www.sgub.edu.lb





Saint George University of Beirut

جامعة القديس جاورجيوس في بيروت

## A Journey For Life

ACADEMIC YEAR 2021-2022

# Welcome to SGUB

Saint George University of Beirut (SGUB) is an institution of higher education of the Greek Orthodox Archdiocese of Beirut and dependencies, licensed in June 2018 by the Lebanese Ministry of Education and Higher Education.

SGUB incorporates a progressive and advanced educational model that adapts to today's challenges in Lebanon, the region, and the world. Nestled in the heart of Beirut, adjacent to Saint George Hospital University Medical Center, SGUB is a hub for students to grow, learn from experts, and become active citizens in their communities, through its integrated campus experiences and established digital platforms.

English is the major language of instruction at SGUB.

#### **Mission**

Saint George University of Beirut is a not-for-profit, higher learning institution that builds on over 150 years of experience in education, healthcare, and community service. It pursues academic excellence, encourages civic engagement and upholds the values of integrity, solidarity, and respect for diversity.

In developing general skills and professional competencies in several disciplines, directly associated with healthcare or potentially relevant to it, SGUB privileges innovative approaches to learning, practice, and research.





#### **Table of Content**

In the Words of our President	4
Our Board of Trustees	5
Partners and Affiliations	6
Healthcare: Present and Future	7
Faculties	8
Faculty of Arts & Sciences	10
Faculty of Medicine	11
Faculty of Nursing	12
Faculty of Business	13
Faculty of Arts & Sciences 2021-2022 Academic Year	15
Program Administrators	16
Educational Paradigm	17
Biology	18
Information Technology	20
Keynote Seminar Series	22
Apply to SGUB	23
Financial Support	23

## In the Words of our President



Dr. Tarek Mitri

To be sure, the many hardships, uncertainties and fears which befell Lebanon will put all our institutions to test, for many years to come. Excellence in education, which has characterized our country for many decades, might be severely periled. However, and against all odds, there is a remarkable energy, rooted in hope, that infuses the efforts of many in various universities and schools, and among educators.

In this context, Saint George University of Beirut (SGUB) aspires to bear witness, not only to an ambition of excellence, but also to the strong determination and commitment of men and women whose creative, while realistic, efforts have been relentless.

For the Greek Orthodox Archdiocese of Beirut, under the inspiring leadership of HE Metropolitan Elias (Audi), Saint George University of Beirut has deep historical roots. In fact, it builds on a hundred and fifty years of active and uninterrupted engagement in education, medical services, and social work. It is meant to be an institution called to hold together faithfulness to the values that inspired this tradition and responsiveness to the needs of society in Beirut, Lebanon and beyond.

The University is a not-for-profit institution committed to accepting and supporting students according to their qualifications and needs, without any discrimination. It provides higher education of the highest quality, incorporating best-practices in other universities in innovative, unique, and dynamic educational paradigms that align with the evolving needs of Lebanon and the world. The commitment of the University to excellence is exemplified by the agreement with Mayo Clinic. In its preparatory work towards the establishment of the Faculty of Medicine, SGUB is benefiting from the advice and support of this leading institution, prominent in integrating healthcare, medical education and scientific research.

Naturally, our nascent university will not be an academic institution serving a particular segment in society, nor does it define itself as an imitator or competitor to any existing university. While not favoring any particular group and ensuring openness to a diverse student population, SGUB will not pursue an accelerated growth and a massive enrollment.

SGUB will emphasize the importance of enabling students to acquire general, soft, and specialized knowledge, skills, and attributes their chosen disciplines. Students will also be prepared, from the start, to get acquainted with the evolving labor markets in Lebanon and abroad. They will be receiving, early in their studies, a practical training and will be encouraged, through an innovative pedagogy, to become "lifelong learners".

The University is cognizant of the fact that being founded under the present circumstances, within the current economic and social conditions prevailing in Lebanon, it will have to address responsibly the problems arising from the difficulty of having prospective students cover their tuition fees. Therefore, Saint George University of Beirut adopts an ambitious and flexible support mechanisms that will allow qualified and motivated students with limited financial means to access and continue university education.

The University also builds on the experience of Saint George Hospital University Medical Center in medical education, post-graduate specialization programs and research. In addition, the Faculty of Medicine is called to be attentive, as one of its distinctive features, to the unfulfilled needs of Lebanon and the Arab world in the wider realm of health care, notwithstanding the large number of graduates from medical Faculties.

The particular focus of SGUB on health care sector extends beyond the Faculties of Medicine and Nursing. It concerns, though indirectly, other fields of education. Various specialties will have to develop close and mutually enriching relations in view of a greater multidisciplinarity.

