



BSc Pharmacy

FACULTY OF MEDICAL SCIENCES

School of Pharmacy

Duration of Study

Six (6) semesters. Part Time only.

General Requirements

Applicants for admission to this course of study must be Registered Pharmacists and holders of a diploma/certificate/associate degree in Pharmacy.

About the Programme

This is a part-time programme, which builds on the student's knowledge of the pharmacy profession as would have been gained by prior training and working experience. The curriculum provides the student with the knowledge, skills, abilities, attitudes and values that, in composite, relate to the professional competencies and outcome expectations of the contemporary pharmacy profession.

The Programme is open to persons who are residents of any of the following sixteen Caribbean countries: Anguilla, Antigua and Barbuda, the Bahamas, Barbados, Belize, the British Virgin Islands, the Cayman Islands, Dominica, Grenada, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago and the Turks and Caicos Islands. **Interested applicants who reside outside of this region are required to contact the Director of the School of Pharmacy before submitting their application.**

For Further Information

The Secretary (Mixed-Mode Programme)

Department of Creative & Festival Arts
The School of Pharmacy
Faculty of Medical Sciences
Eric Williams Medical Sciences Complex
Champs Fleurs, Trinidad and Tobago
Telephone: **1 (868) 645 2640 extension 5005**
E-mail: mmpharmacy@sta.uwi.edu
Website: [School of Pharmacy](#)

Application Procedure

Visit <http://sta.uwi.edu/admissions/> for [instructions](#) on how to [apply online](#) (free) or [on paper](#) (application fee applies).

APPLICATION DEADLINE: April 30, 2012

For a full list of programmes available at the UWI St. Augustine, download a copy of our [Undergraduate Prospectus](#).



Bachelor of Science (Pharmacy) Mixed-Mode Programme

(Upgrade for Professionals)

FACT SHEET

PROGRAMME BEGINS: September 2012.

LOCATION OF PROGRAMME: Online and at the School of Pharmacy, Faculty of Medical Sciences, The University of the West Indies, St. Augustine Campus.

TARGET GROUP: Persons who are holders of a Diploma/Certificate/Associate Degree in Pharmacy and who are registered pharmacists. The Programme is open to persons who are residents of any of the following sixteen Caribbean countries: Anguilla, Antigua and Barbuda, the Bahamas, Barbados, Belize, the British Virgin Islands, the Cayman Islands, Dominica, Grenada, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago and the Turks and Caicos Islands. Interested applicants who reside outside of this region are required to contact the Director of the School of Pharmacy before submitting their application.

DURATION OF PROGRAMME: The programme extends over a minimum of 6 or a maximum of 12 semesters. A total of **ninety four credits** will be required for the award of the B.Sc. Pharmacy degree.

PROGRAMME DESCRIPTION:

This is a part-time programme, which builds on the student's knowledge of the pharmacy profession as would have been gained by prior training and working experience. The curriculum provides the student with the knowledge, skills, abilities, attitudes and values that, in composite, relate to the professional competencies and outcome expectations of the contemporary pharmacy profession.

PROGRAMME DELIVERY METHOD

- The programme will be delivered by mixed mode. Module 1 will be totally online while module 2 will be primarily online with practical/laboratory classes conducted during a **2 week residential period in June/July** at the School of Pharmacy. Module 3 will involve clinical instruction that will be conducted at approved practicum sites throughout the Caribbean.
- In a mixed-mode programme communication between the instructor and the learner is non-contiguous, but interactive, employing various media (e.g. print, audio, video) and various delivery methods (e.g. audio, video, computer conferencing and e-mail), rather than (but sometimes including) face-to-face methods. There are two types of delivery methods; asynchronous delivery requiring interaction and communications between participants to happen at different times, and synchronous communications requiring interaction and communications to happen at the same time. The mixed mode teaching delivery method allows students to organise their time to better fit in with their personal and employment commitments. Students can achieve their academic goals on a flexible schedule.



- Courses have both a Course Coordinator and a number of e-Tutors. The Course Coordinator is the course manager, lead instructor and academic guide for the course. They are responsible for customizing the course and managing the e-Tutors assigned to the course.

