جامعة المجمعة
Majmaah University
كلية العلوم
الطبية التطبيقية

DEPARTMENT MANUAL

Medical Laboratory Sciences

2022-2023
1444-1445

Contents

Message from the Head of the Department

The Medical Laboratory Sciences (MDL) program, provides traditional courses as well as extensive training in actual clinical laboratories. Program's lectures and our practical session in labs provide students with a substantial knowledge base as well as fundamental skills and basic techniques in clinical laboratories. The facilities are modern and well equipped for this purpose. Students receive instruction using actual clinical specimens in a laboratory environment, and students are trained to process these samples and examine all data and results. Additionally, MDL students trained to interact with potential technical errors that could be detected during their lab work and troubleshooting. Both BSc & MSc programs required actively involvement of students in discussions and writing reports to tests their understanding and getting responsibility in initial diagnosis of patient's result in different disciplines as a lab specialist in the future. Finally, MDL department arrange for student's visit to medical laboratories in variety of Hospitals, research centers and medical cities in order to enhance the process of learning and encourage students to gain deep knowledge and understanding of their work space in future.

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Head of the Medical Laboratory Sciences

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Program Identification and General Information

Program title and code: Medical Laboratory Sciences (MDL)		
Name of the College: College of Applied Medical Sciences (CAMS)		
Award granted on completion of the program: Bachelor of Applied Medical Sciences		
Total credit hours needed for completion of the program: 134 Credit hours		
Date of approval by the authorized body (Ministry of Education for private institutions and Council of Higher Education for public institutions)		
Campus Branch/Location	**Approval By**	**Date**
Main Campus: Majmaah campus		
Majmaah Male Campus	Council of Higher Education	06/02/2007
Majmaah Female Campus	Council of Higher Education	06/02/2007
Person responsible for the program: Dr. Sahar Aldosari, Head of the Department		

Importance of the program

The program was established to cater the community needs of professional and highly skillful specialists in the field of medical laboratory sciences for diagnosis and research services.

The mission of Program

Qualifying outstanding cadres scientifically, practically and ethically in the field of medical laboratories to provide health and research services for the community through an appropriate academic environment.

The vision of Program

Excellency in education, research and community service in the field of clinical laboratory sciences.

Program Objectives

1- Enriching educational government institutions, hospitals and research centers with specialists and experts in clinical laboratory sciences.

2- Encourage undergraduate students for Life-long learning, involvement in scientific research and applying ethics on humane aspects of clinical laboratory practices.

3- Enhance the leadership, communication and effectiveness work in team.

Program Learning Outcomes

5.Program learning Outcomes*	
Knowledge:	
K1	Recognize the scientific knowledge base that prepare students to read, interpret, and utilize scientific knowledge in clinical practice.
K2	Define the theoretical concepts of medical laboratory sciences used in conducting medical laboratory tests.
K3	Recognize the role of the clinical laboratory specialists in the assurance of quality of health care.
Skills	
S1	Develop the ability to analyze laboratory results and use statistical approaches when evaluating data.
S2	Explain the principles of management and safety to include preventive and corrective maintenance of equipment.
S3	Appraise quality control measures and participate actively in quality assurance programs.
S4	Perform microscopic examination and analytical tests of cells, tissues, blood, body fluids, and other materials.
S5	Demonstrate proper procedures, for collecting, safe handling, processing, and analyzing human specimens to maintain accuracy and precision.
S6	Demonstrate effective oral and written communication skills.
S7	Demonstrate IT skills to interact with instruments and laboratory information systems.
Values	
V1	Display the standards of ethical practice in the working environment.
V2	Demonstrate leadership, team player, and the desire for continuing education for one's professional development.
V3	Demonstrate ability to handle stressful situations calmly and efficiently.

Program Structure and Organization:

Program Description:

List of the core and elective program courses offered each semester from preparatory year to graduation using the below Curriculum Study Plan Table (A separate table is required for each branch IF a given branch/location offers a different study plan).

Bachelor Curriculum

Semester1/ Level 1			
Pre-requisite	Credit Hours	Course Name	**Course No. Course Code**
-	8	English 1	**PENG 111**
-	2	Introduction to Mathematics	**PMTH 112**
	10		**Total**
Semester 2/ Level 2			
-	2	Computer Skills	**PCOM 113**
-	2	Learning and communication skills	**PSSC 114**
-	6	English 2	**PENG 121**
	10		**Total**
Semester 3/ Level 3			
-	2	English for Health science	**PENG 122**
-	2	Introduction to Chemistry	**PCHM 124**
-	2	Physics for health science	**PPHS 125**
-	3	Biology	**PBIO 126**
	9		**Total**
29		**Total Credit Hours**	

Semester 1/ Level 4			
Pre-requisite	Credit Hours	Course Name	**Course No. Course Code**
-	2 (2 + 0)	University Requirement	**-**
	2 (1 + 1)	Emergency care	**CAMS-231**
PBIO 126	2 (1 + 1)	Principles of Anatomy	**MDL 231**
PBIO 126	2 (1 + 1)	Principles of Physiology	**MDL 232**