Undoubtedly, there are people who see the founding of the Saint George University of Beirut today as an adventurous journey. Suffice to say that the founder of the University, and the Chairman of its Board of Trustees, His Eminence Metropolitan Elias, as well as the members of the Board of Trustees, a large group of friends and the faculty and staff that I serve as President, have a different viewpoint. They look at it, first and foremost, as a noble cause and a promising opportunity for the young people and for Lebanon.



#### **Our Board of Trustees**

#### Chairman

His Eminence Metropolitan Elias Audi

#### Members

Dr. Fadi Attiyeh H.E. M.P. Elias Bou Saab H.E. Judge Ziad Chbib H.E. Ambassador Antoine Chedid H.E. Me Amal Haddad H.E. Mr. Ghassan Hasbani Dr. Huda Abu-Saad Huijer H.E. Mr. Farid Makari H.E. M.P. Nazih Najem Dr. Layla Nimah Mr. Joe Saddi Mr. Wehbe Tamari

## Partners and Affiliations

Saint George University of Beirut's new medical school curriculum is being developed in collaboration with Mayo Clinic College of Medicine and Science. With aspirations to replicate Mayo Clinic's three-shield healthcare model that integrates patient care, education, and research, SGUB intends to leverage Mayo Clinic College of Medicine and Science's expertise to help prepare SGUB Faculty of Medicine students for careers in clinical practice, scientific research, and medical education.

The philosophy of the Mayo Clinic College of Medicine and Science is to engage students in team-based, evidence-based, and patientfocused care. Hands-on learning, and the acquisition of clinical competencies and skills begin in the first year of medical studies.

These skills are markedly enhanced by technology transfer, research, and innovation in educational methodology that create a studentfocused environment of excellence within Saint George Hospital University Medical Center, the oldest and one of the premier medical centers that was founded in 1878 in Beirut.

## Healthcare: Present and Future

Healthcare has grown from one doctor who is dedicated to the health of individuals to groups of doctors collaborating in centers and hospitals who manage the wellbeing of communities. The rapid blossoming of digital technologies is instigating another evolution in healthcare. While doctors, nurses, and other healthcare professionals remain central managers of health, it is now clear that there is an essential requirement for additional *modus operandi*, for example:

- Instituting information technology healthcare platforms for a multitude of purposes, including documentation, management, and analysis
- Collecting and analyzing large collections of data to predict trends and establish new treatments and remedies
- Designing technologies that track the health and wellbeing of individuals
- Developing and implementing cybersecurity platforms, like blockchain, that protect data privacy
- Elaborating educational and communication systems that provide informed, comprehensible, and reliable information to patients and communities

The future of healthcare is one of integration of digital platforms with human compassion, of treating patients with developing better remedies, and of helping individuals with educating communities. The programs at SGUB, building on years of experiences in healthcare and education, are dedicated to the realization of this future.



## Four Faculties One Vision

Faculty of Arts & Sciences Faculty of Medicine Faculty of Nursing Faculty of Business





## These faculties are united in their shared core values of:

Providing solid, and relevant curricula in each discipline

Establishing pathways for multi-disciplinary foundations that expand skills and career options

Incorporating practical and real-world experiences to contextualize learning and facilitate networking with industries/graduate programs

Systematically utilizing pedagogical methods that promote student participation and foster lifelong learning

Nurturing intangible skills, including communication and presentation, that are crucial for post-graduate careers

Actively demonstrating the importance and strength of ethical behavior, teamwork, and kindness



#### Faculty of Arts & Sciences 2021-2022 Academic Year

The Faculty of Arts and Sciences prepares students for their post-graduate careers as humane innovators and societal mentors. It is a community of educators, administrators, and students who share the passion for personal and professional growth through discovery and cooperation.

The learning paradigm in the Faculty of Arts and Sciences revolves around student engagement, both inside and outside the classroom. Serving as an entryway to eminent post-graduate careers, the Faculty of Arts and Sciences incorporates real-world experiences through functional partnerships with various entities, particularly in the healthcare sector. Through its continuously improving curricular and pedagogical approaches to education, it lays the foundation for independent seekers of knowledge who habitually apply critical thinking skills while remaining committed to the central values of honesty, respect, and empathy.



### **Faculty of Medicine**

#### 2022-2023 Academic Year

The Faculty of Medicine offers a four-year program leading to the MD degree, and post-graduate medical education (PGME) residency and fellowship programs at Saint George Hospital University Medical Center (SGHUMC); students will be involved in research in all programs.

