furnished to the Examination Directorate. A student may improve or repeat the courses as per NUMS policy. End semester examinations shall be conducted by the Examination Directorate

- e. The supervisor through the concerned HoD/ Dean shall send bi-annual report of each student in prescribed form to the Academics Directorate by the end of third semester and fourth semester if research work is not completed
- f. Guidelines for Synopsis & Dissertation/ Thesis Writing. Available on NUMS website/ PG Students handbook
- 5. Degree Requirement
 - a. **Course work.** Minimum course work requirement for Master program is 24 CHs. Details of course work of each program is mentioned in the curriculum
 - b. **Research.** 6 -10 CHs depending on program requirement. However, in clinical subjects, student may opt for research or article publication
 - c. Synopsis Approval.
 - 1) Every student is required to submit a research synopsis after approval from supervisory committee, (Form # PG-09) in first month of the third semester to the department.
 - 2) Guidelines for Synopsis & Dissertation/ Thesis Writing. Scholar shall submit a research proposal on prescribed format. These are available on NUMS website
 - 3) The students shall present their synopsis before the MP-GSC chaired by Head of Institution/Dean and its approval shall be done on prescribed evaluation score form. (Form # PG-10)
 - 4) The MP-GSC may recommend changes in the synopsis and student shall repeat presentation within stipulated time. The approval of synopsis shall be finalized by a majority vote. (Form # PG-11)
 - 5) If any observation/ revision in research title/ project is needed, student will resubmit the title/ project through concerned institute with all above formalities after approval from FBS
 - 6) IRB approval shall be taken wherever required
- **5. Research Bench fee.** NUMS will pay Rs. 100,000/- to MPhil/ MS student for research purpose on case to case basis after recommendations from FBS

6. Research Work.

- a. The research work will be carried out under the direct guidance and supervision of the supervisor who will keep the members of the MP - GSC abreast of the progress of the research work as per the procedures prevalent in the institution
- b. Research work should be completed within stipulated time. However, time may be extended by the committee on concurrence from the Academics Directorate provided a student has completed 50% of the research work as certified by the supervisor
- c. All student shall write the thesis in the NUMS prescribed format
- d. Word count of thesis shall be minimum 15000.
- e. Thesis Preparation/ Submission. Every student should write his/her thesis in the prescribed manner and format. After careful review and similarity index check by using 'Turnitin' software which should be <19% as per HEC's guidelines,

the concerned supervisor will recommend the thesis for final evaluation. The student will submit prescribed thesis verification form (Form #PG-13) with two copies of soft bound draft thesis to the concerned Dean's Office through the concerned departmental head

f. Thesis Evaluation. MP - GSC will review and send the thesis evaluation report in the prescribed form to Dean office within four weeks. If MP - GSC give satisfactory report, the student shall be allowed to proceed for defense of thesis examination. The changes/ amendments, if suggested by the examiners, shall be incorporated in the thesis

7. Thesis Defense.

- a. After receiving a satisfactory thesis evaluation report, the Dean will schedule a date under intimation to the Academics Directorate/ Controller of Examinations/ Director QA and Heads of the concerned College or Institute for final defense of the thesis.
- b. Student will be allowed to go for thesis defense only if he/ she has completed 24 CH of coursework with CGPA ≥ 2.50
- c. Final defense of the thesis shall be in presence of the Dean and MP GSC. The grading of thesis research shall be done using prescribed evaluation score form. However, its scoring shall not be considered for CGPA calculation.
- d. The examiners may approve the thesis as such, recommend minor or major changes in the dissertation, not approve and repeat the presentation if required
- e. The finally approved bound copies shall be submitted to the HoD through the supervisor within one month after thesis defense. The date of signatures by the Dean will be taken as degree award date.
- f. Two hard copy along with soft copy shall be shared with Acad Dte. Acad Dte in turn will send, after scrutiny, one hard copy to the Exam directorate for award of degree and one copy to library
- g. The Academics Directorate will check the documents required for award of degree and forward the dossier, result and bound copies of thesis to the Examination Directorate for record and gazette notification

8. Research Paper.

In MPhil, MS and MHPE programs, each student will have to submit one research paper with acknowledgment of concerned journal to corresponding author, in any of the PM&DC/ HEC approved journals.

Two Master students may be allowed to fulfill the publication requirement after approval of FBS.

- **9. Practicum (On-the-job Assignment).** Practicum of 02 CH is offered in MSPH & MSc HCA. The goal of the practicum is to provide a structured and supervised opportunity for the student to apply the theories, principles, knowledge and skills, as learned in the classroom, in a practice setting. The practice experience occurs in a carefully-selected health services organization approved by the Programme Coordinator and is supervised by faculty and an immediate supervisor/mentor. This takes into account the transition from education to professional practice.
 - a. Prerequisites and Requirements:
 - Students must have completed all the course work and defended the

dissertation before registering for the practicum.

- In consultation with the practice site or organization, the student must develop a short, formal proposal of the work or project to be accomplished by the student during the assignment.
- The student will complete the assigned hours of practicum experience with the selected organization.
- The student will write a well-constructed report (10-15 pages, excluding appendices) detailing their experience
- The student will be evaluated by an immediate supervisor/mentor of the participating organization.

b. Role of Immediate Supervisor/Mentor

- Responsible for the student's learning during the practicum.
- Serves as a role model for the student and advises the student routinely.
- Periodically consults responsible faculty on student's progress.
- Completes a student evaluation form at the end of the practicum.

10. Award of Master's degree.

The student must have completed total credit hours of course work with CGPA > 2.50 and research work of 06 - 10 credit hours followed by successful defense of thesis. In MPhil/MS/ MHPE, one research paper submitted in any of the PM&DC / HEC approved journals with acknowledgment of concerned journal to corresponding author. However, in Masters of clinical programs, students may conduct 06 credit hours' research followed by thesis or submit one research paper in any of the PM&DC / HEC approved journal.

11. MPHIL PROGRAM

a. Introduction.

The aim of this program is to create high quality human resource in country in the diversified fields of medical and social sciences. NUMS is currently offering MPhil programs in multiple disciplines of basic medical sciences and pathology. Well-qualified and experienced faculty is available in our constituent institutions

b. General Scheme of Studies of MPhil Program.

Semester Duration	18 weeks
Course Duration	2-4 years
Regular Semesters	04
Course Load per Semester	12 Credit Hours
Core Courses	24 Credit Hours
Research	10 Credit Hours
Total	34 Credit Hours

c. Conduct of MPhil Course.

1) MPhil programs comprise of four semesters with following course work.

Semesters	Course Work	Credit Hours
1st Semester	Core Courses	12 Credit Hours
Summer Semester	Any deficient course/ improvement	
2nd Semester	Core Courses	12 Credit Hours
3rd Semester	Research Work	04 Credit Hours
Summer Semester	Any deficient course/ improvement	
4th Semester	Research Work	06 Credit Hours

2) Details of courses for each MPhil program is mentioned in its curriculum

- 3) Course instructor will maintain the results of quizzes, sessional, mid semester and practical exam. Exam and Academics directorate will be intimated before end semester exam
- 4) **Noncredit course.** Student may take additional elective course as a noncredit course with permission of HoD for acquisition of knowledge
- 5) 04 credit hours of Research will be carried out in third semester and 06 credit hours of Research will be carried out in fourth semesters

12. MASTER PROGRAMS

Master of Science in Public Health

a. Introduction

MSPH curriculum emphasizes on basic public health sciences, essential managerial and analytical skills including project planning and evaluation, epidemiological investigations, health systems analysis, reproductive and child health, environmental and occupational health, disease control and research. Practical consist of individual fieldwork, group fieldwork, field visits, individual assignments and class exercises in all semesters.

b. General Scheme of Studies of MSPH Program

Points	Details
Degree Offered	MSPH
Duration	2-4 Years
Total Credit Hours	36 Credit Hours
1. Core Course	24 Credit Hours
2. Practicum	02
3. MSPH Thesis Research	10 credit Hours

b. Details of courses is mentioned in its curriculum

MSc Healthcare Administration

a. Introduction

Effective management in health care is the key to success for implementing programs in health sector. The significance of MSc Healthcare Administration is much higher in the 21st century compared to the previous years. MSc Healthcare Administration will be a two years' program designed to give in-depth education in managing healthcare problems as well. The instructional and training components will be carried out by the qualified faculty of health management at Armed Forces Post Graduate Medical Institute (AFPGMI) Rawalpindi. The award of the course will require evidence of satisfactory completion of course

and research. All students will be assessed during the course and through end semester examinations as per HEC grading system/ policy.

b. General Scheme of Studies

1.	Course Duration	24 Months
2.	Semester Duration	16 Weeks
3.	Semesters	4
4.	Course load per Semester	12 Credit hours
5.	Course Work	24 Credit hours
6.	Practicum + Seminar	03+03 (06) Credit hours
7.	Research	06 Credit hours
	Total Credit Hours	36 Credit hours

c. Details of courses is mentioned in its curriculum

MSc in Cardiac Anaesthesia

a. Introduction

This program is offered by the National University of Medical Sciences (NUMS), Islamabad. The two-years training will be done at the Department of Cardiac Anaesthesia & Intensive Care of the Armed Forces Institute of Cardiology & National Institute of Heart Diseases (AFIC-NIHD). The Focus of the MSc Cardiac Anesthesia program is to provide a nurturing environment to acquire the knowledge and develop the technical skills necessary to provide superb clinical care and cultivate high quality research.

b. Duration of Program & Scheme of study

MSc in Cardiac Anaesthesia is 24 months' program consisting of core courses and clinical training in the wards. There will be 4 regular semesters of 16 weeks' duration and 38 credit hours have to be completed. Successful MSc completion will require a minimum CGPA of 2.50.

- c. Details of courses is mentioned in its curriculum
- d. Log Book. Proper log books of clinical procedures and cases along with written reflections by all students will be maintained with the help of Program Coordinator. The reflections written by the students will be commented and endorsed by the supervisors.

Degree Offered	MSc in Cardiac Anaesthesia
Duration	24 months
Total semesters	04
Course load per semester	09-12 hrs
Core courses	24 hrs
Elective courses	06 hrs
Research thesis/ article publication	06 hrs
Internship	02 CH
Total CHs	38 Hrs

Masters in Health Professions Education (MHPE)

MHPE is a two-year program that aims to develop medical educationists who will help to improve quality of healthcare delivery through improvements in health professions education with an emphasis on Inter Professional Education (IPE).

The program further aims to improve patient care by producing leaders who, via understanding the interrelationship of theory, research and clinical practice, can ensure continuous use of evidence-based insights while making informed decisions in education of all health professions, at national and international levels

Scheme of Study

Details	Masters
Program Duration	02 years
Number of Semesters (excluding Summer semester)	04
Course Load per Semester (excluding Summer semester)	09 CH
Core Courses	24 CH
Internship	04 CHs
Remedial (summer semester)	
Thesis / Research	06 CH
Total Credit Hours	34 CH

Master Programs in Biological Sciences

Duration of the Program & Scheme of Study		
Degree Offered	MS	
Duration	2-3 Years	
Total Credit Hours	36 Credit Hours	
Course Work	26 Credit Hours	
Core Course	12 Credit Hours	
Elective Course	12 Credit Hours	
> Seminar	2 credit hours	
MS Research Work	10 CHs	

Duration of the Program & Scheme of Study

MS in Human Genetics

The vision behind this post-graduate program is to produce highly skilled professionals who will be actively engaged in research in the field of human genetics. Pakistan is facing a challenge of ever-increasing burden of genetic disorders due to the high incidence of consanguineous marriages, cancer and other non-communicable diseases. Our graduates will contribute towards mitigating these challenges, by undertaking basic and translational research, using the latest tools and techniques in molecular biology. The faculty members at the Department of Biological Sciences are highly gualified and experienced PhDs with diverse research expertise and background. This set of the highly competent faculty members will provide an educational program in Human Genetics at par with that of any internationally recognized university. The emphasis of this post-graduate program will be problem solving research for the benefit of our patients and the community at large. The program aims to nurture confident individuals who are effective contributors towards the growth of the nation

MS in Microbiology & Immunology

The MS program in Microbiology & Immunology will provide exceptional avenues for graduate training at the MS levels in advanced concepts of Microbiology & Immunology.

In line with the diverse expertise of the department faculty, core research areas include bacteriology, virology, environmental microbiology, microbial ecology, microbial physiology, immunology, bacterial and viral-based infectious diseases, antimicrobial resistance, microbiomes and antimicrobials. A particular emphasis is placed on tackling scientific problems with a multi-disciplinary approach.

In this regard, national and international research collaborations with major research groups and industries is the primary focus of the department. Our graduate program will not only provide a strong foundation in microbiology major but also strong scientific background to do research in basic, applied, advanced and emerging areas of the field.

MS in Biotechnology

The vision behind the post-graduate program in Biotechnology is to produce competent Biotechnologists who can employ quality processes and applications, which will profoundly influence the existing paradigm of agricultural, industrial, healthcare, and environmental Biotechnology by providing sustainable competitive edge to the society. The faculty members at the Department of Biological Sciences having obtained Ph.D. and post-Ph.D. experience from various technologically advanced countries of the world possess diverse research and teaching expertise. This diverse skill set of highly competent faculty members will provide Biotechnology Educational Program with impetus to generate quality workforce. The post-graduate program will also create awareness about the potential of Biotechnology with economical and socio-ethical implications. Moreover, this program is designed to instill the spirit of innovation and creativity in young minds with sound research aptitude. The program aims to nurture confident individuals who are effective contributors to the growth of the nation. This program in our department will not only potentially increase the employability of students, but will also increase the potential of biotechnology-related startups and entrepreneurship Pakistan.

MS in Photochemistry and Natural Products

Our graduate program will provide a new generation of scientists with a solid broadspectrum background in the disciplines dealing with chemical, biological, phytochemical, and technological aspects of drugs discovery from natural sources. This program aims to train students in the methods used to analyze and characterize medicinal natural products and ethno-pharmaceutical uses of plants from traditional systems of medicines.

Maters of Science in Bioinformatics

This program has been conceived in light of the framework of Higher Education Commission, Pakistan for MS Bioinformatics program. The degree program is designed to provide our post graduates (PGs) an opportunity to acquire advanced bioinformatics knowledge that is required for a researcher to interpret and decipher the information embedded in complex biological processes. We envision that our program will provide a research-based educational platform for researchers where they will be provided state of the art research facilities and opportunities to meet the research standards nationally as well as internationally.

Maters of Science in Nanomedicine

This cross-disciplinary program will provide robust scientific understanding along with exceptional opportunities for graduate students at the MS level in the exciting and emerging discipline of Nanomedicine. This new Master's degree program is first of its kind offered in Pakistan to produce highly qualified academicians, researchers and future leaders in the field of Nanomedicine. The course will focus on the application of nanotechnology in the medical field to develop nanomaterials for diagnosis, monitoring, control, prevention and treatment of diseases

MS CLINICAL PSYCHOLOGY

a. General Scheme of Studies of Diploma Program.