PBIO 126	4 (3 + 1)	General Microbiology	**MDL 234**
	12		**Total**
Semester 2/ Level 5			
-	2(2 + 0)	University Requirement	-
-	2 (2 + 0)	College required elective 1	-
PCHM 124	3 (2 + 1)	Organic Chemistry	**MDL 233**
-	3 (2 + 1)	Hematology	**MDL 241**
-	2 (1 + 1)	Introduction to Immunology	**MDL 244**
	12		**Total**
Semester 3/ Level 6			
MDL231	3 (2 + 1)	Histology	**MDL 242**
PCHM 124	3 (2 + 1)	Analytical Chemistry	**MDL 245**
-	2 (2+ 0)	Epidemiology	**MDL- 472**
-	2 (2 + 0)	University Requirement	-
-	2 (2 + 0)	College required elective 2	-
	12		**Total**
36		**Total Credit Hours**	

Semester 1/ Level 7			
Pre-requisite	**Credit Hours**	**Course Name**	**Course No. Course Code**
-	2 (2 + 0)	University Requirement	-
MDL 234	3 (2 +1)	Medical Microbiology	**MDL 243**
MDL 233	3 (2 + 1)	Principles of Biochemistry	**MDL 351**
MDL 342	3 (2 + 1)	Histotechnology	**MDL 353**
	11		**Total**
Semester 2/ Level 8			
-	2 (2 + 0)	University Requirement	-
-	3 (2 + 1)	General Pathology	**MDL 352**
MDL 243	3 (2 + 1)	Clinical Mycology	**MDL 354**
-	3 (2 + 1)	Clinical Parasitology	**MDL 355**
	11		**Total**
Semester 3/ Level 9			
-	2 (2 + 0)	University Requirement	-
MDL 351	3 (2 + 1)	Medical Biochemistry	**MDL- 361**
MDL 243	3 (2 + 1)	Clinical Bacteriology	**MDL- 363**
-	3 (2 + 1)	Pathophysiology	**MDL- 364**
-	3 (3 + 0)	Department required elective	**MDL- 365/366**

	14		**Total**
36		**Total Credit Hours**	

Semester 1/ Level 10			
Pre-requisite	**Credit Hours**	**Course Name**	**Course No. Course Code**
MDL 353	3 (1 + 2)	Electron Microscopy	**MDL- 362**
MDL 243	3 (2 + 1)	Clinical Virology	**MDL- 471**
MDL 361	3 (2 + 1)	Clinical Biochemistry	**MDL- 474**
-	3 (2 + 1)	Department required elective	**MDL- 476/477**
	12		**Total**
Semester 2/ Level 11			
-	2 (2 + 0)	University Requirement	**-**
MDL244	3 (2 + 1)	Clinical Immunology and Serology	**MDL- 473**
-	2 (1 + 1)	Research and Seminar	**MDL- 475**
MDL 474	4 (2 + 2)	Applied Clinical Biochemistry	**MDL- 482**
	11		**Total**
Semester 3/ Level 12			
MDL 363	3 (2 + 1)	Applied Clinical Microbiology	**MDL- 481**
-	3 (2 + 1)	Analytical Laboratory Automation	**MDL- 483**
MDL 473	3 (2 + 1)	Applied Immunology and Hematology	**MDL- 484**
MDL 352	3 (2 + 1)	Cellular and Molecular Pathology	**MDL- 485**
	12		**Total**
35		**Total Credit Hours**	

Master curriculum

Track 1: BIOCHEMISTRY & MOLECULAR MEDICINE

Course code	Course Title	Credit hours		
		Lecture	Practical /Tutorial /Labs	Total
First Semester				
CLS 601	Cellular & Molecular Biology	3	2	5
CLS 602	Professional Practice in Medical Laboratory.	2	1	3
CLS 603	Biostatistics.	2	2	4
	Total Credits			**12**
Second Semester				
CLS 611	Biochemistry I	3	2	5
CLS 604	Research Methodology.	4	0	4
	Total Credits			**9**
Third Semester				
CLS 614	Biochemistry II	3	2	5
CLS613	Molecular Bases of Diseases	3	1	4
CLS605	Medical Genetics	3	0	3
	Total Credits			**12**
Fourth Semester				
CLS612	Biochemistry of Body Fluids	3	2	5
CLS 616 OR CLS 617	Endocrinology and medical metabolism OR Topics in molecular medicine	2	2	4
	Total Credits			**9**
Fifth Semester				
CLS615	Molecular Diagnostics	3	2	5
CLS 606	Project proposal	0	3	3
	Total Credits			**8**
Sixth Semester				

