Academic Program Description Form

University: Southem Technical University
College :Technical Institute/Amara
Department :Medical Laboratory

Lecturer. Dr. Shahad Ali Qassem
Head of Department
Date : 30/6/2025
Signature

Lecturer. Dr. Jehad Kadhum Mohamme
Dean's Assistant For
Date : 30 / 6 / 2025
Signature J.K.M

The fiil is checked by Quality Assurance and University Performance Manager
Directore of the Quality Assurance and University Performance Manager

Asst. Lecturer. **Akram Karim Khader**
Date: 1 / 7 / 2025
Signature

Approval of the Dean

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Program Specification provides a concise summary of the main features of the program and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the program.

1. Teaching Institution	Southern Technical
2. University Department/Centre	Technical institute/Amara
3. Program Title	Medical Laboratory
4. Title of Final Award	Technique Diploma in medical laboratory
5. Modes of Attendance offered	Yearly
6. Accreditation	Technic in medical laboratory
7. Other external influences	
8. Date of production/revision of this specification	30/6/2024
9. Aims of the Program	
The program aims to prepare technical staff capable of working in the field of medical laboratory. 1. Collecting some information from the patient such as name, age and gender registration as well. 2. Taking the sample from the patient, whether it is blood, urine, discharge, tissue culture, etc., according to the doctor's instructions. 3. Record the above information in special records kept in laboratories. 4. Conducting examinations for the patient. 5. Recording the results of the tests on the record in the laboratory. 6. Delivery of the results of the examinations to the patient.	

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

A1. Learn how to collect patient information
A2.
A3.
A4.
A5.
A6.

B. Subject-specific skills

1. Teaching and training the student on how to collect laboratory samples.
2 - Teaching and training the student on how to prepare the patient for each examination and according to the patient's condition.
3 - Teaching and training students how to memorize patterns, whether blood, urine, or others.
4- Teaching and training the student how to carry out the examinations

Teaching and Learning Methods

Theoretical lectures, self-learning, seminars, panel discussions,
Practical training in laboratories (tissue and cellular slides, laboratory techniques and quality control, laboratory equipment, blood transfusion, tissues and anatomy, nursing basics, chemistry, computer applications, clinical chemistry, hematology, parasites and viruses, medical fungi, immunity and serum, summer training, graduate research)

Assessment methods

Daily written exams, quarterly and final exams, weekly reports on the examinations conducted by the students during training, seminars, seminars, in addition to daily attendance and class participations.

C. Thinking Skills

C1. Self-learning (through assignments about the student taking certain tests and then presenting them to him).
C2. Training on group participation in how to collect information from the patient and then conduct them for analyzes
C3. Learning through groups (Group Therapy)
C4.

Teaching and Learning Methods

Traditional lectures, training in laboratories, writing reports, showing scientific films and special videos, conducting scientific visits, and summer training
Assessment methods
Practical exams, semester and final exams, commitments to assignments (such as making reports in the field of specialization and then discussing reports.)

D. General and Transferable Skills (other skills relevant to employability and personal development) D1. Skills of dealing with patients. D2 - Skills of preparing the patient for the collection of laboratory samples. D 3- Skills of dealing with emergency situations. D4 - Computer application skills. D 5- Skills of using laboratory equipment. D2. D3. D4.
Teaching and Learning Methods
Traditional lectures, training in laboratories, writing reports, showing scientific films and special videos, conducting scientific visits, and summer training
Assessment Methods
Practical exams, semester and final exams, commitments to assignments (such as making reports in the field of specialization and then discussing reports.)

11. Program Structure				12. Awards and Credits
Level/Year	Course or Module Code	Course or Module Title	Credit rating	
first		Medical laboratory techniques department	22 42	Bachelor Degree Requires (x) credits

second		Medical laboratory techniques department	26 52	

13. Personal Development Planning
1- Examining the new scientific literature 2- Participation in relevant scientific conferences 3-Sending workers for training inside and outside the country to see the modern equipment used in laboratories 4-Hosting professional teachers
14. Admission criteria .
1- average ٢-Scientific section 3-personal interview 4-Determining the ratio of males to females 5-Taking into account the specialty lessons within the general average 6-Determining the number of students to be accepted after reviewing the relevant authorities (for example, forming a committee between the institute and the health departments in the governorate)
15. Key sources of information about the program
1-Head of Department 2- department Lecturers The technical lectures in the department

