



**UWI**  
ST. AUGUSTINE  
CAMPUS

**POST  
GRADUATE**

# Food & Agriculture

Regulations & Syllabuses  
2019/2020



# TABLE OF CONTENTS

HOW TO USE THIS HANDBOOK.....	2
DISCLAIMER - PROGRAMMES & COURSES .....	2
DISCLAIMER – PRIZES & AWARDS.....	2
ACADEMIC CALENDAR 2019/2020 .....	3
MESSAGE FROM THE DEAN .....	4
OUR VISION.....	5
MISSION STATEMENT .....	5
STAFF LISTING .....	6
THE UNIVERSITY OF THE WEST INDIES BOARD FOR GRADUATE STUDIES AND RESEARCH - REGULATIONS FOR GRADUATE DIPLOMAS AND DEGREES.....	7
<b>SECTION 1 - GENERAL REGULATIONS</b> .....	7
GRADUATE DIPLOMAS AND DEGREES.....	7
<b>SECTION 2 - REGULATIONS FOR WRITTEN EXAMINATIONS AND COURSEWORK</b> .....	16
<b>SECTION 3 - REGULATIONS FOR THE EXAMINATION OF RESEARCH PAPERS, PROJECT REPORTS AND THESES</b>	
<b>APPOINTMENT OF EXAMINERS</b> .....	24
APPENDIX 1 - UNIVERSITY REGULATIONS ON PLAGIARISM.....	28
GRADUATE DIPLOMAS AND DEGREES.....	28
DEFINITIONS AND NOTES.....	32
GENERAL INFORMATION ON POSTGRADUATE STUDIES IN THE FACULTY .....	33
THE UNIVERSITY FIELD STATION (UFS) .....	36
THE CAMPUS LIBRARIES.....	38
STUDENT LIFE AND DEVELOPMENT DEPARTMENT (SLDD).....	39
STUDENT EXCHANGE & STUDY ABROAD .....	40
DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION.....	41
<b>STAFF LISTING</b> .....	41
<b>PROGRAMME OFFERINGS</b> .....	42
(I) MSc Marketing and Agribusiness .....	43
(II) MSc Agricultural Economics .....	44
(III) MPhil Agricultural Economics.....	46
(IV) PhD Agricultural Economics .....	47
(V) The MPhil Degree in Agricultural Extension.....	48
(VI) The PhD Degree in Agricultural Extension .....	48
(VII) The MPhil Degree in Human Ecology .....	49
(VIII) The PhD Degree in Human Ecology.....	50
DEPARTMENT OF FOOD PRODUCTION.....	51
<b>ABOUT THE DEPARTMENT</b> .....	53
<b>PRIZES</b> .....	53
<b>DETAILS OF DEGREE PROGRAMMES</b> .....	54
The MSc Degree in Tropical Animal Science and Production .....	54
The Postgraduate Diploma and MSc Degree in Tropical Crop Protection .....	56
Post-Graduate Diploma and MSc Degree in Agri-Food Safety and Quality Assurance .....	58
MSc Degree Value Addition for Food and Nutrition Security.....	60
THE MPhil AND PHD DEGREES.....	62
DEPARTMENT OF GEOGRAPHY .....	64
<b>THE MPhil AND PHD DEGREES</b> .....	65
MPhil & PhD in Geography .....	65
COURSE DESCRIPTIONS.....	67
DEPARTMENT OF AGRICULTURAL ECONOMICS & EXTENSION.....	67
DEPARTMENT OF FOOD PRODUCTION.....	77
DEPARTMENT OF GEOGRAPHY.....	91
BUSINESS DEVELOPMENT UNIT.....	91

# HOW TO USE THIS HANDBOOK

The Faculty Handbooks (also known as Faculty Booklets) are available on the Campus website in PDF format at <http://sta.uwi.edu/faculty-booklet-archive> . The Handbooks include:

- Relevant Faculty Regulations – e.g. Admission Criteria, Exemptions, Progression, GPA, Leave of Absence, etc.
- Relevant University Regulations including the Plagiarism Regulations and Declaration Forms
- Other Information on Co-Curricular courses, Language courses and Support for Students with physical and other disabilities or impairments.
- Programme Descriptions and Course Listings which include the list of courses to be pursued in each programme (degrees, diplomas and certificates), sorted by level and semester; course credits and credits to be completed for each programme – majors, minors and specials.
- Course Descriptions which may include details such as prerequisites and methods of assessment.

Students should note the following:

- The Regulations and Syllabuses issued in the Faculty Handbooks should be read in conjunction with the following University Regulations:
- The Undergraduate Regulations and Syllabuses should be read in conjunction with the University Regulations contained in the [Undergraduate Handbook](#) and the University's Assessment Regulations (with effect from August 2018)
- The Postgraduate Regulations and Syllabuses should be read in conjunction with the University Regulations contained on the [Postgraduate Admissions website](#) and the [Board for Graduate Studies and Research Regulations for Graduate Certificates, Diplomas and Degrees \(with effect from August 2018\)](#)

Progress through a programme of study at the University is governed by Faculty Regulations and University Regulations. Should there be a conflict between Faculty Regulations and University Regulations, University Regulations shall prevail, where appropriate.

## DISCLAIMER - PROGRAMMES & COURSES

Notwithstanding the contents of Faculty Handbooks, course outlines or any other course materials provided by the University, the University reserves the right at any time to altogether withdraw or modify programmes or courses as it deems necessary.

## DISCLAIMER – PRIZES & AWARDS

In the case where Faculty/Student Prizes or Awards may be listed, the Faculty does not bind itself to award any or all of the listed prizes/awards contained herein or its stated value and reserves the right to modify or altogether remove certain prizes/awards as described in either or both the electronic and printed versions of the Faculty Handbooks.

# ACADEMIC CALENDAR 2019/2020

ACTIVITY	SEMESTER 1 AUGUST – DECEMBER 2019	SEMESTER 2 JANUARY – MAY 2020	SUMMER MAY – JULY 2020
Semester <b>BEGINS</b>	August 25, 2019	January 19, 2020	May 24, 2020
<a href="#">Registration</a> <b>BEGINS</b>	August 19, 2019	January 13, 2020	May 18, 2020
<a href="#">Registration</a> <b>ENDS</b>	September 13, 2019	January 31, 2020	June 13, 2020
Teaching <b>BEGINS</b>	September 2, 2019	January 20, 2020	May 25, 2020
Teaching <b>ENDS</b>	November 29, 2019	April 17, 2020	July 3, 2020
Late registration/late payment Fee of TT\$200.00 APPLIES from	September 9, 2019	February 01, 2020	June 8, 2020
<b><a href="#">STUDENT PAYMENT PLAN (SPP)</a></b>			
1st Installment (down payment)	Last working day August	Last working day January	Last working day May
2nd installment	Last working day September	Last working day February	Last working day June
3rd installment	Last working day October	Last working day March	
Last day for payment of fees before <a href="#">course registration is removed</a> / Compulsory leave of absence is recorded.	October 31, 2019	March 31, 2020	June 30, 2020
<a href="#">Examinations</a> <b>BEGIN</b>	December 02, 2019	April 27, 2020	July 20, 2020
<a href="#">Examinations</a> <b>END</b>	December 20, 2019	May 15, 2020	July 31, 2020
Semester <b>ENDS</b>	December 20, 2019	May 15, 2020	July 31, 2020
Application to Carry forward Coursework <b>ENDS</b> Application for Leave of Absence <b>ENDS</b> Application for Credit and Exemptions <b>ENDS</b>	September 13, 2019	January 31, 2020	June 13, 2020
Submission of Faculty Overrides <b>BEGINS</b>	August 19, 2019	January 13, 2020	May 18, 2020
Submission of Overrides <b>ENDS</b>	September 10, 2019	January 28, 2020	June 10, 2020
Deadline for processing of overrides in Banner by Faculty	September 13, 2019	January 31, 2020	June 13, 2020
UWI LIFE	AUGUST 28, 2019		
<b>Semester II - Break</b>		<b>April 20 - 24, 2020</b>	
<a href="#">ELPT</a> : Scheduled for the following dates	August 19, 2019 October 10, 2019	February 13, 2020	-
<b>SPECIALY-ADMITTED 2019 / 2020</b>	SEMESTER 1	SEMESTER 2	ENTIRE ACADEMIC YEAR
Application for Specially Admitted <b>OPENS</b>	November 12, 2018	November 12, 2018	November 12, 2018
Application for Specially Admitted <b>ENDS</b>	July 12, 2019	December 13, 2019	June 28, 2019
<b>CEREMONIES</b>			
<a href="#">Matriculation</a> Ceremony	September 18, 2019		
<a href="#">Graduation</a> Dates	October 12, 2019 (Open Campus) October 24 – 26, 2019 (St. Augustine)		October 19, 2019 (Cave Hill) November 01 to 02, 2019 (Mona)
Inter-Faculty and Inter-Campus <b>TRANSFERS 2020 / 2021</b>	OPENS		ENDS
All Faculties	November 11, 2019	June 30, 2020	
<b>UNDERGRADUATE SCHOLARSHIPS &amp; BURSARIES</b>			
OPENS			
Scholarships and Bursaries [tenable in 2019/2020]	January 20, 2019 CONTINUING Students	May 31, 2019	
	September 1, 2019 First Year Students	September 30, 2019	

Revised August 2019. This calendar is subject to change by the appropriate authorities. This is an abridged version of the Academic Calendar. For the full and most up-to-date calendar, visit <https://sta.uwi.edu/registration/academiccalendar.asp>

# MESSAGE FROM THE DEAN

I extend my warmest welcome to you! For all of us, lecturers, administrators and other members of the Faculty of Food and Agriculture (FFA), we are indeed thrilled to have you here.

In the coming weeks, as you get to know the campus and the people who work here, I hope you will take a moment to reflect on the astounding array of resources that have been marshaled to support your development as responsible and independent human beings. Use these resources fully and wisely. If you do, I am sure that your experience at The UWI will be even better than you anticipated.

The FFA offers postgraduate programmes at the taught Diploma/Masters and research-based MPhil and PhD levels in various fields. The UWI and FFA's rules, regulations, procedures and processes are online. This booklet contains FFA's regulations governing each programme. Postgraduate programmes are subject to University-wide regulations and it is also in your own best interest to be well informed about those as well. If you need further elaboration and/or further information specific to a

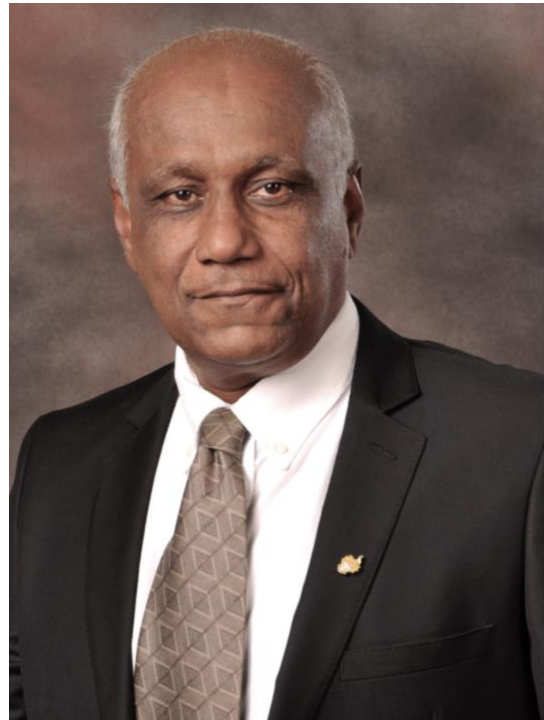
programme of interest, you may visit the office of the Head of the Department where the programme resides and /or contact the Deputy Dean, Graduate Studies, Research and Innovation through the Office of the Dean of FFA. Further information on general regulations governing taught Masters and research-based postgraduate programmes can be obtained from the Office of Graduate Studies and Research, located in the Lloyd Brathwaite Building. Avoid depending on second-hand information.

Your development will not be confined to academics. We have several clubs and student organizations — so no matter what your interests are, there's a place for you. And if there isn't, you can create one! Be bold. Be imaginative. You are destined to be our next leaders, whether it's by conquering climate change, or developing a new crop variety. We want you to become leaders who succeed by examining facts, who understand complexity and who work to bridge differences. You will come to understand how living in a community of peers with ideas, cultures and backgrounds quite different from your own can enrich and broaden your understanding of the world, and help you define the place that you want to take in society.

I can guarantee you that your years here will fly by — and that the amount of change and growth you see in yourselves will be astonishing.

You - the students - are the most important part of a university. You represent the future generations that are needed to tackle the difficult and complex challenges ahead; whether national or global. As with all things, you'll get out of this experience what you put into it. So, give it all you've got. We stand ready to support you as best as we can. Have a wonderful 2019- 2020 academic year with us!

**Wayne Ganpat (Professor)**  
**DEAN**



## **OUR VISION**

To be an excellent global university rooted in the Caribbean.

## **MISSION STATEMENT of the Faculty of Food & Agriculture (FFA)**

The Mission Statement reflects the primary purpose of the University, that is, the reason for its existence.

The enduring mission of the UWI is:

To advance agricultural, geographical, food and nutritional and family sciences education and create knowledge through excellence in teaching, research, innovation, public service, intellectual leadership and outreach in order to support the inclusive (social, economic, political, cultural, environmental) development of the Caribbean region and beyond.

# STAFF LISTING

## DEAN

**Professor Wayne Ganpat**

Ext. 82112/82113

Email: [wayne.ganpat@sta.uwi.edu](mailto:wayne.ganpat@sta.uwi.edu)

## DEPUTY DEANS

**Dr Marquitta Webb**

Teaching, Learning and Student Development

Ext. 83525

Email: [marquitta.webb@sta.uwi.edu](mailto:marquitta.webb@sta.uwi.edu)

[FFADD.UG@sta.uwi.edu](mailto:FFADD.UG@sta.uwi.edu)

**Dr Gaius Eudoxie**

Outreach and Internationalization

Ext. 83322

Email: [gaius.eudoxie@sta.uwi.edu](mailto:gaius.eudoxie@sta.uwi.edu)

[FFADD.outreach@sta.uwi.edu](mailto:FFADD.outreach@sta.uwi.edu)

**Dr Wendy-Ann Isaac**

Graduate Studies, Research and Innovation

Ext. 83955

Email: [wendy-ann.isaac@sta.uwi.edu](mailto:wendy-ann.isaac@sta.uwi.edu)

## SECRETARIAT:

### ADMINISTRATIVE OFFICER

**Mrs Cheryl Layne**

BSc, MSc (UWI)

Ext. 82429

Email: [cheryl.layne@sta.uwi.edu](mailto:cheryl.layne@sta.uwi.edu)

### ADMINISTRATIVE ASSISTANT

**Ms Deniece Deane**

BSc (Anglia Ruskin University)

Ext. 83903

Email: [deniece.deane@sta.uwi.edu](mailto:deniece.deane@sta.uwi.edu)

### DEAN'S SECRETARY

**Ms. Tiffany Telesford**

BSc (UWI)

Ext. 82112/82113

Email: [tiffany.telesford@sta.uwi.edu](mailto:tiffany.telesford@sta.uwi.edu)

### UNDERGRADUATE STUDENT AFFAIRS UNIT

ADMINISTRATIVE ASSISTANT

**Ms. Sonja Joseph**

Ext. 82600

Email: [sonja.joseph@sta.uwi.edu](mailto:sonja.joseph@sta.uwi.edu)

### SECRETARY

**Ms Sabrina Ragoo**

BSc (UWI)

Ext. 83954

Email: [sabrina.ragoo@sta.uwi.edu](mailto:sabrina.ragoo@sta.uwi.edu)

### FACULTY IT SUPPORT SECTION

NETWORK SUPPORT TECHNICIAN

**Mr Kevin Sandy**

Ext. 82585

Email: [kevin.sandy@sta.uwi.edu](mailto:kevin.sandy@sta.uwi.edu)

### ASSOCIATE WEB DEVELOPER

**Mr Joshu Morris**

BSc (Greenwich)

Ext. 82267

E-mail: [joshu.morris@sta.uwi.edu](mailto:joshu.morris@sta.uwi.edu)

### FACULTY PUBLICATION AND COMMUNICATION UNIT

MANAGING EDITOR OF TA AND UNIT CO-ORDINATOR

**Ms Sarojini Ragbir**

BSc, MPhil (UWI)

Communications Coordinator

Direct Line: 645-3640

Ext. 82088

Email: [sarojini.ragbir@sta.uwi.edu](mailto:sarojini.ragbir@sta.uwi.edu)

### EDITOR IN-CHIEF OF TA

**Dr Lynda Wickham**

BSc, PhD (UWI)

Senior Lecturer, Crop Science/Post-Production Technology

Ext. 83259/82110

Email: [lynda.wickham@sta.uwi.edu](mailto:lynda.wickham@sta.uwi.edu)

### AUDIO-VISUAL AND GRAPHICS SUPPORT TECHNOLOGIST

**Mr Terry Sampson**

Ext. 82296

Email: [terry.sampson@sta.uwi.edu](mailto:terry.sampson@sta.uwi.edu)

### TECHNICAL ASSISTANTS

**Ms Treasure Alcindor**

BSc, MSc (UWI)

Ext. 82210

Email: [treasure.alcindor@sta.uwi.edu](mailto:treasure.alcindor@sta.uwi.edu)

### BUSINESS DEVELOPMENT UNIT

2nd Floor, Frank Stockdale Building

Tel: (PBX):(868) 662-2002 Ext. 83327/82318

Tel: (Direct Line): (868) 662-2686/83719

Fax: (868) 663-9686

Email: [bdu@sta.uwi.edu](mailto:bdu@sta.uwi.edu)

### FACILITIES MAINTENANCE TECHNICIAN

**Mr Glen Byer**

Ext. 82426

Email: [glen.byer@sta.uwi.edu](mailto:glen.byer@sta.uwi.edu)

### UNIVERSITY FIELD STATION

MANAGER

**Dr Altman Ragoobarsingh**

BSc, MSc, PhD (UWI)

Tel: (868) 662-2750/663-1483

Email: [altman.ragoobarsingh@sta.uwi.edu](mailto:altman.ragoobarsingh@sta.uwi.edu)

# THE UNIVERSITY OF THE WEST INDIES BOARD FOR GRADUATE STUDIES AND RESEARCH - REGULATIONS FOR GRADUATE DIPLOMAS AND DEGREES

WITH EFFECT FROM August 2018

[SECTION 1 - GENERAL REGULATIONS](#)

[SECTION 2 - REGULATIONS FOR WRITTEN EXAMINATIONS AND COURSEWORK](#)

[SECTION 3 - REGULATIONS FOR THE EXAMINATION OF RESEARCH PAPERS, PROJECT REPORTS AND THESES](#)

[APPENDIX 1- UNIVERSITY REGULATIONS ON PLAGIARISM](#)

## SECTION 1 - GENERAL REGULATIONS

### GRADUATE DIPLOMAS AND DEGREES

#### GRADUATE DIPLOMAS

- 1.1 Graduate Diplomas shall be awarded on the basis of:
- written examinations together with a research paper or project report; or
  - requirements prescribed for specific Graduate Diplomas in the respective Faculties.