CLS 607	Thesis	0	9	**9**
	Master Program Total Credits			**59**

Track 2: MICROBIOLOGY & IMMUNOLOGY

Course code	Course Title	Credit hours		
		Lecture	**Practical /Tutorial /Labs**	**Total**
First Semester				
CLS 601	Cellular & Molecular Biology	3	2	5
CLS 602	Professional Practice in Medical Laboratory.	2	1	3
CLS 603	Biostatistics.	2	2	4
	Total Credits			**12**
Second Semester				
CLS 621	Microbiology I	3	2	5
CLS 604	Research Methodology.	5	0	4
	Total Credits			**9**
Third Semester				
CLS 624	Microbiology II	3	2	5
CLS 623	Diagnostic Microbiology	2	2	4
CLS605	Medical Genetics	3	0	3
	Total Credits			**12**
Fourth Semester				
CLS 622	Immunology	3	2	5
CLS 626 OR CLS 627	Viral Pathogenesis and infection OR Infectious and non-infectious diseases	2	2	4
	Total Credits			9
Fifth Semester				
CLS 625	Antimicrobial agents and infection control	3	2	5
CLS 606	Project proposal	0	3	3
	Total Credits			8
Sixth Semester				

CLS 607	Thesis	0	9	9
	Master Program Total Credits			**59**

Track 3: HEMATOLOGY & BLOOD TRANSFUSION

Course code	Course Title	Credit hours		
		Lecture	**Practical /Tutorial /Labs**	**Total**
First Semester				
CLS 601	Cellular & Molecular Biology	3	2	5
CLS 602	Professional Practice in Medical Laboratory.	2	1	3
CLS 603	Biostatistics.	2	2	4
	Total Credits			**12**
Second Semester				
CLS 631	Hematology I	3	2	5
CLS 604	Research Methodology.	4	0	4
	Total Credits			9
Third Semester				
CLS 634	Hematology II	3	2	5
CLS 632	Blood Transfusion I	2	2	4
CLS605	Medical Genetics	3	0	3
	Total Credits			**12**
fourth Semester				
CLS 633	Diagnostic Molecular Hematology	2	2	4
CLS 636 OR CLS 637	Blood coagulation and homeostasis OR Blood Transfusion II	2	2	4
	Total Credits			9
Fifth Semester				
CLS 635	Topics in Clinical Hematology	3	2	5
CLS 606	Project proposal	0	3	3
	Total Credits			8
sixth Semester				
CLS 607	Thesis	0	9	9
	Master Program Total Credits			**59**

Admission Requirements:

The initial enrolment for the program is done once a year at the beginning of each academic year. The enrolment in the program is completely online, the students apply through the deanship of student's admission and registration website. Based on their eligibility and availability of seats, the students are then assigned to different colleges and departments.

General Requirements for Admission: Majmaah University (MU) has central policies and procedures for admitting and following up the progress of all students throughout the university. The following are admission requirements stipulated for the admission of the new student:

An applicant for admission must have a Saudi Secondary School Certificate -Science Section (SSSCSS) or its equivalent. The secondary school certificate should not be more than five years old and the Rector of the University may give exemption from this condition.

- Must have an Aptitude Test Certificate (ATC) administered by the National Center for Assessment in Higher Education.
- The minimum qualifying scores in SSSCSS & ATC tests are: (a) A total equivalent percentage of 75% (based on 30% from the SSSCSS + 30% from the ATC + 40% from cumulative basic Science of SSSCSS).
- Must not have been dismissed from another university for disciplinary reasons.
- When applicants exceed availability, priority is given to the students with higher grades.

Attendance:

- The regular student must attend the lectures. He shall be debarred from the final examination if the percentage of his attendance is less than the percentage fixed by the University Council, provided it is not less than (75%) of the lectures for each course during the semester.
- The student who is debarred, because of absence, is considered as a failure in the course and will be awarded the denial grade (DN).
- The grade of the student who absents himself from the final examination shall be zero in that exam.
- His grade in that course shall be counted according to the scores of the course work he obtains.
- The student may withdraw from the semester without being considered a failure if he provides an acceptable excuse to the authority specified by the University Council, within a period of time specified by the operational rules, approved by the University Council. The grade (W) shall be given to the student. This semester will be counted as part of the time required to complete the requirements of graduation.

Examination:

The assessment measures are designed to evaluate the effectiveness of teaching methods for delivering the intended program outcomes. A range of assessments strategies that match all aspects of the instructional plans is being used for different modules. The assessment strategies are planned to match the instructional goals and objectives at the beginning of the semester and implemented throughout the semester. The selection of appropriate assessments also matches courses and program objectives. All the modules of the medical laboratories' sciences program have specific learning objectives that are aligned with the program outcomes. Both direct and indirect assessment techniques are utilized to ensure that the desired program outcomes are achieved. The process of assessment is carried out by using combinations of course work such as quizzes, written exams, lab reports, presentations, homework, etc., Where the grades on these exercises are directly tied to the course outcomes. One to two midterm exams and one end of the semester final examination are conducted during each semester and, as part of continuous assessment; quizzes, class presentation, group discussion, assignments are conducted on regular basis throughout the semester.