Semester Duration	18 weeks
Course Duration	2 Year
Number of Regular Semesters	04
Coursework	24
Internship	16 Credit Hours
Research	06 Credit Hours
Total Credit Hours	46 Credit Hours

Master of Science in Nursing (MSN)

a. Introduction

The duration of Master of Science in Nursing(MSN)program is a two years countable from the commencement of classes to the submission of thesis however; extendable for further one year. The program is focused on various specialties. There are four semesters comprising three semesters of clinical based course work and research. The students will be required to complete minimum course work of 38 credit hours including 6 credits of thesis. The practicum//research work etc. may be carried out in the hospitals, research/healthcare or community health work organizations.

b. General Scheme of Studies of Diploma Program.

•	-
Semester Duration	18 weeks
Course Duration	2 Year
Number of Regular Semesters	04-06
Course Load per Semester	09-12 Credit Hours
Course work	32 Credit Hours
Electives	04
Practicum	06
Thesis	06
Total Credit Hours	48 Credit Hours

13. POSTGRADUATE DIPLOMA IN CARDIOLOGY (DIP CARD)

a. Aim

The aim of this program is to train medical graduates with professional skills in the clinical fields so that they can apply their acquired expertise at health care system.

b. General Scheme of Studies of Diploma Program.

Semester Duration	18 weeks
Course Duration	2 Year
Number of Regular Semesters	04
Course Load per Semester	09-12 Credit Hours
Core Courses	30 Credit Hours
Internship	06 Credit Hours
Total Credit Hours	36 Credit Hours

c. Log Book.

Proper log books of clinical procedures and cases along with written reflections by all students will be maintained with the help of Program Coordinator. The reflections written by the students will be commented and endorsed by the supervisors.

14. CERTIFICATE IN HEALTH PROFESSION EDUCATION

a. Duration of Program & Scheme of Studies.

Duration of Program is 6 months during which $1 \times Contact$ Session of 5 days' duration each will be held, at the beginning of program

- b. Frequency. Once a Year
- c. **Credits:** 12 Credit Hours
- d. No of Courses: 04
- e. Description of Course & Scheme of Study.

The Course will be hybrid, with a face to face and online self-study components. Each course will be of 05 to 06-week duration

f. Overview of Learning and Instruction.

1) One face to face sessions of a 5 days near the start of program

2) Distance Learning

Distance learning will be using Moodle software, customized for the program, will be used by students and faculty for access to learning materials, discussion and assessment of each course.

g. Assessment Plan: Assessment will be continuous, end of course summative and certification exams

15. Clinical Certification in Hybrid Imaging (PET-CT SCAN)

a. Introduction

This program will train the diagnostic radiologists from Armed Forces and civil sectors in the sub-specialty of hybrid imaging. The trained doctors with this clinical fellowship will be able to work independently and more efficiently in PET/ CT scan and Radiology Departments. Emerging hybrid imaging techniques

and its evolving roles has created the opportunities along with the challenges for nuclear medicine practitioners and changes in traditional professional relationships with other health care disciplines.

b. General Scheme of Studies

Course Duration	12 months
Number of Regular Semesters	03
Course Load per Semester	06-09 Credit Hours
Course work	18 Credit Hours
Research	06
Total Credit Hours	24 Credit Hours

16. Clinical Certification in General Body & Vascular Interventional Radiology

a. Introduction

This Clinical Fellowship program provides a firm foundation in the practice of General Body & Vascular Interventional Radiology to radiologists who wish to enhance their careers in this field. Since Pakistan is still lacking far behind the developed world in field of General Body & Vascular Interventional Radiology, this program will serve as an ice breaker not only to provide the country with much needed support in this field, but also a perfect career opportunity to the program participants.

b. General Scheme of Studies

Course Duration	12 months
Number of Regular Semesters	03
Course Load per Semester	06-09 Credit Hours
Course work	18 Credit Hours
Research	06
Total Credit Hours	24 Credit Hours

17. Clinical Fellowship in Otology & amp; Audio-Vestibular Rehabilitation

a. Introduction

With the growing noise pollution and growing use of ototoxic medicines, hearing loss is becoming a much bigger and growing hazard then it ever used to be. Otology and Audio-Vestibular Rehabilitation are now full clinical sciences concerned with treatment and Audio-Vestibular rehabilitation of individuals with Audio-Vestibular disorders. Most countries of the developed world are running post-fellowship courses in Otology and Audiology of a duration ranging from one to five years. Unfortunately, this science is not so well developed in Pakistan.

The only courses offered so far are BSc/MSc Audiology which can be done even by a non-doctor, and is limited to hearing evaluation and fitting of hearing aids.

In the Armed Forces particularly, hearing loss is a disease included among

professional hazards of a soldier. Every soldier involved in a combat operation and exposed to high intensity noise of firearm or military vehicles has some degree of hearing loss depending on duration of exposure. Incidence of auditory injury among soldiers is rising by 13 percent to 18 percent a year. This is in addition to the conductive deafness caused by ear drum perforation due to pressure effect of firearms.

Clinical Fellowship in Otology & Audio-Vestibular Rehabilitation is the first program of its kind in Pakistan. It is structured to provide the theoretical, scientific, clinical, research and vocational skills necessary to practice enhanced otology, audio-vestibular medicine and audiology. The program is designed for ENT surgeons who have successfully completed the qualification of FCPS (or equivalent), who wish to develop or enhance their careers or specialize in the important aspect of Otology & Hearing Rehabilitation.

b. General Scheme of Studies

Course Duration	02 years
Number of Regular Semesters	04
Course Load per Semester	09-12 Credit Hours
Course work	30 Credit Hours
Research	06 Credit Hours
Total Credit Hours	36 Credit Hours

CHAPTER VI

ASSESSMENTS & EXAMINATIONS

- 1. NUMS shall follow semester- based examination system for all postgraduate and non-medical undergraduate academic programs each having two regular semesters in the academic year, Spring semester from January till May and Fall semester from August till December. However, in special circumstances program can be started other than above mentioned time with approval from VC. Each regular semester shall be for 18 weeks' duration (16 weeks of teaching & learning and 2 weeks for examination). There is additional summer semester of 09 weeks with weekly contact hours for a course being double of the regular semester
- 2. In the beginning of a semester, the teacher of each course will guide the students about the successful completion of the course requirements.
- 3. Minimum 75% (85% for Nursing) attendance in each course is mandatory. In case of deficient attendance, student has to repeat the course either in summer semester or whenever the course is offered. Where required, the course instructor shall report student's absences to the HoD.
- 4. Student may opt for deficient/ improvement courses in summer semester or whenever the course is offered. However, in deficient/ improvement courses, the student is required to complete all formalities applicable to repetition of a course, i.e., sessional, mid semester examination, project, assignments, quiz, etc and End Semester Examination.
- 5. Taking Alternative Elective/Optional Course. A student may take an alternative elective for repetition with the approval of Dean or HOD. A student's transcript shall show the grades of both the courses. However, the better grade will be used in the computation of CGPA.
- 6. Noncredit courses. Courses may be taught as non-credit courses as well. The assessment marks of these courses shall not contribute towards CGPA.

7. Assessment Management

- a. NUMS Examination Directorate:
 - 1) The Controller of Examinations shall be responsible for the preparation of the examination calendar and the conduct of all examinations during an academic year
 - 2) Date sheet of all examinations shall be prepared by Controller of Examinations in consultation with the constituent & affiliated institutions at least three months prior to the commencement of final examination.
 - 3) The University will publish the examination schedule of written and practical examinations on NUMS website with a copy to concerned institution
 - 4) End Semester examination in semester-based programs shall be held in 18th week of semester initiation.
 - 5) In case of unforeseen circumstances, Controller of Examinations may change the date sheet and assessment modalities (online)
 - 6) Examination Directorate NUMS will be responsible for the collection of all exam questions/cases, scheduling and conduction of moderation of written

question papers, practical exams marking of final examination and compilation of results as per NUMS and regularity authority guidelines

- 7) Examination Directorate will conduct post Hoc of all exams and schedule Post Hoc meetings with members of NDHPE Team before the announcement of results.
- 8) Exam Directorate shall share template prepared by NDHPE with the faculty for construction of MCQ, SAQ, SEQ and OSCE/ OSPE
- 9) Exam Directorate will be responsible for maintaining, enhancing and periodic review of NUMS Question Bank.
- 10) Examination Directorate NUMS shall ensure that the candidates' documents are correct and shall forward admit cards to the institutions, at least two weeks before the commencement of examination for issuance to individual students.
- 11)Declaration of Result: Every effort shall be made to declare the result of annual based examination within one month of the last practical examination and within two weeks in semester- based examination after post hoc.
- **b. Institutional Examination Cell:** Every institution will establish Institutional Examination Cell (IEC) headed by Institutional Deputy Controller (IDC) of Examinations, who will be responsible for:
 - 1) Ensuring development of MCQs and SAQs/SEQs/OSCE/OSPE by the concerned faculty and their maintenance in the institutional bank.
 - 2) Ensuring conduct of pre per and post exam quality assurance measures in collaboration with institutional DHPE/Assessment Cell
 - 3) Maintenance of record of internal assessment of continuous assessment in semester- based programs
 - 4) Maintenance of record of attendance of each candidate (minimum 75 % except in Nursing programs where it is 85 %)
 - 5) Submission of internal assessment of each student at least 2 weeks prior to end semester examination to Examination Dte NUMS
 - 6) Submission of examination application form and prescribed fee to the Examination Dte NUMS at least 6 weeks before the commencement of the examination
 - 7) End Semester Examination: Maintenance of papers secrecy, conduct of annual/ end semester examination and onward submission of papers to the Examination Dte NUMS
- **c. Departmental Board of Studies.** Departmental Board of Studies will be responsible for:
 - 1) Development of Table of Specification (TOS) and assessment blueprint
 - 2) Ensuring quality of assessment of each program through pre per and post exam measures
 - 3) Monitoring the internal/ continuous assessment, and finalization of result ensuring transparent scoring of NUMS.
 - 4) Ensuring that course files/ dossiers of students are properly maintained.

5) Recommendation of examiners to the Examination Dte NUMS for final professional/ end semester examination as per NUMS and regulatory authority guidelines.

8. Policy Guidelines

- a. NUMS considers student assessment as a means of refining its academic programs and to improve student learning and performance.
- b. Multiple assessment methods are necessary to capture all or most aspects of clinical competency and any single method is not sufficient to do the job. Therefore, following assessment tools may be selected by the faculty:
 - 1) For knowledge, concepts, application of knowledge ('Knows' and 'Knows How' of Miller's conceptual pyramid for clinical competence): context-based MCQ, short answer questions and Essay questions
 - 2) For 'Shows How": multi-station OSCE/ OSPE, Long case (observed and structured) and Short case
 - 3) For performance-based assessment ('does'): portfolio or log book
- c. All assessment blue prints shall give clear educational rationale for adopting proposed forms of assessment. However, number of questions may vary from program to program
- d. All assessment blue prints of PG programs shall be submitted to Academic Directorate through respective Dean for further approval from AS&RB, and UG programs from NUMS Coordination Committee. Template for assessment blueprint is attached (Annexure-G)
- e. Assessment tools shall be appropriate and match learning outcome being assessed
- f. Level of difficulty of all questions shall be mentioned as Recall and/or Application
- g. All information regarding scheduling and nature of examinations shall be known to the students in time
- h. The performance of each student in a course will be assessed periodically throughout the semester to check as to how well the students' learning outcomes are being achieved and how effectively are the teaching standards being maintained
- i. Semester Based Programs: Continuous/Internal assessment (60%) and End Semester Examination (40%) shall be cleared separately with minimum 50% marks. However, the cumulative result shall be calculated as per NUMS Grading Policy
- j. These assessments will have different weighting as given below, that contribute towards the overall assessment in percent marks.

Nature of Examination	Weightings		
Quizzes	5%		
Sessional examination	10%	60 %	
Mid semester examination	25%		
Practical/Assignments/Presentation	20%		
Final semester examination	40%	40 %	
Total	10	0%	

- l. Quizzes/ Sessional Tests/ Mid-Semester Examinations
 - 1) Assessment tool for quizzes, sessional and mid semester exams shall be decided by the course instructor
 - 2) Quizzes, sessional exams and Mid-Semester examination of each course shall be evaluated by the respective course instructor. Results will be sent to the Controller of Examination through Institutional Examination Cell
 - 3) Whenever a student misses mid-semester examination/ sessional test due to reasons acceptable to the Departmental Board of Studies, make up test may be arranged within the 04 weeks

m. Practical/Assignments/Presentation

- 1) Practical examination is the responsibility of the course instructor and DBS
- 2) Assessment tool for practical exams shall be decided by the course instructor as per the course requirement. Proposed assessment tools for different programs are:

For PG Programs (Basic Sciences & Pathology)				
Assessment 40 20%				
Critical Appraisal of Article / Assignment	10	05%		
 OSPE/ Practical/Viva/Assignments/ PPTs 	30	15%		
For Clinical Sciences Programs				
Assessment	40	20%		
 Portfolio/ Log book 	10	05%		
OSCE (at least 07 stations)/ Short case/ Assignments/	30	15%		
Presentations etc				

n. Final Semester Examinations:

- 1) The end semester theory paper of each course shall be prepared and evaluated by the panel of examiners approved by the Controller of Examinations
- 2) Paper shall be developed by the Departmental Board of Studies as per the requirement of their subject based on NUMS template out of two options as per the subject requirement
- 3) There will be no supplementary/ special examination for end semester exam and if a student fails in a course, he/she is required to repeat it
- 4) Whenever a student misses End Semester Examination due to a reason acceptable to the Dean/ HoD provided his/her attendance is not less than the program requirement, he/ she can appear in the examination whenever offered.
- 5) The HoD and Institutional Deputy Controller of Examinations shall supervise and oversee the conduct of examination in the departments

CHAPTER VII NUMS GRADING POLICY

1. Grade Point Average

- a. The student's final assessment shall be done by Grade Point Average (GPA).
- b. For calculation of GPA, absolute grading on the scale of 4.00 points shall be used
- c. Following grade calculations are used as per HEC policy for use by all concerned:

S No	Percentage	Grade Points	Grade	S No	Percentage	Grade Points	Grade
1	85 & above	4.00	Α	23	63	2.22	
2	84	3.93		24	62	2.11	C
3	83	3.86		25	61	2.00	
4	82	3.80	- A-	26	60	1.88	
5	81	3.73		20	00	1.00	C-
6	80	3.66		27	59	1.77	<u> </u>
7	79	3.60		28	58	1.70	
8	78	3.52			Below 58	0.00	F
9	77	3.46	B+				
10	76	3.40					
11	75	3.33					
12	74	3.24					
13	73	3.16	- B				
14	72	3.08	D				
15	71	3.00					
16	70	2.88					
17	69	2.77	В-				
18	68	2.66					
19	67	2.58					
20	66	2.50	C+				
21	65	2.42					
22	64	2.33					

d. **Computation of GPA/ CGPA and degree award:** GPA is a figure ranging from 0.00 to 4.00 used to indicate the performance of a student in the semester. It is calculated as follows:

Semester Grade Point Average (GPA)= <u>Sum over all courses in a semester (course credit hrs x grade point earned)</u> Total Semester Credit Hours

Cumulative Grade Point Averages (CGPA)=<u>Sum over all courses in all Semester (Courses Crd Hrs x Grade Point Earned)</u> Total Semester Credit Hours

e. Minimum qualifying CGPAs for PhD and MPhil/ Master programs shall be 3.00 and 2.50 respectively and for Undergraduate programs shall be 2.00

2. Academic Deficiencies.

A student who obtains one or more of the following grades in the semester result shall be considered academically deficient:

- a. Semester GPA less than 2.00 for PG programs and 1.70 for UG programs
- b. CGPA less than 3.00 for PhD, 2.50 for MPhil/Masters programs and 2.00 for UG programs *in any semester other than first semester* or after completion of the coursework
- c. 'F' grade in any course
- d. 'l' (incomplete) grade in any course.
 - 1) Award of Grade "F". "F" grade is awarded on the basis of:
 - a) Academic failure i.e. below 1.70 GPA in any course of PG programs and below 1.00 in any course of UG programs
 - b) Attendance less than 75% in any course (85% for Nursing programs)
 - 2) Incomplete "I" Grade. An incomplete "I" grade will be awarded by the faculty only in exceptional cases only when where beyond the control of a student such as serious accident, family tragedy, serious health ailment, etc. The grade will be approved by the concerned Dean provided the attendance of a student is not less than 75% (and 85% in case of nursing program). The student will be given a proper grade after examination as per NUMS grading policy without prejudice to the previous grade "I". In case a student fails to make up the required score, s/he will be awarded an "F" grade

3. Recommendations for Academic Deficiencies

The cases of academically deficient students shall be discussed in the Departmental Board of Studies meeting and issue one of following recommendations where applicable, as mentioned below:

- a. Warning issued to the student by the concerned HOD
- b. Probation.
- c. Withdrawal.