#### TAUGHT MASTER'S AND DM DEGREES

- 1.2 Taught Master's degrees and the Doctor of Medicine degree shall be awarded on the basis of:
- written examinations together with a research paper or project report; or
  - requirements prescribed for specific degrees in the respective Faculties.

#### RESEARCH DEGREES: MPhil, PhD, MD

- 1.3 The MPhil, PhD and MD shall be primarily research degrees and shall be awarded primarily on the basis of examination by thesis. Other requirements shall be as specified in the respective Faculties.

#### PROFESSIONAL DOCTORATES

- 1.4 Professional Doctorates shall be awarded on the basis of examination by written papers together with examination of the thesis. Other requirements shall be as specified in Programme and Faculty Regulations.

#### QUALIFICATIONS FOR ADMISSION

- 1.5 The following are eligible to apply for registration for a Graduate Diploma or degree:
- Graduates of the University of the West Indies;
  - Persons who possess a degree from an approved university;
  - Persons holding such other suitable qualifications and/or experience as the Board for Graduate Studies and Research may approve.

#### SPECIALLY ADMITTED STUDENTS

- 1.6 In addition to the persons mentioned above, the Vice-Chancellor may also admit to the University as specially admitted students, for limited periods, such persons as he may deem fit.
- 1.7 Such persons are deemed eligible for special admissions:
- Persons sponsored by the Governments or other employers to read certain courses, not for credit towards a University qualification, under a special arrangement.
  - Any individual who wishes to pursue and develop a particular area of intellectual interest.

(c) Graduates of the University of the West Indies or other approved universities who wish to pursue a particular course or courses.

- 1.8 Applications for special admission must be made on the appropriate forms.
- 1.9 To be considered for entry as "specially admitted students" applicants should normally possess an undergraduate degree. Those students who do not satisfy the requirements for entry to the University should provide satisfactory evidence of their previous studies. In appropriate cases they may be required to sit for a special entrance examination. In the assessment of the qualifications of applicants due allowance shall be made for their maturity.
- 1.10 Such students shall be required to comply with the University Regulations for students as are in force.

#### **MINIMUM ENTRY REQUIREMENTS**

##### **GRADUATE DIPLOMAS, TAUGHT MASTER'S DEGREES AND DM DEGREES**

1.11 The minimum requirement for admission to a Graduate Diploma, Taught Master's or DM degree programme shall be a minimum GPA of 2.5 or a Lower Second Class Honours degree or its equivalent, unless the Campus Committee for Graduate Studies and Research in any particular case otherwise decides.

##### **MPHIL DEGREES**

1.12 The minimum requirement for admission to MPhil programmes shall be a minimum GPA of 3.0, or an Upper Second Class Honours degree or its equivalent, unless the Campus Committee in any particular case otherwise decides.

##### **PHD AND MD DEGREES**

- 1.13 The minimum requirements for admission to PhD and MD programmes:
- Approved graduate degrees awarded primarily for research;
  - Taught Master's degree from the UWI or another approved University, provided that the Master's programme included a research component of at least 25% of the total credit rating and the applicant achieved at least a B+ average or its equivalent;
  - Approval of upgrade application;
  - Such other qualifications and experience as the Board for Graduate Studies and Research may approve.

##### **PROFESSIONAL DOCTORATES**

1.14 The minimum requirements for admission to Professional Doctorates:  
Taught Master's degree in an appropriate field from the UWI or another approved University, having achieved at least a B+ average or its equivalent, and possessing the required experience in the field (as specified in the relevant Programme requirements).

##### **APPLICATION PROCEDURE**

For information on the application procedure, please visit the Graduate Information Portal (GRIP) at [www.uwi.edu/grip](http://www.uwi.edu/grip)

##### **APPOINTMENT OF SUPERVISORS**

- 1.15 Persons related to candidates for Graduate Diplomas or degrees may not be appointed to supervise such candidates. For this purpose, a person shall be deemed to be related to the candidate as a parent, child, grandparent, grandchild, step-parent, step-child, sibling, spouse, fiancé, fiancée, or cohabitee, or any offspring of the above or any other relationship that may give rise to a conflict of interest.
- 1.16 A staff member registered for a graduate degree shall not be appointed as a Supervisor of a student, unless the Board for Graduate Studies and Research in any particular case decides otherwise. Such a staff member may only be appointed to supervise a student registered for a taught degree below the level of the one for which the staff member is registered.
- 1.17 A staff member without a graduate degree or with a degree of a lower level than the one to be supervised, but with long teaching and research experience, may be appointed as Supervisor, but such recommendations for appointment shall be subject to approval by the Board for Graduate Studies and Research.
- 1.18 Supervisors of students pursuing research degrees must have held a graduate degree, of the same or higher level as the degree being supervised, for at least three years, unless the Campus Committee in any particular case otherwise decides.

##### **Research Degrees**

1.19 Before a student is accepted to an MPhil, PhD or MD programme, at least one supervisor shall be appointed by the Campus Committee on the recommendation of the Head of Department.

- 1.20 Where more than one Supervisor is appointed for a student, one shall be designated Chief Supervisor and the other(s) shall be designated Co-Supervisor(s). A person not on the staff of the UWI but fully qualified, may also be appointed a Co-Supervisor but may not be Chief Supervisor, except where approved by the Board for Graduate Studies and Research.
- 1.21 In cases of co-supervision of research which involves disciplines in more than one Department, the Chief Supervisor shall be from the Department in which the student is registered, unless the Campus Committee in any particular case decides otherwise.
- 1.22 By the end of the Semester in which the student is first registered, a Committee of Advisors shall be nominated by the Head of Department and appointed by the Campus Committee. The Committee of Advisors shall comprise a minimum of three persons, and shall include the student's Supervisor(s).
- 1.23 Supervisors shall provide academic guidance and direction to students in the conduct of the students' research. (See Graduate Studies Guide for Students and Supervisors)
- 1.24 The Chief Supervisor, or sole supervisor as the case may be, shall communicate regularly with the student and Co-Supervisor if applicable, convene meetings of the Committee of Advisors at least once per year, and by regular reports, inform the Campus Committee of the state of the student's work.

#### **Professional Doctorates**

- 1.25 Supervisors of professional doctoral theses must be nominated by the relevant Head of Department and approved by the Campus Committee at least three months prior to the scheduled commencement of the research component of the work.

#### **RESEARCH PAPERS AND PROJECT REPORTS**

- 1.26 Supervisors of research papers and project reports must be nominated by the relevant Head of Department and approved by the Campus Committee at least two months prior to the scheduled commencement of the work by the candidates.

#### **REGISTRATION**

- 1.27 A candidate may not be registered for two or more programmes simultaneously, whether at UWI or at any other institution, unless the Board for Graduate Studies and Research in any particular case decides otherwise.
- 1.28 A student awaiting the final results of a programme in which he or she is registered may be provisionally accepted by the Board for Graduate Studies and Research into another programme pending the outstanding results.
- 1.29 The period of registration for a Graduate Diploma or degree shall date from the start of the semester in which the candidate is first registered.
- 1.30 All students, including those who proceed on electives and attachments to other institutions, are required to register each semester.

#### **DEADLINES FOR REGISTRATION**

- 1.31 Deadlines for registration shall be as follows:
  - (a) Continuing students and new students admitted in Semester I:
    - (i) Normal Registration: First week of Semester I
    - (ii) Late Registration: Up to the end of the third week of Semester I. A late registration fee will be charged.
  - (b) New students admitted in Semester II:
    - (i) Normal Registration: First week of Semester II
    - (ii) Late Registration: Up to the end of the third week of Semester II. A late registration fee will be charged.
  - (c) The University Registrar/Campus Registrar may delegate to Campus Committees responsibility with respect to the above deadlines.
- 1.32 Late registration and changes in registration after the above deadlines will be permitted only in exceptional circumstances and with the approval of the Campus Committee, on the recommendation of the relevant Head of Department. Continuing students who have failed to register by the applicable deadlines shall be deemed to have withdrawn, and shall be required to apply for readmission.

- 1.33 Students are deemed to have failed any required examination in courses for which they have registered but which examination they have not taken, except in exceptional circumstances as determined by the Chair of the relevant Campus Committee.
- 1.34 Candidates who have submitted their theses, research papers or project reports before the end of a Semester, but the examination of which has not been completed at the start of the following Semester, must re-register in the new Semester, but need only pay the applicable registration fee. Any costs incurred by candidates in being present for oral examinations, should the Regulations or the Examiners require that they be so examined, shall be borne by the candidates.

#### IDENTIFICATION CARDS

- 1.35 All registered students are required to have a University ID card which they must produce at the Library, examination rooms and other places as may be requested.

#### LEAVE OF ABSENCE

- 1.36 (a) A student who for good reason wishes to be absent from an academic programme for a semester or more must apply for formal leave of absence to the Campus Committee, stating the reasons for the application.
- (b) The length of such leave of absence, if granted, will be subject to approval by the Campus Committee, but will not be less than one semester or greater than one academic year in the first instance, terminating at the end of the semester or the academic year for which the application is approved.
- (c) Leave of absence will not be granted for more than two consecutive academic years, unless the Board for Graduate Studies and Research in any particular case decides otherwise.
- (d) Applications for leave of absence for a semester shall be submitted by the end of the third week of the relevant semester.
- (e) Applications for leave of absence for the academic year shall be submitted by the end of the third week of Semester I.

#### RESIDENCE REQUIREMENTS

- 1.37 Candidates for the MPhil and PhD who are not graduates of the UWI must complete at least one semester of their graduate work in residence at the UWI or at any institution that may be approved from time to time by the Board for Graduate Studies and Research.
- 1.38 Candidates for the MPhil and PhD who hold a first degree of the UWI and wish to conduct a portion of their research in a country outside the Caribbean region, may do so provided that satisfactory evidence has been presented to the Board for Graduate Studies and Research that adequate facilities are available for the proposed programme of work and that adequate arrangements have been made for supervision.

#### INTELLECTUAL PROPERTY

- 1.39 As a UWI student, the candidate agrees to abide by the UWI Policy on Intellectual Property located on the Graduate Information Portal at [www.uwi.edu/grip](http://www.uwi.edu/grip).

#### CHANGES IN REGISTRATION

##### TRANSFER AND UPGRADING OF REGISTRATION

- 1.40 A candidate registered for the MPhil degree who wishes to upgrade his or her registration to the PhD may apply after a period of one year full-time, or two years part-time, from the date of initial registration, and should complete the upgrade of registration by the end of three years full-time, or five years part-time, from the date of initial registration. The candidate must have the support of the Supervisor and the relevant Head of Department and have given evidence of having the qualifications necessary for writing a thesis for the PhD.
- 1.41 A candidate who is registered for a Taught Master's degree may apply after a period of one Semester for transfer of registration to the MPhil if, in the opinion of the Head of Department, the candidate has given evidence of having the qualifications necessary for writing the thesis for the MPhil. A candidate registered for the MPhil/PhD programme who wishes to pursue a Taught Master's degree shall withdraw from the MPhil/PhD, without penalty, and apply for registration in a Taught Master's programme.
- 1.42 The procedure to be followed by Heads of Departments in the upgrading and transfer of registrations under Regulations 1.40 and 1.41, shall be as prescribed by the Board for Graduate Studies and Research in the Manual of Procedures for Graduate Diplomas and Degrees.

- 1.43 A candidate whose application for upgrading or transfer of registration under Regulations 1.40 and 1.41 has been approved shall have the years spent in the MPhil programme counted toward the years spent in the PhD programme (see Regulations 1.49 and 1.50).
- 1.44 A candidate who is registered for the PhD and who has not yet submitted the thesis for examination may apply to the Campus Committee to change registration to MPhil and submit the thesis for examination for the MPhil degree. Where these applications are granted, the registration for the PhD will lapse and the registration for the MPhil will be deemed to have started from the date of the original registration for the MPhil/PhD.

#### **FULL-TIME AND PART-TIME REGISTRATION**

- 1.45 Candidates registered as either full-time or part-time students may apply to the Campus Committee to change their registration status.
- 1.46 Full-time students may take employment for not more than twelve hours per week without losing their full-time status otherwise they shall be registered as part-time. However, research students who hold Teaching or Research Assistantships in the area of their research programmes may be registered as full-time students, provided that their employment commitment does not exceed twenty hours per week.
- 1.47 A candidate who has been registered as a full-time student for two years in the case of the MPhil or three years in the case of the PhD and Professional Doctorate shall not benefit from any extension of time for completion of the requirements of the degree by virtue of any change to part-time registration thereafter (see Regulation 1.53).

#### **TIME LIMITS FOR REGISTRATION**

- 1.48 The minimum period of registration for the MPhil is 2 years full-time, and for the MD, PhD, and Professional Doctorate, is 3 years full-time, unless the Campus Committee in any particular case otherwise decides. The minimum period of registration for the MPhil and Professional Doctorate is 4 years part-time, and for the MD and PhD, 5 years part-time.
- 1.49 Candidates for the MPhil are required to submit their theses for examination within 3 years of their initial registration for full-time studies or, subject to Regulation 1.47, within 5 years of their initial registration for part-time studies, unless the Campus Committee in any particular case otherwise decides.
- 1.50 Candidates for the PhD, MD and Professional Doctorates are required to submit their theses for examination within 5 years of their initial registration for full-time studies or, subject to Regulation 1.47 within 7 years of their initial registration for part-time studies, unless the Campus Committee in any particular case otherwise decides.
- 1.51 The minimum period of registration for a Taught Master's degree shall be one year for full-time students and two years for part-time students, unless the Board for Graduate Studies and Research in any particular case otherwise decides (see the relevant Programme Requirements). Assessment of the taught component must be completed before a research paper or project report can be submitted for examination. A candidate who is permitted to re-write any component of the programme is allowed a consequential extension of these time limits.
- 1.52 A candidate whose period of registration is about to end (see Regulations 1.49-1.50) may apply for an extension of time. Such application must be accompanied by a statement explaining why the thesis, research paper or project report has not been completed and indicating how much work remains to be done. Campus Committees may approve extensions of time limits of up to 1 year for submission of project reports and research papers, and up to 2 years for MPhil, PhD, MD and Professional Doctorate theses.
- 1.53 Extensions of time limits in excess of those in Regulation 1.52 may be granted by the Campus Committee where it considers that exceptional circumstances exist.
- 1.54 For the purposes of calculating time limits for registration, part-time registration is treated as equivalent to one-half year of full-time registration only for the first two years of full-time equivalent (FTE) registration for the MPhil, or three years FTE registration in the PhD. Thereafter, part-time registration will be treated as equivalent to full-time.

#### **WITHDRAWAL**

##### **Students Deemed To Have Withdrawn**

- 1.55 Where a student does not meet the final deadline for submission of any requirement for a Graduate Diploma or degree that student's registration and the right to re-registration shall expire at the end of the semester during which the final deadline occurs. Such students are deemed to have withdrawn.

#### **Students Required To Withdraw**

- 1.56 Students registered in Graduate Diplomas, Taught Master's degrees or programmes in which courses are delivered over a short period may, on account of poor performance, be required to withdraw by the Campus Committee at the end of Semester I, II or at any point within a Semester, as may be prescribed by the approved Programme requirements.
- 1.57 Candidates required to withdraw at the end of Semester I shall be refunded any fees already paid towards Semester II.

#### **RE-ADMISSION OF CANDIDATES**

- 1.58 The re-admission of students who had been deemed to have withdrawn or required to withdraw must be approved by the Campus Committee. Such applicants required to withdraw will be considered for readmission not less than two years after their withdrawal, unless the Board for Graduate Studies and Research in any particular case otherwise decides.
- 1.59 Applicants re-admitted to a Graduate Diploma or degree programme may, with the approval of the Campus Committee, be credited with courses passed during the applicant's previous registration provided that not more than five years have lapsed since the date of expiry of the applicant's previous registration for those courses, or that the course content has not changed significantly in the interval. An applicant may be allowed credit for courses passed after more than five years have lapsed provided the relevant Head of Department submits in writing the reasons for the recommendation, for the approval of the Board for Graduate Studies and Research. Approval of such credit will be granted only where the candidate's performance has been significantly better than a minimal pass, unless the Board for Graduate Studies and Research in any particular case decides otherwise. In cases where a student has been required to withdraw through failure of a research paper or project report and is re-admitted, the research paper or project report which is pursued must address a new topic.

#### **REGISTRATION OF QUALIFYING CANDIDATES**

- 1.60 Students for admission to Graduate Diploma and degree programmes may be required by the Board for Graduate Studies and Research to take qualifying courses and to write examinations in these courses. Such students shall be registered as qualifying students and not as candidates for the diploma or degree. The qualifying courses shall be recommended by the relevant Head of Department for approval by the Campus Committee.
- 1.61 Students who are required to write qualifying examinations shall do so within two semesters of registration as a full-time student or four semesters of registration as a part-time student. The examination shall be conducted through the Campus Registrar who shall advise the candidates of the date, time, and place, not later than four weeks in advance of the examination.
- 1.62 Students will not be allowed to repeat a qualifying examination or any part thereof, except in exceptional circumstances and with the approval of the Campus Committee, on the recommendation of the Examiners.
- 1.63 Students cannot proceed to register for a Graduate Diploma or degree programme unless they have successfully completed the required qualifying examinations.

#### **DEPARTMENTAL EXAMINATIONS**

- 1.64 Students for admission to Graduate Diploma and degree programmes who are deemed generally acceptable but deficient in knowledge of particular aspects of the subject concerned may be required to follow courses, specified by the Campus Committee on the recommendation of the Head of Department, in addition to the courses required for the diploma or degree, and to pass the appropriate examinations before submitting any thesis, research paper, or project report as required. Such examinations shall be termed Departmental Examinations.
- 1.65 Students who are required to write Departmental Examinations shall register for the appropriate examinations at such time as is determined by the Campus Committee, on the recommendation of the Head of Department. The examinations shall be conducted through the Campus Registrar, who shall advise the candidates of the date, time and place not later than four weeks in advance of the examination.