Academic Counseling:

The academic regulations are the framework and rules of a study course. This legal document describes how the Health Informatics program is structured, how students are assessed and what requirements have to be fulfilled to successfully graduate with a Bachelor degree. Academic Advising is an essential and central element in the educational system, it is an objective response to the economic, humanitarian and social variables built into the system and philosophy of education, as well as being responsive to the needs of the student to Communicate with university education, which represents a necessary national development to achieve humanity innovation and excellence requirements.

Tasks of the Academic Advising Unit Coordinator There is an academic advising unit in each faculty headed by a member of the faculty staff. Such coordinator has the following tasks:

1. General supervision of the work of academic advisors and follow up the cases referred to him/her.
2. Welcome new students on the first day of study and introduce them to the university regulations.

3. Allocate students in a fair manner between faculty staff taking into consideration all psychological, social and linguistic factors. Student's Handbook (Dept. of MDL)

4. Receive reports about students' issues in addition to the reports sent by the academic advisors, solve their problems or refer them to Vice Dean for Academic Affairs or to Dean if needed.
5. Organize counselling meetings, seminars and workshops to advance the academic advising

efforts.

6. Facilitate the tasks of the academic advisors and prepare students' files and forms.
7. Discuss with the faculty council (the Dean or heads of departments) all new developments related to students and suggest solutions and ways for development.

MDL Deportment's Committee

1- Quality and academic accreditation Committee

2- Academic affairs Committee

3- Student's affairs Committee

4- Training and Clinical affairs Committee

5- Scientific research & innovation Committee

6- Human resources & higher Education Committee

7- Curriculum & study plan development Committee

8- Laboratories & equipment Committee

1. Quality and academic accreditation Committee

1.1 Introduction

The Quality & academic accreditation committee plays an important role in achieving the mission of the collage and program strategic plan. In accordance with the aforesaid the committee is proceeding confidently towards the excellence and academic accreditation of the MDL program. In this regards, the quality committee seeks continuous development with the application of quality management systems in the departments to achieve a number of objectives:

- Academic accreditation locally and internationally.
- Development of the faculty and staff members.
- Spread the culture of quality assurance and development among the faculty members.
- Ensure the application of quality in the department and measure the results of their application in administrative and academic work.

1.2 Tasks and duties:

- To monitor and enforce standards to enhance the quality of practice and reduce incompetence.
- To prepare/review the course specification, course reports, course portfolio for both bachelor and master programs.
- To review benchmarks and KPIs reports for both bachelor and Master program.

- Create different working groups to handle specific accreditation standards or problem/improvement issues.
- To submit regular reports to the Programs' Quality Assurance and Academic Accreditation unit.
- To identify areas that need improvement and propose the appropriate solutions.
- Organize a meeting with stakeholders through the advisory board.
- Implement workshops and quality learning sessions for faculty members.

2. Academic affairs Committee

2.1 Introduction

The academic affairs committee of MDL department is committed to provide excellent academic, educational and counselling services to all students. Additionally, guiding students, and solving issues related to academic achievement.

2.2 Tasks and duties:

- Follow up on early registration, confirm registration, and follow up on male and female students during the early registration period to discover errors that may occur and solve problems that may interfere with the registration process.
- Prepare the study schedules for the male and female sections.
- Activate and apply academic counseling and solving issues related to academic achievement.
- Follow up on students' attendance and consider students' excuses for absence and non-attendance for exams, as well as looking into requests for apologies for studying.
- Counting the number of students who exceeded the allowed limit in absence (25%), in preparation for depriving them of entering the final exams for each semester.
- Preparing the final exams schedule for each semester.
- Supervising the course equivalency process.
- Spreading awareness of academic regulations among students, and helping them understand study plans.
- Provide forms for course add/drop/withdrawal and change of section.
- Follow-up of all student cases from postponement, apology, transfer, change of specialization, and defaulting students.
- Notify the student when his academic average is low, and sign the academic warnings.

3. Student's affairs Committee

3.1 Introduction

The Committee of Curriculum development aims to develop innovative and reliable curriculum. This is achieved by covering the necessary concepts, knowledge and skills medical laboratories sciences. Additionally, committee is to review, monitor, evaluate and continuously improve the MDL curriculums and study plans to ensure high quality curriculums for all courses are conducted in the department. The committee designs and suggests recommendations and revisions for courses based on the inputs gathered from quality assurance unit, students and faculty.

3.2 Tasks and duties:

- Coordination of department activities and community service, courses, initiatives, national & international days.
- Process academic advising applications.
- Regular meetings and contacts between the students and their academic advisors.
- Arrange visits to the secondary schools to increase the knowledge about the program.
- Encourage the students to join the annual university prizes for extracurricular activities – based competitions.
- Encourage the students to document their extracurricular activities in their skills record.
- Participation of faculties in the activities of community service.