For probation and withdrawal, recommendations shall be sent to Controller of Examination NUMS who will notify it in the result.

- a. **Warning.** A PG student should be placed on warning under the following condition at the time of declaration of semester result by Controller of Examination of the University:
 - 1) Semester GPA less than 2.00
 - 2) CGPA 2.50-3.00 for PhD and between 2.00 2.50 for MPhil/Masters programs
 - 3) Failing in any paper(s)
 - 4) While on warning, a student is to:
 - a) Contact concerned faculty for guidance.
 - b) Improve semester work comprising home assignments, laboratory reports, quiz, mid semester and the marks obtained
- b. **Probation.** A PG student should be placed on academic probation under the following conditions:
 - 1) CGPA less than 2.00
 - 2) Maximum two probations

- 3) While on probation, a student is to:
 - a) Contact concerned faculty for guidance.
 - b) Improve semester work comprising home assignments, laboratory reports, quiz, mid semester and the marks obtained

c. Withdrawal

A student is recommended for withdrawal from the University on the recommendation of Dean/ HOD, by Registrar Directorate NUMS subject to any of the conditions listed below:

- 1) Earns four F grades or more in first semester onlyCannot complete his/her degree requirements within the maximum stipulated time, even if s/he utilizes the summer semester.
- 3) A student who remains absent for more than 45 days continuously without valid reasons
- 4) Withdraw from a Particular Course
- 5) Students can withdraw from a particular course with the consent of the concerned dean. Students can withdraw from a maximum of 01 courses in one semester. This should be within four weeks after the start of classes.
- 6) More than two academic probations.
- 7) Students with CGPA less than 1.70 in two consecutive semesters of the program even after attending summer semester. However, he will be eligible to seek re-admission if applied for in the next available admission season. Re-admission will be allowed only once on payment of full admission fee
- 8) PhD students if fails twice in the comprehensive examination or fails to qualify coursework requirements including comprehensive examination within 03 years.
- 9) On consistent unsatisfactory academic performance when reported by the supervisor of the PhD students
- 10) A student can seek withdrawal from any program at any stage of his degree on his own request duly recommended by supervisor and for PhD students by Supervisory Committee of the Institute/ College and take readmission within two years from the stage on which withdrawal was taken

Note: If a student is likely to be withdrawn on academic deficiencies, s/he will be duly warned and counseled.

d. Repeating Courses

- If a student gets 'F' grade, he will be required to repeat the course or its recommended alternate, if any. However, "F" grade obtained earlier will also be recorded on the transcript. A student who fails in a subject, and after repeating fails again the number of F's counted in this case will be one "F" only
- It is the student's responsibility to clear the failed / dropped courses, subject to availability of resources at the respective institution and approval of Dean / Associate Dean / HoD
- **4. Improvement of CGPA.** A student may repeat a course, within the maximum permissible duration, to improve his/her CGPA subject to the following provisions:

- 1) Course may be repeated/improved in summer semester or when the course is offered.
- 2) The student should register for the course(s) to be repeated after formal permission from the respective HoD.
- 3) The student shall not be allowed to improve his/her CGPA after completion of the degree.
- 4) The terms and conditions of repeat courses shall be the same as per regular courses.
- 5) Students may repeat a course with grade "C" & below, however if a PhD student's CGPA is less than 3.00, he/ she may repeat course/s with grade "B-" & below to qualify for comprehensive examination.
- 6) A student may repeat up to three (03) courses in the PG program. In such a case, both the course and the grade obtained will be recorded on the transcript, however, only the better grade shall be calculated in the CGPA. In case of CGPA improvement, it would be recorded with (Imp) on the transcript
- 7) A student can repeat the course twice if he desires to improve the grade.

5. Indiscipline in Examinations

- a. Any candidate found guilty of following matters; his/her case will be submitted to Unfair Means Cases Committee constituted by the University. This committee will be constituted of 02 senior faculty members, Director of student's affairs, headed by senior Professor of the University.
 - 1) Removes a leaf from his/her answer book, the answer book shall be cancelled.
 - 2) Submits forged or fake documents in connection with the examination.
 - 3) Commits impersonation in the examination.
 - 4) Copies from any paper, book or notes.
 - 5) Mutilates the Answer Book.
 - 6) Possesses any kind of material, which may be helpful to his/her in the examination.
 - 7) Does anything that is immoral or illegal in connection with the examination and which may be helpful to him/her in the examination.
 - 8) Refuses to obey the invigilation staff or refuses to follow the instructions issued by the University in connection with the examination.
 - 9) misbehaves or creates any kind of disturbance in or around the examination centre
 - 10) Uses abusive or obscene language on the answer script.
 - 11) Possesses any kind of weapon in or around examination centre.
 - 12) Possesses any kind of electronic device which may be helpful in the examination
- b. His/her case shall result in penalties keeping in view the nature and intensity of offence.
 - 1) Cancellation of paper
 - 2) Suspension from programme for one semester.
 - 3) Heavy and light Fine

- 4) Expulsion forever from the University.
- 5) Any other.
- c. All serious cases of indiscipline shall be subjected to enquiry by the Unfair Means Cases Committee will decide that the student will have to appear in summer semester/with regular semester for the cancelled paper provided that nothing will restrict the inherent powers of the Vice Chancellor to award any suitable punishment in any disciplinary case without reference to the said committee
- d. While dealing in student disciplinary cases, the principles of natural justice shall not be compromised under any circumstances even in the situations where such cases are decided on summary basis.
- e. If a student is not satisfied by the decision of the Unfair Means Cases Committee, s/he can submit his/her appeal within a week after the decision of the Committee to the Vice Chancellor whose decision will be final.

6. Rechecking of Examination Script

The answer book of a candidate shall not be re-assessed under any circumstances.

- a. Whereas the re-checking does not mean re-assessment/re-evaluation/remarking of the answer book. The Controller of Examination can arrange for rechecking of examination script by any faculty member from the relevant discipline on the complaint/request of students. The Controller of Examination or any officer or rechecking committee appointed shall see that:
 - 1) There is no computational mistake in the grand total on the title page of the answer book
 - 2) The total of various parts of a question has been correctly made at the end of each question
 - 3) All totals have been correctly brought forward on the title page of the answer book
 - 4) No portion of any answer has been left un-marked
 - 5) Total marks in the answer book tally with the marks sheet
 - 6) The hand-writing of the candidate tally in the questions/answer book.
- b. The candidate or anybody on his behalf has no right to see or examine the answer books for any purpose
- c. The marks of a candidate could even decrease in light of (a) (3) above. In the event of reduction of marks, the record shall be corrected accordingly and revised transcript will be issued.

7. Medical Certificate

Medical certificate from a registered medical practitioner duly endorsed by the University Medical Officer is acceptable for the examination purposes

8. Permission of Writer for Special Students:

- a. A visually impaired student may be allowed to attempt examinations on Braille/ computer/ any other specialized means of facilitation.
- b. In case a student is physically handicapped/visually impaired, he may in advance apply to HoD with acceptable proof of disability or impairment at least two weeks before the start of examination, for permission to engage a writer in

tests/ examinations. Such student shall be allowed 45 minutes (maximum) extra time for a question paper.

c. The qualification of the person who acts as writer of a handicapped student must be at least one step lower than that of the student.

9. Damaged/ Lost Answer Script:

In an exceptional case where an answer script is damaged, lost or destroyed due to unavoidable circumstances, the student concerned may be given following options: a. Average marking shall be awarded to the student in that subject/ course

- b. In case of final examination, if the candidate desires so, s/he shall be given another chance as a special case to take examination in that subject/ course in the next examination and no examination fee shall be charged from the student
- c. In case of internal assessment, if the candidate desires so, s/he shall be given another chance as a special case to take the Make-up assessment in that subject/ course in the same academic session

10. Matters Related to Degree/Transcript Award

- a. Transcript.
 - 1) Examination Directorate may issue two types of transcripts i.e. interim and final.
 - 2) Interim transcript shall be issued to such students who have not completed their programs. It will show the grades of all semesters which a student has completed along with GPA/ CGPA. It will show program status as well. In MBBS/BDS, it will show marks/ percentage of all subjects in every professional examination
 - 3) Final transcript shall be issued to the students who have completed their degree requirements showing complete academic record of the students along with GPA/ CGPA in semester based programs and show marks/ percentage of all subjects in every professional examination. It will show program status as well with academic honor, if any.
 - 4) The final transcript shall at least cover the following information:
- b. Front:
 - 1) Name of student, father's name, date of birth, registration number/ roll number.
 - 2) Name of the program.
 - 3) Date of admission into degree program.
 - 4) Semester wise break-up with dates.
 - 5) Subjects detail along with credit hours.
 - 6) Type of enrollment full time or part time.
 - 7) Picture of the applicant be printed on transcript date of completion of degree requirements.
 - 8) Date of completion of degree requirements.
 - 9) Mode of study regular or private or distance learning.
 - 10) Online result verification key/ID (front side at the end of the transcript).
 - 11)GPA/CGPA and overall percentage against earned CGPA (at the end of the front side of transcript) for semester based programs.

c. Back

- 1) Basic Admission Requirement of the Programme
- 2) Previous Degree held by the Student along with Institution Name
- 3) Credit Hours Exempted/ Transferred if any/ applicable.
- 4) CNIC No. for Pakistani and Passport No. for Foreign Students
- 5) Grading System must be mentioned on Back Side of the Transcript
- 6) Charter Date of the University/ DAI may be mentioned
- 7) Name of Campus/ College be mentioned along with HEC Permission Date
- 8) Signature of Issuing Officer(s) (Front and Back Side at the end of the Transcript)
- 9) The degree/ diploma/ transcript must have the water-mark seal on it.
- d. **Duplicate Transcripts.** The students may request for additional or duplicate copies of transcripts on payment of prescribed fee. Each type of transcript shall depict transcripts definition and legend of grades on its reverse side

11. Award of Degree

Degrees shall be issued against payment of prescribed fee.

- a. Urgent degree can be issued upon the request of student on payment of special fee, if any.
- b. Duplicate degree may be issued (with completion of all requirements) to a student in case the original degree is lost/damaged or in case of change in the name of candidate. The duplicate degree shall be signed by the Controller of Examinations only

12. Standing Committee - Use of Unfair Means in University Examinations

Composition

- 1) President : Director Academics
- 2) Members : Director Legal
- 3) Secretary : Dy Controller of Examination

Terms of Reference

To investigate and make recommendations about any disciplinary matter/complaint against students in the jurisdiction. Secretary of the committee is to convene the meeting whenever required and submit the report to the competent authority for approval within seven days of occurrence of the incidents

CHAPTER VIII

GUIDELINES FOR SYNOPSIS & THESIS WRITING

Synopsis Writing

1. Introductory

The aim of this compilation is to guide NUMS PhD, MPhil and Masters students in writing research proposal of reasonable quality. The Postgraduate Studies Office is always pleased to provide guidance and support for postgraduate students for completion and timely submission of their synopsis and thesis. Students are expected to be fully aware of their responsibilities to meet all deadlines, formatting requirements and paperwork needed to be done for the completion and submission of their synopsis/ thesis.

2. Synopsis Contents/ Structure

A synopsis is an outline of the proposed research project to be conducted in the University for postgraduate studies. It highlights a clear research question and approaches to solve the problem, its originality and significance.

It should be concise, avoid repetitions and provide sufficient details to be accepted on academic merits. A synopsis should be constructed in a manner that facilitates the supervisory committee to assess the originality of the idea, background information, methodology, outcome and feasibility of the research project. It should be structured in the manner explained hereinafter.

3. Title Page

The title page of a synopsis should include:

- a. title of the research project
- b. name of the student
- c. degree for which synopsis is being written (e.g. MSc, MPhil, PhD etc) name of discipline (e.g. pathology)
- d. name of the supervisor, department, institution, university and supervisory committee members along with their qualifications, designations & place of work

4. Title

The title should be brief, specific and reflect the main objectives of study. It should neither be too short nor too long to exceed fifty words. Superfluous phrases or expressions such as 'an investigation into' must be avoided

5. Project Summary

A project summary describes the proposed research giving a clear idea about the background information, research question and student's intent to explore the key issues. The student should summarize the major components of the research proposal including a background/ rationale of study, short statement of the problem, objectives/ hypothesis of the study, research design, methodology of data analysis and anticipated results and their significance.

6. Keywords

This section is an alphabetically ordered list of the appropriate keywords up to 5-8 that would help to find out the recent literature on the relevant subject in a search engine. The words should be separated by semi-colon (;)

7. Introduction

It gives the background of the project and the rationale for conducting the study. The introduction consists of well-written three paragraphs to efficiently and meaningfully set the context of the proposed research. The first paragraph introduces the main area of research and relevant background in the subject area in precise manner. The problem under study must be relevant to the community and national needs to improve the healthcare system. The second paragraph introduces the project by describing the specific gap in the present knowledge or existing problem in the basic biomedical field/ healthcare system particularly in Pakistan. It should further describe critical analysis of the problem being studied in precise and clear terms based on the review of recent scientific literature. It is important that in this paragraph, the research question for which the proposed investigation aims to find an answer is explicitly formulated. The third which is the final paragraph should highlight the proposed objectives and justification for the conduct of the study. An explanation of its significance should be used as an opportunity to demonstrate that research has not been conducted/ performed before and that the proposed project will really add something new to the existing scientific literature

8. Objectives of the Study

All research projects should have 'SMART' objectives (Specific, Measureable, Achievable, Relevant and Time-bound). They must be consistent with the problem and identify the variables involved in the research. The objectives should be clearly stated and logically presented. Students are advised to resist any temptation to put too many objectives or over-ambitious objectives that cannot be adequately achieved under the protocol. Objectives are written in 'action verbs' 1. to determine 2. to compare.... etc. After statement of the primary objective, secondary objectives may be mentioned.