#### **COURSE OF STUDY**

##### **Graduate Diplomas, Taught Master's and DM Degrees**

- 1.66 (a) The course of study for a Graduate Diploma or Taught Master's degree shall include, in addition to the required courses, supervised research work culminating in the submission of a research paper or project report, except as stated in approved Programme requirements. The subject of any such research paper or project report shall be recommended by the relevant Head of Department to the Campus Committee for approval not later than two months before the date of submission of the research paper or project report.

- (b) The course of study for a DM degree includes both an academic programme and clinical rotations covering all aspects of the discipline over 4 to 7 years depending on the discipline. For all disciplines, it is necessary to be attached to an accredited hospital or to be assigned to clinical duty. All DM candidates are required to complete successfully a research project or case book before the final examination.

#### **Research Degrees and Professional Doctorates**

- 1.67 A candidate for the MPhil, PhD, MD or Professional Doctorate is required to follow such courses of study, and to undertake such other work, as may be approved by the Campus Committee on the recommendation of the relevant Head of Department, and to pass the appropriate examinations before submitting the thesis:
- (a) For students enrolled in an MPhil degree, a minimum of 6 credits should be taken through courses, and for students enrolled in a PhD programme, a minimum of 9 credits should be taken through courses.
- (b) For students upgrading from MPhil to PhD, their MPhil courses will contribute to the course requirements for the PhD.
- (c) Students entering either the MPhil or PhD degree already holding a Taught Master's degree may apply to the Campus Committee for exemption from the course requirements of the research degree.

#### **RESEARCH SEMINARS**

- 1.68 Students enrolled for an MPhil degree must satisfactorily complete at least two research seminars, to be convened by the relevant Head of Department, prior to the submission of their MPhil thesis. Students enrolled for a PhD or MD degree must satisfactorily complete three such seminars. The upgrade seminar will count as one of the three seminars for the PhD, provided that it is not the last seminar. Assessment of students' seminars must be included in their Progress Reports. Students enrolled in Professional Doctorates must satisfactorily complete research seminars as specified in Programme requirements.

#### **PROGRESS REPORTS**

- 1.69 Each Chief Supervisor or sole Supervisor as the case may be, shall submit biannually to the Campus Committee through the Head of Department, a report on the work of any candidate placed under his or her supervision. Members of the Committee of Advisors are required to meet at least once per year with the student, and based on their meeting(s), shall submit to the Campus Committee, through the Head of Department, an annual report on the student's progress. These reports should say what work the candidate has done, assess the work, indicate what remains to be completed and whether the candidate is on schedule. The Supervisor shall supply the student with a copy of these reports, and the student shall be invited to verify that he or she has seen these reports.
- 1.70 Where the candidate disagrees with the Supervisor's assessment of the candidate's progress, he or she shall so indicate to the Campus Committee in writing. The Campus Committee shall consider the candidate's objections, together with the Supervisor's report, and may, if it sees fit, refer the matter for the report from another person qualified under these Regulations to supervise the candidate. If the Campus Committee decides against accepting the Supervisor's assessment, it may, and shall if the candidate requests, replace the Supervisor with another Supervisor appointed after consultation with the Dean of the Faculty and Head of Department.
- 1.71 Candidates whose work is at any time reported by their Supervisors to be unsatisfactory may be required to withdraw

#### **MARKING SCHEME**

- 1.72 The marking scheme for graduate degrees and diplomas is as follows: Passing Grades:

A	70 -100%
B+	60 - 69%
B	50 -59%
<i>Failing Grade:</i>	
F	0 - 49%

Where students are writing Qualifying Courses or Departmental Examinations, the minimum pass will be as indicated above. The minimum passing grade will not necessarily qualify the student for entry into all graduate programmes. The threshold for admission will be determined by the programme.

#### THE AWARD OF DISTINCTION AND OF HIGH COMMENDATION

- 1.73 In the case of Graduate Diplomas and Taught Master's degrees which require the submission of a project report or research paper, a distinction is awarded to candidates who achieve an average of 70% or better (Grade A) in the written courses and a mark of 70% or better in the research paper or project report. A candidate failing a course (including an elective course) required for the completion of the programme shall be ineligible for the award of distinction. Failure in a co-requisite course or in a qualifying course shall not exclude the student from receiving a distinction.
- 1.74 In the case of programmes conducted entirely by courses, candidates must obtain an A grade in at least 70% of the courses and the average mark of all courses must not be less than 7% to qualify for distinction. A candidate failing a course (including an elective course) required for the completion of the programme shall be ineligible for the award of distinction. Failure in a co-requisite course or in a qualifying course shall not exclude the student from receiving distinction.
- 1.75 The award of an MPhil/PhD shall be conferred with high commendation where the Examiners are unanimous in their recommendation that such an award should be made. In the case of Professional Doctorates, candidates should also have attained a Grade A average over the coursework component of the programme, and a candidate failing a course (including an elective course) required for the completion of the programme shall be ineligible for the award of high commendation. Failure in a co-requisite course shall not exclude the student from receiving high commendation.

#### POSTHUMOUS AWARD OF DIPLOMA OR DEGREE

- 1.76 Where a candidate dies after submission but prior to forwarding the thesis, research paper or project report for examination, the Campus Registrar shall in all cases inform the Examiners of the status of the candidate. Where the Examiners require only editorial changes, the Campus Committee may authorise the candidate's Supervisor to effect such changes. Where Examiners require substantive changes, the matter shall be referred to the Board for Graduate Studies and Research for determination.
- 1.77 Where a candidate dies after Examiners have reported, but prior to completing required corrections, the procedure at Regulation 1.76 shall apply with respect to the required changes.
- 1.78 The Board for Graduate Studies and Research shall consider the award of a posthumous diploma or degree only on receipt of a formal request by the candidate's personal representative. The Board shall consider the particular circumstances of each request prior to approving the award of the diploma or degree.
- 1.79 The posthumous award of a diploma or degree shall be considered only when the thesis, research paper or project report needed to complete programme requirements has been submitted to the Campus Registrar for examination, unless the Board for Graduate Studies and Research in any particular case otherwise decides.

#### CHEATING

- 1.80 Cheating is any act intended to benefit one's self or another by deceit or fraud.
- 1.81 A candidate must not directly or indirectly give assistance to any other candidate, or permit any other candidate to copy from or otherwise use his or her papers. A candidate must not directly or indirectly accept assistance from any other candidate or use any other candidate's papers. These behaviours will be regarded as cheating.
- 1.82 (a) If any candidate is suspected of cheating, or of attempting to cheat, the circumstances shall be reported in writing to the Campus Registrar. The Campus Registrar shall refer the matter to the Chair of the Campus Committee for Graduate Studies and Research. The Chair shall appoint an Investigating Committee of not less than 5 members to consider the case. If the Chair so decides, the Committee shall invite the candidate for an interview and shall conduct an investigation. If the candidate fails to attend the interview, and does not offer a satisfactory explanation, the Committee may hear the case in the candidate's absence.
- (b) When investigating allegations of cheating, the quorum of the meeting shall include the Chair of the Campus Committee for Graduate Studies and Research, at least one (1) other member of the Campus Committee and the graduate student representative on the Campus, or in his/her absence, a student nominated by the President of the Student Society. In the event that the Chair of the Campus Committee for Graduate Studies and Research is unable to attend, either Co-Chair of the Board for Graduate Studies and Research shall appoint an Acting Chair. The Campus Registrar shall be the Secretary to the Committee.

- (c) If the candidate is found guilty of cheating or of attempting to cheat, the Committee may recommend to the Board for Graduate Studies and Research that the candidate be disqualified from the examination concerned, or disqualified from all his/her examinations taken in that examination session; or disqualified from all further examinations of the University for any such period of time as it may determine.
- (d) A student may appeal to the Senate from the decision of the Board for Graduate Studies and Research. Appeals against decisions of the Board for Graduate Studies and Research shall be received by the Campus Registrar within two weeks of the date on which the decision is communicated to the student. Such appeals shall be heard by an Appeal Committee of Senate. Such an Appeal Committee may uphold or reverse the decision and may vary the penalty in either direction within the limits prescribed in (b) above. The decision of the Appeal Committee of Senate shall be final.
- (e) Regulations 1.82(a)-(d) apply to all forms of cheating except plagiarism.

**PLAGIARISM**

1.83 Regulations applicable to plagiarism are provided in **APPENDIX 1 TO THESE REGULATIONS**.

## SECTION 2 - REGULATIONS FOR WRITTEN EXAMINATIONS AND COURSEWORK

### GENERAL EXAMINATION REGULATIONS

- 2.1 Candidates taking courses for Graduate Diplomas and degrees shall be examined by means of one or more of the following:
- Written Examinations;
  - Coursework, which shall include practical work, essays and other forms of course-work exercise or written test or any combination of these prescribed by Programme Regulations and approved by the Board for Graduate Studies and Research;
  - Oral Examinations, if recommended by the Examiners of written examinations or coursework and approved by the Campus Committee.
- 2.2 No candidate will be permitted to repeat the examination in any one course on more than one occasion, unless the Board for Graduate Studies and Research in any particular case decides otherwise.
- 2.3 Candidates permitted a second attempt at a course, in cases of courses with mixed methods of assessment, will be required to rewrite only that component failed, unless the Campus Committee in any particular case decides otherwise. Marks allotted to the component passed at the first attempt will be credited to the candidate at his or her second attempt at the course.
- 2.4 In exceptional circumstances a third attempt may be granted by the Board for Graduate Studies and Research. In these instances, the Examiners may recommend a passing mark of no more than 50% as the final overall mark for the course.
- 2.5 The number of courses in which a candidate may be permitted a repeat examination shall be specified in the Requirements for the particular programme, subject to the approval of the Board for Graduate Studies and Research.
- 2.6 Candidates who repeat the examination in any course shall not be eligible for the award of a diploma or degree with distinction.
- 2.7 The conduct of examinations in conformity with these Regulations and the decisions of the Senate shall be under the overall administrative control of the University Registrar. However, the Campus Registrar shall act on the advice of either the Chair of the Board for Graduate Studies and Research or the Chair of the relevant Campus Committee for Graduate Studies and Research, who shall consult the relevant Dean and Head of Department.
- 2.8 Any of these Regulations for examinations of graduate diplomas and degrees may be waived by the Chair of the Board for Graduate Studies and Research, who shall report his or her action to the next meeting of the Board.

### WRITTEN EXAMINATIONS

#### DECLARATION OF INTEREST

- 2.9 (a) All categories of staff are required to submit a declaration of interest to the Campus Registrar if they have a relative writing an examination in which they are involved. Failure to comply with this regulation will result in the candidate's results being declared null and void and the staff member being reported to the Disciplinary Committee.
- (b) Where a member of staff has a relative writing examinations for a course taught by him or her, that member shall be divorced from the setting of the examination paper and another Examiner must be appointed to set the paper and to examine a sample of the scripts, including the script(s) of the relative. Such sample should comprise 10% of the total scripts but in no case be fewer than five scripts.
- (c) For the purposes of these Regulations, a person shall be deemed to be related to the candidate as a parent, child, grandparent, grandchild, step-parent, step-child, sibling, spouse, fiancé, fiancée, or cohabitee, or any offspring of the above.

#### APPOINTMENT OF EXAMINERS

- 2.10 Examiners shall be appointed by the Campus Committee, following receipt of nominations from Faculty Boards. Such nominations should be submitted to the Campus Registrar no later than two months prior to the date of the examination.

- 2.11 Every written examination for a Graduate Diploma or degree, whether taken at one time or in sections, shall be set and graded by two Internal Examiners, one of whom shall be appointed First Examiner.
- 2.12 The minimum qualifications required for an Internal Examiner are:
- (a) An appointment in the grade of Lecturer or above;
  - (b) A record of scholarly publications;
  - (c) At least three years' experience as an Examiner at an approved University.
- 2.13 (a) A Head of Department wishing to recommend for appointment as an Examiner a staff member who does not satisfy one or more of the qualifications listed in Regulation 2.12 shall make an appropriate case to the Campus Committee.
- (b) In instances where part-time members of staff are being recommended as Internal Examiners, their degrees, relevant qualifications, lists of publications, University titles and current academic appointments shall be submitted to the Campus Committee.
- 2.14 The Campus Committee shall recommend to the Board for Graduate Studies and Research those courses, or groups of courses, in which it is not necessary to appoint External Examiners or in which it is desirable to appoint Independent Examiners.
- 2.15 External Examiners shall be appointed by the Campus Committee following receipt of nominations from the relevant Head of Department.
- 2.16 A person who is currently a member of staff, or on the Council, the Campus Council or the University Strategy and Planning Committee, or who has so served within the prior five year period, shall not be appointed External Examiner.
- 2.17 An External Examiner shall not be appointed for more than three years in the first instance. Such appointment may not be extended beyond one additional three year period, unless the Board for Graduate Studies and Research in any particular case otherwise decides.
- 2.18 At the time of nomination of External Examiners, their degrees, relevant professional qualifications, lists of publications, University titles and current academic appointments shall be submitted to the relevant Campus Committee for approval.

#### **DUTIES OF EXAMINERS AND HEADS OF DEPARTMENTS**

- 2.19 The setting of the examination question paper should be based on full consultation between the Internal Examiners and should normally reflect the consensus of all Examiners concerned.
- 2.20 The duties of the First Examiner shall include:
- (a) Preparing a camera-ready copy of the question paper and a marking scheme;
  - (b) Ensuring that all scripts are seen by at least two Examiners;
  - (c) Determining the marks, including reconciling the marks between different Examiners where necessary, and preparing the marksheets;
  - (d) Forwarding copies of the signed component marksheets by the prescribed deadline to the Campus Registrar on completing the examination of each course; (e) Forwarding to the External Examiner through the Campus Registrar, on completion of marking: marksheets appropriately signed; the question paper(s); the relevant marking schemes; solutions and other relevant material including approved course descriptions; and a sample of the scripts and coursework assignments covering performance at all grades, chosen in consultation with the other Internal Examiners (see Regulations 2.29, 2.32, 2.67).
- 2.21 The Head of the Department, or his or her nominee, is responsible for the administrative arrangements involved in the setting and marking of examination papers and the submission of draft papers to the Campus Registrar. In cases where the Head of the Department, or his or her nominee, encounters problems in ensuring the smooth running of the examination process, he or she shall notify the Campus Registrar in writing, with a copy to the person(s) appropriate.

- 2.22 The Internal Examiners shall be responsible for the preparation of draft question papers for the marking of other examination exercises, and for participation in oral examinations where required.
- 2.23 All Examiners marking scripts must perform full examining duties (as defined in the University Examination Regulations for First Degrees, Diplomas and Certificates).
- 2.24 The First Examiner shall be in attendance at the start and during the first half hour of each written examination, except where the written examination requires the expertise of more than one Internal Examiner in which case all Internal Examiners shall be present. In such circumstance where there are no resident Examiners, the First Examiner shall be available for the first half hour of the examination to respond to telephone enquiries.
- 2.25 The Head of Department or his nominee shall use his or her best efforts to ensure that:
- (a) The agreed examination papers are submitted to the Campus Registrar by the dates prescribed, and that such question papers are signed by the Internal Examiners;
  - (b) The examination papers are checked for accuracy by the Internal Examiner(s), at least two days before the examination;
  - (c) The scripts are marked by both Internal Examiners;
  - (d) The scripts, signed marksheets and other relevant examination material are returned to the Campus Registrar within three weeks of the date of the examination.
- 2.26 In cases where the Head of the Department, or his or her nominee, encounters problems in ensuring the smooth running of the examination process, he or she shall notify the Campus Registrar in writing, with a copy to the person(s) as appropriate.
- 2.27 All Examination material shall be addressed to the Campus Registrar under confidential cover, and shall be handed in personally to the Examinations Section by the Head of Department or by the First Examiner. In no circumstance shall a script or other completed examination exercise leave a country unless it has been marked by at least one Internal Examiner, or a facsimile copy has been made. Lost examination scripts will be dealt with as outlined in the University Examination Regulations for First Degrees, Associate Degrees, Diplomas and Certificates save that the reference therein to the Chair, Campus Committee on Examinations will be taken to mean Chair, Campus Committee for Graduate Studies and Research.
- 2.28 Consultation on the examination papers and scripts shall be conducted through the relevant Campus Registrar.
- 2.29 There may be full External Examination of any course or External Examination through post facto review. Full External Examination of courses apply to at least the first two years of every new programme after which External Examination will normally be post facto.
- 2.30 The minimum duties of the External Examiner in the Full External examination process shall be:
- (a) to review and comment on the examination paper(s) and such other examination material as may be referred to him or her by the First Examiner through the Campus Registrar;
  - (b) to assess students' examination scripts, coursework assignments (when sent to the External Examiner; see Regulation 2.67) and other responses, and to recommend marks in any case in which he or she does not agree with the mark awarded by the Internal Examiners. The External Examiner shall include in his or her report the reasons for any substantial disagreements so indicated. When such disagreements affect the issue of pass or fail, the External Examiner should submit his or her mark to the appropriate Campus Registrar as soon as possible;
  - (c) to report to the relevant Campus Registrar within six weeks of the receipt of the scripts on the standard of the examinations as a whole;
  - (d) to comment in the report on the relevance of the examination paper(s) and coursework topic(s), as appropriate, to the course objectives;
  - (e) to comment on comparability of the course(s) with those in similar programmes in other institutions, and to make recommendations where appropriate for the general improvement of the course(s);

- 2.31 In the case of Full External Examination, the External Examiner shall receive:
- (a) Course descriptions and all its elements;
  - (b) The examination scripts and other relevant examination material;
  - (c) The marksheets appropriately signed;
  - (d) The approved examination question paper(s) and, where appropriate, solutions;
  - (e) The coursework assignments, where relevant (see Regulation 2.64);
- 2.32 With respect to External Examination through post facto review, the External Examiner shall receive, for each of the courses for which he or she is responsible, a copy of the approved course description and all its elements, the question paper, the marksheet, marking scheme and solutions, a representative sample of the scripts, and where relevant (see Regulation 2.64), a sample of the coursework and any Master's project reports.
- 2.33 The duties of the External Examiner in post facto reviews shall include:
- (a) Undertaking a review of the standard of each examination after the scripts have been marked, and where relevant (see Regulation 2.64), of the standard of the coursework;
  - (b) Acting as a reviewer, and advising in this capacity on curricular matters in the area of study to which he or she is appointed;
  - (c) Writing a report to the Campus Registrar on each course examined. Copies of reports of External
  - (d) Examiners shall be sent by the Campus Registrar to the relevant Head of Department, Faculty Dean and Campus Committee. The External Examiner shall submit his or her report no later than four weeks after the receipt of the scripts.
- 2.34 Each External Examiner shall return to the Campus Registrar, in sealed registered packets, all scripts, marksheets and such other examination materials as may have been referred to him. These should be sent by airmail unless they need to be returned more urgently for the attention of the Board of Examiners.
- 2.35 Copies of reports from External Examiners shall be sent by the Campus Registrar to the relevant Campus Committee, Faculty Dean and Head of Department.