Year / Level	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific Skills				Thinking Skills				General and Transferable Skills (or) Other skills relevant to employability and personal development			
			A2	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
First	Medical laboratory techniques	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Histological &cytological techniques	Basic																
	Medical Lab. Instrument	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Blood Transfusion																	
	Chemistry	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Histology and Anatomy	Assistant	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Fundamentals of nursing	Assistant	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Computer applications																	
	Human rights&democratic	general	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Second	Clinical chemistry	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Hematology		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Bacteriology	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Parasitology	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Immunology and serology	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Virology	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Medical mycology	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Professional Ethics Computer application Research project	Assistant Assistant Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

TEMPLATE FOR COURSE SPECIFICATION COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

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

1. Teaching Institution	Southern Technical University
2. University Department/Centre	Medical laboratory department
3. Course title/code	Histological & cytological Techniques
4. Program(s) to which it contributes	
5. Modes of Attendance offered	1-Weekly lesson schedule (theoretical and practical) 2-Scientific discussions, seminars, other extra-curricular activities, and scientific conferences
6. Semester/Year	Yearly
7. Number of hours tuition (total)	150 hour
8. Date of production/revision of this Specification	20/6/2023
9. Aims of the Course	
1-Teaching and training students on how to prepare slides for different body tissues 2-Teaching and training students on how to dye slides and body fluid smears 3-Teaching and training students on how to prepare chemical solutions 4-Teaching and training students on how to fix and preserve tissue samples	

10· Learning Outcomes, Teaching ,Learning and Assessment Method

A- Knowledge and Understanding

A1.Identify histological slides of different tissues
A2. Learn about fixation and preservation of tissue samples
A3. Identify the chemical solutions used in preparing the slides

B. Subject-specific skills

B1. Training on fixation and preservation of the tissue sample
B2. Tissue staining training
B3. Training in the dyeing of body fluid smears
B4.Training in the preparation of chemical solutions

Teaching and Learning Methods

Traditional lecture, writing reports, conducting seminars, methodological training in the laboratory, and summer training

Assessment methods

1-Written and oral exams, practical exams, quarterly and final exams, assignment commitments, attendance and commitment, feedback (student's test on the previous topic)

2-Self-assessment (questions are put to the student by the teacher and the student answers the questions, as well as the teacher answers the same questions. The student is asked to evaluate himself in the light of the teacher's answers (reports about scientific developments in the field of competence, analytical and inferential questions)

C. Thinking Skills

C1. Field visits to gain experience from others
C2.View scientific developments in the field of specialization
C3.Practical training in hospitals
C4.See modern methods of learning and teaching

Teaching and Learning Methods

Traditional lecture, writing reports, conducting seminars, methodological training in the laboratory, and summer training

Assessment methods

1-Written and oral exams, practical exams, quarterly and final exams, assignment commitments, attendance and commitment, feedback (student's test on the previous topic)

2-Self-assessment (questions are put to the student by the teacher and the student answers the questions, as well as the teacher answers the same questions. The student is asked to evaluate himself in the light of the teacher's answers (reports about scientific developments

in the field of competence, analytical and inferential questions)
D. General and Transferable Skills (other skills relevant to employability and personal development) D1. Field visits to gain experience from others D2.View scientific developments in the field of specialization D3.Practical training in hospitals D4.See modern methods of learning and teaching

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
First	5		Definition of some terminology that deal with Histology	lecture discussion feedback show poster Show videos and movies	practical test
Second	5		Sample collection, biopsy ,autopsy	lecture discussion feedback show poster Show videos and movies	practical test
3+4	10		Steps of preparing tissue for study ,fixation ,fixatives	lecture discussion feedback show poster Show videos and movies	practical test

7+8+9+10	20		Washing, Dehydration, Clearing, Infiltration	lecture discussion feedback show poster Show videos and movies	practica l test

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Recommended books and references (scientific journals, reports, etc.) Electronic references, websites
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions	
Pre-requisites	
Minimum number of students	
Maximum number of students	

Course description form

This course description provides a summary of the most important characteristics ‹of the course and the learning outcomes that the student is expected to achieve learning opportunities demonstrating whether he or she has made the most of the linked to the program description must be.