Courses will be divided into groups of approximately 20 learners. Each group will be assigned an e-Tutor to facilitate the interactions in the group, to mark assignments and to provide feedback to learners. The specific duties of the e-Tutor include:

1. Guide the learning experience of all students and act as a resource for learners as they move through the course
2. Where required, make available additional material to enhance the learning experience of the students
3. Respond to all student queries in the Tutor-Student Exchange forum. Where necessary, access information from the appropriate source in order to address the matter raised
4. Provide guidance on all learning activities
5. Regularly communicate with individual students via e-mail to counsel, guide, advise and motivate them
6. Regularly contribute to all discussions and provide appropriate feedback to learners.

Your e-Tutor and Coordinator should be viewed as persons who are there to facilitate your learning and assist you to succeed. Do not be afraid to ask them questions. If you realize you want to learn more about a specific concept or topic then feel free to ask your facilitator for additional resources.

If you are struggling with a concept or idea, then share your concerns with your e-Tutor. He or she is there to help you master these concepts. If you think others in the course would have similar questions, then post your query in the appropriate discussion area.

- The programme is unlike the traditional classroom experience. The student must be motivated and able to manage their own learning experiences. They must learn to virtually network with their peers and supporting faculty members.



PROGRAMME STRUCTURE/CONTENT:

The programme is divided into **three (3) modules** as outlined below:

1. This module consists of courses necessary for developing critical knowledge in areas basic to pharmacy science:
 - **Integrated Basic Health Sciences** (*will introduce students to concepts in Anatomy, Physiology, Biochemistry, Microbiology, Immunology, General Pathology and Community Health - that are basic to understanding the normal functioning of the body, pathophysiology of diseases and to aspects of public health, primary care and epidemiology of diseases*);
 - **Pharmacology and Medicinal Chemistry** (*will provide the foundation of knowledge about the mechanisms/actions, uses and side effects; whilst assisting students in understanding drug design, structure-activity relationships and interactions of commonly used drugs*);
 - **Communication Skills for Health Personnel** (*will introduce students to enabling strategies to communicate effectively as individuals in public, small group and face-to-face interactions with persons seeking health care*);

2. Courses in Module 2 are focused on developing the necessary skills and knowledge to evaluate patient data, scientific literature and pharmaceutical products and to optimise drug utilisation for therapeutic and diagnostic purposes:
 - **Uses and Evaluation of Scientific Literature** (*will introduce students to Biostatistics, Research Methodology, Drug Information/Literature Evaluation, and presentation of selected topics in Pharmacy Seminars.*)
 - **Pharmacy Practice** (*students will learn the technical skills involved in compounding products, adherence to good manufacturing practice, to demonstrate understanding of considerations necessary to assure pharmaceutical product quality*)
 - **Biopharmaceutics, New Drug Delivery Systems & Devices** (*students will be provided with an understanding of the relationship between physical, chemical and biological principles as they apply to pharmacokinetics and pharmacodynamics*)
 - **Applied Therapeutics** (*students will learn about the clinical manifestations of disease states and acquire the skill required to ensure the most effective use of drugs as therapeutic tools*)
 - **Pharmacokinetics** (*students will gain an understanding of the time-course of drugs and metabolites in the body and the potential applications of this to common clinical problems*)
 - **Complementary/Alternative Medicine and Non-prescription Drugs** (*students will learn the social, scientific and legal foundations for the alleviation of symptoms of disease with or without the advice of a physician*)

3. Module 3 comprises
 - **Pharmacy Administration** introduces students to pharmacy practice environment and professional issues that include the application of marketing principles of products, pricing and promotion, inventory control and human resource management. Also included is budget preparation, financial forecasting and risk management in pharmaceutical care.
 - **Pharmacy Practice Clerkship (Experiential Program)** provides students with opportunities to develop essential pharmacy practice skills in various settings under



the guidance of qualified pharmacy practitioners (preceptors); and is designed to allow students to practice pharmaceutical care in collaboration with physicians, nurses and other health care providers on patient care units, through the use of communication, medication information, care planning and pharmacy management skills.