#### **CONFIDENTIALITY AND FORMAT OF QUESTION PAPERS**

- 2.36 The confidentiality of all examination matters shall be preserved.
- 2.37
- (a) The final draft question paper(s) shall be signed by the Internal Examiners and shall be on such form(s) as the University Registrar may prescribe.
  - (b) The final approved question paper(s) shall be printed or otherwise reproduced as prescribed by the Campus Registrar.
  - (c) No question paper shall be adopted as an examination paper unless it has been signed by the Internal Examiners.
- 2.38 Examiners must not transmit question papers by unsecured means.

#### **CONDUCT OF WRITTEN EXAMINATIONS**

- 2.39 Instructions to candidates taking written examinations, and duties of Invigilators, shall be as in the University Examination Regulations for First Degrees, Diplomas and Certificates, except that functions assigned to the Campus Committee on Examinations, its Chair, or the Chair of the Board for Undergraduate Studies, shall be performed respectively by the Campus Committee for Graduate Studies and Research, its Chair, or the Chair, Board for Graduate Studies and Research.
- 2.40 The dates of all examinations, other than Special Examinations, shall be as prescribed by the Campus Registrar.
- 2.41 The Examination Timetable, in respect of written examinations, shall be published at least one month before the examinations begin. Any changes in dates after publication shall be brought to the attention of candidates by means of additional notices posted on the official Examination Notice Board or an approved electronic medium at each Campus. Candidates will not be informed individually of such changes. In no case will any such change be made later than one week prior to the commencement of the series of examinations.
- 2.42 Each Chair of a Campus Committee is authorised to grant permission for the holding of a Special Examination on the recommendation of the relevant Head of Department.

- 2.43 Examinations being taken by both full-time and part-time students will be scheduled in accordance with the full-time programme.
- 2.44 No candidate shall be admitted to any examination unless:
- (a) He or she has satisfied all the requirements and passed all the qualifying examinations prescribed in the Programme Requirements; or
  - (b) He or she has been exempted from any such requirements by the Campus Committee on the recommendation of the relevant Head of Department.
- 2.45 Any candidate who has been absent from the University for a prolonged period during the academic year for any reason other than certified illness, or whose attendance at prescribed lectures, classes, practical classes, tutorials or clinical instructions has been unsatisfactory, or who has failed to submit essays or other exercises set by his or her teachers, may be debarred from the relevant University examination(s) by the Board for Graduate Studies and Research, on the recommendation of the relevant Head of Department.
- 2.46 Any student who, having registered for a course, fails to take the examination shall be deemed to have failed the examination unless the Board for Graduate Studies and Research, on the recommendation of the relevant Head of Department, in any particular case decides otherwise.
- 2.47 If the performance of a candidate in any part of any examination is likely to have been affected by factors of which the Examiners have no knowledge, the candidate may report the circumstances in writing to the Campus Registrar. If the candidate decides to report such circumstances, he or she must do so within seven days of that part of the examination which may have been affected.
- 2.48 The Campus Registrar may pass the information referred to in Regulation 2.47 to the Chair of the Board of Examiners, if in his or her opinion it is likely to assist the Examiners in the performance of their duties. Boards of Examiners shall not take cognizance of illness, or other circumstances claimed to affect the performance of candidates, if these have not been referred to them by the Campus Registrar.
- 2.49 Any student who, for reason of permanent or temporary incapacity, desires special arrangements during examinations shall apply to the Campus Registrar through the relevant Dean of the Faculty or Head of Department. The arrangements desired should be specified, and the Campus Registrar may require a Medical Certificate as proof of such incapacity. Such student(s) shall be given extra time in which to write the relevant examination(s). The Campus Registrar shall inform the Board of Examiners of the circumstances in which the examination was performed.
- 2.50 Any amanuensis or secretarial assistance provided to students with special needs shall be approved by the Campus Registrar. The University will normally defray the additional costs involved.
- 2.51 In cases of illness, the candidate shall present to the Campus Registrar a medical certificate, as proof of illness, signed by the University Medical Officer or by other Medical Practitioners approved for this purpose by the University. The candidate shall send the medical certificate to the Campus Registrar within seven days from the date of that part of the examination in which the performance of the candidate is affected. A certificate received after this period will be considered only in exceptional circumstances.
- 2.52 Where, in the opinion of the University Medical Officer or any other approved Medical Practitioner concerned, a student is unable to submit a medical certificate in person, the University Medical Officer may do so on his behalf, within the time period prescribed in Regulation 2.51.
- 2.53 In the case of written examinations, every script shall bear the candidate's ID number but not his or her name.
- 2.54 The place, time and date at which a written examination shall be held will be determined by the Campus Registrar.

#### **COURSEWORK REGULATIONS**

- 2.55 Any coursework component, which is intended to count towards the final mark for a course, must be approved by the Board for Graduate Studies and Research.
- 2.56 The relevant Head of Department or Nominee must advise the students in writing about the coursework requirement before the end of the second week of the semester in which the coursework assignment is due, unless the Campus Committee in any particular case otherwise decides. Copies of this advice must be posted on the appropriate Faculty or Department Notice Boards or an approved electronic medium.

- 2.57 The submission date(s) of coursework assignments which count towards the final mark for a course shall be posted on Faculty or Departmental Notice Boards or an approved electronic medium at least two weeks in advance of the submission date(s) for the particular assignments.
- 2.58 Any student who fails to submit by the posted submission date, a coursework assignment which is intended to count towards the final mark for a course shall be deemed to have failed the assignment unless the Campus Committee, on the recommendation of the relevant Head of Department, in any particular case otherwise decides.
- 2.59 In the case of written examinations of coursework, the Lecturer or Internal Examiner for the course shall be present for at least the first half hour of the examination, and appropriate invigilation shall be arranged by the relevant Head of Department or Examinations Section where appropriate for the entire examination.
- 2.60 In the case of written examinations of coursework, the Examinations Section shall determine the place, time and date at which the examination will be held, and this information shall be posted on the relevant Faculty or Departmental Notice Boards or an approved electronic medium at least two weeks in advance of the examination date.
- 2.61 For all coursework assignments, and for written examinations of coursework, the candidate's work must bear either the candidate's ID number or his or her name, as prescribed by Faculty Regulations.
- 2.62 Coursework assignments and examinations should be examined by at least two Internal Examiners. Where the Internal Examiners fail to agree on a coursework mark, the Head of Department shall determine the coursework mark in consultation with the Internal Examiners. In such a case, he or she must submit a full report to the Campus Committee.
- 2.63 Internal Examiners are permitted to inform students of their grades and marks for individual pieces of coursework as soon as an agreed grade and mark are available.
- 2.64 In cases where coursework counts for more than forty percent (40%) of the total assessment of a course, the coursework must be sent to the External Examiner in accordance with Regulations 2.29 and 2.32.
- 2.65 For all coursework assessment, the First Examiner is required to submit to the Head of Department, before the date of the written examination for the course, a coursework marksheet indicating marks for each coursework component and the final coursework percentage and grade.
- 2.66 In respect of any courses in which the students collaborate in teams and submit team reports as components(s) of their coursework requirements, the report of each team may identify which portions of its contents have been contributed by which student. All coursework shall be written work except where the Board for Graduate Studies and Research gives approval for an alternative procedure.

#### **ORAL EXAMINATIONS**

- 2.67 The Examiners appointed to examine a written paper may put oral questions to a candidate in any case in which they believe that this will help towards a more accurate assessment, if the Chair of the Campus Committee so approves.
- 2.68 In cases where a student fails a written examination of a course within 5% of the pass mark, the Examiners may recommend an oral examination to the Chair of the Campus Committee.
- 2.69 In cases of students failing the written examination component of a course on the first attempt, being allowed an oral examination, and performing satisfactorily in the oral examination, the Examiners shall recommend a passing mark of no more than 50% for the written component. This shall then be combined with the coursework mark to obtain the final overall mark for the course. In cases of students failing the written examination component of a course on the second attempt, being allowed an oral examination, and performing satisfactorily in the oral examination, the Examiners shall recommend a passing mark of no more than 50% as the final overall mark for the course.
- 2.70 The Campus Registrar shall set the time and place of the oral examination.
- 2.71 Oral examinations will be conducted by at least two Examiners, and chaired by the relevant Head of the Department or a senior member of the Faculty nominated by the Chair of the Campus Committee, if the Head of the Department is absent or is an Examiner. A report of the examination must be submitted to the Campus Committee.
- 2.72 The Examiner of an oral examination shall not serve as Chair.

2.73 The Examiners at an oral will normally be the persons who examined the written paper, but if one Examiner is not available, the Chair of the Campus Committee, in consultation with the relevant Head of Department, may appoint another Examiner in his or her place.

#### **EXAMINERS' MEETINGS**

2.74 The marks obtained by all candidates in each course examined shall be presented by the Internal Examiners to a Board of Examiners.

2.75 The relevant Head of Department, or Faculty Dean, shall chair the Board of Examiners, unless in any particular case the Campus Committee otherwise decides.

2.76 The Board of Examiners shall consist of all of the Internal Examiners appointed for all of the courses offered in the Programme concerned, unless in any particular case the Campus Committee decides otherwise. The Campus Registrar must be notified in advance of all meetings of Boards of Examiners and shall attend. The Minutes of these meetings shall be prepared by the relevant Faculties.

2.77 The Chair of the Campus Committee may attend meetings of the Boards of Examiners.

2.78 In cases where full external examination of a course is retained and where the External Examiner's judgement of a candidate's performance is at variance with that of the Internal Examiners', each of the Internal Examiners shall be requested to provide a comment on the External Examiner's position for the guidance of the Board of Examiners and Campus Committee. Where the judgement of the examiners continues to differ, the Campus Committee shall determine the candidate's result in the light of the collective comments of all Examiners.

2.79 A list of candidates and their results in every examination, and the recommendations arising therefrom, shall be drawn up at each meeting of a Board of Examiners, signed by the Chair of the meeting, and communicated to the Campus Registrar within two weeks of the meeting for the approval of the Campus Committee.

2.80 All examination results and marksheets shall be approved and signed by the Chair of the Campus Committee.

2.81 (a) All proceedings at meetings of Examiners shall be strictly confidential. Except as provided for in (b) and (c) below, examination results, grades and marks shall not be communicated in advance of publication to anyone except to the appropriate officers of the University. Copies of examination marks circulated to Boards of Examiners shall be treated as secret and confidential. The First Examiner for the course may, after the official marksheet has been approved and signed, disclose the final mark to the student.

(b) Heads of Departments, Chairs of Boards of Examiners, or Chairs of Campus Committees are permitted, in cases where this is considered necessary, to advise students in relation to their continuing registration on the basis of their performance at examinations before the final examination results are published.

(c) In respect of coursework, Examiners may inform students of their marks and grades for individual pieces of coursework as provided for in Regulation 2.63.

(d) After publication of results, the relevant Campus Registrar is authorised to issue final examination marks and grades to individual students.

#### **REVIEW OF EXAMINATION RESULTS**

2.82 (a) A student who is dissatisfied with the results of his or her examination should report his or her dissatisfaction in writing to the Campus Registrar. Such a report must be made within two weeks of the publication of results.

(b) The Campus Registrar shall forward the student's report to the Chair of the Campus Committee.

(c) Only students who have failed a course may request to go through their script or coursework with the Examiner (utilizing any approved electronic teleconferencing system if necessary);

(d) Students may request to have their script or coursework re-marked by a new and independent Examiner.

2.83 The student may inform the Campus Registrar that he or she wishes to have the examination remarked, and must pay the relevant fee to have this done.

2.84 The right to report dissatisfaction and request a remark shall apply to both the coursework and written examinations.

- 2.85 (a) Where a re-marking is requested, the Campus Registrar shall inform the Chair of the Campus Committee, who shall request the relevant Head of Department, or in his or her absence the relevant Faculty Dean, to nominate a new and independent Examiner from within or without the University for appointment by the Chair of the Campus Committee, to re-mark the examination script or coursework.
- (b) Where the Head of the Department is an Examiner, the nomination shall be made by the Dean. Where both the Dean and the Head of the Department are Examiners, the Chair of the Campus Committee shall make the appointment after such consultation, as he or she considers appropriate.
- (c) The new and independent Examiner no later than ten (10) days after receiving the script shall return the re-marked script or coursework with a written report and, where applicable, signed mark-sheet or grade-sheet to the Campus Registrar.
- 2.86 In the case of the re-marking of a script or coursework the mark of the new and independent Examiner shall be regarded as the final mark.
- 2.87 The Campus Registrar shall inform the candidate of the result of the re-marking.
- 2.88 Where the re-marking under Regulation 2.83 results in a higher mark than that previously recorded, the fee shall be refunded, provided that the increased mark results in a change of grade.
- 2.89 The results of the re-marking shall be conveyed by the Campus Registrar to the Chair of the Campus Committee, the Chair of the Board of Examiners and the relevant Head of Department.

## SECTION 3 - REGULATIONS FOR THE EXAMINATION OF RESEARCH PAPERS, PROJECT REPORTS AND THESES APPOINTMENT OF EXAMINERS

- 3.1 Examiners shall be nominated by the relevant Head of Department at least three months before the proposed date of submission of theses, and at least two months before the proposed date of submission for research papers and project reports. Heads of Departments are required to submit the names of nominated Examiners to the Campus Committee on the prescribed form and to advise Internal Examiners of their nomination, in writing. These nominations shall remain confidential.
- 3.2 All Examiners shall be appointed by the Campus Committee on behalf of the Board for Graduate Studies and Research, on the recommendation of the relevant Head of Department.
- 3.3 For all research papers and project reports contributing to more than 25% of the programme credit rating, at least three Examiners shall be appointed, one of whom shall be external.
- 3.4 For all theses at least three Examiners shall be appointed including one Internal Examiner and two External Examiners. The Supervisor shall not be an Examiner of a thesis. One of the External Examiners shall be appointed as an Additional External Examiner who shall be engaged: (a) when the first External Examiner indicates that he/she is unavailable or unwilling to serve as an Examiner of the thesis; or (b) different recommendations are made by the Internal Examiner and the External Examiner as to whether the thesis should Pass or Fail.
- 3.5 For oral examinations, and for practical or written tests required by Examiners after reading theses, research papers or project reports, the Examiners shall be the same persons appointed by the Campus Committee, but the Board for Graduate Studies and Research may, at its discretion, appoint Examiners specifically for oral examinations.
- 3.6 The minimum qualifications required for an Examiner of a research paper or project report are:
  - (a) An appointment in the grade of Lecturer/Assistant Professor or above at an approved University;
  - (b) A record of scholarly publications;
  - (c) At least three years' experience as an Examiner at an approved University.
- 3.7 The Examiners (Independent Internal and External) of an MPhil, PhD or Professional Doctorate thesis are expected to be specialists and active researchers in their field, and should preferably have substantial experience in the supervision and examination of theses and should not be previously involved in the instruction or the work of the candidate being examined. The minimum qualifications required are:
  - (a) For MPhil and PhD degrees, an appointment in the grade of Associate Professor/Senior Lecturer or above;
  - (b) A record of scholarly publications;
  - (c) At least three years' experience as an Examiner at an approved University;
- 3.8 The Campus Registrar shall inform Examiners of their appointment by the Campus Committee.

### EXAMINATION OF RESEARCH PAPERS AND PROJECT REPORTS

- 3.9 Research papers or project reports which constitute 25% or less of the programme credit rating shall be assigned a mark by each Internal Examiner who shall report to the Campus Registrar individually on his or her assessment of the work. Where the marks differ substantially, the final mark will be determined by the Campus Committee in accordance with the Manual of Procedures for Graduate Diplomas and Degrees.
- 3.10 Research papers or project reports for which the credit weighting is greater than 25% shall require examination by an External Examiner. Such project reports and research papers will be simultaneously examined by all Examiners who will each submit a report, a grade and a mark to the Campus Registrar. Should the marks of Examiners differ

substantially the final mark will be determined by the Campus Committee in accordance with the Manual of Procedures for Graduate Diplomas and Degrees.

- 3.11 Examination of clinical research projects shall be governed by the relevant Regulations for Postgraduate Clinical Programmes.
- 3.12 The regulations applicable to examination of research papers are as follows:
- (a) Candidates shall only be required to make corrections to research papers or project reports before the award of a final grade where minor corrections would enable an agreed marginal failure (45-49%) to be awarded the minimum passing mark (50%).
  - (b) A research paper or project report which has been failed by the Examiners will be allowed only one re-submission. The re-submission must be within a six month period following initial notification of the failure. Re-submitted research papers or project reports will only receive the minimum passing mark (50%).
  - (c) Research papers or project reports assigned an A grade shall be deposited in the Campus Library. Research papers or project reports assigned a lesser grade may also be deposited, on the recommendation of the Supervisor to the Campus Committee.
  - (d) Candidates may be required to make corrections to research papers or project reports to be lodged in the Campus Library to ensure that such work reaches acceptable standards of presentation. Such corrections shall not alter the final grade assigned.

#### **EXAMINATION OF THESES**

##### **ENTRY FOR EXAMINATION BY THESIS**

- 3.13 A candidate must submit for the approval of the Campus Committee, the exact title of his or her thesis at the time when he or she applies for entry to the examination. An approved thesis title may not be changed except with the permission of the Campus Committee.
- 3.14 The MPhil candidate must have satisfactorily completed two (2) seminars before applying for the examination of the thesis. The PhD candidate must have satisfactorily completed three (3) seminars before applying for the examination of the thesis. The Professional Doctorate candidate must have satisfactorily completed seminars as specified in Programme and Faculty Regulations before applying for the examination of the thesis (See Regulation 1.68).
- 3.15 The candidate must apply to enter for the examination by thesis on the prescribed form not less than three months before the expected date of submission of the thesis. The application must be accompanied by the required examination fee.
- 3.16 The candidate must submit the Application for Examination of Thesis form to the Campus Registrar through the Supervisor who shall indicate his or her approval by signing a Certificate of Completion of Thesis/Research Paper/Project form. In signing a Certificate of Completion of Thesis/ Research Paper/Project form, the Supervisor will be required to certify:
- (a) whether, to the best of his or her knowledge, the work in the thesis was done by the student,
  - (b) whether, in the Supervisor's opinion, the thesis is ready for examination, and
  - (c) whether the student has indicated that the work was checked for plagiarism.
- 3.17 If the Supervisor has concerns about the integrity of the thesis, he or she shall so indicate to the Campus Registrar, in writing, and the Campus Committee shall establish a Review Committee to assess the concern. In such circumstances, the Review Committee will make a recommendation to the Board for Graduate Studies and Research on the admissibility of the thesis for examination.
- 3.18 If, in the opinion of the Supervisor, the academic content or technical presentation of the thesis is such that the thesis is not ready for examination, he or she shall so indicate to the Campus Registrar and the candidate in writing. In such circumstances, the Campus Committee will meet with interested parties who may include the candidate, the Supervisor, the student's Committee of Advisors, the relevant Head of Department or, if the Head is Supervisor, the relevant Faculty Dean. Should the consensus from the meetings be that the thesis is not yet suitable for examination the student should be informed and counselled. Where the student insists on submitting the thesis for examination

in the present form, the Board for Graduate Studies and Research may decide that it is appropriate to submit a report of the Campus Committee's deliberations to the Examiners.

