

Republic of Iraq

Ministry of higher education & scientific research
Supervision and scientific evaluation directorate

Quality assurance and academic accreditation



Academic Program Specification Form For The Academic

University : Northern Technical University

College: College of Health and Medical Technology

Department: Medical Laboratory technique

Date of form completion: 10/1/2024

Prof. Dr. Mohammed Y. Noorallden

الأستاذة الدكتورة
عبيدة عباس العطار

Prof. Dr. Abeer Abbas Ali

Dean`s Name

Dean`s Assistant for
Scientific Affairs

Head of Department

Date: / /

Date: / /

Date: 10 / 1 / 2024

Signature

Signature

Signature

Dr. Ayoub Ali Hussein

Quality Assurance and University performance manager

Date: / /

Signature

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TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provide a concise summary of the features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she take full advantage of the learning opportunities that are provide. It is supported by a specification for each course that contributes to the programme.

1.Teaching Institution	Northern Technical University/Health and Technical College/Kirkuk
2.University Department/Centre	Medical Laboratory Techniques
3.Programme Title	Bachelor of Medical Laboratory Technique
4.Title of Final Award	Bachelor of Medical Laboratory Technique
5.Modes of Attendance offered	course system
6.Accreditation	Ministry of Higher Education Scientific Research
7.Other external influences	Non
8.Date of production of this specification	10/1/2024
9.Aims of the Programme	
The department aims to graduate medical staff able to work in Laboratories of Hospitals and daily clinics with title job. Medical Technology who awarded Bachelor or Master degree that able to perform medical tests for patients.	

10.Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

- A1. Perform chemical tests for human body**
- A2. Perform microbiological tests (bacteriology, Parasitology , microbiology , virology)**
- A3. Perform blood tests**
- A4. Perform immunological , histopathological tests**

B. Subject-specific skills

- B1. Ability to carry out biochemical , microbiological , pathological tests**
- B2. Ability to carry out blood and immunological tests**
- B3. Ability to carry out histopathological ,tests**

Teaching and learning Methods

Blended learning (Online educational material with online interaction, with place Classroom methods), Scientific Films , Teaching Videos , Laboratories , Trainee and summer internship , Graduation projects

Assessment method

Daily , Monthly , Final examination and weekly reports

C. Thinking Skills

- C1. Student gain principles skills of Fundamental lab manager**
- C2. Analysis and solve problems that face people in med**
- C3. Evaluate the solutions that offer and choose the suitable one**
- C4. Design and open Medical lab. And upgrade the self learn skills**

Teaching and Learning Methods

Blended learning (Online educational material with online interaction, with place Classroom methods), Scientific Films , Teaching Videos , Laboratories , Trainee and summer internship , Graduation projects

Assessment methods

Daily , Monthly , Final examination and weekly reports

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Team work skills

D2. Computing and Internet skills

D3. English Lagrange skills

D4. Leadership and taking the responsibility skills

D5. Self learning and lifelong learning

Teaching and Learning Methods

Blended learning (Online educational material with online interaction, with place Classroom methods), Scientific Films , Teaching Videos , Laboratories , Trainee and summer internship , Graduation projects

Assessment Methods

Daily , Monthly , Final examination and weekly reports

11. Programme Structure

Level/Year	Course or Module Code	Course or Module Title	Credit rating	12. Awards and Credits
first	Chmtk1 MLT1	first level/college req dep. Req.	32th/29p	Bachelor Degree Requires (x) credits
second	Chmtk2 MLT2	Second level/college req dep. Req.	30th/28p	
third	Chmtk3 MLT3	third level/college req dep. Req.	27th/29p	
forth	Chmtk4 MLT4	fourth level/college req dep. Req.	26th/27p	

13. Personal Development Planning

- 1- Self learning**
- 2- Scientific seminars and symposium**
- 3- Scientific researching and publishing papers**
- 4- Trainee courses outside and inside the country**

14. Admission criteria

- High school section**
- The average degree**

15. Key sources of information about the programme

- 1- Book and textbook**
- 2- Scientific catalogues**
- 3- Scientific research and publishing paper**
- 4- Internet**