9. Hypothesis

The researchers formulate a hypothesis as an expectation concerning the relationship between the variables in the research project. Generally, there are two types of hypotheses, null and alternate. The null hypothesis: where the researcher makes a statement of no difference from an expected outcome. In the alternate hypothesis: the researcher makes a statement that a true difference does exist between expected and obtained outcomes. However, it must be kept in mind that descriptive studies do not carry or involve any hypothesis.

10. Significance/ Impact/ Benefits of Study.

It emphasizes on the significance/ importance of the research work/ study; vital contribution of the results of the study and who will benefit from it. Convince the reviewers that the proposed research will make a significant and substantial contribution to increase the knowledge in the particular subject/area /literature. It should be possible in most cases to predict the specific and general benefits for

people and policy-maker on completion of the proposed research.

11. Review of Literature/ Justification for the Research Problem.

Review of literature in a synopsis helps the reviewer in assessing the knowledge of the researcher. It familiarizes the reviewers to the problem under study and the work done by other researchers at local or international level on similar subjects. A comprehensive and upto-date literature review clearly highlights the existing gaps. It assists in identifying various variables in the research project and conceptualizes their relationship. Research methodology of the researcher can be structured and modified after reviewing the literature. It helps the researcher to understand the difficulties faced by others and the corrective steps taken or modifications made by them. The reviewer can assess the work put in by the researcher, assists in the feasibility and justification of the proposed research project to address the national needs. Use of very old references (more than 5 years old) when adding information from literature should be avoided. References must be properly cited in all paragraphs using author/ year format.

12. Research Methodology (plan).

Student should specify what research methodology is chosen to conduct the study and justify the specific approach selected to substantiate the proposed research project. This section should also include the following:

- a. Setting: State the place where research work will be undertaken and data will be collected. This may be a hospital and / or its department(s)/ labs or the community or both.
- b. **Study Design:** Mention the name of the appropriate study design which should preferably relate to objectives (qualitative or quantitative research). A single study design or a combination can be selected e.g. cross-sectional study or survey; observational analytical designs; prospective study; experimental designs or clinical or field trials.
- c. **Sample Size:** The sample size should be adequate to apply all relevant tests of statistical significance and has appropriate power. The sample size depends on the study design. The sample size must be justified scientifically as how it was calculated. The parameters used for sample size calculations must be clearly mentioned and referenced.
- d. **Sampling Technique:** The study population can be healthy people, patients or recipients of certain treatment, animal or medical device. There are many methods for sampling like simple random, systemic and stratified sampling, cluster sampling, etc. The sample should be representative of the population and should be reliable. This minimizes sampling errors. Type of sampling employed for each category of subjects under study should be mentioned.
 - 1) Inclusion criteria, on what bases will the study subject be inducted in the study? Background variables which are considered for inclusion must be stated. In case of special circumstances, the criteria must clearly state the inclusion strategy.
 - 2) **Exclusion criteria**, on what bases will the study subject be excluded from the study? How the variables mentioned in exclusion criteria are detected? Exclusion must also be justified as what pushed the researcher to

exclude a particular subject from the study.

13. Ethical Approval.

Wherever necessary, Ethical Committee's approval from the institute must be obtained and attached with the synopsis. Ethical approval is required in all human and animal studies. Consent as approved by Institutional Review Board should invariably be used.

14. Analytical Methods/ Data Collection Procedure.

Complete details of data collection procedure should be mentioned. The researcher will have to describe the method of data collection, which may be in the form of a questionnaire(s), interviews, screening procedures, medical examination, laboratory investigations/ experiments/ instruments and quality control to get reliable and valid data. Clinical trials should have the proprietary names, chemical composition, dose and frequency of administration of drugs in the trial protocol.

15. Data/ Statistical Analysis.

Data analysis is an important part of a research project and must mention the statistical package use for data analysis like SPSS. A good analysis leads to good results. The plans for data analysis should be mentioned as follows:

- a. Type of variables along with analysis plan must be mentioned.
- b. Type of statistical test in case of analytical studies, corresponding to type of comparing variables, correlation, regression, ANOVA must be mentioned.
- c. Level of significance for rejecting the null hypothesis must be mentioned (less than 0.05 is significant).
- d. Computer program/ software used and data sorting method must be mentioned.

16. Collaborating Organizations.

The researchers are encouraged to collaborate with partner(s) within and outside Pakistan. In this regard, the researcher is required to identify complementarity and/ or justify the need for collaboration, clearly identify the part(s) of research that will be carried out in the collaborator's laboratory and include a letter from collaborating partner/ agency expressing willingness to collaborate.

17. Facilities and Budget.

The details of facilities (equipment available for the research project in the host university/ institution and budget estimate for proposed project should be reported as under:

Description	% of time devoted to Project	Year 1	Year 2	Amount (in million Rs.)
Equipment				
Cubtotal				
Subtotal:				
Reagents/kits				
Subtotal:				

Subtotal:		
Subtotal:		

18. Duration/ Timeline.

The expected duration of research study and why this duration is required (number of patients, hospital tests, data collection and analysis, report writing, etc.). A detailed timetable (Gantt chart) of students' activities on a weekly or monthly basis, outlining targets that he expects to achieve per week or month for the entire duration of the study.

19. References:

References are given in Harvard style i.e. body of the text and take the form of the author's surname followed by the date of the publication, all within parentheses, e.g., (Johnston, 1917). Detail is given in the Appendix E.

20. Official documents required:

All applicants are required to fill in the following forms as related to their study. Blank forms can be downloaded from NUMS' website. e.g. *synopsis format and forms, etc.*

- a. <u>Covering letter</u> (subject: consideration of synopsis)
- b. Ethical Approval letter from the concerned Institution Review Board (IRB)
- c. Informed consent form Consent form taken must also be attached
- d. Plagiarism report

21. Format of Synopsis.

- a. Language: English.
- b. Text: should be in a single column and black in color.
- c. Page size: Page size should be A4.
- d. **Margins:** The left margin should measure 1.5 inches. The right, bottom and top margins should each measure 1 inch.
- e. Line spacing: Line spacing, of all text, including bibliographic references, should be 1.5. Figures, tables and their captions should be single-spaced. Line spacing should be 6 points (before and after) between the paragraphs.
- f. Font style: Times New Roman font style should be used.
- g. Font size: should be 12 points in main body text. For figures, tables, captions and charts, a font size of 10 points is to be used.
- h. **Headings and sub-headings:** Headings should appear at center of the page, all in capitals, bold 14-point font, sub-headings should be left aligned, all in capitals, bold and 12-point font.
- i. **Page numbering:** Page numbers should be placed at the center bottom of the page. Page numbers must be in the same font and font size as your text. Except for the title page, page numbers must be placed on each page of the synopsis. All pages of the synopsis should be numbered consecutively in Arabic numerals.

SYNOPSIS Title:

Dr. PhD Trainee in -----

(Registration No. -----)



Academic Supervisor

Department of	-
Institute	-

National University of Medical Sciences (NUMS) Rawalpindi



Title of Research Project:	
Synopsis submitted for: Master DMPhil DPhD	Discipline: Pathology (Chemical Pathology)
Name of the Applicant: Dr	Qualifications (list all; with date)
Date of Enrollment:	Registration No.
Supervisor	
Signature:	
Name:	
Qualification:	
Designation:	
Address: Department of Chemical Pathology Rawalpindi.	/ & Endocrinology, AFIP/AFPGMI
Phone No: 03	Email:@yahoo.com
Head of Department	
Signature:	
Name:	

References

References are given in Harvard style i.e. body of the text and take the form of the author's surname followed by the date of the publication, all within parentheses, e.g., (Johnston, 1917).

References book. The standard reference format for a book is: author(s) or editor(s) surname (s)/ and the initial(s) of their first name(s), year of publication, title of book (italicised), book edition (where the book is beyond the 1st edition), place of publication, publisher, page numbers you have taken information from (in case of a direct quote or a diagram, picture, etc.). Examples are given below:

Material Type	In-text Example	Reference List Example
Book: Single	Costanzo (2006) wrote	Costanzo L. (2006). Physiology,
author	that	Philadelphia: Saunders Elsevier.
	OR	
	(Costanzo, 2006).	
Book: 2	Pears & Shields (2008)	Pears, R. and Shields, G. (2008). Cite
authors	OR	them right: The essential referencing
	(Pears & Shields, 2008).	guide, 3rd ed. New York: Springer
		Publishing Co.
Book: 3	Simon, Lipman and Jacox	Simon, L.S., Lipman, A.G. and Jacox,
authors	(2002)	A.K. (2002). Pain in Osteoarthritis,
	OR	Rheumatoid Arthritis and Juvenile
	(Simon, Lipman and Jacox,	Chronic Arthritis, 2nd ed. Glenview,
	2002)	IL:
		American Pain Society.
Book: more	(Darlow et al., 2013).	Darlow, B., Dowell, A., Baxter, G.D.,
than 3		Mathieson, F., Perry, M. and Dean, S,
authors		(2013). 'The enduring impact of what
		clinicians say to people with low back
		pain', Annals of Family Medicine, 11
		(6), pp.527-534.
Book: no	Black's	Black's medical dictionary, (1979).
author	medical (1979).	32nd ed. London:
		A. & C. Black.
Book: editor	(Galanter, 2001).	Galanter, M. (ed.) (2001). Services
		Research in the Era of Managed Care,
		New York: Kluwer
		Academic/Plenum.
Book: 2 or	(Patrick & Scambler,	Patrick, D. & Scambler, G. (eds.) 1986.
more editors	1986).	Sociology as applied to medicine,
		London: Balliere Tindall.
Book:	Bergeron and Lowe (2003)	Bergeron, C. and Lowe, J. (2003).
chapter or	stated	Frontotemporal degeneration:
article in an	that	introduction. In: Dickson, D.W. (ed.)

edited book		Neurodegeneration: The Molecular Pathology of Dementia and Movement Disorders, Switzerland: Neuropath Press, pp.342-348.
eBook	Veletsianos (2010) stated that	Veletsianos, G. (2010). Emerging technologies in medical education, London: Routledge. Retrieved from: eBrary database. [Accessed 29 September 2015].
eBook: chapter in an eBook	(Resnick, 2001). stated that. 	Resnick, N.M. (2001). Geriatric medicine. In: Braunwald, E., A.S. and Isselbacher, K.J. (eds.) Harrison's Online. Based on: Braunwald, E., Hauser, S.L., Fauci, A.S., Kasper, D.L., Longon, D.L. and Jameson, J.L. (eds.) Harrison's Principles of Internal Medicine. New York: McGraw-Hill. Retrieved from: http://www.hsls.pitt.edu/resources/d ocumentation /harrisonsinfo.html.[Accessed 6 December 2015]. from: eBrary database. [Accessed 29 September 2015].
eBook: chapter in an eBook	(Resnick, 2001).	Resnick, N.M. (2001). Geriatric medicine. In: Braunwald, E., A.S. and Isselbacher, K.J. (eds.) <i>Harrison's Online</i> . Based on: Braunwald, E., Hauser, S.L., Fauci, A.S., Kasper, D.L., Longon, D.L. and Jameson, J.L. (eds.) <i>Harrison's</i> <i>Principles of Internal Medicine</i> . New York: McGraw-Hill. Retrieved from: <u>http://www.hsls.pitt.edu/resources/do</u> <u>cumentation/harrisonsinfo.html</u> .[Access ed 6 December 2015].

References from journals' articles. use last name followed by authors' first name initials. Write the year of publication (in parentheses), title of article, name of journal (in italics, capitalise the first letter of each word). Mention volume of journal and issue (in parentheses). Write pages of articles at the end with hyphen in between the first and last page of article. Examples are as under:

Material Type	In-Text Example	Reference List Example
Journal article: print	(Henderson, 2005) (Arrami & Garner, 2008) (Nowotny et al., 2015)	Henderson, J. (2005). Google Scholar: A source for clinicians? <i>Canadian Medical Association</i> <i>Journal</i> , 172 (12) 1549-1550. Arrami, M. & Garner, H. (2008). A tale of two citations. <i>Nature</i> , 451 (7177) 397-399. Nowotny, K., Jung, T. and Grune, T. (2015). Advanced glycation end products and oxidative stress in type 2 diabetes mellitus. <i>Biomolecules</i> , 5 (1) 194-222.
Journal article: electronic database	(Castell, 2008)	Castell, F. (2008). Professionalism in nursing practice. <i>Nursing Journal</i> , 12(9) 13-17. Retrieved from CINAHL. [Accessed 13 October 2015].
Journal article: online only journal (volume & issue number available	(Koopman, 2001)	Koopman, W. J. (2001). Prospects for autoimmune disease: Research advances in rheumatoid arthritis. <i>JAMA: Journal of the</i> <i>American Medical Association</i> , 285(5) 648- 650. Retrieved from: http://jama.ama- assn.org/ [Accessed 13 October 2015].
Journal article: Digital Object Identifier (DOI)	(Strachan et al., 2008)	Strachan, M.W., Price, J.F. & Frier, B.M. (2008). Diabetes, cognitive impairment, and dementia. <i>BMJ</i> , 336 (7634) 6. doi: 10.1136/bmj. [Accessed 10 November 2016].
Website	World Health Organization,(2010)	World Health Organization. (2010). Tuberculosis. http://www.who.int/mediacentre/factshee ts/104/en/ [Accessed 14 February 2012].
Dissertations and Theses	(Khan, 2016)	Khan, N.A. (2016). <i>Mechanisms of Antibiotic Resistance</i> . PhD thesis, National University of Medical Sciences.
Conference proceedings/ abstract s		Khuri, F.R., Lee, J.J. and Lippman, S.M. (2003). Effects on head and neck cancer tumors. In: Proceedings from the American Society of Clinical Oncology; May 30-31; Chicago, IL. Abstract 359.

THESIS GUIDELINES

1. General Guidelines.

The objective of a thesis is to produce quality research work which should be creative and innovative. The guidelines given hereinafter for preparation of MPhil thesis and PhD dissertation of reasonable quality which are binding on all NUMS' enrolled postgraduate students. Thesis/ dissertation is a product of your hard work and original research which will become a part of records in several libraries (Department, University/ Institute, HEC etc.).

2. Format of Thesis/ Dissertation.

- a. Language: English
- b. Word Count
 - 1) PhD Minimum 30000 words.
 - 2) MPhil/ Masters Minimum 15000 words
 - **3)** Bibliography, appendices, acknowledgements page, table of contents and title page will not be included in the overall word count.
- c. Text: should be in a single column and black in color
- d. Page Size: Page size should be A4 to be used as guided below:
 - 1) <u>Margins:</u> The left margin should measure 1.5 inches and the right, bottom and top margins should each measure 1 inch.
 - Line Spacing: Line spacing of all text including bibliographic references, should be 1.5. Long quotations, headings and captions should be singlespaced. Multi- lined subdivision headings, figures and table captions, footnotes and endnotes should all be single-spaced. Line spacing should be 6 points (before and after) between the paragraphs.
 - 3) <u>Font Style and Size</u>: 'Times New Roman' font style should be used. All text, page numbers, table numbers, figure numbers, captions, references, and footnotes must be in Times New Roman style. Font size should be 12 points in main body text and type on one side of the page. For figures, tables, captions, charts, graphs and footnotes, a font size of 10 points is to be used.
 - 4) Major headings and sub-headings:
 - a) Major headings: Chapter titles are considered major headings. A major heading should appear at the center of the page, all in capitals, bold 16 points font, preceded by 'Chapter number'. Begin new chapters on a fresh page.
 - b) <u>Sub-headings</u>
 - (1) **First-order sub-heading:** First-order sub-headings should be left aligned, bold and 14 points font. A mix of upper and lower case letters are used.
 - (2) **Second and third-order sub-headings:** Second and third order sub-headings should be left aligned, bold and 12 points font. A mix of upper and lower case letters are used.