- 3.19 Five copies of the thesis for examination shall be submitted to the Campus Registrar, one of these shall be an electronic copy submitted with written verification by the Supervisor.
- 3.20 A candidate for a graduate degree examined by thesis may not submit the thesis for examination on more than two occasions, and in any case, must submit the thesis within the time limits imposed for the particular degree (see Regulations 1.49, 1.50, 1.52-1.53).

#### **FORM OF SUBMISSION OF THESES**

- 3.21 Requirements for the presentation of theses are set out in the Thesis Guide published by the Board for Graduate Studies and Research. Theses which are not presented in accordance with the provisions of the Guide shall not be sent for examination.

#### **ACCESS TO THESES**

- 3.22 (a) At the time of submission every candidate shall sign a Declaration Form for the Reproduction of Thesis/ Research Paper/Project permitting access in the libraries of the University to the thesis, research paper or project report accepted for a graduate diploma or degree.
- (b) Where a candidate has good reason he/she may apply for an embargo, wholly or in part, to be placed on the reproduction and distribution of his/her Thesis/Research Paper/Project for three years after the date of its deposit.

#### **EXAMINATION PROCEDURES FOR THESES**

- 3.23 Candidates for degrees examined by thesis are required to satisfy the Examiners in such oral, practical or written examinations as stipulated by the Board for Graduate Studies and Research and in Faculty Regulations.
- 3.24 Examiners of theses are required to report to the Board for Graduate Studies and Research, through the Campus Registrar, within two months of the date of delivery of a thesis. The report shall contain:
- (a) An evaluation of the thesis;
- (b) A recommendation in accordance with Regulations 3.25-3.31 including an indication of whether high commendation should be awarded;
- (c) An indication of any changes in the thesis which the Examiner thinks should be made before the award of the degree.
- 3.25 Subject to Regulations 3.28-3.31, the Examiners of a PhD or Professional Doctorate thesis shall, after reading the thesis, examine the candidate orally and may, at their discretion, also examine the candidate by practical or written questions or by both of these methods.
- 3.26 If an Examiner of an MPhil or MD thesis deems that the thesis needs to be examined further, the candidate may be required to be examined by oral, practical, or by written examination, or by any combination of these methods.
- 3.27 If, in the opinion of the Examiners, an MPhil thesis is of such high standard and potential that it might be developed into a submission for the PhD degree, the Examiners may recommend that the candidate be permitted to transfer registration to the PhD and to submit within a timeframe specified by the Board, but it shall be the right of the candidate at any time to accept conferment of the MPhil degree.
- 3.28 If, in the opinion of the Examiners, a PhD thesis is of insufficient merit to justify the award of the PhD degree, the Examiners may, without further test, recommend that the candidate be permitted to resubmit the thesis with revision for the MPhil degree, or that the MPhil be awarded without further revision of the work.
- 3.29 The Examiners may, without further test, recommend that a thesis be rejected. A candidate whose thesis is rejected by the Board for Graduate Studies and Research after it has received reports from all of the Examiners, shall not be permitted to present the same thesis for examination, or a revised version of the thesis with the same title, unless re-approval of candidature has been granted by the Board for Graduate Studies and Research.

- 3.30 If, in the opinion of the Examiners, the thesis is inadequate, but of sufficient merit to justify a second attempt at the examination, the Examiners may, without further test, recommend that the candidate be permitted to resubmit the thesis for examination in a revised form. A candidate who is required by the Examiners to make such major changes to the thesis and to resubmit the thesis in a revised form for examination, must resubmit within eighteen months of the date of notification. The Campus Committee shall send to the candidate pertinent comments of the Examiners relating to the changes they propose.
- 3.31 If, in the opinion of the Examiners, the thesis is adequate but defective in minor ways which do not require it to be resubmitted for examination, they may require the candidate to make such amendments to the thesis as will remove the defects indicated, to the satisfaction of the Supervisor and/or Internal Examiner as determined by the Campus Committee, before the award of the degree. Subject to Regulation 3.31, such changes shall be made after the oral examination for PhD candidates. A candidate who is required by the Examiners to make such amendments to the thesis must do so within a period of six months after the date of notification.
- 3.32 If there are substantial differences in recommendations amongst the Examiners, the Chair of the Campus Committee may circulate the conflicting reports among the Examiners and attempt to arrive at a common position. If a common position among the differing Examiners cannot be reached, the Chair of the Campus Committee shall engage the Additional External Examiner who shall examine the thesis and report in accordance with Regulation 3.24.
- 3.33 If the reports of the Examiners indicate that a thesis requires extensive revision, but not re-submission, in accordance with Regulation 3.31, the Board for Graduate Studies and Research may direct that the candidate be requested to effect such revision to the satisfaction of the Supervisor and/or Internal Examiner prior to any oral examination. Such revision should be completed within twelve months of the date of notification.
- 3.34 If, in the opinion of the Examiners, the thesis is adequate but the candidate fails to satisfy the Examiners at the oral, practical, or written examination held in connection therewith, the Examiners may recommend that the candidate be permitted to submit to a further oral, practical or written examination within a period not exceeding eighteen months from the decision of the Board for Graduate Studies and Research. In such cases, the Board for Graduate Studies and Research may direct the candidate to effect any revision required to the satisfaction of the Supervisor and/or Internal Examiner prior to the further oral examination.
- 3.35 If, in the opinion of the Examiners, the thesis is adequate, and if the candidate satisfies the Examiners in any oral, practical or written examination required, the Examiners shall recommend that the degree be conferred. Where Examiners recommend conferment of the degree, they are required to certify that the thesis is worthy of publication as a thesis approved for the relevant degree of the University of the West Indies.
- 3.36 Oral examinations will be held within one month of receipt of the written reports of all of the Examiners, unless the Campus Committee in any particular case decides otherwise.
- 3.37 Candidates will be required to present themselves for any oral, practical or written examination at the time, place and date set, in writing, by the Campus Registrar.
- 3.38 An oral examination shall be chaired by a senior academic appointed by the Campus Committee and shall be attended by the Independent Internal and the External Examiner. In cases where the Additional External Examiner has been engaged, he/she shall also be present at the oral examination. Where there is a disagreement among the Examiners, the recommendation of the majority shall be accepted as the final recommendation to the Board for Graduate Studies and Research.
- 3.39 The Chair of the oral examination and the Examiners shall send a report on the oral examination to the Chair of the Campus Committee in which they shall report on the candidate's knowledge of his or her field of study and make a recommendation in accordance with the 3.34 and 3.35 of these Regulations. The report should provide the Board with the details of any further changes required of the candidate by the Examiners before recommending the award of the degree. The Chair of the Campus Committee shall forward the recommendation of the Examiners to the Board for Graduate Studies and Research for approval.
- 3.40 Candidates who
- (a) fail to present themselves for any oral or written examination; or
  - (b) fail to re-submit a revised thesis within the time periods specified in these Regulations; or
  - (c) fail to satisfactorily make alterations in accordance with Regs. 3.28 and 3.31
- and who have not been granted an extension in respect of Regulation 3.30, 3.31 and 3.33 shall be deemed to have failed the examination.

# APPENDIX 1 - UNIVERSITY REGULATIONS ON PLAGIARISM

## GRADUATE DIPLOMAS AND DEGREES

### APPLICATION OF THESE REGULATIONS

1. These Regulations apply to the presentation of work by a student for evaluation, whether or not for credit, but do not apply to invigilated written examinations.

### DEFINITIONS

2. In these Regulations, “plagiarism” means the unacknowledged and unjustified use of the words, ideas or creations of another, including unjustified unacknowledged quotation and unjustified unattributed borrowing; “Level 1 plagiarism” means plagiarism which does not meet the definition of Level 2 plagiarism; “Level 2 plagiarism” means plagiarism undertaken with the intention of passing off as original work by the plagiariser work done by another person or persons.
3. What may otherwise meet the definition of plagiarism may be justified for the purposes of Regulation 2 where the particular unacknowledged use of the words, ideas and creations of another is, by the standards of the relevant academic discipline, a function of part or all of the object of the work for evaluation whether or not for credit, including without limitation:
  - (a) The unacknowledged use is required for conformity with presentation standards;
  - (b) The task set or undertaken requires producing a result by teamwork for joint credit regardless of the level of individual contribution;
  - (c) The task set or undertaken requires the use of an artificial language, such as is the case with computer programming, where the use of unoriginal verbal formulae is essential.
4. The fact that a user enjoys the right of use of certain words, ideas and creations as a matter of intellectual property, does not justify their unacknowledged use under Regulations 2 and 3.
5. In these Regulations, “BGSR Regulations” means the University of the West Indies Regulations for Graduate Diplomas and Degrees; “Campus Co-ordinator” means the Campus Coordinator for Graduate Studies and Research.

### EVIDENCE OF PLAGIARISM

6. In order to constitute evidence of plagiarism under these Regulations, there must be identified as a minimum the passage or passages in the student’s work which is/are considered to have been plagiarised and the passage or passages from which the passages in the student’s work are considered to have been derived.

### STUDENT CERTIFICATION

7. When a student submits for examination prepared work under Regulation 1, the student shall sign a statement, in such form as the Board for Graduate Studies and Research may prescribe, that the work submitted is free of plagiarism including unattributed unjustified quotation or paraphrase. The student may utilize electronic vetting to facilitate the assessment and certification. The results of the electronic vetting shall be provided to the Supervisor by the student when the work is submitted to the Supervisor for approval to submit for examination.
8. Quotation or paraphrase is attributed for the purpose of Regulation 7 if the writer has indicated that the work is not the writer’s own, even if the source is not identified.
9. Absence of certification does not prohibit the University from proceeding with a charge of plagiarism.

### ELECTRONIC VETTING FOR PLAGIARISM BY THE UNIVERSITY

10. The Campus Coordinator may authorise or direct the Faculty Office, or other authorized body on behalf of the Campus Committee, that the work submitted under Regulation 7 be subjected to further electronic scrutiny in order to verify its freedom from plagiarism before being submitted to the Examiners. The results of the electronic vetting shall be submitted to the Campus Coordinator, the Dean and the Head of Department, and shall be considered in determining whether the University proceeds with submission of the work to the Examiners. The results of such

electronic vetting although capable, where the requirements of Regulation 6 are satisfied, of constituting evidence under these Regulations, are not thereby conclusive of any question as to whether or not plagiarism exists.

11. Where suspected plagiarism is detected, whether through the procedures outlined in Regulation 10, or whether subsequently during the course of examination, the person(s) detecting the suspected plagiarism, whether the Dean, Head of Department or Examiner, shall:
  - (a) where there is suspected evidence of Level 1 plagiarism in work which does not constitute a thesis or major project report (defined as the report comprising 25% or more of the total credits for the programme), refer the matter to the Examiners for their consideration as a charge of Level 1 plagiarism under Regulation 12; or
  - (b) where there is suspected evidence of Level 1 plagiarism in a thesis or major project report, refer the matter to the Campus Coordinator as a charge of Level 1 plagiarism under Regulation 13; or
  - (c) where there is suspected evidence of Level 2 plagiarism, refer the matter to the Campus Coordinator as a charge of Level 2 plagiarism under Regulation 19.

#### **LEVEL 1 PLAGIARISM**

##### **PLAGIARISM IN WORK WHICH DOES NOT CONSTITUTE A THESIS OR MAJOR PROJECT REPORT**

12. In work submitted for examination which does not constitute a thesis or major project report under the University Regulations for Graduate Degree and Diplomas, and where the Examiners are satisfied that Level 1 plagiarism has been committed, they shall levy a penalty for the Level 1 plagiarism charged in the form of a reduction in the marks which would have otherwise been awarded. The First Examiner must inform the Campus Registrar of the penalty levied and of the evidence of plagiarism. When the normal examination process is complete, the Campus Registrar must communicate this information to the student.

##### **PLAGIARISM IN THESES AND MAJOR PROJECT REPORTS**

13. In the case of theses and major project reports, evidence of Level 1 plagiarism must be reported to the Campus Co-ordinator to support a charge of Level 1 plagiarism by the Dean, the Head of Department or an Examiner, where the person making the report considers that Level 1 plagiarism has been committed. Such a report and charge may be made regardless of the outcome of any scrutiny under Regulation 10.
14. If the Campus Co-ordinator considers that Level 1 plagiarism has been committed as charged, the Campus Co-ordinator shall return the submitted work to the student for revision and resubmission within a period determined by the Campus Coordinator but which may not exceed one year. The outcome and the penalty levied shall be reported to the Board for Graduate Studies and Research and the University Registrar. The University Registrar shall inform the student of the outcome of the assessment and the penalty levied.

#### **APPEALS**

15. In the case of work which is neither a thesis nor a major project report, a student may appeal against the finding of plagiarism or the penalty levied under Regulation 12 to the Head of Department or, where the Head of Department is the First Examiner who has levied the penalty, to the Dean. Where the same person discharges both the functions of Dean and Head of Department and is also the First Examiner who has levied the penalty, the appeal is to the Campus Co-ordinator.
16. In the case of theses and major project reports, the student may appeal to the Board for Graduate Studies and Research from a decision of the Campus Co-ordinator under Regulation 14.
17. The Board for Graduate Studies and Research, the Campus Co-ordinator, the Dean or the Head of Department, as the case may be, hearing the appeal, in a Level 1 plagiarism case, may hear the appeal by correspondence. In the case where the Board or person hearing the appeal is not satisfied that there has been plagiarism, or considers that the penalty levied was excessive, they may allow the appeal or remit or reduce the penalty accordingly.
18. The Board for Graduate Studies and Research, Campus Co-ordinator, Dean or Head of Department, hearing the appeal, as the case may be, shall report the outcome of the appeal to the Campus Registrar, who shall advise the student accordingly.

#### **LEVEL 2 PLAGIARISM**

19. When a Campus Co-ordinator receives a report of suspected Level 2 plagiarism under Regulation 11c, whether the evidence is in a thesis, a major project report or in work which does not constitute either a thesis or major project report, the Campus Coordinator may either:

- (a) where not concurring with the identification of evidence of Level 2 plagiarism, communicate with the person(s) reporting the suspected plagiarism, whether the Dean, Head of Department or Examiner, declining to proceed further in relation to the Level 2 proceedings, and shall in addition:
- (i) indicate that the decision is intended to preclude the invocation of the procedures for Level 1 plagiarism; or
  - (ii) indicate that the avenue is open for the matter to be treated as a case of suspected Level 1 plagiarism under Regulation 12 in work which does not constitute a thesis or major project report, or as a case of suspected Level 1 plagiarism under Regulation 13 in work which constitutes a thesis or major project report; or
- (b) refer the matter to the University Registrar who shall inform the person(s) reporting the suspected plagiarism and the student that there is a case to be answered, subject to an application under Regulation 20.
20. Where the Campus Co-ordinator replies in the terms of Regulation 19a, the Dean, Head of Department or Examiner may apply, no later than the elapse of two complete calendar weeks after the reply has been notified, through the University Registrar to the Chair of the Board for Graduate Studies and Research seeking a reversal of the Campus Coordinator's decision.
21. The Chair of the Board for Graduate Studies and Research may:
- (a) where concurring with the identification of evidence of Level 2 plagiarism, uphold the application in Regulation 20 and treat the case as one which has been referred to the Chair under Regulation 19b; or
  - (b) deny the application.
22. A denial by the Chair of the Board for Graduate Studies and Research of an application under Regulation 21b is, subject to Regulation 32, conclusive in relation to an allegation of Level 2 plagiarism in the case under consideration.
23. A denial by the Campus Co-ordinator under Regulation 19a which is, after the elapse of three complete calendar weeks after the reply has been notified, not the subject of an application under Regulation 20, or a denial by the Chair of the Board for Graduate Studies and Research under Regulation 21b, terminates the proceedings on the plagiarism charge, subject to Regulation 32 and save to the extent that the Campus Co-ordinator has ruled otherwise under Regulation 19aii.
24. Where the matter has been referred under Regulation 19b or an application has been upheld under Regulation 21a, the Chair of the Board for Graduate Studies and Research, at the request of the University Registrar, shall establish a Committee of Inquiry comprising:
- i. The Chair of the Board for Graduate Studies and Research or his/her nominee.
  - ii. One Academic Board representative from each campus sitting on the Board for Graduate Studies and Research.
  - iii. One postgraduate student representative from among those sitting on the Board for Graduate Studies and Research.
- Four members of the Committee including the Chair shall constitute a quorum.
25. The Committee of Inquiry is not a court of law but the hearing shall be conducted in accordance with the rules of natural justice. The Committee may summon witnesses to give evidence.
26. The Committee of Inquiry reserves the right to have legal representation.
27. The student shall be given a written notice from the University Registrar specifying the allegations of the Level 2 plagiarism, along with a copy of all material relevant to the charge and made available to the Committee, at least fourteen days before the hearing of the allegation and within one calendar month of the case first being reported to the Campus Co-ordinator.
28. The student shall have a right to appear before the Committee of Inquiry and to be accompanied or represented by a friend or by an attorney-at-law whose expenses will be borne by the student.
29. The student shall have the right to ask questions of witnesses, to call his/her own witnesses, to make statements on his/her own behalf, and to make submissions.
30. If the student fails to make an appearance before the Committee of Inquiry and does not offer a satisfactory excuse, the Committee of Inquiry may hear the case in the student's absence.