1. Educational institution	Southern Technical University
2. center/ department Scientific	Medical laboratory techniques
3. Course name/code	Microscopic preparations
4. Available attendance forms	1- (theoretical and practical) eekly lesson schedule 2- Discussions, scientific seminars, other extracurricular activities and scientific conferences
5. Semester/year	quarterly
6. (total) Number of study hours	75hours
7. Date this description was prepared	2020/6/20
8. Course objectives	
1- Teaching and training students on how to prepare slides for various body tissues	
2- Teaching and training students on how to stain tissue slides and body smears	
3- solutions Teaching and training students on how to prepare chemical	
4- Teaching and traning students on histological sampels save and fixation.	

9. Course outcomes , teaching methods ,learning ,and evalution.

A- Cognitive objectives

A -*Identifying histological slides and various tissues

A- ** Idientyfing fixation and preserfation of tissue samples

A-*** Identify the chemical solutions used in preparing slides

B - The following are the skill objectives of the programme

B-* Training on fixing and preserving the tissue sample

B** Traning on staining of histological slides

B*** training on staining of body fluid swab

B-****Training on preparing chemical solution

C- Emotional and value –based aims

C-*Training on preparing tissue slides

C-** Training on the steps to prepare slides collectivly

D-General and qualifying transferble skills (other skills related to employability and personal development

D-* Field visits to gain experience from others

D -**Access to scientific developments in the field of specialization

D -***Practical training in hospitals

D****Accearing and teaching methods and modern learning

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

and oral tests, applied tests, semester and final exams, obligati eassignments (attendance and commitment, feedback (testing the student on the previous subject

evaluation (questions are set for the student by the teacher and the student answers -

the questions, and the teacher also answers the same questions and the student is asked

10. Course structure

Evaluation method	Teaching method	Name of the unit/course or subject	Required learning outcomes	hours	the week
practical test	**a lecture**	Definition of some scientific terms related to tissue and cell science	Know some terms to histology related	5	the first
	discussion		Know some cell science terminology		
	feedback		Know some terms related to the technique of preparing tissue slides		
	Show poster				
	Show videos and movies				
practical test	**a lecture**	Sample collection	Identi fy ypess of ti tssue samples	5	the second
	discussion		Know the difference between living and dead tissue		
	feedback				
	Show poster				
	Show videos and movies				
practical test	**a lecture**	Fabric preparation steps fixing,) (stabilizers	Learn about the benefits and functions fixation	10	The third and fourth
	discussion		Fixation methods		
	feedback		Identify the types of fixatives		
	Show poster		Learn about the characteristics and features of each fixatives		

	Show videos and movies				
practical test	**a lecture**	Routine and special fixatives	Identify the routine fixatives used in histopathological laboratories	10	Fifth and sixth
	discussion		Identyfy on specific fixativefor each tissue		
	feedback				
	Show poster				
	Show videos and movies				
practical test	**a lecture**	Steps (washing, drying, quenching, (filtration	Identify washing solutions	20	The seventh tenth ...
	discussion		Learn dehydration methods and the most important solutions		
	feedback		Identify the steps of clearing and clearing solutions		
	Show poster		Identify the filtration steps and types of used media		
	Show videos and movies				
practical test	**a lecture**	Landfilling and logging	Learn about the method of embeding a ndtrimining	5	The -Eleventh
	discussion				
	feedback				
	Show poster				

	Show videos and movies				
practical test	**a lecture**	Cutting using a micro tom	How to secting the tissue sections by microtome	5	twelveth
	discussion		Examine the sections microscopically		
	feedback				
	Show poster				
	Show videos and movies				

11. Course development plan
1- Reviewing modern scientific literature 2- scientific conferences Participation in relevant 3- Training teaching staff devote themselves to applying and working in hospitals, even one day a week 4- Hosting specialized professors 5- Field research related to the specialty 6- colleges Scientific pairing with other universities and corresponding

Course description

This course provides a summary description of the most characteristics of the course and the learning outcomes that the student is expected to achieve ,it must be learning opportunities of the description and must be linked to the program.

institution Educational1-	Southern Technical University
2-Scientific departmen/center	Medical laboratory techniques Scientific Section
Course name/code3-	Laboratory techniques
Available attendance forms4-	3- (Weekly lesson schedule (theoretical and practical 4- Discussions, scientific seminars, other extracurricular activities and scientific conferences
Semester/year5-	quarterly
Number of study hours6- (total)	90 hours
Date this description was7- prepared	2023/6/20
Course objectives8-	
1-Teaching and training students on the basics laboratory tools.	
2- Teaching and training students on the pinciples of bacteriology	
3- Teaching and training students on urine examination	
*Education Students And training On the principles of hematology	