3. Figures/ Tables/ Charts and Graphs.

Figures, tables, charts and graphs may be presented horizontally or vertically and must fit within the required margins. They should be placed adjacent to the related text (i.e., usually either on the same page or the page immediately following). Labels or symbols are preferred rather than colors for identifying lines on a graph. Colored graphs and pictures can be used as per need. Tables and figures should be numbered consecutively within individual chapters; one sequence for tables (e.g., Table 1.1; Table 1.2; etc.), and a separate sequence for figures (e.g., Figure 1.2; etc.). Captions must be as concise as possible. Numbers and captions should appear at the bottom of the figure and top of the table. Single-space line spacing is used for tables, figures and captions. Refer to figures/ tables within the main text as table 1.2, figure 2.3, etc. The top of tables/ figures should align to the left of the page.

4. Page Numbering.

Page numbers should be placed at the center bottom of the page. Page numbers must be in the same font and font size as your text. Except for the title page and cover pages, page numbers must be placed on each page of the thesis. Page numbers for the preliminary pages (e.g. dedications, abstract, acknowledgements, tables of contents, abbreviations and preface) should be numbered consecutively in lower case Roman numerals (i, ii, iii...). All pages starting from introduction to the end of the thesis should be numbered consecutively in Arabic numerals (1, 2, 3...).

5. Binding/ Submission Procedure.

- a. **Electronic format:** All students need to submit an electronic version (PDF) of their thesis or dissertation to the office of the Postgraduate Studies in NUMS' Secretariat. Electronic versions will be checked for structure/ format. They will also be checked with 'Turnitin' for plagiarism before approval.
- b. **Binding of soft bound thesis:** The students will prepare soft bound copies (either spiral or gum-bound) of their thesis for examination. Copies must be printed on one side of white, acid-free A4 paper. All PhD/ MPhil/ Master enrolled students need to make two soft bound copies (1 for the University library,1 for exam branch). The copies must be submitted to the postgraduate studies office of NUMS as aforesaid along with the submission form.
- c. **Binding of hard bound thesis:** Two permanent/hard bound copies of thesis will be submitted after successful defense of the thesis (1 for University library, 1 for Exam Branch).
- d. Front cover should bear: Full title of the thesis, name of the candidate and the name of the Institute/ Department/ Centre/ College through which submitted, in the same order from top to bottom. The lettering may be in boldface and properly spaced. Their font sizes should be: title 24 points, name of the candidate 18 points and the name of the department/ institute/ college/ university 18 points.
- e. **Spine of the thesis** should show 'M. Phil / PhD thesis' on top across the width of spine, name of the candidate in the middle and the year of submission across the

width at the bottom.

- f. The color of binding: The colour of hard bound cover shall be dark brown.
- g. **Published work:** Published work from the thesis has to be included as appendix (reprints/ proof/ preprint).

6. Outline for Thesis/ Dissertation.

The main structure of thesis/ dissertation should contain the following:

Part-I: Consisting of:

- (a) Title page with the name of the student and the programme they are working under, i.e. name and MSPH with year.
- (b) Declaration duly signed by the Advisors/Supervisors
- (c) Acknowledgements
- (d) Table of Contents
- (e) List of Tables/Figures with page numbers
- (f) List of Abbreviations used
- All pages are to be given Roman numerals before the summary.
- (g) Summary/Abstract

A structured summary should be the first part of the dissertation write up. Introduction, Objectives, material and methods: Study design, duration, sample population including sampling techniques, sample size and sample selection and statistical analysis. Brief results and conclusions. Key words: 3-5 words best describing the study

Part-II

1. Introduction

It shall cover:

- (a) Establish importance of topic
- (b) Conceptual model/relationship of independent and dependent variables
- (c) Summary of what is/is not known
- (d) What gap the study is filling
- (e) Statement of research purpose(s)
- 2. Literature Review
- It shall cover:
- (a) General overview
- (b) Theoretical models/conceptual frameworks
- (c) Relationships among variables
- (d) Other relevant literature
- 3 Aims and Objectives (or research questions)

4 Material and Methods

- a. Study design
- b. Duration of study
- c. Conceptual models/conceptual frameworks
- d. Study population
 - 1) Sampling techniques
 - 2) Sample size/power
 - 3) Sample recruitment: Inclusion and Exclusion criteria

5 Data Collection Procedure*

Identify the recruitment of the population to the collection of:

- 1) Variables: how measured
- 2) Measurements: how performed?
- 3) instruments*: questionnaires etc.
- 4) reliability
- 5) validity

*include copies of relevant instruments (surveys, etc) as appendices.

6 Data analysis plan

How was the data analyzed? Procedures for statistical application and statistical software/s used should be outlined in sufficient details

7 Ethical Considerations

Consent form must be attached as an Annexure. Ethical clearance should be attached from the IRB. Informed Consent Procedures: Consent Form.

8 Results

This chapter includes presentation of results as tables, figures etc. based on the statistical applications and not as computer outputs. The results should be described in adequate details indicating the major findings. The results should be in line with the objectives of the study. The results should be on separate pages; one table/figure on one page. Same tables cannot be replicated as figures.

9 Discussion

In this chapter a detailed discussion of the results and comparisons with other study reaching to a conclusion in accordance will be made.

10 Conclusions

The conclusions should be in line with the objectives and the results.

11 References

The reference list consists of published articles not older than 5 years unless required for the work. References from books are not the preferred method. The pages should be numbered from (Introduction to references) in Arabic numerals.

Title Page (Font 20, Regular)

Topic:



Ву

Dr._____

(Registration No._____)

Department of -----

Institute -----

National University of Medical Sciences, Rawalpindi Month Year

Thesis 2nd Page (Font 20, Regular)

Topic:
Ву
Dr
(Registration No)
A thesis submitted in partial fulfillment of the requirement for the degree of
Master of Philosophy
In
Chemical Pathology
Academic Supervisor
Department of
Institute

National University of Medical Sciences (NUMS) Rawalpindi

APPROVAL CERTIFICATE

It is hereby certified that the thesis titled 'Effects of Delta-tocotrienol Supplementation in Nonalcoholic Fatty Liver Disease' submitted by Dr.________ is accepted in its present form, by the Department of Chemical Pathology & Endocrinology, Armed Forces Institute of Pathology, National University of Medical Sciences, Rawalpindi. The thesis is satisfactory and fulfills the requirements for the award of degree of Master of Philosophy in Chemical Pathology.

1. Supervisor	
2. Internal Examiner	
3. External Examiner	
4. External Examiner _	
Date:	

DEDICATION (Optional)

To my amazing (children/ siblings, etc.), (names), wise beyond their years

and

To my beloved (family/ parents, husband, etc.) (name, infinitely supportive)

(You can always choose your own wordings this is only a format to be followed for uniformity of all thesis/ dissertation under NUMS).

Begin printing page numbers here, using lower case Roman numerals and continue consecutive Roman numeral numbering throughout the preliminary pages.

ABSTRACT

An abstract is a short summary of a longer work. The abstract concisely reports the aims and outcomes of your research so that readers know exactly about the research. The abstract should be structured and consists of introduction, objectives, methods including study design, sampling, data collection, major results and the conclusions. The final sentences explain the major implications of the work. The abstract should be single spaced. The abstract page is not numbered. Abstracts should not have any citations. A good abstract is concise, readable and quantitative. Length should be limited to a maximum of 1-2 pages.

AKNOWLEDGEMENT

In the name of Allah, the most Gracious, the most Merciful.

I am extremely thankful to Almighty 'Allah' Who is the entire source of knowledge and wisdom endowed to mankind, for providing me with the acumen and vision to complete this endeavor.

I would like to express my profound gratitude to my supervisor (name) for his wise counsel and encouraging attitude towards this study. I am extremely grateful to him for immensely facilitating me during my study period by ensuring the provision of favorable circumstances and conducive environment. This project would not have been possible without his support and expert guidance.

In the end, I would like to extend my deepest gratitude to my family members. Without their encouragement, I would not have been able to complete this endeavor. (You can always choose your own wordings; this is only a format/ sample to be followed for uniformity of all thesis/ dissertation under NUMS)

Dr._____

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LIST OF ABBREVIATIONS (On new page)

ACC	Acyl CoA-Carboxylase
AFIP	Armed Forces Institute of Pathology
AGEs	Advanced Glycation End Products
BMI	Body Mass Index
DNL	de novo hepatic lipogenesis
ETC	Electron Transport Chain
FDA	Food and Drug Administration

(Centered, 16 Bold, Upper-case, all Major Headings)

CHAPTER-1 INTRODUCTION (Centered, 16 Bold)

1.1 Objectives (left aligned, 14 bold) Main body text (Justified, 12 points)

1.2 Hypothesis (left aligned, 14 bold)

CHAPTER-2 REVIEW OF LITERATURE (Centered, 16 Bold)

- 2.1 Prevalence
- 2.1.1 Pathogenesis (left aligned, 14 bold)
- 2.1.1.1 Evolution of Hypotheses (left aligned, 12 bold)

CHAPTER-3 MATERIAL AND METHODS (Centered, 16 Bold)

- 3.1 Setting (Left aligned, 14 bold)
- 3.2 Study design (Left aligned, 14 bold)

CHAPTER-4 RESULTS (Centered, 16 Bold)

- 4.1 Demographic and Baseline Characteristics (Left aligned, 14 Bold)
- 4.2 Results-----

CHAPTER-5 DISCUSSION (Centered, 16 Bold)

- 5.1 Discussion
- 5.2 Conclusions (Left aligned, 14 Bold)
- 5.3 Future Study (Left aligned, 14 Bold)

References: References are given in Harvard style i.e. body of the text and take the form of the author's surname followed by the date of the publication, all within parentheses, e.g., (Johnston, 1917). Detail is given in the Appendix E.

1. Attendance.

Every postgraduate student shall be required to attend class lectures, seminars, practical and clinical classes of each course with attendance of at least 75% (85% for nursing) or as per regulatory authority of concerned program.

2. Leave.

For more than three days, a student may directly or through his/her parents or guardian send a written application to the Head of the Institution reporting cause of absence. Sick leave will be granted only on production of a medical certificate from an authorized medical officer appointed by the Head of the Institution. In all cases leave taken will be at the student's own risk so far as the percentage of attendance is concerned and even the medical certificate will not condone a deficiency in attendance. A student, who is absent without leave continuously for a period of four weeks, will be struck off the university roll.

3. Correspondence.

Joint applications are entirely prohibited and will not receive attention. Any student wishing to make a representation on any subject has the right of direct access to the head of the institution during the college hours.

4. Etiquettes and Conduct Norms.

- a. Students are expected to extend highest level of courtesy and respect towards their teachers. Any student misbehaving in the classroom shall at once be reported by the teacher to the Head of the College/ Institution for disciplinary action.
- b. No student is allowed to leave the lecture room without prior permission of his teacher or until the class is dismissed. Every student is required to be punctual according to the schedule notified for clinical teaching and ward duty.
- c. Students attending hospitals are required to abide by the hospital rules and while in the hospital, they are under the head of the concerned medical/dental institution for all disciplinary purpose.

5. Social Media Use.

Students are expected to use social media responsibly and be aware of the unexpected and long-term consequences of its irresponsible use. No derogatory/negative discussions about the country, NUMS, or army should be discussed on social media. At campus, use of social media should be restricted to academic purposes only.

6. Student Welfare Services.

A range of services is available to support students during their studies at NUMS. NUMS strives to create a student support system, where every student will be taken care of in terms of personal, emotional, social or in academic terms. Course Coordinator will help you to assist in academic, personal, financial & extra-curricular domains.

7. Student Engagement.

Students shall be required to actively participate in various co-curricular activities for personal and professional grooming

8. Conflict of interest.

Faculty and other Staff with a close personal or familial relationship with a student or a student's family should not be involved in decisions about that student's admission, supervision or academic progress, or the award of any studentships, prizes or other grants to the student.

9. Disciplinary matters.

The disciplinary matters shall be investigated as per Disciplinary policy issued by Registrar Directorate

10. Academic Integrity and Plagiarism.

NUMS Plagiarism Policy

a. Introduction:

- 1) Originality, genuineness and integrity are the fundamental principles of research work. NUMS out rightly condemns plagiarism and always endeavors to discourage and combat plagiarism in academic and research domains. Keeping in view the guidelines, instructions and policies of the Higher Education Commission, NUMS has been making all efforts to enlighten its faculty and students to avoid infringements of intellectual originality of their academic and research efforts. NUMS unconditionally rejects intellectual dishonesty in its all forms and manifestations.
- 2) Based upon its strong determination to foreclose all possibilities of the commission of any plagiarism-related offence, NUMS has developed this plagiarism policy (which is primarily embedded in anti-plagiarism outlook) for strict compliance with immediate effect. The principal purpose being to ensure that ethical and academic standards of intellectual integrity are met at NUMS in their entirety (HEC plagiarism policy is available on their official website).

b. Aim:

The aim of this policy is to apprise the students, teachers, researchers and staff of NUMS about plagiarism enabling them to avoid it under all circumstances. It is also aimed at preventing plagiarism by authorizing and regulating preventive and punitive actions against those found guilty of being deliberately involved in plagiarism.

c. Applicability:

1) All enrolled students as well as those who have graduated, faculty members, researchers, staff of the university including its constituent and affiliated colleges and institutes as well as its teaching hospitals.