4. Training and Clinical affairs Committee

4.1 Introduction

The Clinical Training and internship committee of MDL department is committed to ensuring the quality and smooth performance of the clinical training program for MDL students to complete the internship year successfully. Additionally, arranging frequent hospital visits for students from different academic levels for diagnostic/research laboratories demonstration in diffent Kingdom hospitals and research centers, and to improve students' communication and practical skills, follow up graduated students.

4.2 Tasks and duties:

- Process internship applications, prepare and issue letters based on the required training sites.
- Create database for interns/graduated students.
- Follow up interns during internship year.
- Coordinating of hospital visits.
- Coordination of training courses to prepare students for internship

- Coordination of training session for SCHS classification exam.
- Update and implement guidelines and policies for the clinical training for internship year approved by the Clinical training units in the CAMS.
- Ensure the quality of the clinical training to meet national and international accreditation standards.
- Organizing periodic meetings to plan and review the clinical training policies and guidelines to improve skills that deliver learning outcomes for students.
- Review and update the clinical training manual for internship year.
- Organizing clinical training program (workshop- training courses) schedule.
- Follow up graduated students' percentage of successfully completed their internship/graduated and conduct further studies or employed.
- Develop quantitative evaluation methods, to ensure quality and outcomes of graduated MDL students.

5. Scientific research & innovation Committee

5.1 Introduction

The scientific Research Unit is to provide a distinctive research environment among the faculty members which helps in developing the skills of innovation, high quality and creative research that positively impacts on the social, educational and healthcare needs of the society.

5.2 Tasks and duties:

- Enhancing the activities of college and developing its capabilities in the field of scientific research.
- Preparing the operational plan for scientific research and emphasizing its implementation mechanisms among the academic departments of college.
- Maximizing the scientific research outputs from the faculty.
- Coordinating with Deanship of Scientific Research, and scientific research, and research centres in in the university for procuring research funds for the faculty.
- Increasing the level of collaborative and interdisciplinary research nationally and internationally.
- Implementation of any directives by the Vice-Dean for graduate studies and scientific research. Follow up graduated students' percentage of successfully completed their internship/graduated and conduct further studies or employed.
- Develop quantitative evaluation methods, to ensure quality and outcomes of graduated MDL students.

6. Human resources & higher Education Committee

6.1 Introduction

The Human Resources & Higher Education Committee is a committee of the MDL department. Its responsibilities towards the selection of qualified faculty & recruitment, training and development and scholarship with all relevant applicable laws. It also advises on the employment arrangements and required allowances/awards & deanship annual prize applications processing.

6.2 Tasks and duties:

- Reviewing the promotion files.
- Announcing vacant academic jobs
- Sorting and interviewing applicants for academic positions.
- Reviewing of applicants for a master's program & conducting interviews.

7. Curriculum & study plan development Committee

7.1 Introduction

The Committee of Curriculum & study plan development aims to develop innovative and reliable curriculum. This is achieved by covering the necessary concepts, knowledge and skills medical laboratories sciences. Additionally, committee is to review, monitor, evaluate and continuously improve the MDL curriculums and study plans to ensure high quality curriculums for all courses are conducted in the department. The committee designs and suggests recommendations and revisions for courses based on the inputs gathered from quality assurance unit, students and faculty.

7.2 Tasks and duties:

- The committee reviews all course specifications, files, content, in order to improve their courses learning outcomes (ILOs).
- The committee requests meeting with other units/committees, if needed.
- The committee gathers current study plans for review.
- Submit a monthly report to the Vice Dean for Educational Affairs

8. Laboratories & equipment Committee

8.1 Introduction

Laboratories & Equipment Committee is responsible for ensuring laboratory facilities at Department of medical laboratories are meets the requirements for teaching and efficient laboratory practices. In MDL department we have five laboratories including: Hematology lab, Histology lab, Biochemistry lab, Anatomy & Physiology, and Microbiology lab.

8.2 Tasks and duties:

- Maintain laboratory and laboratory equipment (daily, weekly, monthly).
- Apply safety requirements.
- Coordination of practical lectures – (practical scheduling for each lab)
- Create records for chemicals and glassware classification.
- Keep the main stock and inventory for consumable and book is constantly updated.
- Order reagents, laboratory teaching and demonstration tools upon faculty members' request.
- Updating relevant laboratories policies and regulations.
- Review and update standard operating procedures for laboratories (SOPs).
- Regular meetings with all members of the committee to ensure proper use of laboratories.
- Prepare a list of laboratory requirements for MDL department annually.
- Keep records of all laboratory documents and report to the Quality & program Committee.

Rights and Duties

A Student's Academic Rights:

1. A university student must be provided with the appropriate study environment and academic climate to enable him/her to obtain a high-quality education in keeping with the university's mission.

2. Student has the right to be provided with the scientific material and knowledge associated with the university curricula in accordance with the university's rules and regulations which govern academic work.

3. Student has the right to maintain and keep total confidentiality and privacy of the information related to him/ her and will disclose or otherwise use the personal information, academic record and grade transcripts only to authorized persons.