31. Where a Committee of Inquiry has been established under Regulation 24, the procedure under these Regulations prevails, subject to Regulation 32, over any other disciplinary proceedings against the student based on the same facts and, without prejudice to Regulation 38. Any other such disciplinary proceedings must be terminated, subject to being re-opened to consider a recommendation of the Board for Graduate Studies and Research under Regulation 34b.
32. Where other disciplinary proceedings based on the same facts have been completed or have reached the stage of a hearing, whichever comes first, any procedure under these Regulations based on a charge of Level 2 plagiarism shall be terminated.
33.
  - (i) If the Committee of Inquiry is satisfied, after holding a hearing, that the student has committed Level 2 plagiarism, it shall in making a determination on the severity of the penalty take into consideration:
    - (a) the circumstances of the particular case;
    - (b) the seniority of the student; and
    - (c) whether this is the first or a repeated incidence of plagiarism by the student.
  - (ii) Where a determination on the severity of the penalty has been made, the Committee of Inquiry shall report its conclusions and recommendations to the Board for Graduate Studies and Research which shall:
    - (a) if the work in which the plagiarism occurred was not a thesis or major project report, fail the student in the assignment and hence the course in which the assignment was submitted, with the option to re-take the course at a time specified by the Board;
    - (b) if the work in which the plagiarism occurred was a major project, fail the student in the project report, with the option to re-do and re-submit a project report on a different topic at a time specified by the Board;
    - (c) if the work in which the plagiarism occurred was a thesis, either:
      - (i) find the thesis to be inadequate, requiring re-submission of the revised thesis within eighteen months of the date of notification; or
      - (ii) fail the thesis, with no allowance for resubmission.
34. The Board for Graduate Studies and Research may also, if the Committee of Inquiry so recommends after being satisfied that the student has committed Level 2 plagiarism, either:
  - (a) exclude the student from all further examinations of the University for such period as it may determine; or
  - (b) recommend to the relevant Academic Board that the student should be dismissed from the University, with or without the possibility of re-entry.
35. The decisions taken by the Board for Graduate Studies and Research following receipt of the conclusions and recommendations from the Committee of Inquiry with respect to the outcome of the hearing and the severity of the penalty shall be communicated by the Chair of the Board to the University Registrar who shall inform the student, the Dean, the Head of Department and the Examiners of the decisions taken.

#### **CLEARANCE ON A CHARGE OF LEVEL 2 PLAGIARISM**

36. If the Committee of Inquiry is not satisfied, after holding a hearing, that the student has committed Level 2 plagiarism, it will direct the Campus Coordinator to reply to the Dean, the Head of Department, the Examiners and the student, through the University Registrar, advising them of the decision against proceeding further on the charge of Level 2 plagiarism, and may in addition:
  - (a) indicate that the decision is intended to preclude the invocation of the procedures for Level 1 plagiarism; or
  - (b) indicate that the avenue is open to pursue the matter as a case of Level 1 plagiarism under Regulation 12 in work which does not constitute a thesis or major project report, or as a case of Level 1 plagiarism under Regulation 13 in work which constitutes a thesis or major project report.
37. A determination of the Committee of Inquiry under Regulation 33 terminates the Level 2 plagiarism proceedings and also precludes any further Level 1 plagiarism proceedings except as indicated by the Committee of Inquiry under Regulation 36b.

#### **APPEAL TO THE SENATE**

38. A student may appeal to the Senate from any decision of the Board for Graduate Studies and Research under Regulations 33 and 34a and of Academic Board under Regulation 34b.

**DELEGATION BY DEAN OR HEAD OF DEPARTMENT**

39. The Dean or Head of Department, as the case may be, may generally or in a particular instance delegate that officer's functions under these Regulations.

**SUPERVISOR'S CONFLICT OF INTEREST**

40. Any person who has at any time been a supervisor of work in relation to which an issue of plagiarism is being considered under these Regulations must withdraw from performing any functions under these Regulations other than those of supervisor and examiner.

## DEFINITIONS AND NOTES

In Sections 1, 2 and 3 of these Regulations for Graduate Diplomas and Degrees:

**CAMPUS COMMITTEE** means the Campus Committee for a Campus of the Board for Graduate Studies and Research;

**DEPARTMENT** includes an Institute, Centre or other Unit of Learning and Research;

**HEAD OF DEPARTMENT** means the Head, however styled, of a Department;

**PROGRAMME** means a selection of courses (designed to achieve pedagogical goals) the taking of which is governed by certain regulations and the satisfactory completion of which (determined by such regulation) makes a candidate eligible for the award of a degree/diploma or certificate;

**ADMISSION TO A PROGRAMME** means the acceptance of the candidate's right to register to participate in the Programme as a student;

**CAMPUS REGISTRAR** includes any Assistant Registrar made responsible by the Campus Registrar for the administration of matters pertinent to Graduate Studies and Research.

**A PERIOD OF ONE (1) YEAR FULL-TIME** is equivalent to two (2) years part-time, but see Regulations 1.58-1.63. These Regulations should be read in conjunction with the Manual of Procedure.

# GENERAL INFORMATION ON POSTGRADUATE STUDIES IN THE FACULTY

## **1. SCHOOL FOR GRADUATE STUDIES AND RESEARCH (SGS&R)**

The School for Graduate Studies and Research has the overall responsibility for the development of graduate studies and research on all four campuses of The University of the West Indies. The School is chaired by its Dean, PVC (Graduate Studies) and is governed by the Board for Graduate Studies and Research. There is a committee of the SGS&R on each campus called the Campus Committee for Graduate Studies and Research. The SGS&R works closely through these four Campus Committees to manage and administer activities related to research and graduate studies. The School assists academic departments with the maintenance and development of coherent graduate studies programmes and, through the Board for Graduate Studies and Research, approves the establishment of new postgraduate programmes and the award of degrees.

## **2. TYPES OF GRADUATE PROGRAMMES OFFERED IN THE FACULTY OF FOOD AND AGRICULTURE**

The Faculty offers a wide range of certificates, diplomas, taught Master's degrees as well as research degrees (MPhil and PhD).

### **(A) TAUGHT PROGRAMMES**

The programmes for the Master of Science (MSc) degrees and for Postgraduate Diplomas consist mainly of a set of lectures, seminars, coursework assignments and either a project or a research paper. The Faculty also offers Diplomas and Certificates by distance

### **(B) (I) RESEARCH DEGREES**

The Master of Philosophy (MPhil) and the Doctor of Philosophy (PhD) degrees are research degrees. Research degrees involve independent study, directed by one or more supervisors. All MPhil and PhD programmes of study culminate in the presentation of a thesis conveying the results of the independent study and research carried out by the graduate student. It is necessary that graduate students, supervisors, advisory committees and examiners ensure that the qualitative and quantitative distinction between the MPhil Degree and PhD Degree be understood and maintained.

#### **(II) THE MPhil THESIS**

The MPhil thesis reviews the state of knowledge in a particular field, creates and evaluates a new design or novel experiments in a particular aspect of an area of study or makes an appropriate critique or interpretation of the subject. The Master's Thesis should be evidence of the graduate student's ability to effectively review the relevant literature in the field, to undertake independent research and to present the results in a clear, systematic and scholarly form.

It is normally expected that a Master's Thesis will make some independent contribution to knowledge or understanding in the subject area in which the student is working.

#### **(III) THE DOCTORAL THESIS**

A Doctoral thesis must set forth a significant contribution to knowledge or understanding, adding to or critiquing through approved research methodologies the current theoretical underpinnings and empirical base in the student's field of study.

The thesis must be set forth in a scholarly manner demonstrating the original and independent investigations conducted and setting forth unambiguously its achievements, contributions and findings in a format appropriate to Doctoral Theses in the particular discipline.

The Doctoral Thesis must reflect not only mastery of the subject area under investigation and competence in research techniques, but also the ability to select an important problem for investigation and to deal with it in a mature, competent manner.

The Doctoral Degree is, by nature and tradition, the highest certificate of membership in the academic community. It is meant to indicate the presence of superior qualities of mind, intellectual interest and high attainment and knowledge in a chosen field. It is not conferred merely as a certificate for a prescribed course of study and research,

no matter how faithfully pursued. Independent achievement at a high intellectual level is a prerequisite to its conferment. A Doctoral Thesis or parts thereof must be judged to be potentially publishable.

The award of a PhD also requires the candidate to defend his/her thesis at a public oral examination. Many research degrees now contain a taught element. The intention of these taught courses is to provide students with research techniques and skills that will not only help them complete their current research topic, but will also stand them in good stead for life after University.

With the exception of holders of MPhil degrees from recognised Universities, candidates interested in pursuing the PhD degree are normally required to register for the MPhil Degree in the first instance. If your Supervisors are happy with your progress, then provisions exist to upgrade your registration from the Master's to Doctoral level without first submitting a Master's dissertation.

If you decide to pursue a research degree, it is very important that the thesis topic you choose is of genuine and sustainable interest to you.

### **3. Registration**

The academic year is divided into two semesters as follows:

Semester I - August to December

Semester II - January to May

Candidates for the MPhil or PhD degree may register during the first two weeks of either Semester but it is more usual for such candidates to begin their studies at the start of the academic year. A candidate wishing to pursue a taught Master's Degree or an Advanced Diploma programme MUST begin his/her studies at the start of the academic year unless otherwise specified.

Students from Trinidad & Tobago may be registered for full-time or part-time studies. You will not be registered for full-time studies if you spend an average of twelve or more hours a week in paid employment. For a student registering as part-time, proof of leave of absence from your job must be submitted at the time of registration. Overseas students will normally be required to register for full-time studies.

No allowances will be made with respect to attendance at lectures, laboratories, tutorials or examinations for students on the condition of their employment.

### **4. Time Limitation**

The following table shows IN GENERAL the time limitation for graduate degrees:

PROGRAMME	FULL TIME		PART TIME	
	Minimum	Maximum	Minimum	Maximum
Diplomas	1		2	
MSc (taught)	1	2	2	4
MPhil	2	3		5
PhD	3	5	5	7

### **5. Academic Supervisor**

Each research student is assigned one or more supervisors who will guide the student through his/her studies. The appointment of a supervisor(s) is recommended by the relevant Head of Department after careful consideration of the Faculty member's expertise and experience. Also, a Committee of Advisors shall be appointed by the Board for Graduate Studies and Research for each MPhil and PhD student. This Committee shall comprise a minimum of three persons, including the supervisor(s) of your research programme.

### **6. Assessment**

#### **A. TAUGHT PROGRAMMES**

The methods of assessment may vary, but examinations are conducted mainly by written papers supplemented by in-course testing, practical examinations, a project report, a research paper, or a combination of these methods.

Candidates are required to pass all courses and all coursework, designated by the Department as forming part of the higher degree programme for which they are registered, with a mark of 50% or better.

#### **B. MPhil/PHD THESIS AND EXAMINATION**

All research degrees are examined by theses. In addition, research students will be required to pass courses amounting to a MINIMUM of 6 credits for the MPhil and 9 credits for the PhD degree. For the MPhil degree the candidate may be required to defend his/her thesis by an examination. Every candidate for the PhD must defend his/her thesis by an oral examination.

A candidate who is unsuccessful in the examination for the PhD may apply to the Board for Graduate Studies and Research for transfer of registration to the relevant MPhil and for permission to resubmit the relevant thesis or a revised version of it for examination for a Master's degree. Where the application is approved, the registration for the PhD will lapse and the registration for the MPhil will be deemed to have started from the date of registration for the PhD.

### **7. Upgrading of Registration**

Postgraduate students who are registered for the MPhil degree and who wish to be considered for the upgrading of their registration to PhD must apply to do so in the second year of registration on the written recommendation of their supervisor(s). Applications for upgrading will normally not be considered after the third year of registration. Applicants for upgrade must have completed all departmental coursework requirements by this time and must defend their proposal for upgrading at a Faculty seminar.

A supervisor must state why he/she considers the student to be outstanding and whether in his/her opinion the work can be developed to the level of the PhD

All recommendations from Departments for PhD upgrade registrations are subject to the approval of the Board for Graduate Studies and Research.

### **8. Graduate Research Seminars**

All postgraduate research students are required to present at least two seminars on their work at the MPhil level and three seminars at the PhD level. These seminars will be examined and graded on a "pass or "fail" basis. Students are also required to attend a minimum of 75% of all Departmental/Faculty seminars. A Seminar attendance register will be kept by all Departments.

### **9. Postgraduate Course in "Scientific Presentation and Critique"**

These courses are designed for MPhil and PhD students. Its purpose is to:

- Immerse graduate students into a culture of reading and critical analysis of research in their field and related disciplines.
- Expose students to a broad range of research topics in and related to their discipline.
- Involve students in regular scientific discourse involving their own work and the work of others.
- Develop students' analytical and critical thinking skills as well as their oral presentation and writing skills.

**NOTE:** Current School of Graduate Studies regulations state that MPhil students are required to present two assessed seminars and PhD students must present three. This course may be used as a forum for these presentations which will be assessed in the manner prescribed for such "assessed seminars".

#### **MPhil**

<b>Course Code</b>	<b>Course Title</b>
GRSM 7001	Graduate Research Seminar 1
GRSM 7002	Graduate Research Seminar 2

#### **PhD**

<b>Course Code</b>	<b>Course Title</b>
GRSM 8001	Graduate Research Seminar 1
GRSM 8002	Graduate Research Seminar Critique 2
GRSM 8003	Graduate Research Seminar 3

# THE UNIVERSITY FIELD STATION (UFS)

This is located approximately 4 km from the main campus, has facilities for livestock and crop production work including a rabbitry, cattle, sheep and poultry facilities, a laboratory, a machine shop, plant propagation facilities, and temperature-controlled rooms for vegetable and fruit storage work. In addition there is an abattoir and a milk pasteurisation facility.

## ***THE COCOA RESEARCH CENTRE (CRC)***

This Centre, which is the custodian of the International Cocoa Genebank, Trinidad, has a collection of some 2,300 accessions. The CRC is involved in a number of multi-disciplinary research programmes, which include collection and conservation of germplasm, morphological and molecular characterisation, germplasm enhancement, evaluation for resistance to major diseases and flavour assessment. In addition, the CRC plays a role in the improvement of cocoa by providing useful and diverse germplasm to cocoa producing countries. The Centre is involved in several international research projects, collaborates with other research institutions, and continues to attract local and external funding to support its research activities.

## ***ENTRY REQUIREMENTS***

Candidates seeking entry to the Diploma, or MSc, or MPhil programmes in the Faculty must satisfy the minimum requirements of the School for Graduate Studies and Research (Lower Second Class Honours for MSc and Upper Second Class Honours or equivalent for MPhil) AND must hold a BSc degree at the prescribed level in Agriculture or Natural Sciences (or an equivalent qualification) from an approved university. In exceptional cases, students may be admitted with a pass degree and considerable work experience in a related area.

For direct entry into the PhD programme, a student must satisfy minimum entry requirements of the School of Graduate Studies & Research AND have obtained a MPhil degree (or an equivalent qualification) in an appropriate field of study in science or agriculture from an approved tertiary level institution.

## ***PROGRAMMES***

The FFA which comprises the departments of Agricultural Economics and Extension, Food Production and Geography, has a long history of excellence in teaching, research and outreach dating back to 1924 in the Imperial College of Agriculture (ICTA). The Faculty is staffed by well-qualified and experienced academic and technical staff.

Research in the Faculty is focused on the problems of low productivity of the agricultural sector in the Caribbean, as well as competitiveness and sustainability in the new global environment; agricultural biotechnology; soil and water conservation; crop and livestock production and post-harvest technology. Research is done in close collaboration with the Department of Life Sciences, the Faculty of Engineering and the School of Veterinary Science.

Research work is financed from University funds, augmented by grants from the private sector, international agencies and the Government of the Republic of Trinidad & Tobago.

The FFA offers postgraduate degrees in the following areas:

### ***Postgraduate Diploma in:***

- Agri-Food Safety and Quality Assurance
- Tropical Crop Protection

### ***Master of Science (MSc) Degrees in:***

- Agricultural Economics
- Agri-Food Safety and Quality Assurance
- Tropical Crop Protection
- Marketing and Agribusiness
- Tropical Animal Science and Production
- Value Addition for Food and Nutrition Security

**Mounting of these programmes in any given year is subject to obtaining a suitable number of students.**

***Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) Degrees in:***

- Agricultural Economics
- Agricultural Extension
- Crop Science
- Food Safety and Quality
- Geography
- Horticulture
- Human Ecology
- Livestock Science
- Soil Science
- Tropical Crop Protection
- Tropical Earth and Environmental Science

# THE CAMPUS LIBRARIES

THE UNIVERSITY OF THE WEST INDIES  
ST. AUGUSTINE CAMPUS

The Campus Libraries support the teaching, learning and research activities of The University of the West Indies (UWI), St. Augustine Campus (STA) community. These libraries include:

- The Alma Jordan Library
- The Medical Sciences Library
- The Norman Girvan Library of The Institute of International Relations
- The Republic Bank Library and Information Resource Centre of the Arthur Lok Jack Graduate School of Business
- The School of Education Library
- The Patience-Theunissen Memorial Library of the Seminary of St. John Vianney & the Uganda Martyrs Theological Institute at Mt St Benedict, and
- The Seismic Research Centre Library.

## **Resources for Students**

Each Library's website (<https://libraries.sta.uwi.edu/>) is the gateway to discovering their comprehensive electronic, print and multimedia information resources. From there students can access, on and off campus, state-of-the-art scholarly full-text databases. The Libraries' collections contain specialised and the most up-to-date information relevant to all faculties and specialised research centres and institutes on Campus. They currently provide access to:-

- electronic resources: - 259 databases, 84,198 e-journal titles and 62,500 e-books
- print resources: - over 500,000 books/monographs and 975 journal titles;

Moreover, a sizeable body of Caribbean research may be accessed from maps, microforms, newspapers, theses, photographs, oral history interviews, and over 150 special collections in the West Indiana and Special Collections Division.

## **Library Services**

In addition to traditional loan services, the Libraries provide personal and small group research consultations; reference assistance; interlibrary loan/document delivery; dissertation/thesis checking, web-based guides, etc. They conduct orientation tours and year-round Information literacy sessions and provide facilities ranging from audio-visual rooms, to computer laboratories with photocopying and printing equipment, as well as group study rooms and areas for quiet study.