Curriculum Skills Map

Please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Programme Learning Outcomes

Year/ Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transferable Skills relevant to employability and personal development			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
First	Ntu100	Human right	Fundamental	B		T	T			B	L	T	P		L	L			P
	Ntu105	Sport or French	Accessory	T			T			P			R		R		T		R
Second	Ntu200	English	Fundamental	T	L	B	L				T		P				P		R
	MLT 229	Genetic engineering or Stem cell	Accessory	T	B	P									T		L		B
Third	Ntu300	English	Fundamental	T	B		S				R		L					T	
	MLT329	Medical entomology or opportunistic parasites	Accessory	T	P		B				P				T			P	J
Forth	NTU400	Scientific research methodology	Fundamental	T	L		B				L							T	J
	NTU411	English																	
	CHMTK 412	Preventive and social medicine or Serology and Vaccines	Accessory	T	L	B													

B/ Book T/ Theory P/Practical R/Report S/Seminar L/Lab. J/Project

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW:PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provide a concise summary of the main features course and the learning outcomes that a typical student might reasonable expected to achieve and demonstrate if he/she take advantage of the learning opportunities that are provided. It should be cross-referenced with the specification

1.Teaching Institution	Ministry of higher education & scientific research
2.University Department/Center	Northern Technical University
3.Course title/code NTU/ University requirements CHMTK/ college requirements MLT/ department requirements	
4.Programme (s) to which it contributes / / attended lectures	
5. Modes of Attendance offered / course system	
6. Semester/Year	2023-2024
7. Number of hours tuition(total)	115 THEORY/ 113 PRACTICAL
8.Date of production/revision of this specification	10/1/2024
9. Aims of the Course	
Equip the scientific knowledge in medical Lab. Techniques to student depend on instruction in section of private skills of teaching and learning method addition to thinking and personal developments skills	

10. Learning Outcomes , Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

A1. Perform chemical tests for human body

A2. Perform microbiological tests (bacteriology, Parasitology , microbiology , virology)

A3. Perform blood tests

A4. Perform immunological , histopathological tests

B. Subject-specific skills

B1. Ability to carry out biochemical , microbiological , pathological tests

B2. Ability to carry out blood and immunological tests

B3. Ability to carry out histopathological ,tests

Teaching and Learning Methods

Blended learning (Online educational material with online interaction, with place Classroom methods), Scientific Films , Teaching Videos , Laboratories , Trainee and summer internship , Graduation projects

Assessment methods

Daily , Monthly , Final examination and weekly reports

C. Thinking Skills

C1. Student gain principles skills of Fundamental lab manager

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Blended learning (Online educational material with online interaction, with place Classroom methods), Scientific Films , Teaching Videos , Laboratories , Trainee and summer internship , Graduation projects

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D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Team work skills

D2. Computing and Internet skills

D3. English Lagrange skills

D4. Leadership and taking the responsibility skills

D5. Self learning and lifelong learning

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1-15	2th +3prac	Non	dependent on the level	lectures	Quires and examinations

12. Infrastructure

Required reading: - CORE TEXTS - COURSE MATERIALS - OTHER	YES
Special requirements (include for example workshops, periodicals, IT software, websites)	Workshops
Community-based facilities (include for example, quest, lectures, internship, field studies)	Summer training , quits lechers

13. Admissions

Per-requisites	High School section , outstanding student in the institute
Minimum number of students	25
Maximum number of students	100

الجامعة التقنية الشمالية
الكلية التقنية الصحية والطبية - كركوك
مقررات تقنيات المختبرات الطبية

المحدث للعام الدراسي 2023-2024 حسب كتاب وزارة التعليم العالي والبحث العلمي/ دائرة الدراسات والتخطيط/ قسم الدراسات والتخطيط ذي العدد 7/2/ 10555 في 14/ 8/ 2023 وكتاب الجامعة التقنية الشمالية/ قسم الشؤون العلمية ذي العدد 11/11/ 2023 في 23/10/ 2023 وكتاب الجامعة التقنية الشمالية/ قسم الدراسات والتخطيط ذي العدد 7/ 2/ 12398 في 29/11/ 2023