- **Elective Courses:** Two (2) electives are chosen from among the following, that will allow students to pursue individual interests:
 - **Research Project** (*provides a basic level of training in systematic investigation of a topic of interest to the student. It provides an opportunity to learn about research methods, gain skill in writing a research proposal in an appropriate format, skill in literature survey, experimental design, data collection/ organisation /interpretation and presentation.*)
 - **[Community] Pharmacy Practice Management** (*introduces students to hospital pharmacy management and to the services frequently associated with a hospital pharmacy – procurement, storage, compounding, manufacturing, packaging, dispensing, distribution and monitoring of medications and also includes safe and appropriate use of drugs within the framework of pharmaceutical care.*)
 - **Clinical Toxicology** (*students learn how changes in vital signs help in the diagnosis of poisoned patients and explore selected key concepts and topics in the management of acute toxicoses of plant, animal, natural and man-made origins that affect the cardiovascular, renal, hepatic, nervous, reproductive system and those that affect miscellaneous systems.*)
 - **Pharmacoeconomics** (*attempts to identify measure, evaluate and improve the effectiveness of healthcare and control the cost of inappropriate care. The student will understand both the direct and indirect costs and benefits of therapeutic options borne by patients, their families and employers.*)

METHOD OF ASSESSMENT

Courses are generally assessed on the basis of a combination of in-course and final/end of semester examinations. For some courses, in addition to assignments, you might have a mid-semester test for the in-course assessment. Each course also has a final/end of the semester examination at a designated examination centre (for example, an Open Campus site) in your country. Some courses may have an alternative to the final examination, such as a major project/research report.

Students who reside in countries other than the 16 listed, and who are therefore unable to write examinations at an Open Campus site, may be accommodated at a proctored site in their country of residence. These arrangements must be formally approved prior to registration for the programme. To do this you must write to the Senior Assistant Registrar, Examinations, St. Augustine Campus, **through** the Director, School of Pharmacy, Faculty of Medical Sciences. **You will be required to pay an additional fee for this service.**

EXAMINATIONS

In-course assignments are submitted to e-tutors by uploading on mylearning. “mylearning” is the St. Augustine Campus’ online learning environment. Final/end of the semester written examinations are scheduled for the morning, afternoon, or the evenings



and are two or three hours in length. Candidates in other jurisdictions should be aware that in some cases, examinations may be scheduled on their public holidays.

In general, the Course Work component is 40% and Final/End of Semester Examinations 60%, please refer to the Individual Course Outlines as necessary.

Registered students will receive their online individualized timetable approximately a month before the start of the Examination period via their secure area in the online Student portal. Students are advised to visit this area periodically for updates to the Examination Schedule.

Academic Advising

The School of Pharmacy has implemented support systems to ensure that you enjoy a meaningful learning experience, and that all your concerns are heard and addressed. Some of the support services provided are:

Pre-Course Counselling

You must contact the Secretary, Mixed Mode programme, School of Pharmacy for general counselling in determining which courses you should register for **before** registering. You will be counselled as to the work load that is suited to your learning needs and provided with advice to assist you in overcoming any difficulties that you may experience which can adversely affect your studies.

Note: For every 3-credit course you will be timetabled for 3 hours of interaction with peers and/or e-tutors per week. In addition you will normally be expected to engage in another 6 hours of self-directed study.

In-Course Academic Counselling

When you register for courses in any of our programmes, your facilitators can arrange for academic counselling, which will prepare you to cope with any difficulties you might encounter while studying.

Course Offerings 2012/2013 Academic Year

Semester 1

PHAR 1401 Integrated Basic Health Sciences I (Anatomy, Physiology, Biochemistry, Community Health) (6)

COMS 1001 Communication Skills for Health Personnel (3)

Semester 2

PHAR 1402 Integrated Basic Health Sciences II (Anatomy, Physiology, Biochemistry, Community Health) (6)

FOUN 1101 Caribbean Civilization (3) **or** FOUN 1301 Law Governance Economy and Society (3)



COMS 1002 Communication Skills for the Health Professions (3)

Semester 3 (Summer)

PHAR 2402 Medicinal Chemistry (3)

PHAR 2403 Pharmacology I (3)

PHAR 2408 Pharmaceutics (Biopharmaceutics, New Drug Delivery Systems & Devices) (4)

More detailed information is provided in the Faculty of Medical Sciences Undergraduate (Regulations & Syllabuses) booklet which can be viewed at <http://data.sta.uwi.edu/MedSciUndergrad.pdf>.

LIBRARY SERVICES

Library and information services are provided at the Medical Sciences Library and can be accessed online. Online access to campus libraries at the Cave Hill, Mona Campuses and the Alma Jordan Library at the St. Augustine Campus is also available.