4. Student has the right to be notified before any decision is taken against him/her, have his/ her attention drawn in case of any violations, and to be informed in writing of any decision taken and be given the right to object to any decision that runs contrary to his/her academic interest in accordance with the university's rules and regulations.

5. Student has the right to freedom of expression and discussion of the educational issues of interest to him/her, subject to the condition that this be accomplished within the boundaries of appropriate behavior in accordance with the university's rules and regulation.

6. Student has the right to file a grievance before the competent agencies in case of violation of his/her rights.

7. Student has the right to require the faculty members to commit to the hours and dates of the lectures, office hours and break periods and recess between the lectures. The faculty should not cancel or otherwise change the timings of the lectures except in cases of dire need, subject to announcing such change and to giving substitute lectures for the ones which have been canceled or missed and on the proviso that such arrangements should not contravene the student's time and his/ her ability to accommodate the substitute lectures.

8. The student has the right to be informed on how and where to get the university rules and regulations (the university website, the Admission and Registration Deanship, the Students' Affairs Deanship, etc.)

9. Each student has the right to be enrolled in the college or academic division of his/her choice in accordance with the admission and registration controls and conditions established by the university as well as with the constraints of the university's resources and capabilities.

11. A university student has the right to be issued the university's identification card to be used inside and outside the university.

12. A university student has the right to be informed of the orientation day intended to introduce and acquaint him or her with the university colleges and divisions so that he / she may determine which is the most suitable one to enroll in, subject to satisfaction of the admission conditions as may be determined by the responsible agency, namely the Deanship of Admission and Registration.

13. A university student has the right to access the study schedule before commencement of classes for completion of the registration of the courses available in the system in accordance with the terms and conditions of the Deanship of Admission and Registration

15. Deletion or addition of any curriculum or deletion of the entire study semester in accordance with the university calendar issued by the Deanship of Admission and Registration.

16. A university student has the right to access the study curriculum plan before commencement of the study. Such plan will include and provide information on the professor(s) involved in the curriculum, the study curriculum and its objectives and outputs, the time table for execution of the curriculum, methods and procedures of the student's evaluation during the semester, the examinations, the material – related activities, the practical applications of the material, distribution of the skills to be acquired and the knowledge and learning references and sources related to the curriculum.

17. A university student has the right to transfer from one college to another or from one division to another within the university or otherwise migrate from distance to regular learning system or vice versa in accordance with the applicable rules and regulations and the available resources and space in the college.
18. A university student has the right to be awarded the graduation document within the duration prescribed by the university and upon satisfaction of the graduation requirements in accordance with the applicable rules and regulations of the university.
19. A university student has the right to avail of constant communication opportunities with the faculty members in different ways and means, such as email or meetings during office hours etc.
20. A university student has the right to avail of the opportunity for effective scientific discourse and discussion and the freedom to pose questions to the faculty without embarrassment or trepidation while being committed to the ethics of debate and the dictates of public decency and respect.
21. A university student has the right to ensure the confidentiality of the complaint filed against his/her professor.
22. A university student has the right to a sense of security and the right to avoid being exposed to physical harm or health hazards as well as the moral and emotional security so that the student does not feel exposed to moral threats, such as intimidation by penalty, or else exposure to insults, ridicule or sarcasm by academic or administrative entities.
23. A university student has the right to have access to his/ her grades in the study curriculum and the results of periodic and semester tests after correction, to review his / her results in the final exams and to have access to and review his / her answer sheet, if need be, in accordance with the university-approved rules and regulations.
24. A university student has the right to be informed of the warnings, alerts or disqualifications and deprivation from sitting for the final exams and the causes thereof in advance.
25. The examination questions must be derived from the study curriculum and its contents, while paying due attention to the balanced and logical distribution of the grades within this framework.
26. A university student has the right to know the model answers to the questions of the semester tests.
27. A university student has the right to recover all homework submitted during the study semester, whether they are in hard copies, electronic softcopies or other forms.

A Student's Non-academic Rights:

1. A university student has the right to access social care services offered by the university in accordance with the applicable rules and regulations.
2. A university student has the right to access and receive adequate healthcare as provided for in the university rules and regulations, including treatment in hospitals and health centers attached to the university.

3. A university student has the right to participate in the activities offered by the university depending on available resources.

4. A university student has the right to avail of the university services and facilities, such as university housing, library, psychological and social assistance, sports playgrounds, educational activities and functions, restaurants, and car parks etc.). Such utilization will be in accordance with the university's applicable rules and regulations and available resources and facilities.

5. A university student has the right to avail the additional material incentives and rewards as provided for in the statutory regulations, if he / she is a top performer student.

6. A university student has the right to avail financial subsidies or loans after review of his / her financial condition and substantiation of his / her need for such subsidies in accordance with the university' rules and regulations.

7. A university student has the opportunity to attend training courses and programs, academic trips and voluntary activities and operations in a way that should not conflict with his / her academic duties.

9. A university student has the right to secure the appropriate and correct services for his /her needs.

If the student has special needs, he / she must be informed of such services based on available resources.