The state-of-the-art programs are carefully designed in collaboration with top-ranked and renowned faculties of medicine in the USA. All programs are compliant with the highest international requirements and standards, and the new curriculum that relies on advanced educational technologies is based predominantly on interactive flipped teaching methods that incorporate didactic and blended online material. The curriculum, as of Med I, exposes the students to hands-on clinical experiences through interactions with patients, actors, cadavers, artificial simulations and community healthcare. The Faculty prepares its students to meet the growing needs of healthcare in the future through the establishment of life-long, self-learning skills.

SGUB Prospectus 2021 - 11

## **Faculty of Nursing**

#### 2022-2023 Academic Year

The shortage of nurses in Lebanon and the region and the global shortages in nursing faculty and in practicing nurses has led the profession to significant transformations, in light of rapid evolutions in technology, models of healthcare delivery, diverse patient/client population, and the shift toward more patient-centered care. The need for training more nurses is undeniable and the adoption of creative methods is vital.

Saint George university of Beirut will strive to be an innovative university in nursing education for Lebanon and the region. Its Faculty of Nursing main features will be: community-based nursing education, interprofessional education, focus on simulation in training, partnership with the Faculty of Medicine and with the Nursing Services of Saint George University Hospital Medical Center.





#### Faculty of Business Coming Soon

The SGUB Business Administration degree provides versatility that can be effectively used for acquiring quality employment or pursuing a Master's degree in Business Administration (M.B.A.). The undergraduate program offers students an internationally recognized education in fundamental and innovative business practices.

The Business Administration program at SGUB has a diversified curriculum. The core business classes, besides focusing on profound business knowledge, systematically develop competencies such as communication skills, presentation skills, flexibility, and tenacity. The program also includes several emphases, for example in Health Management, Digital Transformation and Change Management, and Entrepreneurship and Creativity.



14 - SGUB Prospectus 2021

# Faculty of Arts & Sciences 2021-2022 Academic Year

The healthcare industry, from medical practitioners to Information Technology support structures, is projected to significantly expand over the next few years. This expansion will include innovations in the delivery of healthcare at personal and population events, as has been highlighted by the global response to the COVID-19 pandemic.

The Faculty of Arts and Sciences is launching its first two programs, one in Biology and the other in Information Technology, both united in their emphasis on the present and emerging career opportunities in the healthcare sector. Graduates of these two programs will possess, in addition to foundational knowledge in each discipline, a focused expertise on healthcare that is the doorway to careers in this sector, including:

- Continuing studies in medical schools to become medical doctors
- Continuing studies in graduate schools to become researchers and/ or academicians
- Positions in healthcare facilities, for example hospitals, clinics, and life sciences manufacturers and suppliers
- Positions in research facilities, for example hospitals, universities, and biopharmaceutical companies
- Becoming entrepreneurs or work in a wide range of businesses and industries.

## **Program Administrators**

#### **Professor Hanna Fares**

Dean of the Faculty of Arts and Sciences and Chair of the Department of Biology

PhD in Biology - University of North Carolina, Chapel Hill, USA

Postdoctoral Scientist - Columbia University, New York, USA

Professor and Acting Chair - Department of Molecular and Cellular Biology, University of Arizona, Tucson, USA



#### **Professor Marcel Karam** Chair of the Department of Information Technology

PhD in Computer Science - Dalhousie University, Nova Scotia, Canada

Researcher - TJ Watson, IBM, New York, USA

Associate Professor - Department of Computer Science, American University of Beirut, Beirut, Lebanon

Professor, Department Head, and Acting Director of Office of Quality Assurance - Kuwait College of Science and Technology, Al Asimah, Kuwait

Associate Dean for Accreditation, and Executive Consultant to the President - Ta'if University, Ta'if, KSA



## Faculty of Arts & Sciences **Educational Paradigm**

#### Collaboration with the Faculty of Medicine

Engaging students in formative experiences at Saint George Hospital University Medical Center

#### **Emphasis on Healthcare**

Providing students with expanded career paths

#### Career Focus

#### **Outcome-Based Learning**

Developing competencies of students that are essential for careers, including communication and problem-solving skills

#### Student Engagement

Foster student participation inside and outside classrooms to develop leadership and lifelong self-learning skills

#### Practical Experiences

Engaging students in real-world projects that serve as an entryway to eventual careers

#### **Biology** Undergraduate Major Degree

The Department of Biology offers a Bachelor of Science program that educates students on life processes that span molecular, cellular, system, organismal, and population levels. Several career paths are available to graduates, including medicine, academic or biotechnology research, education, and entrepreneurship.

