DEAN
Youssef G. Comair, M.D., FRCSC

ASSOCIATE DEANS
Zeinat Hijazi, M.B.B.CH, DCH, MRCP, FRCP, MRCPCH, FRCPCH, Medical Education
Jacques E. Mokhbat, M.D., Graduate Medical Education

ASSISTANT DEAN
Sola Bahous, M.D., Ph.D., Clinical Affairs

PROGRAMS
The School of Medicine offers a four-year study program leading to the Medical Doctor (M.D.) degree.

MISSION
The mission of the School of Medicine at LAU is to create a medical academy that will define and shape the character of a “New Physician.”

VISION
While providing talented young men and women with the opportunity to pursue an American-style medical education, the School of Medicine also emphasizes a world-class, basic, and clinical/translational research, particularly targeting the regional health needs. The school aims for regional pre-eminence by adopting strategic objectives that will establish triangular collaborations among regional medical centers, their partners in American medicine, and LAU.

HARVARD MEDICAL INTERNATIONAL
Harvard Medical International (HMI) and LAU have entered into a long-term relationship focused on the development of a state-of-the-art academic medical institution based in Byblos. The school features an innovative American-style curriculum designed to bring the best in medical education to the most pressing health care challenges facing the people of Lebanon and the surrounding region.

LEARNING OBJECTIVES
1. Demonstrate ethical and professional behavior in the practice of medicine;
2. Provide patient-centered care;
3. Employ evidence based practice;
4. Become a life-long learner;
5. Apply critical thinking in healthcare practice;
6. Promote interdisciplinary and inter-professional practice.

The School’s academic program is competency-based and these competencies will be achieved through a four-year medical curriculum. They are delivered under four themes in the pre-clinical years (Med I and Med II) and under five competencies in the clinical years (Med III and Med IV).

PRE-CLINICAL YEARS (MED I AND MED II) THEMES:
1. Basic and Clinical Science Theme
2. Clinical Competence Theme
3. Professional and Behavioral Theme
4. Social Medicine and Public Health Theme

CLINICAL YEARS (MED III AND MED IV) COMPETENCIES:
1. Physician as Scientist
2. Physician as Communicator
3. Physician as Care giver
4. Physician as Advocate
5. Physician as Professional

1. Physician as Scientist:
   a. Possess a solid foundation of scientific and medical knowledge and applies this knowledge to the care of patients and populations.
   The following are behaviors or practices that the student adopts and
applies to demonstrate competence:
- Describes the normal structure and function of the human body;
- Explains pathologic and pathophysiologic processes leading to alterations in normal structure and function of the human body for major causes of illness;
- Describes population based factors that affect disease prevalence, course and treatment;
- Describes patterns of diseases at different levels of acuity: emergency, acute and chronic;
- Discusses social determinants of health and illness;
- Explains principles of pharmacology and major categories of drugs, their actions, interactions, contraindications and clinical uses;
- Explains the principles underlying normal behavior and mental diseases;
- Solves basic clinical problems using knowledge of mechanisms of disease.

b. Continues to seek, access, analyze and apply knowledge to a changing environment. Behaviors that demonstrate competence:
- Contributes new knowledge to the healthcare team;
- Utilizes evidence-based medicine for patient management;
- Seeks appropriate resources for improving quality of care;
- Critically analyzes literature.

2. Physician as Communicator:
Communicates effectively with patients, their families, colleagues and the healthcare team.
Behaviors that demonstrate competence:
- Develops effective patient-physician relationship, showing respect and empathy;
- Listens attentively and elicits appropriate data in history taking;
- Elicits pertinent social, cultural and economic determinants of health;
- Effectively exchanges data both verbally and in writing with members of the health care team;
- Demonstrates ability to use appropriate communication skills in discussing diagnosis and disease management with patients;
- Is an active valued member of the healthcare team;
- Presents patient information clearly, accurately and in a timely fashion;
- Demonstrates ability to use all communication skills both verbally and in writing;
- Involves patient and family in developing healthcare plan;
- Educates patient on illness and care plan;
- Practices coordinated care among members of the healthcare team;
- Cooperates with patients and healthcare professionals from diverse cultural backgrounds.