2) Any person listing his/her CV on the NUMS website containing any current publication or applying for any benefit on the basis of published or presented work that is plagiarized will be liable to be penalized as per prescribed rules.

d. Definition of Plagiarism:

Plagiarism may take place in many forms including but not limited to the following:

- 1) Wholly or partly reproducing someone else's past work with or under one's own name.
- 2) Paraphrasing a source and material exactly from books under one's own name.
- 3) Making a mash-up, mixture or fusion of sources of already published work and publishing under one's own name.
- 4) Word-for-word or word-by-word copying portions of another author's research work or from reports by citing but not clearly differentiating what text has been copied (e.g. not applying quotation marks correctly) and /or not citing the source correctly.
- 5) The re-use of significant, identical, or nearly identical portions of one's own work without acknowledging that one is doing so or without citing the original work.

e. HEC's Definition:

HEC has quoted the definition of plagiarism from the Concise Oxford Dictionary, namely "taking and using the thoughts, writings, and inventions of another person as one's own". HEC has, however emphasized that there is a variety of forms in which plagiarism manifests. These usually include but are not limited to the following:

- 1) Verbatim copying, near-verbatim copying, or purposely paraphrasing portions of another author's paper or unpublished report without citing the exact reference.
- 2) Copying elements of another author's paper, such as equations or illustrations that are not common knowledge, or copying or purposely paraphrasing sentences without citing the source.
- 3) Verbatim copying portions of another author's paper or from reports by citing but not clearly differentiating what text has been copied (e.g. not applying quotation marks correctly) and /or not citing the source correctly.
- 4) The unacknowledged use of computer programs, mathematical/computer models/algorithms, computer software in all forms, macros, spreadsheets, web pages, databases, mathematical derivations and calculations, designs /models / displays of any sort, diagrams, graphs, tables, drawings, works of art of any sort, fine art pieces or artifacts, digital images, computer-aided design drawings, GIS files, photographs, maps, music / composition of any sort, posters, presentations and tracing.
- 5) Self-plagiarism, that is, the verbatim or near-verbatim re-use of significant portions of one's own copyrighted work without citing the original source.

f. Responsibility of the Colleges/Institutes of NUMS:

1) All colleges and institutes of NUMS to whom this policy applies, are responsible to ensure that their students, teachers, researchers and staff members are

aware of the definition of plagiarism, its implications and penalties for committing plagiarism-related contraventions/violations.

- 2) These colleges and institutes should invariably educate their staff and students regarding research ethics. NUMS will host workshops on research ethics and plagiarism to raise awareness among all its colleges and institutes on regular basis. Still the ultimate responsibility of ensuring that all papers/articles/reports/manuscripts/theses/synopses/patents/abstract/books submitted for publication attain the highest ethical standards lies with the authors including the coauthors and supervisors.
- 3) The student's supervisors in these colleges and institutes shall be responsible and accountable for the originality and integrity of the synopses/theses/research papers of their students. They must, therefore, ensure that any work submitted by their students is clear of plagiarism before submission to NUMS-ORIC.
- 4) In case any complaint is launched in any college or institute or if any thesis/report/paper submitted to NUMS-ORIC has a similarity index > 19 or there is a similarity index of >=5% from a single source without citation then allegation report (Refer: "Guidelines on 'Ethics of Using Turnitin for Instructors" will be generated by NUMS ORIC which will have processed in PSC as per rules and procedure mentioned in this policy.
- 5) As a general rule an anonymous complaint is not to be entertained. However, if overwhelming evidence of plagiarism is found, even anonymous complaints will be considered to be dealt with as per plagiarism policy with the approval of the Competent Authority. (Refer "Time bound SoPs" for Plagiarism cases.
- 6) The case pertaining to the period before the announcement of HEC Plagiarism Policy on 27 September, 2007 will be investigated/evaluated for plagiarism 'only' if the accused has drawn some benefit on the basis of the plagiarized work, because academic dishonesty has never been acceptable at any point in time. However, if the accused claims that he/she has not drawn any benefit of the plagiarized work, following actions are to be taken:
 - a) The authors will withdraw the research paper from the journal and remove its mention from their resume
 - b) The corresponding authors(s) will send letter of apology to the publisher
 - c) The authors will submit affidavits on stamp papers stating that neither they have claimed any credit for the plagiarized work nor will they claim any credit in future. (Reference: HEC letter DD-QA/HEC/2015/153 dated September 5, 2017.

g. Launching of complaint:

A complaint of plagiarism should be launched in writing to the NUMS ORIC with the following details:

- 1) A complete citation of the original idea/paper/patent etc., which is alleged to have been plagiarized.
- 2) Citation of the alleged plagiarized paper.
- 3) Copies of both papers/documents mentioned above.

- 4) Any other related information which can establish a case for plagiarism.
- 5) Name, designation, organization, address, email and contact number of complainant along with attested copy of the CNIC.
- 6) Name, designation, organization, address, email and contact number of the accused.

h. Investigation:

- 1) Upon receipt of a complaint containing an allegation of plagiarism, the NUMS ORIC will immediately carry out a discrete investigation through the Plagiarism Standing Committee (PSC) according to the guidelines of HEC.
- 2) The PSC will determine the authenticity of the allegation, consult experts, provide the accused author(s) a chance to clarify or justify their position and, if required, to the complainant as well as the author(s) whose paper is deemed to have been plagiarized. During the investigation process, the members will not disclose any details of the investigation until the Committee reaches its final conclusion.
- 3) On completion of investigation, not later than sixty days of the receipt of complaint, the PSC will present its comprehensive report to the Vice Chancellor.
- 4) The final decision which may contain appropriate preventive or punitive actions will be made by the Vice Chancellor after affording opprortunity of hearing to the concerned person or persons as and if deemed necessary.
- 5) The final outcome of the case shall be intimated to HEC as per procedure in vogue.
- 6) All investigation proceedings, their outcome and consequential actions shall be treated "confidential" and kept away from the access of persons not authorized or concerned with implementation of plagiarism policy.
- i. Composition of NUMS Plagiarism Standing Committee:

The Vice Chancellor has constituted the NUMS Plagiarism Standing Committee under the chair of Pro Vice Chancellor Academics along with internal/external member and 1 x nominee of HEC.

j. Penalties for Plagiarism:

- 1) For faculty members, staff and researchers, plagiarism is a very serious offense and is punishable by sanctions ranging from letter of warning to termination/dismissal from service.
- 2) Students are also expected and required to do their own original work on each assignment and research work. A student who recycles his/her course/research work from one class/project to another may face an allegation of academic/research dishonesty. An instructor who believes that a student has committed an act of plagiarism should take immediate appropriate action, including the issuing of a "penalty grade" for academic dishonesty.
- 3) When plagiarism allegation has been proven in any investigated case, the PSC is required to recommend to the Vice-Chancellor to take necessary penal action depending on the nature and gravity of the offense against the faculty/staff/student.

4) Keeping the above in view, the penalties for plagiarism have been divided into two separate categories, i.e. those for 'Faculty Members, Researchers and Staff' and those for the 'Students' as per table given below.

k. Table of Penalties

1) For Teachers, Researchers and Staff:

S#	Penalty	Nature/Extent of Offence	Penal Action
1	Major Penalty	Plagiarism has been proven to be > 60%) of the content (or key results) have been exactly copied from any published work of other people without giving/quoting reference of the original work.	 a) dismissal/termination from service OR b) Ineligibility for employment in academic/ research organization at NUMS for any cadre. c) Blacklisting on HEC & NUMS websites (if approved by VC)
2	Moderate Penalty	Plagiarism has been proven to be 35-60% of the content including some key results have been copied without citation.	 a) Demotion to next lower grade OR b) Stoppage of promotion or annual increment(s) in time scale or otherwise c) Freezing of research/ travel grant(s) in time scale or otherwise d) Permanent or time-specific disqualification for supervision of PhD/MS/MPhil/Equivalent students
3	Minor Penalty	Plagiarism has been proven to be 20-35% of the content without giving reference of the original work.	 Anyone or a combination of following: a) Warning letter b) Freezing of research/travel grant (s) in time scale or otherwise c) Stoppage of promotion/ annual increment(s) in time scale or otherwise d) Permanent or time-specific disqualification for supervision of PhD/ MS/ MPhil/ Equivalent students

2) For Students:

S#	Category	Characte	eristic		Action			
1	esis	mplete	or	partial	For	Moderate	and	Minor

2	blication	plagiarism in any case	plagiarism: Anyone or a
	y content/published		combination of following:
	(online or in print)		a) The offender may be expelled
	under NUMS		/rusticated or relegated to lower
		с	class and notified to all concerned
			b) Failure in the relevant
			discipline/subject
			c) Imposition of fine as deemed
			appropriate
			d) Written warning (in case of minor
			offense)
			e) Specific or general debarring
			from scholarship, travel grants,
			fellowship or any other funded
			project as deemed appropriate.
			For Major Plagiarism:
			a) Withdrawal of
			degree/certificate in case of
			major plagiarism in the thesis
			b) In case plagiarism in thesis is
			found, the role of the supervisor in
			the commission of the offence will
			be investigated for fair
			determination of his/ her
			responsibility.

I. Additional Actions:

In addition to the above penalties, the following additional common actions may also be taken in situations where the offense of plagiarism stands proved and established:

- 1) If the plagiarized paper is accessible on the web, its access should be removed. The paper itself will be kept in the database for future legal purposes.
- 2) The author(s) will be asked to write a formal letter of apology to the authors of the original paper/ work that was plagiarized, including an admission of plagiarism. In case of refusal, harsher penalty may be inflicted by the Vice Chancellor as deemed appropriate.
- 3) If the paper is submitted but not published, the chief editor/editor of the journal shall be informed for the paper to be retracted at once.

m. Responsibilities of the Principal Author:

1) The principal author shall, in addition to his/ her other responsibilities along with the co-authors, follow and observe all ethical responsibilities of research and authorship.

- 2) He/she will be responsible for the originality and genuineness of the contents of his/her articles, writings, compositions and other similar products. He/she shall not make any false claims for anything which is not a result of his/her own work or efforts.
- 3) While submitting his/ her manuscript to ORIC, he/ she shall furnish a personal certificate with his/her own and co-authors' signatures, about the originality and genuineness of the contents and every such certificate shall be countersigned by the Head of the Department (HoD) and in his/her absence by the Dean concerned.
- 4) The principal author should give authorship to others only if they have made significant contribution. He shall be responsible for ensuring that all co-authors have played their role in the manuscript preparation and have consensus on the order of authorship.

n. Responsibility of Co-Authors:

- 1) All co-authors will be deemed and treated to be equally responsible for any plagiarism committed in a published paper in any journal or presented at a conference.
- 2) The co-authors will be liable to the same penal actions as are applicable to the principal author.

o. General Responsibilities of Authors:

- References to all sort of data and reported researches must be given. It is authors' duty to submit original work and give due credit to others' work. Material quoted verbatim must be given in quotation marks.
- 2) The author can publish the work which was previously published only in abstract form. He/she can republish previously published research work if it is significantly different from the previous research due to value addition on account of more data.
- 3) Authors must acknowledge all persons, institutions or organizations who have helped in the research work or research process.

p. Responsibility on the Supervisor of a Plagiarized PhD/MS/MPhil/Equivalent Program Thesis:

If the plagiarism is established in the thesis of a PhD/MS/MPhil scholar, then the supervisor shall also be held responsible for this act and black listed for 05 years and the information will be uploaded on the NUMS and HEC websites. Besides, a disciplinary action shall also be initiated against such supervisor. (Refer HEC letter No. 1-22 (NQAC)/QAD/2017/HEC/07-364 dated March 24, 2017

q. Black Listing of Complaints of False Allegation by NUMS/HEC:

The complainant of false allegation of plagiarism shall be blacklisted for the 05 years and the information will be uploaded on the NUMS and HEC websites.

(Refer HEC letter No. 1-22 (NQAC)/QAD/2017/HEC/08-365 dated March 24, 2017.

r. Appeal against penalties:

The affected person(s) will have the right to appeal to the Vice Chancellor / Chairman HEC for a review of the findings or may submit a mercy petition within

30 days from the date of issuance of the impugned decision. All such appeals and petitions will be processed and finalized according to HEC guidelines.

s. Anti-Plagiarism Measures:

- 1) IT Readiness: use of Turnitin shall be considered and made mandatory before submitting material for publication.
- 2) Awareness of research and academic ethics shall be promoted on regular basis as an essential institutional management feature.
- 3) Dissemination of plagiarism policy among students and faculty shall be conducted as a regular feature of the overall academic and research policy.

t. Over-rider:

- 1) In case of any discrepancy between this policy and the policies/guidelines/instructions of HEC on any aspect of plagiarism, the latter shall prevail.
- 2) This policy will be reviewed every three years and revised & updated if required.

11. NUMS Grievances Policy

- a. The Grievance Policy applies principally to employees including faculty and staff and students of NUMS. However, any member of the NUMS community, including but not limited to students, employees, and alumni, has a right to express a grievance. This policy also applies to those who interact with the NUMS or its affiliated programs
- b. This policy applies to all university-related activities both on and off campus and applies to all individuals involved in these activities, as well as to the conduct by or directed toward third parties, which are not themselves employees or students of NUMS.
- c. It covers individual grievance of specific nature raised individually by the concerned stakeholder only and not the grievances of general applicability or of collective nature or raised collectively by more than one stake holder.
- d. This procedure does not apply to complaints, grievances or appeals where other policies or procedures are in place like sexual harassment, dismissal or disciplinary action; or where the grievance relates to matters that are already being considered pursuant to another policy or procedure.
- e. Academic matter shall be dealt with as per HEC/ PMC policy
- f. Referred to NUMS Student Grievances Policy available at Registrar Directorate

12. Scholarship policy.

As per HEC scholarship policies

13. Teaching Assistantships and Research Assistantships:

- a. The university departments may offer Teaching and Research Assistantships to outstanding PhD enrolled students at various stages of their enrollment.
- b. Teaching assistantship provides an opportunity to PhD students to assist professors in preparing teaching and research materials for groups of students enrolled in

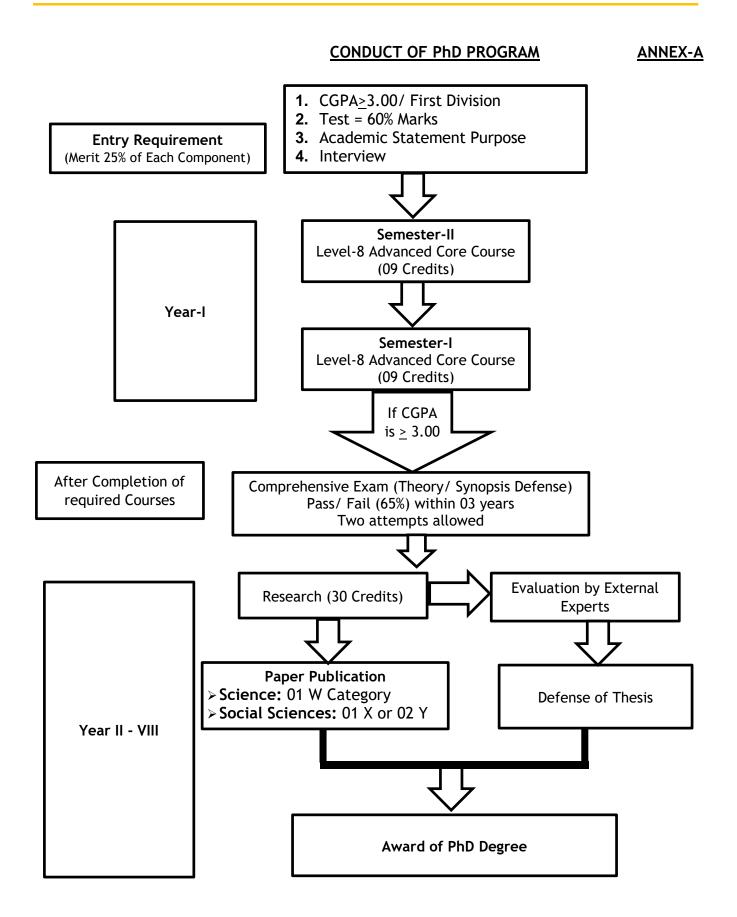
their classes.