10. A university student has the right to evaluate the student service rendered to him/her using the questionnaire forms.

11. A university student has the right to access a specific entity in the university to take care of and follow up on his/her rights.

12. A university student has the right to be provided with a complete list of the rules and regulations, including the disciplinary and penalty rules

13. A university student has the right to be formally informed of the mistakes attributed to him/her.

The penalties meted out will be based on the university-approved disciplinary and penalty rules.

The penalties may go as high as final dismissal from the university.

The Student's Duties

1. The student is expected to respect the rules and regulations of the university.

2. The student is required to respect the dignity and safety of the university staff and personnel.

3. The student must present accurate and precise information at the time of registration and meet his/her administrative commitments to the institution.

4. The student must demonstrate good morals and behavior.

5. The student must respect the right to freedom of expression by university staff and personnel as long as within the limits allowed in the university regulations, academic norms and community values in the Kingdom of Saudi Arabia.

6. The student must never plagiarize the work of others.

7. The student must preserve and protect the study locations and devices provided for his / her services in the educational process. He / she must preserve all properties of the university and avoid tampering therewith for destruction and pilferage purposes.

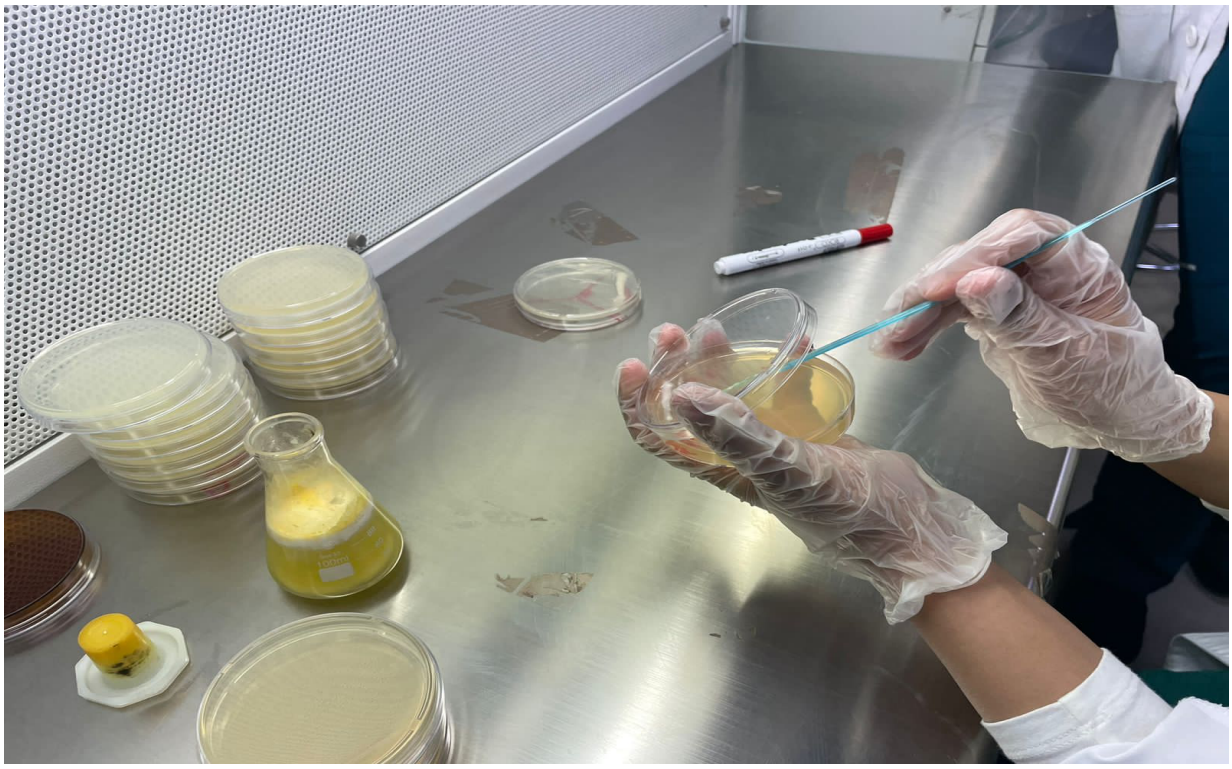
8. The student must respect the university's security rules, public security controls, and maintain the university and its facilities in a clean and tidy state.