12. teaching, learning and evaluation metho outcomes and Course

A_Cognitive objectives

A1_Identify the most important A2_laboratory equipment

A3_Identifying blood samples

C_The following are the skill objectives of the programme

C1_Training on fixing and preserving the sample

C2_Training on dyeing slides

C3_Training on dyeing the body swab

C4_Training on preparing chemical solutions

.C- Emotional and value based goals

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject (

- evaluation (questions are set for the student by the teacher and the student

answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on scientific developments in the field of specialization, asking analytical and deductive questions)

structure Course

Evaluation method	Teaching method	Name of the unit/course or subject	Required learning outcomes	hours	the week
practical test	**a lecture**	Definition of some laboratory equipment and tools		5	the first
	discussion				
	feedback				
	Show poster				
	Show videos and movies				
practical test	**a lecture**	mpleSa collection		5	the second
	discussion				
	feedback				
	Show poster				
	Show videos and movies				
practical test	**a lecture**	Fabric preparation steps fixing,) (stabilizers		10	The third and fourth
	discussion				
	feedback				
	howS poster				

	Show videos and movies				
practical test	**a lecture**			10	Fifth and sixth
	discussion				
14. Infrastructure					
			Required course books .١		
			(references (sources Main .٢		
			a. Recommended books and references (scientific journals, (٠٠٠٠reports,		
			B. Electronic references, Internet sites		
	Show poster				
	Show videos and movies				
practical test	**a lecture**	Steps (washing, drying, ،quenching (filtration		5	٠٠٠The seventh ten
	discussion				
	feedback				
	Show poster				
	Show videos and movies				

15. Course development plan

7- Reviewing modern scientific literature
8- Participation in relevant scientific conferences
9- staff devote themselves to applying and working in hospitals, even Training teaching one day a week
10- Hosting specialized profes
11- Field research related to the specialty
12- Scientific pairing with other universities and corresponding colleges

Course description

description provides a summary of the most important This course characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most ed to the program available. It must be link learning opportunities of the .description

uthern Technical UniversitySo	16. Educational institution
Medical laboratory techniques Scientific Section	17. department Scientific center/
Laboratory equipment	18. Course name/code
3- Weekly lesson schedule (theoretical and (practical 4- Discussions, scientific seminars, other extracurricular activities and scientific conferences	19. Available attendance forms
quarterly	20. Semester/year
60 hours	21. Number of study hours (total)
2023/2/6	22. Date this description was prepared

23. Course objectives
5- equipment Teaching and training students on how to deal with laboratory
6- nts on how to maintain laboratory equipmentTeaching and training stude

24. Course outcomes and teaching, learning and evaluation methods

A- Cognitive objectives

A1- Identify all the equipment in the labora

A2- Identify the principles of operation of each device in the laboratory

A3- Learn how to use, operate and maintain each device

B - The following are the skill objectives of the programme

B1 - Training on how each device works

B2 - Training on equipment maintenance

C- and value Emotional - based goals

D - General and qualifying transferable skills(other skills employability and personal development

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching methods

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

assignments, Written and oral tests, applied tests, semester and final exams, obligations to (attendance and commitment, feedback (testing the student on the previous subject

evaluation (questions are set for the student by the teacher and the student answers the - questions, and the teacher also answers the same questions and the student is asked to pments in the evaluate himself in light of the teacher's answers (reports on scientific develo

field of specialization, asking analytical and deductive question)

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most must be linked to the program available. It learning opportunities of the .description

Southern Technical University	25. Educational institution
Medical laboratory techniques Scientific Section	26. Scientific department center/
Transfusion	27. Course name/code
5- (schedule (theoretical and practical Weekly lesson 6- Discussions, scientific seminars, other extracurricular activities and scientific conferences	28. Available attendance forms
quarterly	29. Semester/year
150 hours	30. Number of study (total) hours
2023/2/6	31. Date this description was prepared
32. objectives Course	
7- Teaching and training students on how to transfuse blood	
8- Teaching and training students about blood types	
9- Teaching and training students on how to match blood types	

33. outcomes and teaching, learning and evaluation methods Course

A- Cognitive objectives

A1- Identifying blood and its most important characteristics

A2- Identifying blood types

A3- Identify the most important compatibility tests

B- The following are the skill objectives of the programme

C - Emotional and value-based goals..