- c. Research assistantships are paid fellowship stipends for outstanding research scholars for assisting a professor, who pays the research assistant out of the research grant s/he has received. The stipend varies based on the level of effort and budget available to the Principal Investigator
- d. The University may have named scholarships to promote quality research by philanthropic donors based on priority themes and topics on the national research agenda.

14. Regulations Relating to Expulsion.

- a. The punishment of expulsion whenever imposed on a student mean a loss of a specific duration of studies as determined by the authority concerned and will mean his being debarred from the university examination during the period of his/ her expulsion.
- b. A student expelled from the university will not be readmitted before the expiry of the period of his expulsion.
- c. All cases of expulsion should be reported to the Academics Directorate by the concerned College/ Institution concerned for registration and notification.
- **15. Over-riding effect.** Where on any matter, issue or question, there is any conflict or divergence between any of the provisions of this policy instrument and any of the provisions of NUMS' statutes, regulations or rules, the provisions of the statutes, regulations or as the case may be, rules shall prevail.

Repeal - On commencement of NUMS Policy for Post Graduate Academic Programs 2024 (Revised), Academic policy for PG Studies 2018 is hereby repealed.



STUDENTS' FEEDBACK PROFORMA

A	Academic year <u>2021</u> Semester <u>First</u> Date of feedback	-				
]	Please mark appropriate column by $$					
(Rating: 1 - Excellent,2 -Very good,3 - Good,4 - Fair,	5	- Bel	ow av	verag	ge)
Na	me of Course:	Cou	rse Co	ode:		
	Core Questions: Course	1	2	3	4	5
1.	Course outcomes/contents were clearly mentioned & provided at the start of course	e				
2.	Course contents were aligned with learning outcome					
3.	Teaching and learning methods encouraged your participation					
4.	Time allocated to the course was sufficient and manageable					
5.	Learning environment was comfortable and conductive to learning					
6.	Learning resources were relevant & helpful					
7.	The provision of learning resources in the library was adequate and appropriate					
8.	The course stimulated my interest and thought on the subject area					
9.	Assignments were helpful for learning of core concepts					
10.	Practical / skill development sessions were helpful for learning of core concepts					
11.	Assessment was in line with the provided Table of Specifications					
12.	Methods of assessment were appropriate					
13.	Satisfied with over all conduct of the course					
1	Core Questions: Faculty	1	2	3	4	5
1.	The Instructor is prepared for each class					
2.	The Instructor demonstrates knowledge of the subject					
3.	The Instructor has completed the whole course					
4.	The Instructor provides additional material apart from the textbook					
5.	The Instructor communicates the subject matter effectively					
6.	The Instructor shows respect towards students and encourages class participation					
7.	The Instructor maintains an environment that is conducive to learning					
8.	The Instructor is punctual					
9.	The Instructor is fair in examination					
10.	The Instructor was responsive to student's need and problems					
11.	. The Instructor dealt effectively with my problems					
Coi	nments/ Suggestions:					
Na	me & Signature of the student (Optional):					

ANNEX-B

<u>Annex-C</u>

Postgraduate (PG) Forms

POSTGRADUATE (PG) FORMS (Downloadable from NUMS website)

S. No	Form No	Title
i.	PG-01	Post-graduation Registration Form
ii.	PG-02	Application Form for Migration/Transfer of Credit
iii.	PG-03	Request for Freezing of Semester
iv.	PG-04	Appointment of Supervisor/Co- Supervisor
v.	PG-05 (a)	Graduate Supervisory Committee (GSC) (PhD Program-GSC)
vi.	PG-05 (b)	Graduate Supervisory Committee (GSC) (Master Program - GSC (Medical Programs)
vii.	PG-05 (c)	Graduate Supervisory Committee (GSC) (Master Program - GSC (Non-medical Programs)
viii.	PG-06	Petition for Change in Graduate Supervisory Committee
ix.	PG-07	Improvement/Repeat Course Form
x.	PG-08	Bi-annual Progress Report
xi.	PG-09	Synopsis Submission Form
xii.	PG-10	Synopsis Evaluation Report
xiii.	PG-11	Synopsis Approval/ Qualifying Examination (B) Report
xiv.	PG-12	Change of Synopsis Title/ Project
xv.	PG-13	Thesis/Dissertation Submission/ Verification
xvi.	PG-14	Thesis/Dissertation Evaluation Report
xvii.	PG-15	Publication/ Article Submission
xviii.	PG-16	Thesis/ Dissertation Oral Defense Report
xix.	PG-17	Final Thesis/Dissertation Approval Report
xx.	PG-18	Check List for Award of Degree

2023

POSTGRADUATION REGISTRATION FORM

1. Name	I. Name							
3. Date of Birth		4	. Geno	der				
5. Nationality	6	6. Distr	ict of Domicile_					
7. CNIC Number 8. PM&DC Registration No					n No			
9. Mailing Address								
10. Telephone/Mobile Number 11. Email address								
12. Academic Da	ta/ Qualification							
	School/ College/ University From To Division GPA/ Grade Marks obtained (%) Major subjects taken							
 Matric O'Level/ Other 								
 F.A./ F.Sc. A'Level/ Other 								
MBBS/ BDSBS/ Other								
MPhil/ MSc/Equivalent								
Department:	Department: College/Institute:							
Program: Diploma	MSc/ MP	'H		MPhil	PhD			

CERTIFICATE BY THE APPLICANT

I, hereby, solemnly declare that the information provided and statements made by me in this form are true and correct to the best of my knowledge and belief. I fully understand that any false statement of mine shall render me liable for termination from the college/institute/program.

Date:	Student Signature:
Head of Department:	Head of Institute/ Dean:
Date:	Date:

Registration No. issued Checked by Signature:	Registrar Signature:
Name:	Name:
Date:	Date:

INSTRUCTIONS

1. Attach Following:

a) Two 1" x 1" size photographs of the candidate with sky blue background attested on the back

b) Photocopies of the certificates of Matric/ Intermediate or equivalent (including equivalence certificates)

- c) Photocopy of Entry Test result of NUMS/ NTS/ GAT
- d) Original NOC to be attached, if migrating from other Board/ University/ Institution

)

- e) Photocopy of Passport/ (_____
- f) Photocopy of CNIC/Form 'B'

2. The Principal/ Dean of all Colleges/ Institutions shall submit the Registration Form alongwith attested copies of Academic Record and Registration Fee at prescribed rates to the Registrar within 20 days of admission

3. The form, photocopies of Academic record and Photographs must be attested by the Principal/ Dean or applicant's duly authorised nominee

4. In case of a student migrating from any other University/ Board, Migration Certificate/ NOC in original should also be submitted

5. If any student is struck off from the rolls of a College/ Institution/ Department, migrates/ shifts to another College/ Institution/ Department, rusticated or expelled or is readmitted, such facts shall be reported to the Registrar within seven days

6. In case of a student already registered with University, getting admission to another course at the same/ another College/ Institution/ Department, the Principal/ Dean/ Head of the College/ Institution/ Department shall forward a fresh registration form dully filled from all respects quoting the registration number of such student along with the prescribed registration fee for the course.

Distribution:

 1 x copy to be maintained in the concerned Institute, Registrar Office/ Academics Directorate &Controller of Examinations.

APPLICATION FORM FOR MIGRATION/ TRANSFER OF CREDIT HOURS

1. Name: 3. Date of Birth (dd/ mm/ yyyy):	_ 2. Registration No:
5. Nationality:	_6. District of Domicile:
7. CNIC Number:	8. PM&DC Registration No:
9. Mailing Address (mention all relevant information	n like H. No., St No., Sector, etc.):

10. Telephone/ Mobile Number: ______11. Email address: _____

12. Academic Data/Qualification

		Name and Location of School/ College/ University	From	То	Division GPA/ Grade	Marks obtained (In%)	Major subjects taken
•	Matric						
•	O'Level/ Other						
•	F.A./F.Sc.						
•	A'Level/ Other						
•	MBBS/ BDS/BS/ Other						
•	MPhil/ MSc/						
•	Equivalent						

Academic Achievements

Distinctions, awards paper published and other recognitions of academic achievements (please indicate the basis of selection and date of each listing).

13. Current Academic Program Program (currently studying):

Institution/ university: _____ Entry date: _____ Semesters completed: _____ Credits earned: _____CGPA: _____

14. Reason of Transfer

(Be specific and to the point. Clearly indicate changes in circumstances, which render it difficult for you to continue education in your present institution)

15. **Undertaking:** I have read the details given in application form for Transfer of Students. I, hereby, apply for admission to the MPhil/ PhD Program at NUMS as a Transfer student and certify that, to the best of my knowledge, all the above statements are complete and correct. I also declare that I have never been involved in any illegal activity. I understand that any

attempt to influence the admission process or providing false or incomplete information would result in my disqualification or dismissal from the program at any stage.

Date: _____ Applicant's Signature: _____

16. (TO BE FILLED BY CONCERNED NUMS' COLLEGE / INSTITUTE)

Details of Accepted Courses / Credits Course Code

Course Code	Course Title	Credits	Grade

Details of Deficient Courses

Course Code	Course Title	Credits	Grade

The case for migration from above mentioned institution to our College/ School/ Institute has been critically examined by faculty and it is recommended that Migration/ transfer of credits of student be accepted to join ______semester with _____credit hours _____of course work.

Recommended/ Not Recommended

Dated:	Signature of Head of Department:
	Approved/ Not Approved
Dated:	Signature Head of Institute/ Dean:

Please attach the following documents with the migration form:

- a. Official transcript of semesters studied at Parent University.
 - b. Photocopy of mark sheets of Matric and FSc/ equivalent examinations (equivalence certificates from IBCC, Pakistan in case of O/ A level/ equivalent exams).
 - c. Detailed courses outline of courses already studied.
 - d. No Objection Certificate (NOC) from Parent University.
- e. Character certificate
- f. Bank Draft amounting to Rs. 5000/- (Rupees five thousand) in favour of NUMS as processing fee (non-refundable).

Distribution:

 1 x copy to be maintained in the concerned Institute, Registrar Office/ Academics Directorate & Controller of Examinations.

R	EQUEST FOR FREEZIN (PhD & Master P	
Name:	·	Registration No:
Department:		Institute:
Cell No:		E-mail:
Freezing Requested for:	Semester	Date
Will rejoin:	Semester	
Reasons for freezing(Tick (🖂) Present Postal Address _	a. Domestic / Personal c. any other reason:	
Date	Stude	nt's Signature
3. Remarks of Head of	Department	Rs
	Recommended/ Not	Recommended
Date	S	Signature Dean/ Head of Institute
		Dean/ Head of Institute
1. Freezing semester:	(For Registrar Offi	ce use only)
2. Will rejoin: Date	Semester	
Date	Approved/ Not Aregist	Approved rar

Notes: Freezing period will be counted toward overall allowed duration for completion of PG program. a) Applicant will be charged registration fee @ of 25% of tuition fee per month for the freezing period. b) Copy of approved form will be sent to Registrar/Academics Directorate & Controller of Examinations.

APPOINTMENT OF SUPERVISOR/ CO-SUPERVISOR (PhD & Master Programs)

Professor/Assistant Professor (HoD)	
Department	
Dear Sir/ Madam,	
The Head of Department of, (Colleg	ge/ Institute) is
pleased to appoint you as the Supervisor/Co-Supervisor for	r the following Student:
Student's Name:	
Registration No:	
Program/ Subject:	
During the period of research work, you are requested to	supervise the course work, synopsis,
thesis defense and send us progress report on the prescrib	ped form. You will also be required to
be present at the time of thesis defense. Kindly send us you	ur acceptance in writing or through an
email, so that we may formally intimate your name to NUMS	Academics Directorate.
I hope the student will greatly benefit from your valuable ex	perience towards completing his/ her
degree in time.	
Date:	(Head of Department)
I am willing to supervise above mentioned student	
Date:	(Supervisor)
<u>Countersigned</u>	
Date:	
	Dean/ Head of Institute
Distribution:	
1 x copy to be maintained in the concerned Institute, Acad Dte &	Controller of Examinations
	90

GRAI	ANNEX-PG-05 (a) DUATE SUPERVISORY COMMITTEE (PhD Program–GSC)
Name:	Registration No:
Department:	Institution
Subject:	Date of Admission:
Contact No:	Email:
Date:	Student's Signature:
Gradu	ate Supervisory Committee Members
1. Supervisor:	Signature:
Qualification/ Dept./ Inst	itute:
2. Internal member:	Signature:
Qualification/ Dept./ Inst	itute:
3. External member:	Signature:
Qualification/ Dept./ Inst	itute:
4. External member:	Signature:
Qualification/ Dept./ Inst	itute:
5. Co-Supervisor (if any):	Signature:
Qualification/ Dept./ Ins	titute:
R	ecommended/ Not Recommended
Dated:	Signature of Head of Department:
	Approved/ Not Approved
Dated:	Signature Head of Institute/ Dean:

Distribution:

1 x copy to be maintained in the concerned Institute, Academics Directorate & Controller of Examinations.

ANNEX-PG-05 (b)

•••••	UATE SUPERVISORY COMMITTEE Program - GSC (Medical Programs)
Name:	Registration No:
Department:	Institution
Subject:	Date of Admission:
Contact No:	Email:
Date:	Student's Signature:
<u>Gradu</u>	ate Supervisory Committee Members
1. Supervisor:	Signature:
Qualification/ Dept./ Insti	tute:
2. Internal member:	Signature:
Qualification/ Dept./ Insti	tute:
3. External member:	Signature:
Qualification/ Dept./ Insti	tute:
4. External member:	Signature:
Qualification/ Dept./ Insti	tute:
5. Co-Supervisor (if any): _	Signature:
Qualification/ Dept./ Inst	itute:
Re	ecommended/ Not Recommended
Dated:	Signature of Head of Department:
	Approved/ Not Approved
Dated:	Signature Head of Institute/ Dean:

Distribution:

• 1 x copy to be maintained in the concerned Institute, Academics Directorate & Controller of Examinations.

ANNEX-PG-05 (c)

GRADUATE SUPER	VISORY COMMITTEE
Master Program - GSC ((Non-Medical Programs)

Name:	Registration No:
Department:	Institution
Subject:	Date of Admission:
Contact No:	Email:
Date:	Student's Signature:
<u>Gradu</u>	uate Supervisory Committee Members
1. Supervisor:	Signature:
Qualification/ Dept./ Inst	iitute:
2. Internal member:	Signature:
Qualification/ Dept./ Inst	itute:
3. External member:	Signature:
Qualification/ Dept./ Inst	itute:
4. Co-Supervisor (if any):	Signature:
Qualification/ Dept./ Ins	titute:
R	ecommended/ Not Recommended
Dated:	Signature of Head of Department:
	Approved/ Not Approved
Dated:	Signature Head of Institute/ Dean:

Distribution:

• 1 x copy to be maintained in the concerned Institute, Academics Directorate & Controller of Examinations.