The Institutional Repository, UWISpace, (<http://uwispace.sta.uwi.edu/dspace/>) facilitates the collection, preservation and distribution of the scholarly/research output of the University. UWIScholar (<https://uwischolar.sta.uwi.edu>) is our research information management system designed to aggregate and manage researcher (faculty and students) profiles, and facilitate global networking and expertise discovery. In addition, the Campus Libraries through their Dataverse platform (<https://dataverse.sta.uwi.edu/>) allow researchers to archive and preserve datasets generated in the course of their research activities. The Libraries also provide services and software that enable UWI faculty, staff, and students to publish their own subscription and open access online journals (<https://journals.sta.uwi.edu/>). These journals are published using Open Journals System (OJS), an open-source editorial management and publishing system, which can manage some or all of the stages of the journal publishing process including submissions, peer review, the editorial process, online publishing, and indexing. The Alma Jordan Library (AJL) in collaboration with the St. Augustine Centre for Innovation and Entrepreneurship (STACIE), and the Intellectual Property Office of the Ministry of the Attorney General and Legal Affairs provides an Intellectual Property Help Desk Service to help support researchers.

For further information on these resources and services, please refer to your Library's website or contact your Faculty Liaison Librarian listed below:

### **Ms Joy Smith**

Faculty Liaison Librarian (Food and Agriculture & Science and Technology)

Science and Agriculture Division, Floor 2

The Alma Jordan Library

Tel.: 662 2002, ext. 83596, 83359

Fax: 662-9238

E-mail: [joy.smith@sta.uwi.edu](mailto:joy.smith@sta.uwi.edu)

Alma Jordan Library: <http://libraries.sta.uwi.edu/ajl>

# STUDENT LIFE AND DEVELOPMENT DEPARTMENT (SLDD)

The Department is the first and most important stop for high quality academic support for the diverse populations of students throughout The University including full-time, part – time and evening and mature students, international and regional students, student athletes and students with special needs (disabilities and medical conditions ).

The Department now provides the following services:

- Disability Support
- Academic Support
- International and Regional Student Support
- Postgraduate and Mature Student Support

## **SUPPORT SERVICES FOR STUDENTS WITH SPECIAL NEEDS (TEMPORARY AND PERMANENT)**

- Provision of aids and devices such as laptops, USB drives, tape recorders and special software
- Special accommodation for examinations
- Classroom accommodations
- Liaison with faculties and departments, Deans, HODs, Lecturers

**Students with special needs should make contact before or during registration. Every effort will be made to facilitate your on-campus requirements in terms of mobility, accommodation, coursework, examinations, and other areas. No student of The UWI will be discriminated against on the basis of having special needs. Sharing your needs before registration will enable us to serve you better as a part of the Campus Community.**

## **ACADEMIC SUPPORT SERVICES FOR ALL STUDENTS**

- Educational Assessment – LADS (dyslexia) – LASSI (Study Skills)
- Time Management
- Examination Strategies
- Workload Management
- Career Planning
- Study Skills
- Peer Tutoring
- Peer-Pairing

## **HOW DO I REGISTER AT SLDD?**

- Visit the SLDD to make an appointment to meet the Manager.
- Complete the required registration form
- Students with disabilities and medical conditions must submit a medical report from a qualified medical professional
- An assessment of the student’s needs will be conducted
- The required assistance will be provided

All Students experiencing academic challenges should communicate with **Dr. Jacqueline Huggins**, Manager, Student Life and Development Department (SLDD), Heart Ease Building, Heart Ease Car Park, Wooding Drive, St. Augustine Campus

Tel: 662-2002 Exts. 83866, 83921, 83923, 84254. OR 645-7526

Hours: 8:30 am- 4:30 pm, Monday to Friday

Email: [sldd@sta.uwi.edu](mailto:sldd@sta.uwi.edu)

Registration forms are available at the office or from the website at <https://sta.uwi.edu/sldd/>

# STUDENT EXCHANGE & STUDY ABROAD

## OFFICE OF INSTITUTIONAL ADVANCEMENT AND INTERNATIONALISATION (OIAI)

The St. Augustine Campus has a range of partnership agreements managed through the International Office, OIAI that facilitates exchanges by UWI students as well as students from our international partners to spend time at each other's campuses. The Office also enables student mobility with institutions where we do not have such formal partnerships.

The UWI Student Exchange programme will allow you to study at one of our many international partners around the world, including in North America, Europe, South America, Africa, Asia and the Caribbean in addition to other UWI Campuses.

This type of international immersion has many educational and personal benefits. Students who have participated in the past have all spoken about the tremendous experiences and learnings not only in the classroom, but also from the people and places that they were able to interact with. They have become more independent in their thinking, self-sufficient and confident. They have also been able to make new friends, learn new languages and experience the world first-hand as true global citizens. A number of options for student exchanges are available to undergraduate and postgraduate students which are:

1. Exchange Students – from one semester to one year duration.
2. Study tours through the “UWI Discover’s” programme – for one to two weeks.
3. Visiting Students – for postgraduate students doing research on invitation by overseas institution.

Funding is available to assist students with some of these exchange opportunities.

For further information on funding as well as Student Exchange and Student Mobility, please visit our website: <http://sta.uwi.edu/internationaloffice/> or visit our Facebook Page for the latest news on mobility opportunities at: <https://www.facebook.com/UWIInternationalOffice/>, or contact:

### ***Alviann Thompson (Outbound Mobility Coordinator)***

International Office  
The University of the West Indies, St. Augustine Campus  
Trinidad and Tobago, West Indies  
Email: [outgoing.mobility@sta.uwi.edu](mailto:outgoing.mobility@sta.uwi.edu)  
Phone: [+1\(868\) 662-2002](tel:+1(868)662-2002) ext. 85010/ Direct: [+1\(868\) 224-3708](tel:+1(868)224-3708)

### ***Aleksei Henry (Inbound Mobility Coordinator)***

International Office  
The University of the West Indies, St. Augustine Campus  
Trinidad & Tobago, West Indies  
Email: [incoming.mobility@sta.uwi.edu](mailto:incoming.mobility@sta.uwi.edu)  
Phone: [+1\(868\) 662-2002](tel:+1(868)662-2002) ext. 84206/ Direct: [+1\(868\) 224-3708](tel:+1(868)224-3708)

### ***Afiya Francis (Study Tours Coordinator)***

Study Tours & International Recruitment  
International Office  
The University of the West Indies, St. Augustine Campus  
Trinidad & Tobago, West Indies  
Email: [discover@sta.uwi.edu](mailto:discover@sta.uwi.edu)  
Phone: [+1\(868\) 662-2002](tel:+1(868)662-2002) ext. 84280/ Direct: [+1\(868\) 224-3707](tel:+1(868)224-3707)

### ***Evelyn Ferreira (Manager, International Office)***

Email: [evelyn.ferreira@sta.uwi.edu](mailto:evelyn.ferreira@sta.uwi.edu) or [internationaloffice@sta.uwi.edu](mailto:internationaloffice@sta.uwi.edu)  
Phone: [+1\(868\) 662-2002](tel:+1(868)662-2002) ext. 84151/ Direct: [+1\(868\) 224-3708](tel:+1(868)224-3708)

# DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION

## STAFF LISTING

### HEAD OF DEPARTMENT

**Dr. Sharon Hutchinson**

Ext. 82093

Email:

### SECRETARIES

**Ms Meresa Lobin**

Ext. 82075

Email: [meresa.lobin@sta.uwi.edu](mailto:meresa.lobin@sta.uwi.edu)

**Ms Asisha Patterson**

Ext: 83281

Email: [asisha.patterson@sta.uwi.edu](mailto:asisha.patterson@sta.uwi.edu)

### TECHNICAL ASSISTANTS

**Ms Tynessa Gay-Felix**

Ext. 82094

Email: [tynessa.gay@sta.uwi.edu](mailto:tynessa.gay@sta.uwi.edu)

**Ms Melony John**

Ext. 82309

Email: [melony.john@sta.uwi.edu](mailto:melony.john@sta.uwi.edu)

**Ms Fabiola Wells-Powell**

Ext. 83528

Email: [fabiola.wells@sta.uwi.edu](mailto:fabiola.wells@sta.uwi.edu)

### ACADEMIC STAFF

**Ms. Tessa Barry**

**Dr Sa'eed Halilu Bawa**

PhD (SGGW)

Senior Lecturer, Human Nutrition and Dietetics

Ext. 82076

Email: [sa'eed.bawa@sta.uwi.edu](mailto:sa'eed.bawa@sta.uwi.edu)

**Prof Mattias Boman**

PhD (SLU)

Professor, Agricultural Economics

Ext. 83561

Email: [mattias.boman@sta.uwi.edu](mailto:mattias.boman@sta.uwi.edu)

**Dr Isabella Francis-Granderson**

BSc (Howard), M.P.H., PhD (UWI)

Lecturer, Human Nutrition and Dietetics

Ext. 83209

Email: [isabella.granderson@sta.uwi.edu](mailto:isabella.granderson@sta.uwi.edu)

**Prof Wayne Ganpat**

BSc, MPhil, PhD (UWI)

Professor, Agricultural Extension

Ext. 83206

Email: [wayne.ganpat@sta.uwi.edu](mailto:wayne.ganpat@sta.uwi.edu)

**Dr Margaret Gordon**

BSc (Wisconsin Stout), PGD (Ed), MEd (UWI)

Instructor, Consumer Sciences

Ext. 83212

Email: [margaret.gordon@sta.uwi.edu](mailto:margaret.gordon@sta.uwi.edu)

**Dr Sharon D. Hutchinson**

BSc, MSc (UWI), PhD (Florida)

Lecturer, Food and Resource Economics

Ext. 83279

Email: [sharon.hutchinson@sta.uwi.edu](mailto:sharon.hutchinson@sta.uwi.edu)

**Ms Chanelle Joseph**

BSc, MSc, MBA (UWI)

Coordinator of Internships/Practicums/Instructor

Ext. 83277

Email: [chanelle.joseph@sta.uwi.edu](mailto:chanelle.joseph@sta.uwi.edu)

**Mr. Omardath Maharaj**

BSc (UWI)

Instructor, Agricultural Economics

Ext. 83274

Email: [omardath.maharaj@sta.uwi.edu](mailto:omardath.maharaj@sta.uwi.edu)

**Dr Selby Nichols**

BSc (UWI), MSc (UCL), PhD (UWI)

Senior Lecturer, Human Nutrition

Ext. 83564

Email: [selby.nichols@sta.uwi.edu](mailto:selby.nichols@sta.uwi.edu)

**Dr Hazel Patterson-Andrews**

BSc, MSc, PhD (UWI)

Lecturer, Agribusiness

Ext. 82308

Email: [hazel.pandrews@sta.uwi.edu](mailto:hazel.pandrews@sta.uwi.edu)

**Dr Anisa Ramcharitar-Bourne**

BSc, MSc, PhD (UWI)

Instructor, Human Ecology

Ext. 84313

Email: [anisa.ramchritar@sta.uwi.edu](mailto:anisa.ramchritar@sta.uwi.edu)

**Dr Govind Seepersad**

BSc, MSc, PhD (UWI)

Lecturer, Agricultural Economics

Ext. 83274

Email: [govind.seepersad@sta.uwi.edu](mailto:govind.seepersad@sta.uwi.edu)

**Dr Marquitta Webb**

BSc, MSc, PhD (Howard)

Lecturer, Human Nutrition & Dietetics

Ext. 82444

Email: [marquitta.webb@sta.uwi.edu](mailto:marquitta.webb@sta.uwi.edu)

## PROGRAMME OFFERINGS

The Department offers:

- MSc in Agricultural Economics which has courses in three core areas of specialisation:
  - Trade Policy and Competitiveness
  - Marketing and Agribusiness Management
  - Environmental and Natural Resource Economics
- MSc in Marketing and Agribusiness
- MPhil and PhD degrees in Agricultural Extension and Agricultural Economics.
- MPhil and PhD in Human Ecology

The Agricultural Economics degrees qualify graduates for potential employment as Agricultural Economists, Agricultural Planners, Development Bankers, Marketing Specialists, Rural Development Specialists, Environmental Specialists, Consultants or University Lecturers while the Agricultural Extension degrees qualify graduates for potential employment as Extension Programme Planners, Communication Specialists, Rural Sociologists, Rural Development Specialists, University Lecturers, Consultants, Nutrition Extension Specialists and Youth Counsellors. The Human Ecology degree is aimed at producing individual who can function at the leadership and policymaking levels in the various areas of specialisation

### RESEARCH AGENDA

Research in the Department addresses current issues in the agricultural sector of Caribbean countries with the objective of making a contribution towards the development and transformation of agriculture.

The research programme in Agricultural Economics and Human Ecology focuses on contemporary policy areas for the regional agricultural sector. These include:

- i. Human Nutrition;
- ii. Rural Development;
- iii. Trade and Agricultural Policy;
- iv. Marketing and Agribusiness Management;
- v. Environmental and Natural

### RESOURCE MANAGEMENT

The research programme in Agricultural Extension includes:

- i. Rural development using a multidisciplinary framework
- ii. The organisation and management of Extension especially current trends such as decentralisation and privatisation
- iii. Planning, delivery (including the use of ICTs) and evaluation of Extension programmes dealing with trade liberalisation, competitiveness, food and nutrition, environmental issues.
- iv. Emerging models such as Farmer Field Schools, Fisheries Extension and Forestry Extension

## (I) MSc Marketing and Agribusiness

### ENTRY REQUIREMENTS

The general pre-requisite for entry into the MSc Marketing and Agribusiness is at least a Lower Second Class Honours BSc Degree in Agribusiness, Agribusiness Management, Management Studies, Economics or Agriculture or in a related subject (or equivalent qualifications and working experience).

### Duration of Course

The MSc in Marketing and Agribusiness will normally extend over 2 years of full-time or 4 years of part-time study.

### Award of the Degree

To qualify for the award of the degree, candidates must pass all six Core courses, two Electives and the Research Project. The degree shall be awarded in two categories - Distinction and Pass. For the award of the degree with Distinction, the candidate must have obtained an average mark of 70% or more, across all core courses and electives as well as 70% or more in the Research Project.

### Programme Structure

All candidates in the MSc Marketing and Agribusiness will be required to take one of the following two options:

- A. Business and Marketing Analysis
- B. Managing Food and Nutrition Security

And the degree will be awarded with specialization in either Business and Marketing Analysis or Managing Food and Nutrition Security.

All candidates will be required to take SIX Core Courses, TWO Elective Courses and a Research Project- a total of 44 credits.

### CORE COURSES (COMPULSORY)

THE FOLLOWING CORE COURSES ARE REQUIRED FOR ALL OPTIONS

#### (I) CORE COURSES (COMPULSORY)

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6301	Research Methodology	4
AGBU 6202	Agribusiness Management	4
AGBU 6201	Agricultural Marketing	4
AGBU 6002	International Trade and Marketing	4

Other core and elective courses required for **EACH OPTION** are:

#### A. BUSINESS AND MARKETING ANALYSIS OPTION

##### CORE COURSES

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6102	Statistics and Mathematics for Agribusiness	4
AGBU 6602	Quantitative Methods II (Econometrics)	4
AGBU 6999	Research Project	12

##### PLUS

##### ELECTIVE COURSES (ANY TWO)

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6303	Investment Analysis and Financing for Agribusiness	4
AGBU 6302	Quantitative Methods I (Operations Research)	4
AGBU 6103	Sustainable Rural Development	4
AGBU 6903	Advanced Agricultural Marketing	4
AGBU 6691	Advanced Agribusiness Management	4

##### OR

#### B. MANAGING FOOD AND NUTRITION SECURITY OPTION

##### CORE COURSES

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6401	Economics of Food Security	4
AGBU 6402	Food Policy and Food Security	4

AGBU 6999      Research Project in Food and Nutrition Security      12

**PLUS**

**ELECTIVE COURSES (ANY TWO)**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6103	Sustainable Rural Development	4
AGBU 6102	Statistics and Mathematics for Agribusiness	4
AGBU 6303	Investment Analysis and Financing for Agribusiness	4
AGBU 6691	Advanced Agribusiness Management	4
AGBU 6602	Quantitative Methods II (Econometrics)	4

**OR**

**ANY OTHER RELEVANT COURSE APPROVED BY THE HEAD OF DEPARTMENT**

Schedule of Courses

**YEAR 1**

**SEMESTER 1**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6301	Research Methodology	4
AGBU 6201	Agricultural Marketing	4
AGBU 6102	Statistics and Mathematics for Agribusiness	4
AGBU 6402	Food Policy and Food Security	4

**SEMESTER 2**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6202	Agribusiness Management	4
AGBU 6002	International Trade and Marketing	4
AGBU 6602	Quantitative Methods II (Econometrics)	4
AGBU 6401	Economics of Food Security	4

**YEAR 2**

**SEMESTER 1**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6999	Research Project*	12
AGBU 6903	Advanced Agricultural Marketing I	4
AGBU 6303	Investment Analysis and Financing for Agribusiness	4
AGBU 6901	Agricultural Policy and Analysis	4

**SEMESTER 2**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6999	Research Project*	12
AGBU 6103	Sustainable Rural Development	4
AGBU 6302	Quantitative Methods I (Operations Research)	4
AGBU 6691	Advanced Agribusiness Management	4

\*This is extended across two semesters. For the Managing Food and Nutrition Security Option this Research Project has to be in the area of Food and Nutrition Security.

## (II) MSc Agricultural Economics

**(A) THIS DEGREE IS OFFERED WITH SPECIALISATION IN THE FOLLOWING AREAS:**

- Trade Policy and Competitiveness
- Marketing and Agribusiness Management
- Environmental and Natural Resource Economics

**(B) AREAS OF SPECIALISATION WILL BE OFFERED SUBJECT TO STUDENT DEMAND AND THE AVAILABILITY OF STAFF.**

**(C) ENTRY REQUIREMENTS**

At least a Lower Second Honours BSc degree (minimum GPA of 2.5 or equivalent) in Agribusiness, Agribusiness Management, Agriculture, Agricultural Economics, Economics, Management or related areas.

**(D) QUALIFYING YEAR**

Candidates not considered suitable for minimum entry requirements may be admitted to a qualifying year as determined by the Department. Such candidates will be required to read courses to improve their competency in Economic Theory, Agricultural Economics, Mathematics or Statistics and which may be read on any of the campuses of The University of the West Indies.

These courses may include:

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
ECON 2002	Intermediate Macroeconomics I	3
ECON 2003	Intermediate Macroeconomics II	3
ECON 2000	Intermediate Microeconomics I	3
ECON 2001	Intermediate Microeconomics II	3
ECON 2015	Mathematical Methods in Economics I	3
ECON 2006	Economic Statistics	3

The qualifying year will be designed to suit the needs of the individual student.

**(E) COURSE OF STUDY**

Candidates, on admission may be required to improve their competency in Economic Theory, Agricultural Economics, Mathematics or Statistics by reading one or more of the courses listed above under the qualifying year.