The curriculum of the Department of Biology revolves around a "premedical" focus that prepares students for continuing studies at local and international medical schools. In addition, the flexible curriculum provides students with opportunities to gain central skills in other disciplines; these skills expand the career choices of students.

The educational paradigm of the Department of Biology promotes student-initiated learning to develop lifelong seekers of knowledge and understanding; this paradigm also encourages cooperative endeavors that enhance all participants, coupled with practical experiences that provide early connections to chosen careers.

The following structured programs are offered:

Healthcare – Emphasis Information Technology – Minor

#### Graduates of the Biology program will have the ability to:

- Demonstrate an understanding of fundamental biological principles, including key concepts such as evolution, cellular organization and function, transmission and expression of biological information, and structure/function of biological systems and organisms.
- Analyze biological data and draw informed conclusions.
- Generate plausible biological models based on evidence and cognizance.
- Integrate knowledge from different STEM fields and sub-disciplines.
- Communicate, orally and in writing, biological concepts to targeted audiences coherently and concisely.
- Acquire, organize, and interpret information.
- Engage in ethical collaborative behavior to collectively learn, analyze information, and/or accomplish tasks.
- Demonstrate an understanding of the cultural and humane aspects of healthcare (Healthcare Track).
- Demonstrate an understanding of fundamentals of human anatomy and physiology (Healthcare Track).

#### Curricula

3-Year sample plan - Biology (Emphasis in Healthcare)

YEAR 1 - FALL			
COURSE CODE	COURSE TITLE		CREDITS
ARAB 201	Academic Arabic		3
ENGL 201	Academic English I		3
BIOL 201	General Biology and Evolution		4
MATH 201	Discrete Math		3
CHEM 201	General Chemistry		4
		TOTAL	17

YEAR 1 - SPRING			
COURSE CODE	COURSE TITLE		CREDITS
ENGL 202	Academic English II		3
PHYS 201	Physics I		3
CHEM 210	Organic Chemistry		4
BIOL 310	Molecular Genetics and Genomics		4
MATH 210	Calculus I		3
		TOTAL	17

YEAR 2 - FALL			
COURSE CODE	COURSE TITLE		CREDITS
PSYC 201	Introduction to Psychology		3
BIOL 320	Cell Biology and Development		4
CHEM 320	Chemistry Laboratory		2
PHYS 202	Physics II		3
CHUM 300	General Anthropology		3
		TOTAL	15

YEAR 2 - SPRING			
COURSE CODE	COURSE TITLE		CREDITS
SOCI 201	Introduction to Sociology		3
BIOL 311	Molecular Genetics Laboratory		2
BIOL 210	Biochemistry		3
PHYS 310	Physics Laboratory		2
BIOL 321	Functional Morphology		3
BIOL 330	Epistemology of Biomedical Sciences		2
BIOL 340	Medicine and Community (Internship) I		2
		TOTAL	17

YEAR 3 - FALL			
COURSE CODE	COURSE TITLE		CREDITS
BIOL 422	Cellular and Molecular Neurobiology		3
STAT 202	Probability & Statistics		3
CHUM 201	Cultures and Humanities Exploration I		3
COMM 344	Communication & Presentation Skills		3
BIOL 440	Medicine and Community (Internship) II		3
		TOTAL	15

YEAR 3 - SPRING			
COURSE CODE	COURSE TITLE		CREDITS
BIOL 420	Principles of Microbiology		3
BIOL 421	Mechanisms of Immunology		3
CHUM 202	Cultures and Humanities Exploration II		3
BIOL 430	BioEthics		2
BIOL 431	History of Medical Thought		3
COMM 346	Interpersonal Arabic Communication		3
		TOTAL	17

#### Information Technology Undergraduate Major Degree

The ABET-compliant Bachelor of Science in Information Technology program offers a strong foundation in the evolving discipline of Information Technology with a focus on cybersecurity. The Emphasis in Health Informatics and Minor in Biology tracks provide exciting career options in general information technology and a competitive niche in the healthcare sector.

Our active, hands-on teaching and learning system engages students through project-based and innovative experiences that solve real-life problems, thus preparing graduates for complex professional roles in a variety of organizations and industries. Indeed, the Department is developing interdisciplinary collaborations with the SGUB Faculty of Medicine, industry, and government agencies to prepare students to become innovators, entrepreneurs, and leaders of the future.