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching methods

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

obligations to ،Written and oral tests, applied tests, semester and final exams assignments, attendance and commitment, feedback (testing the student on the (previous subject

evaluation (questions are set for the student by the teacher and the student answers - ons and the student is asked the questions, and the teacher also answers the same questi to evaluate himself in light of the teacher's answers (reports on scientific (developments in the field of specialization, asking analytical and deductive questions

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most must be linked to the program available. It learning opportunities of the .description

Southern Technical University	34. Educational institution
Medical laboratory techniques Scientific Section	35. department Scientific center/
Chemistry	36. Course name/code
7- theoretical and) Weekly lesson schedule (practical 8- Discussions, scientific seminars, other extracurricular activities and scientific conferences	37. e attendanceAvailabl forms
quarterly	38. Semester/year
75 hours	39. Number of study hours (total)
2023/2/6	40. Date this description was prepared
41. Course objectives	
10- Teaching and training students on how to prepare chemical solutions	

11- Teaching and training students on how to use devices and tools

42. outcomes and teaching, learning and evaluation methods Course

A- Cognitive objectives

A1- Identify the most important chemical dumps

A2- Identify the most important chemical reagents

A3- Identify the chemical solutions used and methods of preparing them

B - The following are the skill objectives of the programme

C - Emotional and value-based goals.

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject (

- evaluation (questions are set for the student by the teacher and the student answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on

scientific developments in the field of specialization, asking analytical and deductive questions)

Course description

This course description provides a summary of the most important	
Southern Technical University	43. Educational institution
Medical laboratory techniques Scientific Section	44. department Scientific center/
Nursing basics	45. Course name/code
9- schedule (theoretical and Weekly lesson (practical 10- Discussions, scientific seminars, other extracurricular activities and scientific conferences	46. Available attendance forms
quarterly	47. Semester/year
60 hours	48. Number of study hours (total)
2023/2/6	49. Date this description was prepared
50. objectives Course	
1- Teaching and training students on the basics of nursing	
2- Learn about the foundations of nursing	
*Learn about first aid and laboratory safety	

51. Course outcomes and teaching, learning and evaluation methods

A- Cognitive objectives

A1- Identify the foundations of nursing

A2- Learn about first aid and laboratory safety

A3- Identifying ways to deal with the patient while he is in the laboratory

B– The following are the skill objectives of the programme

.C - Emotional and value-based goals

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching methods

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject (

- evaluation (questions are set for the student by the teacher and the student answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on

scientific developments in the field of specialization, asking analytical and deductive questions)

Second academic year

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most must be linked to the program available. It learning opportunities of the .description

Southern Technical University	52. Educational institution
Medical laboratory techniques Scientific Section	53. department Scientific center/
Blood diseases	54. ourse name/codeC
11- schedule (theoretical and Weekly lesson (practical 12- Discussions, scientific seminars, other extracurricular activities and scientific conferences	55. Available attendance forms
quarterly	56. Semester/year
90 hours	57. Number of study hours (total)
2023/2/6	58. Date this description was prepared
59. objectives Course	
12- Teaching and training students on how to prepare slides for various body tissues	
13- Teaching and training students on how to stain tissue slides and body	

smears
14- Teaching and training students on how to prepare chemical solutions
Samples save And stabilizing How on Students training And Education Histological

60. Course outcomes and teaching, learning and evaluation methods
A- Cognitive objectives A1- Identify the tests and examinations conducted in the laboratory A2- Identify the diagnosis of medical conditions
B - The following are the skill objectives of the programme B1 - Training on fixing and preserving the tissue sample B2 - Training on dyeing textile slides B3 - Training on dyeing the body swab B4- Training on preparing chemical solutions
.C- Emotional and value - based goals
D - General and qualifying transferable skills (other skills related to employability and personal development .(D1- Field visits to gain experience from others D2- Access to scientific developments in the field of specialization D3- Practical training in hospitals D4- Access to modern learning and teaching methods
Teaching and learning methods
Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods
Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject (- evaluation (questions are set for the student by the teacher and the student answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on scientific developments in the field of specialization, asking analytical and deductive questions)

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most must be linked to the program available. It learning opportunities of the .description