MDL Faculty Members

No	Faculty Name	Degree	Specialty	Rank	Nationality
1	Dr. Sahar M. Aldosari	Ph.D	Molecular Genetics	Assistant Professor	Saudi Arabia
2	Dr. Bader Mohammed Alshehri	Ph.D	Molecular Biology - Immunology	Associate Professor	Saudi Arabia
3	Dr. Mohammed Alaidarous	Ph.D.	Biotechnology	Professor	Saudi Arabia
4	Dr. Abdulaziz Abdullah Bin Dukhyil	Ph.D.	Molecular Biology	Associate Professor	Saudi Arabia
5	Dr. Mohammed Alsaweed	Ph.D.	Molecular Biology	Associate Professor	Saudi Arabia
6	Dr. Raid Saleem AlBaradie	Ph.D.	Histology	Professor	Saudi Arabia
7	Dr. Saeed S. Banawas	Ph.D.	Microbiology	Associate Professor	Saudi Arabia
8	Dr. Wael Hamoud Alturaiki	Ph.D.	Molecular Immunology	Associate Professor	Saudi Arabia
9	Dr. Suliman A. Alsagaby	Ph.D.	Molecular Biology	Associate Professor	Saudi Arabia
10	Dr. Fayez Abdullah Alghofaili	Ph.D.	Medical Microbiology	Assistant Professor	Saudi Arabia
11	Dr. Sami G. Almalki	Ph.D.	Cclinical &translational sciences /Stem cells	Assistant Professor	Saudi Arabia
12	Dr. Yahya Awaji Madkhali	Ph.D.	Biomedical sciences/hematology	Assistant Professor	Saudi Arabia
13	Dr. Ayoub Abdulaziz Al Othaim	Ph.D.	Cellular and Molecular Biology	Assistant Professor	Saudi Arabia
14	Dr. Ahmed Abdel-Hadi	Ph.D.	Molecular biology (mycology)	Assistant Professor	Egypt
15	Dr. Manikandan Palanisamy	Ph.D.	Microbiology	Associate Professor	India
16	Dr. Shabir Ahmad Mir	Ph.D.	Proteomics and Molecular Biology	Associate Professor	India
17	Dr. Kamal Shaker Albenasy	Ph.D.	Parasitology	Assistant Professor	Egypt
18	Dr. Hadeel Alyenbaawi	Ph.D.	Medical Genetics	Assistant Professor	Saudi Arabia
19	Dr. Hind Albadrani	Ph.D.	Molecular Medicine	Assistant Professor	Saudi Arabia
20	Dr. Allolo Aldorawish	Ph.D.	Microbiology & immunology /Stem cells	Assistant Professor	Saudi Arabia
21	Dr. Nessrin Ghazi Alabdallat	Ph.D.	Hematology	Professor	Jordon
22	Dr. Randa Mohamed Ibrahim	Ph.D.	Microbiology (Molecular Mycology)	Assistant Professor	Egypt
23	Dr. Johra Khan	Ph.D.	Molecular biology/Biochemistry	Associate Professor	India
24	Dr. Sadaf Jahan	Ph.D.	Microbiology	Assistant Professor	India
25	Ms. Hana Alanazi	M.Sc.	Medical Laboratory Sciences	Lecturer	Saudi Arabia

CHEMISTRY LAB

MAJMAAH MAIN CAMPUS



MICROBIOLOGY LAB

MAJMAAH MAIN CAMPUS

HAEMATOLOGY & HISTOPATHOLOGY LAB

MAJMAAH MAIN CAMPUS

Required Field Experience:

Summary of practical, clinical or internship component required in the program.

Internship is a 12 months comprehensive clinical training program for recent graduates to prepare them for high-quality service in the profession. The graduate shall have completed all academic requirements to qualify for internship program.

The MDL internship components are:

- Hospital & Laboratory Oorientation
- Sample receiving & processing area
- Microbiology & Parasitology
- Clinical biochemistry
- Immunology/Serology/Hematology
- Blood Bank
- Histopathology
- Diagnostic Molecular Laboratory
- Laboratory Management & Quality control

Brief description of field experience activity:

- During internship, the students are expected to learn the following skills:
- Acquire real work environment experience in terms of handling human samples, sophisticated instruments and patient handling.
- Processing of all blood samples and make it ready for required testing procedures.
- Get familiar with laboratory tests and their standard operating procedures.
- Developing the ability to troubleshooting and quality control assessment.
- Develop good communication skills with peers in the hospital laboratory.

- The 5th year of the program, Time allocation and scheduling arrangement Interns are required to work a minimum of 8 hours a day, 5 days a week for 48 weeks, or follow affiliate hospital working hours.

Graduates' employment opportunities

Medical laboratory Sciences play a crucial role in the process of provides data that helps physicians determine the best treatment for the patient. Examine and analyze body fluids, tissues, and cells to identify bacteria, parasites, and other microorganisms. They analyze the chemical constituents of body fluids, crossmatch donor blood for transfusions, and test blood for drug levels to measure the efficacy of particular treatments. MDL also evaluate and interpret laboratory results, integrate data, solve problems, consult with physicians, conduct research, and evaluate new test methods. Graduates of this program are qualified to work as technologist in medical labs in either public or private sector and in a wide range of arenas including.

- Hospital clinical laboratories
- Commercial or reference laboratories
- Public health laboratories
- Pharmaceutical or chemical industries
- Biotechnology companies
- Forensic and law enforcement laboratories
- Research and teaching institutions
- Transplant and blood donor centers
- Fertility clinics

Dr. Sahar ALDosari, PhD

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