3. Physician as Care Giver:
a. Practices evidence-based medicine in the care of patients.
Behaviors that demonstrate competence:
- Recognizes life-threatening situations and delivers basic emergency care for such patients within or outside healthcare facilities;
- Performs both complete and focused physical examination;
- Synthesizes data to formulate a differential diagnosis;
- Describes the appropriate use of laboratory and radiologic techniques in identifying health problems;
- Orders (Mock) appropriate diagnostic tests in correct sequence;
- Describes the appropriate use of laboratory and radiologic techniques in identifying health problems;
- Writes patient care and management plan based on scientific principles, evidence based approach and guidelines from scientific societies in a compassionate manner;
- Discusses both pharmacological and non-pharmacological management plans;
- Re-evaluates patient status and management plan;
- Meets all technical skills requirements;
- Writes discharge summary and plan;
- Applies prescription skills to discharge planning and medication reconciliation.

b. Utilizes the full spectrum of health care delivery: acute, chronic, preventive, rehabilitative, public health and social services to optimize individual and population based care. Behaviors that demonstrate competence:
- Seeks care solutions through various forms of health services;
- Describes various levels of care for each patient;
- Describes healthcare delivery systems in Lebanon and other countries;
- Integrates knowledge of social, cultural and behavioral factors as well as preventive measures and cost effective analysis to advance patient well-being.

4. Physician as Advocate:
Advocates for improved health care: access, health outcomes, health promotion and disease prevention, community services. Behaviors that demonstrate competence:
- Identifies social determinants of health;
- Seeks solutions to barriers for access to health care;
- Recognizes the impact of money and industry on the practice of medicine;
- Discusses community-driven plans for health promotion and disease prevention;
- Discusses the clinical encounter from a cross-disciplinary perspective.

5. Physician as Professional:
a. Consistently practices and models ethical and professional behavior. Behaviors that demonstrate competence:
- Acts in the patient’s best interest;
- Demonstrates reliability and responsibility, and performs duties in a timely and dependable manner;
- Follows rules of health care facility and code of conduct;
- Demonstrates respect and application of policies that govern clinical practice in the country;
- Respects patients, family, colleagues, other health care providers and employees;
- Respects rights of patient and family;
- Applies ethical principles to decision making in patient care;
- Educates patient and family on informed consent;
- Describes Institutional Review Board (IRB) process for research.

b. Reflects on practice and ways to improve self, patient safety and quality. Behaviors that demonstrate competence:
- Analyzes personal experience, acknowledges gaps and works on ways to improve them;
- Discusses medical errors and quality improvement opportunities, and participates in solutions to reduce them;
- Writes critical incident reports;
- Demonstrates responsibility for continuous learning and personal growth and development;
- Identifies areas of weakness and educational needs, and develops an improvement plan using appropriate learning resources.

CURRICULUM
The School of Medicine’s curriculum has been adopted in coordination with Harvard Medical International and the International Advisory Council. It embraces systems-based learning for the pre-clinical years, following an introductory “foundation block” during the first three months of Medicine I. The curriculum is distinct from the traditional lecture-based curriculum as it is:
a. Integrated;
   b. Systems-based;
c. Relies on problem solving for learning (Problem-Based Learning);
d. Promotes self-directed learning;
e. Includes early clinical exposure.

Methods of instruction include:
• Lectures;
• Problem-based learning;
• Laboratory work;
• Simulations;
• Tutorials;
• Case studies;
• Self-directed learning;
• Clinical experience with real as well as standardized patients;
• Bed-side teaching.

COURSE DESCRIPTIONS AND STUDY PLAN

MEDICINE I

IMS711: The Foundations of Medicine (13 weeks): This module introduces the medical student to the basic disciplines underlying the practice of medicine. It contains the full dissection of the human body coupled with clinical correlations (anatomy), as well as the basic principles of cell histology, pathology, physiology, biochemistry, pharmacology, genetic medicine, clinical skills, behavioral and ethical medicine, communication skills, evidence-based medicine, social medicine, preventive medicine, biostatistics and public health.

MEDICINE II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Duration</th>
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<tbody>
<tr>
<td>IMS781</td>
<td>Gastrointestinal System</td>
<td>7 weeks</td>
</tr>
<tr>
<td>IMS771</td>
<td>Cardiovascular System</td>
<td>7 weeks</td>
</tr>
<tr>
<td>IMS751</td>
<td>Musculoskeletal System &amp; Dermatology</td>
<td>9 weeks</td>
</tr>
<tr>
<td>IMS791</td>
<td>Neurosciences</td>
<td>11 weeks</td>
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</table>

These modules provide an integrated approach to each of the organ systems of the body delivered according to four themes: (I) Basic and Clinical Science, (II) Clinical Competence, (III) Professional and Behavioral, and (IV) Social Medicine and Public Health.

MEDICINE III AND MEDICINE IV

The third and fourth-year course requirements consist of rotations in specific clinical subspecialties and electives.

MEDICINE III

Students in Medicine III are required to take 8-week clerkships in medicine, surgery, pediatrics, obstetrics and gynecology and 4-week clerkships in psychiatry, primary care and neurology. The rotations will consist of in-patient and ambulatory, clinical and community experiences.