PETITION FOR CHANGE IN THE GRADUATE SUPERVISORY COMMITTEE (PhD & Master Programs)

Name:	Registration No:
Department:	Program/ Subject:
Contact no:	Email:
Student' Signature:	_ Date:

COMMITTEE MEMBERS CHANGES

Delete	Add
Name:	Name:
Department:	
Signature:	Signature:
Name:	Name:
Department:	Department:
Signature:	Signature:

SUPERVISOR/ CO-SUPERVISOR CHANGES

<u>Dele</u>	te <u>Add</u>
Name:	Name:
Department:	Department:
Signature:	Signature:
Dated:	Recommended/ Not Recommended Signature of Head of Department:
	Approved/ Not Approved
Dated:	Signature Head of Institute/ Dean:

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IMPROVEMENT/ REPEAT COURSE FORM (PhD & Master Programs)

Name:	Registration No:					
Departm	Department:Institution:					
Program:		Subject:	Admission Date:			
S. No.	Course Code	Course Title	Credit Hrs	Core/ Elective	Grade	Grade Points
1.						
2.						
4.						
FOR RE Current Code Code	EPEAT/ IMPROV Semester CGPA Course Title	:Course gr e: e:	ade for repea	at/ improvemen Credit Hour:	t:	CGPA:
Course	offer in Semester	: <u>Spring/ Summer/ Fa</u>	all		_	
Date: _		Ş	Student's Sig	nature:		
		Recommended/	Not Recom	mended		
Date:		Supervisor' Sig	nature:			
		Coun	tersigned			
Head o	f Department:		_Head of Ins	titute/ Dean:		
		Approved/	Not Approv	ed		
Date:		Controlle	r of Examinat	tions:		

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		BI-ANNUAL PR (PhD & Mas	ster Prog	jrams)		ANNEX-PG-08
Name: _		Re	egistratior	n No:		
Departme	nt:	ln	stitution:			
Subject: _		Admission Date:		Date of Registr	ation:	
Degree co	mpletion date	e:Semester:	Dura	ation of progres	s report:	
Coursewo	ork					
S. No.	Course Code	Course Title	Credit Hrs	Core/ Elective	Grade	Grade Points
1.						
2.						
3.						
4.						
Research	work:	A Semester-II: GPA			emester-I∖	′:CGPA:
Date of Ap	oproval from	SC (MPhil)/ AS&RB (Ph	nD)			
Research	Progress:					
	-					

Academic Achievements:

S. No.	Descriptions	During Reporting Period	Total
а	Number of Publications in HEC recognised Journals (Please attach E-Copy of Papers)		
b	Presentations in Conferences/ Seminars/ Workshops Participated (Please attach details)		
с	Any other significant achievements (Please attach details)		

Supervisors' remarks on student's progress:

Date:	Supervisor's Signature: Countersigned
Head of Department:	Head of institute/ Dean:

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SYNOPSIS SUBMISSION FORM (PhD & Master Programs)

Name:	Registration No:
Department:	Institution:
Subject:	Date of synopsis submission:
1. Topic:	Research Work

2. Academic Policies Awareness/ Proposed Timeline:

Check list	YES	NO
Are you aware of the NUMS academic policies for Masters/ MPhil/		
PhD programs?		
Is synopsis prepared according to NUMS' guidelines?		
Are you aware of the plagiarism policy?		
Proposed timeline for completion of research work/ thesis	Date:	

Date: _____Student's Signature: _____

Date: _____ Supervisor's Signature: _____Head of Department: _____

Note: Attach the copy of synopsis with this form.

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				40
Α	NN	IEX·	-PG-	-10

SYNOPSIS EVALUATION REPORT (PhD & Master Programs)

Name:	_Registration No:
Department:	Subject:
Supervisor:	CGPA of Course work:
Thesis/ Dissertation Topic:	

Part A-Synopsis Evaluation (75 Marks)

2	3		Marks*	
	3	4	5	Comments
-	Fotal I	Marks	in (I)	/ 25
Т	otal N	larks	in (II)	/ 20
То	otal M	arks i	n (III)	/20
Тс	otal M	arks i	n (IV)	/ 10
Total I	Marks	in Pa	rt - A	/75
		Total M Total M	Total Marks in Pa	Total Marks in (IV) Total Marks in Part - A

* 2 = unsatisfactory, 3 = satisfactory, 4 = Good, 5 = Excellent

Part-B Presentation & QA session (25 Marks)

Presentation skills/ slides	/10
Q&A session/ Viva	/15

Overall Performance

Part-A _____ out of 75 Marks) Part-B ____out of 25 Marks) Total (100 Marks) _____ Overall Rating

Overall Rating by Evaluators			
	Accepted wi	th conditions	
Accepted	Minor Revisions	Major Revisions	Rejected
Remarks:			

Name of Examiner: ______ Institute_____

Date: _____

Grading Scale:

Excellent >80% (A)	An excellent performance, clearly outstanding. The candidate demonstrates excellent knowledge/skills
Good 68-80% (B)	The candidate demonstrates sound knowledge and a very good degree of independent thinking and research methods.
Satisfactory 60-67% (C)	The candidate demonstrates a reasonable degree of knowledge and application/ research
Unsatisfactory Below 60% (D)	The candidate demonstrates a very limited degree of knowledge/ presentation skills

_____ Signature: _____

Distribution:

• 1x copy to be maintained in the concerned Institute, student file and Academics Directorate

SYNOPSIS APPROVAL/ QUALIFYING EXAMINATION (B) REPORT (PhD & Master Programs)

Name:	Registration No:			
Department:	Institute:			
Subject:	_ Date of Synopsis Meeting:			
Title:				
Graduate	Supervisory Committee Members			
First Attempt:	Second Attempt:			
1				
Supervisor	Signature			
2 Internal Examiner				
Internal Examiner	Signature			
3				
External Examiner (1)	Signature			
4 External Examiner (2)				
External Examiner (2)	Signature			
Head of Department	Signature			
Committee Chair/ Dean remarks				
Approved/Not Approved				
Date				
	Dean/ Head of Institute			

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CHANGE OF SYNOPSIS TITLE / PROJECT
(PhD & Master Programs)

Name:	Registration	n No:
Department:	Institute:	
Subject:	_ Date of Approved Synopsis D	efense:
Approved Title: (Please a	attach already approved title of s	synopsis as Annex-A)
Reason of revision:		
Revised Title: (Please atta	ach approval of revised title of s	ynopsis as Annex-B)
<u>G</u>	raduate Supervisory Committ	ee Members
1 Supervisor		Signature
Supervisor		Signature
2		
Internal Examiner		Signature
3		
External Examiner		Signature
4		
4 External Examiner		Signature
Head of Department		Signature
Committee Chair/ Dean rer	marks	
	Approved / Not Approv	ved
Date		Dean/ Head of Institute
		Dean/ nead of Institute

Distribution:

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THESIS/ DISSERTATION SUBMISSION/ VERIFICATION

	(PhD & Master Programs)
Full Name:	Registration No:
Department:	Institute:
Degree Program:	Date of Submission:
Thesis Title:	

1. Student's Declaration:

a. I declare that the contents/ research presented in this thesis/ dissertation is my own work,
which was done at NUMS unless otherwise stated/ acknowledged in text/ references. The
research work/ thesis has not been previously submitted for any other degree.

- b. My thesis is as per guideline of NUMS and has been reviewed by the Supervisor.
- c. At any time, if my statement is found to be incorrect even after my Graduation, the university has the right to withdraw my MPhil/ PhD degree.

Date: _____ Name/ Signature of student_____

2. Endorsement by Supervisor:

a. I, hereby, confirm that (Name)_____has completed the course work of _____credit hours with CGPA ____required for the program

b. I have screened the thesis by using Turnitin Software and similarity index is _____% report is attached.

c. I am satisfied with the quality of the research work presented and therefore, have no hesitation in recommending that the thesis be submitted for examination.

Date _____ Name/ Signature of Supervisor_____

3. Head of Department:

Recommended/ Not Recommended

Signature of Head of Department: _

For Dean Office:

Check List	YES	NO
Whether the thesis submitted is on prescribed NUMS' format?		
Turnitin report attached/ similarity index is acceptable as per HEC?		
Approved copy of Synopsis is attached?		
Two (2) copies of soft binding thesis are submitted?		
Soft-copy of the thesis is provided in CD/ USB?		
Data on Thesis submission form is as per the University record?		
Examination Fees Receipt is attached?		
Word count		

Name of Staff (received the document) _____

Dated: _____

COUNTERSIGNED

Dated: ______ Signature Head of Institute/ Dean: ______

Distribution:

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THESIS/DISSERTATION EVALUATION REPORT (PhD & Master Programs)

(To be used by Individual Examiner/Foreign Evaluators)

Student Name: ______Registration No._____

Degree enrolled: _____Department: _____

Thesis Topic: _____

Evaluation Criteria	Observations/ Comments
Introduction/ Review	
1. Abstract	
2. Introduction / statement of problem	
3. Research objectives/ originality	
4. Literature review (relevant and clearly phrased)	
Research Methodology	•
5. Experimental design/Sampling	
6. Research methods and techniques	
7. Statistical analysis	
Results	
8. Enough data to achieve objectives	
9. Research findings/originality of results	
10. Clarity of results descriptions (graphs, tables &	
figures)	
Discussions/ Conclusion	•
11. Scientific interpretation of results & comparison	
with published literature	
12. Original contribution to knowledge/ application	
13. Conclusions/recommendations	
Structure of thesis	
14. References, annexures language and grammar	
15. Overall Quality & Clarity of thesis	
Select ONE:	
1. The thesis is ready to proceed to the Oral Defense	
2. Minor revisions before to proceed to the Oral Defe	

3. Major revisions before to proceed to the Oral Defense

Date:

Evaluator' Signature:

NOTE: Report must include a description of the shortcomings /observations you would expect the student to address in order for the thesis to be and proceeded to the Oral Defense. (please use separate sheet for comments if required)

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2023

PUBLICATION/ ARTICLE DETAILS (PhD & Master Programs)

Name:	Registration No:	
Department:Subje	ect:Institute:	
Name of Author(s)		
Title of paper		
Subject discipline		
Name of HEC recognized journal		
Category of the Journal at the time of Publication		
ISSN of journal (print)		
ISSN of journal (online)		
URL of paper/article		
Volume, number, and year		
Page(s) no. in journal		
Date of Publication Online (DD-MM-YY)		
Date of Publication Print (DD-MM-YY)		

Supervisor Name: ______Signature_____Signature

Date: _____

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THESIS/ DISSERTATION ORAL DEFENSE REPORT

(PhD & Master Programs)

(То	be usec	l by	Individual	Evaluator)	
-----	---------	------	------------	------------	--

Name:	_Registration N	No:				
Department:	_Subject:					
Supervisor:	(CGPA	of C	ourse	work:	
Thesis/ Dissertation Topic:						
A-Internal/ External Thesis Evaluato	or (75 Marks)					
Evaluation Criteria		2	Ma 3	rks* 4	5	Comments
I. Introduction/ Review	I	I				
1. Abstract						
2. Introduction / statement of problem	m					
3. Research objectives/ originality						
4. Literature review (relevant & clear	rly phrased)					
		Т	otal	Marks	in (l)	/ 20
II. Research Methodology						
5. Experimental design/ Sampling te	chniques					
6. Research methods and technique	S					
7. Statistical analysis						
		Т	otal N	/larks	in (II)	/ 20
III. Results						
8. Enough data to achieve objective	s					
9. Research findings/originality of re	sults					
10. Clarity of results descriptions (gra	phs, tables etc					
		То	tal M	larks i	in (III)	/ 15
IV. Discussions/ Conclusion						
11. Scientific interpretation of results	& comparison					
with published literature						
12. Original contribution to knowledge 13. Conclusions/recommendations	application					
		То	tal M	arks i	n (IV)	/ 10
V.Structure of synopsis						
14. References, annexures language	, grammar					
15. Overall Quality & Clarity of thesis						
		Тс	otal N	larks	in (V)	/ 10
	т	otal N	larks	in Pa	nrt - A	/75

* 2 = unsatisfactory, 3 = satisfactory, 4 = Good, 5 = Excellent

RECOMMENDATION BY THE EXAMINER

I recommend the thesis to be accepted /accepted subject to suggest correction are incorporated in the thesis and duly certified by the supervisor before the conduct of						
defense/viva-voce thesis examination						
Accepted with conditions						
Accord	Accepted with		Deisstad			
Accepted	epted Minor Revisions Major Revisions Rejected					
Remarks:	L	1				

Note: attach additional page for comments.

B- Defense of thesis (25 Marks)						
Presentation & QA session						
	Total Marks	Marks obtained	Comments			
 Presentation skills/ slides 	(10 Marks)					
2. Q&A session	(15 Marks)					

C- Overall Performance

Part-A (75 Marks)	_ Part-B (25 Marks)	_ Total (100 Marks)	_(Grade*)
Name of Examiner:			_	_

Qualification: _____Institute_____

Date: _____

Signature:

* Grading Scale:

Excellent <u>≥</u> 80% (A)	An excellent performance, clearly outstanding. The candidate demonstrates excellent knowledge.					
Good 79-70 % (B)	A very good performance. The candidate demonstrates sound knowledge and a very good degree of independent thinking.					
Satisfactory 69-60% (C)	A good performance in most areas. The candidate demonstrates a reasonable degree of knowledge.					
Unsatisfactory Less than 60% (D)	A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of knowledge.					

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			ON APPROVA s Programs)	LRE	PORT			
We hereby, recommend that	the	thesis/	dissertation	pre	pared	under	supervision	
of		by						
Registration ID No		_entitled						
be accepted as fulfilling in part of I	Master	s/ MPhil/l	Doctor of Philo	sopl	ny Deg	ree.		
Graduate	e Supe	ervisory	Committee M	<u>emb</u>	<u>ers</u>			
1 Supervisor					Sign	ature		
2								
Internal Examiner					Sign	ature		
3 External Examiner					Signa	ature		
4					-			
External Examiner					Sign	ature		
Examiner 1:/100	Examiner	2:/100	:/100 Total Marks 400					
Examiner 3:/100		Examiner	4:/100					
*Final Average Score		(_% , Grade)			
Head of Department		Signature						
Committee Chair/ Dean remarks_								
	Appr	oved/Not	t Approved					
Date			De	ean/	Head c	of Institu	ıte	
* Calculation of Final score: Add s	score d	of all exar	niners, divide	by 4	00 and	multiply	by 100	

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CHECK LIST FOR AWARD OF DEGREE

Name: _____

Registration No: _____

S. No		Evide	Evidence Attached				
5. NO	Name of the Document	YES	NO	NA			
PG-01	Post-graduation Registration Form						
PG-02	Application Form for Migration/Transfer of Credit						
PG-03	Request for Freezing of Semester						
PG-04	Appointment of Supervisor/Co- Supervisor						
PG-05	Graduate Supervisory Committee (GSC)						
PG-06	Petition for Change in Graduate Supervisory Committee						
PG-07	Improvement/Repeat Course Form						
PG-08	Bi-annual Progress Report						
PG-09	Synopsis Submission Form						
PG-10	Synopsis Evaluation Report						
PG-11	Synopsis Approval/ Qualifying Examination (B) Report						
PG-12	Change of Synopsis Title/ Project						
PG-13	Thesis/Dissertation Submission/ Verification						
PG-14	Thesis/Dissertation Evaluation Report						
PG-15	Publication/ Article Details						
PG-16	Thesis/ Dissertation Oral Defense Report						
PG-17	Final Thesis/Dissertation Approval Report						
PG-18	Check List for Award of Degree						

Date: _____ Reviewed by: _____ Signature_____