المستوى الأول

رمز المقرر	عدد الوحدات	عدد الساعات العملية	عدد الساعات النظرية	اسم المقرر		نوع المتطلب
				باللغة الانكليزية	باللغة العربية	
NTU 100	2	-	2	Human rights and Democracy	حقوق الانسان والديمقراطية (اجباري)	متطلبات معرفية
NTU 101	2	-	2	English Language	اللغة الانكليزية (اجباري)	
NTU 102	2	1	1	Computer principles	مبادئ الحاسوب (اجباري)	
NTU 103	2	-	2	Arabic Language	اللغة العربية (اجباري)	
NTU 104	2	1	1	Sports or French Language	رياضة او فرنسي (اختياري)	
25.6%	النسبة	10				المجموع
CHMTK 111	2	-	2	Medical terminology	مصطلحات طبية (اجباري)	متطلبات الكلية
CHMTK 112	3	3	2	General chemistry	الكيمياء العامة (اجباري)	
CHMTK 113	3	3	2	General biology	علم الاحياء العام (اجباري)	
20.5%	النسبة	8				المجموع
MLT 111	3	2	2	Lab. Instrumentation	اجهزة المختبرات (اجباري)	
MLT 112	3	3	2	General Histology	علم الانسجة العام (اجباري)	
MLT 113	3	3	2	Human physiology	علم الفسلجة البشرية (اجباري)	
MLT 124	3	2	2	Biochemistry basics	اساسيات الكيمياء الحياتية (اجباري)	
MLT 125	3	3	2	General anatomy	تشريح عام (اجباري)	
MLT 126	3	3	2	Human biology	علم الاحياء البشري (اجباري)	
MLT 127	3	3	2	Systematic Histology	علم الانسجة الجهازية (اجباري)	
53.8%	النسبة	21				
	وحدة	39				المجموع الكلي

الجامعة التقنية الشمالية
الكلية التقنية الصحية والطبية - كركوك
مقررات تقنيات المختبرات الطبية
المستوى الثاني

رمز المقرر	عدد الوحدات	عدد الساعات العملية	عدد الساعات النظرية	اسم المقرر		نوع المتطلب
				باللغة الإنكليزية	باللغة العربية	
NTU 200	2	-	2	English Language	اللغة الإنكليزية (اجباري)	متطلبات معرفية
NTU 201	2	1	1	Computer	الحاسوب (اجباري)	
NTU 202	2	-	2	Arabic Language	اللغة العربية (اجباري)	
NTU 203	2	-	2	Crimes of the Defunct Ba'ath party	جرانم حزب البعث البائد (اجباري)	
NTU 204	2	-	2	Professional ethics	أخلاقيات المهنة (اجباري)	
22.7%	النسبة	10				المجموع
CHMTK 211	2	-	2	Medical psychology	علم النفس الطبي (اجباري)	متطلبات الكلية
CHMTK 212	3	2	2	Metabolism	الايض الغذائي (اجباري)	
CHMTK 223	3	2	2	Biostatistics	إحصاء حيوي (اجباري)	
-	-	-	-	مستوفي	تدريب صيفي	
18.1%	النسبة	8				المجموع
MLT 211	3	3	2	Molecular Biology	علم الاحياء الجزيئي (اجباري)	متطلبات القسم
MLT 212	3	3	2	Medical Bacteriology	علم البكتريا الطبية (اجباري)	
MLT 213	3	3	2	Medical Helminthes	علم الديدان (اجباري)	
MLT 214	2	-	2	Lab. Management or Epidemiology	ادارة المختبرات الطبية او وبائيات (اختياري)	
MLT 225	3	3	2	Medical Microbiology	الاحياء المجهرية الطبية (اجباري)	
MLT 226	3	3	2	Basic Immunology	اساسيات علم المناعة (اجباري)	
MLT 227	3	3	2	Metabolic disorders	اضطرابات التمثيل الغذائي (اجباري)	
MLT 228	3	3	2	Medical Protozoa	علم البدائيات (اجباري)	
MLT 229	3	3	2	Genetic engineering or Stem cell	هندسة وراثية او خلايا جذعية (اختياري)	
59.0%	النسبة	26				
وحدة 44						المجموع الكلي