Southern Technical University	61. Educational institution
Medical laboratory techniques	62. department Scientific center/
Microbiology	63. odeCourse name/c
13- and Weekly lesson schedule (theoretical (practical 14- Discussions, scientific seminars, other extracurricular activities and scientific conferences	64. Available attendance forms
quarterly	65. Semester/year
90 hours	66. Number of study hours (total)

2023/2/6	67. Date this description was prepared
68. Course objectives	
15- training students on how to prepare agricultural media Teaching and	
16- Teaching and training students on how to stain tissue slides and body smears	
17- Teaching and training students on how to prepare chemical solutions	
Samples save And stabilizing How on Students And training Education Histological	

69. Course outcomes and teaching, learning and evaluation methods

A- Cognitive objectives

A1- Identify the types of planting media and how to prepare in advance

A2- Identify the types of sterilization and disinfection

A3- Identify the isolation and diagnosis of disease-causing organisms

B - The following are the skill objectives of the programme

B1 - Training on fixing and preserving the tissue sample

B2 - Training on dyeing textile slides

B3 - Training on dyeing the body swab

B4- Training on preparing chemical solutions

.C- and value Emotional - based goals

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching methods

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods

Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject(

- evaluation (questions are set for the student by the teacher and the student answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on scientific

developments in the field of specialization, asking analytical and deductive questions)

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most must be linked to the program available. It learning opportunities of the .description

Southern Technical University	70. Educational institution
Medical laboratory techniques Scientific Section	71. center/ department Scientific
Protozoan parasites	72. Course name/code
15- Weekly lesson schedule (theoretical and (practical 16- Discussions, scientific seminars, ficother extracurricular activities and scienti conferences	73. Available attendance forms
quarterly	74. Semester/year
90 hours	75. (total) Number of study hours
2023/2/6	76. Date this description was prepared
77. Course objectives	
18- Teaching and training students on the most important disease-Causing parasites	
19- Teaching and training students on the techniques used in diagnosing parasites	

78. outcomes and teaching, learning and evaluation methods Course

A- Cognitive objectives

A1- Identify the types of planting media and how to prepare in advance

A2- Identify the types of sterilization and disinfection

A3- Identify the isolation and diagnosis of disease-causing organisms

B – The following are the skill objectives of the programme

B1 - Training on fixing and preserving the tissue sample

B2 - Training on dyeing textile slides

B3 - Training on dyeing the body swab

B4- Training on preparing chemical solutions

.C - Emotional and value-based goals

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others

D2- Access to scientific developments in the field of specialization

D3- Practical training in hospitals

D4- Access to modern learning and teaching methods

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the laboratory and summer training

Evaluation methods
Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject(- evaluation (questions are set for the student by the teacher and the student answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on scientific developments in the field of specialization, asking analytical and deductive questions)

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, learning opportunities demonstrating whether he or she has made the most of the .must be linked to the program description available. It

Southern Technical University	79. Educational institution
Medical laboratory techniques Scientific Section	80. center/ department Scientific
Immunology	81. Course name/code
17- schedule theoretical and Weekly lesson (practical 18- Discussions, scientific seminars, other extracurricular activities and scientific conferences	82. Available attendance forms
quarterly	83. Semester/year
90 hours	84. (total) Number of study hours
2023/2/6	85. Date this description was prepared
86. objectives Course	
20- Teaching and training students on how to handle samples	

87. outcomes and teaching, learning and evaluation methods Course

21- Teaching and training students to conduct serological tests

A- Cognitive objectives
A1- Learn about immunological tests
A2- Identify the parts of the immune system

B – The following are the skill objectives of the programme

.C- Emotional and value- ed goalsbas

D - General and qualifying transferable skills (other skills related to employability and personal development .(

D1- Field visits to gain experience from others
D2- Access to scientific developments in the field of specialization
D3- Practical training in hospitals
D4- Access to modern learning and teaching methods

Teaching and learning methods

Traditional lecture. writing reports . Conducting seminars, systematic training in the summer training laboratory and

Evaluation methods

Written and oral tests, applied tests, semester and final exams, obligations to assignments, attendance and commitment, feedback (testing the student on the previous subject (

- evaluation (questions are set for the student by the teacher and the student answers the questions, and the teacher also answers the same questions and the student is asked to evaluate himself in light of the teacher's answers (reports on scientific developments in the field of specialization, asking analytical and deductive questions)