The online services provided by these libraries are designed to assist you in the following areas:

- Provide access to electronic information resources
- Provide information on how to research papers and prepare bibliographies
- Answer your research queries

You will be provided with the relevant information so that you may contact a Medical Sciences Librarian via e-mail after registration.

REGISTRATION

You can register via the web from anywhere (e.g. at home, at any computer laboratory or at any internet café) using a laptop or PC with internet access.

Online registration uses the Banner Student Administration System which is accessed at <http://sta.uwi.edu/registration>. The Foundation Courses (FOUN 1101 and FOUN 1301) are delivered by the UWI Open Campus. Mixed-mode Pharmacy students register for these courses as “cross campus students” via the Student Portal accessible at <http://my.open.uwi.edu>.

All students are required to register by the end of the first week for semester classes and by the commencement of lectures for summer classes, or lose their status as students at the University. Late registration is permitted up to the end of the 3rd week of the first semester and at the end of the 2nd week of the second and summer semesters on payment of a late registration fee. Full details on the registration procedure would be provided to successful applicants.



FINANCIAL INFORMATION

Students are required to pay the relevant tuition, administrative and compulsory fees in accordance with the regulations. Tuition fees are paid, by semester, at the time of registration. All compulsory fees are payable in full at the beginning of the academic year.

In addition, mixed-mode B.Sc. Pharmacy students are expected to fund their travel and living expenses associated with the 2-week residential period in June/July during the summer semester of Module 2. At this time, students are required to complete practical/laboratory classes conducted at the School of Pharmacy.

Current fees are stated in the Undergraduate Fee Booklet which may be downloaded at: <http://sta.uwi.edu/resources/documents/UndergraduateFeeBklt.pdf>. All course and programme fees are subject to change from time to time as mandated by The University of the West Indies.

Fee Assessment

After registration, students can print their fee assessment invoice for each semester which details their financial obligations.

Payment of Fees

A person is considered to be a UWI Student only after the completion of registration and payment of all fees for the semester.

For students resident in Trinidad and Tobago, tuition and fees payments could be made at any branch of Republic Bank. Payments can be made by cheque or cash.

For students not resident in Trinidad and Tobago, payments should be received at the St Augustine Campus Bursary at least (5) five working days before the start of teaching so as to allow sufficient time for processing and to resolve any problems that may arise. Payments can be made by Bank Draft or Wire Transfer.

Please note: Tuition and examination fees for the Foundation Courses **only** are paid directly to the UWI Open Campus. Instructions are provided on registration.

BANK DRAFT PAYMENTS

Drafts should be made in US\$ and made payable to **The University of the West Indies St. Augustine Campus**. The draft can be sent through registered mail or via an Express Mail courier/delivery service to:

Attention: Mrs. Mary Balbirsingh

The Accountant (Students & Receivables)
Bursary
The University of the West Indies
St. Augustine Campus
Trinidad



WIRE TRANSFER

US DEPOSITS	UK DEPOSITS
<p>FW 026 009 593 Bank of America 100 West 33rd Street New York New York 10001 USA Swift Address: BOFAUS3N Account #65503 52163 Republic Bank Limited FOREX Trinidad Swift Address: RBNKTPX For Account #0002/110/10635 The University of the West Indies, St. Augustine Reason for Payment</p>	<p>Barclays Bank PLC Knightsbridge International P O 391 Bowater House 68 Knightsbridge London, SW1X 7NT United Kingdom IBAN GB09 BARC 2047 3520 0003 45 SWIFTBIC BARCGB22 Sort Code: 204735 For Account # 20000345 The University of the West Indies, St Augustine Reason for Payment</p>

INFORMATION and COMMUNICATION TECHNOLOGY REQUIREMENTS

In order to optimize your online experience, you will need access to

- Laptop or Desktop PC with minimum 2GHz dual-core processor, 2GB RAM (memory), 160GB hard drive
- Webcam (built-in on laptops), Webcam and Headset (on PC's)
- High speed internet access (DSL or Cable)
- Updated Internet Browser (Explorer, Firefox, Google Chrome etc.)
- Microsoft Office 2003 or higher
- Adobe Reader, Adobe Flash Player
- Windows Media Player, VLC Media Player or equivalent
- Skype.

You must also have an active e-mail account that you access regularly.