الجامعة التقنية الشمالية
الكلية التقنية الصحية والطبية - كركوك
مقررات تقنيات المختبرات الطبية
المستوى الثالث

رمز المقرر	عدد الوحدات	عدد الساعات العملية	عدد الساعات النظرية	اسم المقرر		نوع المتطلب
				باللغة الإنكليزية	باللغة العربية	
NTU 311	2	-	2	English Language	اللغة الإنكليزية (اجباري)	متطلبات معرفية
NTU 322	2	-	2	English Language	اللغة الإنكليزية (اجباري)	
10.5%	النسبة	4				المجموع
CHMTK 311	3	3	2	Laboratory Safety	الأمان في المختبرات (اجباري)	
CHMTK 322	2	-	2	Research methods	طرائق البحث الطبي (اجباري)	
-	-	-	-	مستوفي	تدريب صيفي	
13.8%	النسبة	5				المجموع
MLT 311	3	3	2	Clinical Biochemistry	الكيمياء الحياتية السريرية (اجباري)	
MLT 312	3	3	2	Histopathology	علم الامراض التسيجي (اجباري)	
MLT 313	3	3	2	Hematology	علم امراض الدم (اجباري)	
MLT 314	3	2	2	Medical Virology	علم الفيروسات (اجباري)	
MLT 315	3	3	2	laboratory techniques	التقنيات المختبرية (اجباري)	
MLT 326	3	3	2	Medical Mycology	علم الفطريات (اجباري)	
MLT 327	3	3	2	Endocrinology & Clinical Enzymology	الغدد الصماء والانزيمات السريرية (اجباري)	
MLT 328	3	2	2	Medical Genetics	الوراثة الطبية (اجباري)	
MLT 329	3	2	2	Medical entomology or opportunistic parasites	حشرات طبية او طفيليات انتهازية (اختباري)	
75.0%	النسبة	27				
وحدة 36						المجموع الكلي

الجامعة التقنية الشمالية
الكلية التقنية الصحية والطبية - كركوك
مقررات تقنيات المختبرات الطبية
المستوى الرابع

رمز المقرر	عدد الوحدات	عدد الساعات العملية	عدد الساعات النظرية	اسم المقرر		نوع المتطلب
				باللغة الإنكليزية	باللغة العربية	
NTU 400	2	-	2	Scientific research methodology	منهجية البحث العلمي (اجباري)	متطلبات معرفية
NTU 411	2	-	2	Scientific research methodology	اللغة الانكليزية (اجباري)	
النسبة %10.8	4					المجموع
CHMTK 412	2	-	2	Preventive and social medicine or Serology and Vaccines	الطب الوقائي والاجتماعي او علم الامصال واللقاحات (اختياري)	
CHMTK 422	4	-	-	Graduation Project	مشروع التخرج (اجباري)	
النسبة %15.3	6					المجموع
MLT 413	3	3	2	Diagnostic Bacteriology	بكتريا تشخيصية (اجباري)	متطلبات القسم
MLT 414	3	3	2	Diagnostic Parasitology	الطفيليات التشخيصية (اجباري)	
MLT 415	3	3	2	Biochemical Diagnostic Techniques	التقنيات الكيموحيوية التشخيصية (اجباري)	
MLT 416	3	3	2	Antibiotics	المضادات الحيوية (اجباري)	
MLT 427	3	3	2	Nanotechnology or pharmlogic	تقنيات نانوية او الدوائيات اختياري)	
MLT 428	3	3	2	Clinical Immunology	المناعة السريرية (اجباري)	
MLT 429	3	3	2	Blood transfusion	نقل الدم (اجباري)	
MLT 4210	3	3	2	Advanced Clinical chemistry	الكيمياء السريرية المتقدمة (اجباري)	
MLT 4211	3	3	2	Toxicology	علم السموم (اجباري)	
النسبة % 72.9	27		المجموع			
وحدة 37						المجموع الكلي
وحدة 156						المجموع الكلي للوحدات