1. Internal Medicine (8 week clerkship);
2. Obstetrics and Gynecology (8 week clerkship);
3. Pediatrics (8 week clerkship);
4. Surgery (8 week clerkship);
5. Neurology (4 week clerkship);
6. Primary Care (4 week clerkship);
7. Psychiatry (4 week clerkship);
8. Longitudinal Course: It is a multidisciplinary course that is delivered once per week to all Med III students as a class.
MEDICINE IV

Medicine IV consists of required rotations, selective rotations and elective rotations. The required rotations will be in the areas of emergency department (4 weeks), intensive care unit (4 weeks), anesthesiology (2 weeks), pathology (2 weeks), otolaryngology (2 weeks), and ophthalmology (2 weeks). The selective rotations include 4 weeks in medicine subspecialties and 4 weeks in surgical subspecialties. Electives (20 weeks) will be offered in areas across the spectrum of medical studies including all specialties and subspecialties, public health and community medicine, whether local or international. Electives will also be offered in research.

1. Emergency Department (4 week clerkship);
2. Intensive Care Unit (4 week clerkship);
3. Anesthesiology (2-week clerkship);
4. Ophthalmology (2-week clerkship);
5. Otolaryngology (2-week clerkship);
6. Pathology (2-week clerkship);
7. Selective in Medicine: It is a 4-week clerkship where the students can choose to rotate in various Internal Medicine specialties. The goals are listed separately for each selective rotation.
8. Selective in Surgery: It is a 4-week clerkship where the students can choose to rotate in various Surgery specialties. The goals are listed separately for each selective rotation.
9. Electives: Students are expected to satisfactorily complete 20 weeks of electives in various medical and surgical specialties; two weeks being the minimum slot for an elective. The electives could be done intramurally, at UMC–RH (main LAU teaching hospital) or at any affiliated hospital, or extramurally (national or international) after the approval of the Dean’s Office.
10. Continuity Experience Clerkship: The Continuity Experience is a longitudinal program designed to introduce a long-term exposure of medical students to an individual patient or family throughout the duration of Med III and Med IV. Selected individuals will be those with chronic diseases or possibly a pregnant woman or newborn.

ACADEMIC POLICIES

The School of Medicine follows most of the university-wide policies. However, the school has a specific grading system and academic policies that are available in the School of Medicine Student Handbook.

ADMISSION REQUIREMENTS

Admission to the LAU School of Medicine is based on a composite evaluation of the following:

1. Overall grade average and GPA score on graduation (bachelor’s degree in science or art (B.S./B.A.);
2. Overall average on the required core courses in science (34 credits) [see Requirements below];
3. Scores on the MCAT examination;
4. Performance on the admission interview;
5. Lebanese Baccalaureate Diploma (all sections) or its equivalent;
6. Admission interview;
7. English language requirement.

Required core courses in science for pre-medical students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO201</td>
<td>General Biology I</td>
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<tr>
<td>BIO202</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM201</td>
<td>Chemical Principles</td>
<td>3</td>
</tr>
<tr>
<td>BIO321</td>
<td>Genetics</td>
<td>3</td>
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<tr>
<td>BCH301</td>
<td>Biochemistry</td>
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</tr>
<tr>
<td>CHM311</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM312</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
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CHM313  Organic Chemistry I Lab  1
CHM314  Organic Chemistry II Lab  1
PHY301  Classical Physics for Life Sciences  1
PHY305  Modern Physics for Life Sciences  3
PHY306  Modern Physics for Life Sciences Lab  1

Strongly recommended courses for pre-medical students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH200</td>
<td>Mathematics for Life Sciences</td>
<td>3</td>
</tr>
<tr>
<td>STA205</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>BIO343</td>
<td>Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIO344</td>
<td>Anatomy and Physiology Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIO401</td>
<td>Developmental Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO311</td>
<td>Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIO312</td>
<td>Microbiology Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIO420</td>
<td>Virology and Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BIO322</td>
<td>Genetics Lab</td>
<td>1</td>
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</tbody>
</table>

Recommended courses for pre-medical students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHM202</td>
<td>Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIO410</td>
<td>Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BIO331</td>
<td>Ecology</td>
<td>4</td>
</tr>
</tbody>
</table>

GRADUATION REQUIREMENTS:
In order to be eligible for graduation, a student must:

1. Pass all medicine years within the respected time limit set for the M.D. program at LAU (details of criteria for yearly academic promotion are presented in the School of Medicine Academic Policies);
2. Demonstrate satisfactory completion of all assigned remedial work;
3. Demonstrate compliance with policies and code of conduct;
4. Obtain clearance for graduation from the Library, Registrar’s Office, Athletics Department, dorms and clinical facilities.