SGUB's Information Technology program adopts the high-quality standards set by the international Information Technology profession and is committed to continuously improve to maintain its excellence in a constantly evolving world. The Information Technology program currently includes training in essential and exciting topics, such as: Information Technology liability, compliance, and risk management; networks and cybersecurity; Information Technology entrepreneurship and management; networking and communications; software development; system and network administration; databases modeling and databanks programming; and enterprise cloud systems.

The following structured programs are offered:

Health Informatics – Emphasis Biology – Minor

#### Graduates of the Information Technology program will have the ability to:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and risks and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.
- Understand how cybersecurity issues affect decision in IT design and implementations and recognize and deal with the risks.
- Understand how health informatics digital data, information, and knowledge are generated and managed for specific stakeholders and intended uses like health policy and planning (Health Informatics Track).
- Understand and communicate effectively the uses of core health informatics concepts, tools and methods (Health Informatics Track).
- Evaluate approaches to information systems and information technology that support contemporary healthcare in Lebanon and internationally (Health Informatics Track).

#### Curricula

3-Year sample plan - Information Technology (Emphasis in Health informatics)

YEAR 1 - FALL			
COURSE CODE	COURSE TITLE		CREDITS
ENGL 201	Academic English I		3
ITEC 280	Requirements Engineering		4
ITEC 201	Fundamentals of Programming I		4
MATH 201	Discrete Math		3
BIOL 202	Multi-Disciplinary Science Foundations		3
		TOTAL	17

YEAR 1 - SPRING			
COURSE CODE	COURSE TITLE		CREDITS
ENGL 202	Academic English II		3
ITEC 299	IT Liability, Compliance and Risk Manageme	ent	3
ITEC 202	Fundamentals of Programming II		4
STAT 207	Statistics for IT		3
BUSI 201	General Business Principles		3
		TOTAL	16

YEAR 2 - FALL			
COURSE CODE	COURSE TITLE		CREDITS
CHUM 201	Cultures and Humanities Exploration I		3
ITEC 301	Web Programming		3
ITEC 330	Introduction to Networks and Cybersecurity		3
ITEC 350	Databases Modeling and Practices		3
BIOL 220	Contemporary Healthcare Issues		3
		TOTAL	15

YEAR 3 - FALL			
COURSE CODE	COURSE TITLE		CREDITS
ITEC 401	Enterprise Cloud Systems		3
ITEC 491	IT Project Management		3
COMM 344	Communication & Presentation Skills		3
ITEC 460	Human Computer Interaction		3
ITEC 471	Methods & Tools in Health Informatics		3
		TOTAL	15

YEAR 2 - SPRING			
COURSE CODE	COURSE TITLE		CREDITS
ITEC 340	Operating Systems and Administration		3
ITEC 380	Systems Analysis and Design		3
ITEC 331	Fundamentals of Network Administration		3
ARAB 201	Academic Arabic		3
ITEC 470	Basics of Clinical Digital Health		3
		TOTAL	15

YEAR 3 - SPRING			
COURSE CODE	COURSE TITLE		CREDITS
ITEC 499	IT Major Project		3
ITEC 451	Design and Programming of Databanks		3
CHUM 202	Cultures and Humanities Exploration II		3
ITEC 472	Data and Knowledge in Health		3
ITEC 473	Mobile Health and Internet of Things		3
ITEC 492	Information Technology Practicum		1
		TOTAL	16

## Keynote Seminar Series

The Faculty of Arts and Sciences includes in its curriculum seminar series that enable students to learn from, and network with, regional and international renowned keynote speakers.

The first seminar series, entitled "Culture, Technology, and Society", provides SGUB students and the community with a unique opportunity to learn about different societal issues. This planned vibrant intellectual environment promotes knowledge transfer and serves as a catalyst for engagement and collaboration.

The first theme in this seminar series that is scheduled for the 2021-2022 Academic Year, "Frontiers in Healthcare and Information Technology", focuses on issues, careers, and innovations related to Healthcare and Information Technology.

# Apply to SGUB

SGUB admits students based on their qualifications, irrespective of social, cultural, racial, religious, or financial considerations.

SGUB takes into consideration several factors for admission, including secondary school completion, school records, scholastic aptitude and language test scores, and life experiences. SGUB accepts applications from local and international students.

Please apply at www.sgub.edu.lb

## **Financial Support**

As a service to the community and society, the goal of SGUB is to ensure that all students can afford a premier education at SGUB. SGUB offers individually tailored support plans to undergraduate students with financial constraints, regardless of religion, gender, or nationality.



T: +961 1 577055 Youssef Sursock Street – Rmeil, Beirut P.O. BOX: 16-5146 – Ashrafieh, Lebanon Email: info@sgub.edu.lb



www.sgub.edu.lb