**CORE COURSES (COMPULSORY)**

The following core courses are required for ALL areas of specialisation:

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6102	Statistics and Mathematics for Agribusiness	4
AGBU 6602	Quantitative Methods II (Econometrics)	4
AGBU 6301	Research Methodology	4
AGBU 6103	Sustainable Rural Development	4
AGBU 6501	Microeconomics	4
AGBU 6302	Quantitative Methods I (Operations Research)	4
AGBU 6999	Research Project	12

**OTHER COURSES**

Other core and elective courses required for EACH AREA OF SPECIALISATION are:

**1. Trade Policy and Competitiveness**

**CORE COURSES**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6901	Agricultural Policy and Analysis	4
INRL 5007:	International Trade and Economic Development	3

**PLUS**

One (1) Elective Course (equivalent to 4 credits), which may include:

AGBU 6002	International Trade and Marketing	4
-----------	-----------------------------------	---

**OR**

Any other relevant course approved by the Head of Department

**2. Environmental and Natural Resource Economics**

**CORE COURSES**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
ENVI 6001	Introduction to Environmental Planning and Management	4

**OR**

Any other relevant course approved by the Head of Department

AGBU 6902	Environmental Economics II	4
-----------	----------------------------	---

**PLUS**

One (1) Elective Course (equivalent to 4 credits) which may include:

ENVI 6100	Environmental Impact Assessment	4
-----------	---------------------------------	---

**OR**

Any other relevant course approved by the Head of Department

### 3. Marketing and Agribusiness Management

#### CORE COURSES

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6201	Agricultural Marketing	4
AGBU 6202	Agribusiness Management	4

#### PLUS

One (1) Elective Course (equivalent to 4 credits) which may include:

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6303	Investment Analysis and Financing for Agribusiness	4
AGBU 6903	Advanced Agricultural Marketing I	4
AGBU 6691	Advanced Agribusiness Management	4

#### (F) NATURE OF ELECTIVE COURSE

The Elective Course shall be relevant to the candidate's area of research interest and must be approved by the Department.

#### (G) DURATION OF STUDY

The MSc (Agricultural Economics) is available to full time and part-time students. Full-time students will normally be required to complete the degree within 2 years of registration.

Part-time students will normally be required to complete the degree within 4 years of registration.

The normal load for a part-time student is half that of a full-time student.

#### (H) EXAMINATION

Evaluation in all courses will normally be by both coursework and final examinations. Candidates must pass both coursework and final examination.

In Course AGBU 6999 Research Project, a project report will be evaluated.

#### (I) AWARD OF DEGREE

The MSc (Agricultural Economics) degree will be awarded on successful completion of all prescribed courses including the Research Project (AGBU 6999).

The degree shall be awarded in the categories – Distinction and Pass. For the award of the degree with Distinction, the candidate must have obtained a minimum average mark of 70% in all core and elective courses as well as a minimum of 70% in the Research Project.

## (III) MPhil Agricultural Economics

#### (A) ENTRY REQUIREMENTS

1. At least an upper second class honours degree (minimum GPA of 3.0 or equivalent) in Agricultural Economics, Economics, Agriculture, Agribusiness, Agribusiness Management, Management Studies, Marketing or related area.
2. This is a research degree and candidates admitted to this programme will normally be expected to have a good undergraduate or postgraduate academic record.
3. Previous experience in research will be given special consideration in assessing a candidate's suitability for admission.

#### (B) COURSE OF STUDY

Candidates will be expected to complete AGBU 6301 (Research Methodology), At least two Graduate Research Seminar Courses (GRSM 7001, GRSM 7002) and a minimum of eight credits from among the following courses:

COURSE CODE	COURSE TITLE	CREDITS
AGBU 6102	Statistics and Mathematics for Agribusiness	4
AGBU 6602	Quantitative Methods II (Econometrics)	4
AGBU 6301	Research Methodology	4
AGBU 6501	Microeconomics	4
AGBU 6302	Quantitative Methods I (Operations Research)	4
AGBU 6103	Sustainable Rural Development	4

**(C) THESIS**

The candidate must fulfill the MPhil thesis requirements of the Faculty of Science Food and Agriculture and successfully defend his/her thesis at a public oral examination.

## **(IV) PhD Agricultural Economics**

**(A) ENTRY REQUIREMENTS**

1. For admission to the PhD Agricultural Economics programme, candidates should have successfully completed the MPhil degree in Agricultural Economics or an MSc degree in Agricultural Economics or Economics from an approved University and which should have included the writing of a substantial thesis, or an MSc degree with distinction in a relevant discipline.
2. All other candidates will be required to register for the MPhil degree in Agricultural Economics and seek an upgrade to the PhD degree in accordance with University Regulations.

**(B) COURSE OF STUDY**

Candidates would normally be expected to have completed the following courses (or equivalent) on entry into the PhD programme. \*

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6102	Statistics and Mathematics for Agribusiness	4
AGBU 6602	Quantitative Methods II (Econometrics)	4
AGBU 6301	Research Methodology	4
AGBU 6103	Sustainable Rural Development	4
AGBU 6501	Microeconomics	4
AGBU 6302	Quantitative Methods I (Operations Research)	4

**\*CANDIDATES WHO HAVE NOT FULFILLED THESE REQUIREMENTS WILL BE REQUIRED TO COMPLETE THESE COURSES.**

**(C) COURSEWORK EXAMINATIONS**

1. The PhD in Agricultural Economics is awarded on the successful completion of prescribed courses AND a thesis.

The following courses are required for ALL areas of specialisation:

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6610:	Economic Theory	4
AGBU 8000:	Quantitative Methods III	4

2. Courses required for EACH area of specialisation are:

(i) *Trade Policy and Competitiveness*

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6650	Economic Development and International Trade	4

(ii) **Environmental and Natural Resource Economics**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6692	Advanced Natural Resource and Environmental Economics	4

(iii) **Marketing and Agribusiness Management**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGBU 6690	Advanced Agricultural Marketing II	4

**(d) Programmes of study in the areas of specialisation will normally be offered according to the requirements of students and subject to the availability of staff.**

**(E) PHD THESIS**

1. On successful completion of the Departmental COURSEWORK REQUIREMENTS, candidates must prepare a research proposal in the area of the thesis topic to be presented at a Departmental Seminar.
2. The procedures for the presentation of the PhD thesis are outlined in the Postgraduate General Regulations of The University of the West Indies.

## (V) The MPhil Degree in Agricultural Extension

1. The MPhil Degree is offered both on a part-time and full-time basis. It is awarded on the successful completion of the required graduate courses and a thesis.
2. The normal time for the completion of this degree is two years for full-time students and four years for part-time students.

### **Entry Requirements**

3. This is a research degree and candidates should have strong undergraduate academic qualifications. The normal requirement is at least an Upper Second Class Honours degree (minimum GPA of 3.0 or equivalent) in the following disciplines or other approved areas:
  - Agriculture
  - Agribusiness
  - Aquaculture
  - Forestry
  - Natural Resource Management
  - Human Ecology
4. Special consideration will also be given to candidates with lower level qualifications but whom, in the opinion of the Board for Graduate Studies and Research, have adequate research or teaching experience in relevant disciplines.
5. Promising research candidates with undergraduate degrees not considered suitable for direct admission may be admitted to a qualifying year. (Please refer to the general postgraduate regulations regarding Qualifying Examinations)

### **Departmental Course Requirements**

6. In addition to the basic requirements for admission, candidates will be expected to have at least nine credits of approved undergraduate Extension courses at Level II/III or the equivalent. Candidates without these required number of credits will be required to take appropriate undergraduate courses, which they must pass before submitting the proposal for the thesis.

### **Taught Graduate Courses**

7. Candidates accepted into the M. Phil. programme will be required to register for at least four taught graduate courses including Research Methodology AGBU 6301. Students who enter the programme with a taught Master's Degree or Postgraduate Diploma may be granted exemption from the course requirements. However, such students may be required to take additional courses to provide a specific knowledge base for their proposed research.
8. Students who fail more than 50% of their courses in their first attempt will normally be required to withdraw. Only one repeat attempt for each failed course will be allowed.

### **Thesis**

9. The candidate must fulfil the MPhil thesis requirements of the Faculty of Food and Agriculture and successfully defend his/her thesis at a public oral examination

## (VI) The PhD Degree in Agricultural Extension

1. The PhD degree in Agricultural Extension is offered both on a part-time and full-time basis. It is awarded on the successful completion of required departmental courses and a thesis.
2. The maximum time allowed for completing this degree is five years after registration for full-time students and seven years for part-time students.

### **Entry requirements**

3. Applicants who hold an MPhil Degree or other research-based Master's Degree in Agricultural Extension or related disciplines are eligible for direct entry to the PhD programme.
4. Applicants who hold taught Master's degrees may also be eligible for direct entry if the programmes included a research component of at least 25% of the total credits for the degree and if they attained at least a B+ average in both the taught courses and the research project.

5. All other candidates with Master's qualifications applying for admission to the PhD must register first for the MPhil and then apply to upgrade their registration to the PhD programme in accordance with the general regulations.

**Taught Graduate Courses**

6. Candidates gaining direct entry into the PhD programme are required to pass a minimum of 12 credits of taught graduate courses approved by the department.

**PhD Thesis**

The requirements for submission of the PhD thesis are outlined in the general regulations for postgraduate students.

## (VII) The MPhil Degree in Human Ecology

**Entry Requirements**

At least an Upper Second Class Honours degree (minimum GPA of 3.0 or equivalent) in Human Ecology, Family and Consumer Sciences or Human Nutrition and Dietetics, or a related discipline.

This is a research degree and candidates admitted to this programme will normally be expected to have a good undergraduate or postgraduate academic record.

Previous experience in research will be given special consideration in assessing a candidate's suitability for admission.

Candidates who do not qualify for entry as specified in (1) above will be required to do a qualifying year consisting of a minimum of eighteen (18) credits of supplementary courses in the area of Human Nutrition.

**Course of Study**

Candidates will be expected to complete the following courses:

COURSE CODE	COURSE TITLE	CREDITS
AGRI 6620	Statistics	4
AGBU 6301	Research Methodology	4
GRSM 7001	Graduate Research Seminar I	
GRSM 7002	Graduate Research Seminar II	

**PLUS**

**Eight (8) additional credits from courses relevant to the student's area of specialization from the following list:**

COURSE CODE	COURSE TITLE	CREDITS
HUEC 5000	Advanced Foodservice Systems Management	4
HUEC 5020	Advanced Clinical Nutrition	4
HUEC 5040	Advanced Community Nutrition	4
AGBU 6103	Principles of Rural Sociology	4
AGBU 6002	International Trade and Marketing	4
AGBU 6201	Agricultural Marketing	4
AGBU 6202	Agribusiness Management	4
<b>OR</b>		
FOSQ 6001	Agri-food Safety	4
HUEC 7001	Epidemiology for Human Ecology	4
HUEC 7003	Advanced Nutrition in Health and Disease I	4
HUEC 7004	Public Health Nutrition	4
HUEC 7002	Nutrition Epidemiology	4
HUEC 7005	Selected Topics in Human Ecology	2

**Thesis**

The candidate must complete the MPhil thesis (HUEC 7000) of the Faculty of Food and Agriculture and may defend his/her thesis at a public oral examination.

## (VIII) The PhD Degree in Human Ecology

Areas of specialization for the degree are:

- Nutritional Sciences
- Family and consumer Sciences
- Food Service Management

### **Entry Requirements**

For direct admission to the PhD programme, candidates should have successfully completed the MPhil Degree in Human Sciences, Family and Consumer Sciences or Human Nutrition and Dietetics, **OR** an MSc degree in Human Ecology Family and Consumer Sciences or Human Nutrition and Dietetics or a related discipline from an approved university and which should have included the writing of a substantial thesis, or an M.Sc. degree with distinction in a relevant discipline.

All other candidates with degrees in Human Ecology, Family and Consumer Sciences or Human Nutrition and Dietetics will be required to register for the MPhil degree in Human Ecology and seek an upgrade to the PhD degree in accordance with University Regulations.

Applicants who do not qualify for entry as specified in (1) and (2) above may be required to do a qualifying year consisting of supplementary courses in the area of specialization to a minimum of 18 credits.

### **Course of Study**

Candidates are normally expected to complete the following courses:

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
AGRI 6620	Statistics	4
AGBU 6301	Research Methodology	4
GRSM 8001	Graduate Research Seminar I	
GRSM 8002	Graduate Research Seminar II	
GRSM 8003	Graduate Research Seminar III	

### **PLUS**

**Twelve (12) additional credits from courses relevant to the student's area of specialization from the following list:**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
HUEC 5000	Advanced Foodservice Systems Management	4
HUEC 5020	Advanced Clinical Nutrition	4
HUEC 5040	Advanced Community Nutrition	4
AGBU 6103	Principles of Rural Sociology	4
AGBU 6002	International Trade and Marketing	4
AGBU 6201	Agricultural Marketing	4
AGBU 6202	Agribusiness Management	4
FOSQ 6001	Agri- food Safety	4
HUEC 7001	Epidemiology for Human Ecology	4
HUEC 7003	Advanced Nutrition in Health and Disease I	4
HUEC 7004	Public Health Nutrition	4
HUEC 7002	Nutrition Epidemiology	4
HUEC 7005	Selected Topics in Human Ecology	2

### **Thesis**

The candidate must complete the PhD thesis (HUEC 8000) of the Faculty of Food and Agriculture and successfully defend his/her thesis at a public oral examination.

# DEPARTMENT OF FOOD PRODUCTION

Room 213, Sir Frank Stockdale Building,  
UWI Campus, St. Augustine  
Tel: 1-868-662-2002 (Exts. 82090/83208/83989)  
Fax: 1-868-645-0479

## STAFF LISTING

### HEAD OF DEPARTMENT

**Dr. Mark Wuddivira**  
BSc, MSc (ABU), PhD (UWI)  
Ext. 82089/83318  
Email:  
[mark.wuddivira@sta.uwi.edu](mailto:mark.wuddivira@sta.uwi.edu)

### ADMINISTRATIVE ASSISTANT

**Mrs Brenda Bannister**  
BA (UWI)  
Ext. 83746  
Email: [brenda.bannister@sta.uwi.edu](mailto:brenda.bannister@sta.uwi.edu)

### SECRETARY

**Ms Elisha Bridgemohan**  
BSc (UWI)  
Ext. 82090  
Email: [elisha.bridgemohan@sta.uwi.edu](mailto:elisha.bridgemohan@sta.uwi.edu)

### CLERICAL ASSISTANT

**Ms Savita Maharajh**  
BSc, MSc (UWI)  
Ext. 83989  
Email: [savita.maharajh@sta.uwi.edu](mailto:savita.maharajh@sta.uwi.edu)

### CLERICAL ASSISTANT

**Ms Cynthia Lewis**  
Ext. 83208  
Email: [cynthia.lewis@sta.uwi.edu](mailto:cynthia.lewis@sta.uwi.edu)

### ACADEMIC STAFF

**N. Badrie**  
LLB (Univ of London), BSc, MSc, PhD (UWI)  
Professor, Food Microbiology and Safety  
Ext. 83211  
Email: [neela.badrie@sta.uwi.edu](mailto:neela.badrie@sta.uwi.edu)

### **Dr Gaius Eudoxie**

BSc, PhD (UWI)  
Senior Lecturer, Soil Science  
Ext. 83515  
Email: [gaius.eudoxie@sta.uwi.edu](mailto:gaius.eudoxie@sta.uwi.edu)

### **Prof Gary Garcia**

BSc, PhD (UWI)  
Professor, Livestock Science  
Ext. 83328  
Email: [gary.garcia@sta.uwi.edu](mailto:gary.garcia@sta.uwi.edu)

### **Dr. Gregory Gouveia**

BSc, PhD (UWI)  
Senior Lecturer, Soil Chemistry  
Ext. 83516  
Email: [gregory.gouveia@sta.uwi.edu](mailto:gregory.gouveia@sta.uwi.edu)

### **Dr Wendy-Ann Isaac**

BSc, MSc (UWI), MSc (Lincoln), PhD (UWI)  
Senior Lecturer, Weed Science/Agronomy  
Ext. 84055  
Email: [wendy-ann.isaac@sta.uwi.edu](mailto:wendy-ann.isaac@sta.uwi.edu)

### **Dr Upoor Krishnamoorthy**

BVSc, MVSc (UAS, Bangalore), PhD, (Cornell) AvH Fellow  
(Hohenheim)  
Senior Lecturer  
Ext. 83329  
Email: [upoor.krishnamoorthy@sta.uwi.edu](mailto:upoor.krishnamoorthy@sta.uwi.edu)

### **Dr Majeed Mohammed**

BSc (UWI), MSc (Guelph), PhD (UWI)  
Professor, Crop Science/Post-Production Technology  
Ext. 83324  
Email: [majeed.mohammed@sta.uwi.edu](mailto:majeed.mohammed@sta.uwi.edu)

### **Dr. Ravindra Ramnarine**

DipAg (ECIAF), BSc (UWI), MSc (Florida), PhD (Guelph)  
Lecturer, Soil Science  
Ext. 82578  
Email: [ravindra.ramnarine@sta.uwi.edu](mailto:ravindra.ramnarine@sta.uwi.edu)

### **Dr Laura Roberts-Nkrumah**

BSc, PhD, MEd (UWI)  
Professor, Crop Science/Horticulture  
Ext. 83325  
Email: [laura.roberts-nkrumah@sta.uwi.edu](mailto:laura.roberts-nkrumah@sta.uwi.edu)

### **Dr. Duraisamy Saravanakumar**

BSc, MSc (Agri), PhD (Tamil Nadu Agricultural University)  
Senior Lecturer, Plant Pathology  
Ext. 82078  
Email: [duraisamy.saravanakumar@sta.uwi.edu](mailto:duraisamy.saravanakumar@sta.uwi.edu)

### **Dr Reynold Stone**

BSc (UWI), MSc (Guelph), PhD (UWI)  
Professor, Agricultural Engineering  
Ext. 83317  
Email: [reynold.stone@sta.uwi.edu](mailto:reynold.stone@sta.uwi.edu)

### **Dr Lynda Wickham**

BSc, PhD (UWI)  
Senior Lecturer, Crop Science/Post-Production  
Technology  
Ext. 82110  
Email: [lynda.wickham@sta.uwi.edu](mailto:lynda.wickham@sta.uwi.edu)

***Dr. Mark Wuddivira***

BSc, MSc (ABU), PhD (UWI)  
Senior Lecturer, Soil Physics  
Ext. 84412  
Email: [mark.wuddivira@sta.uwi.edu](mailto:mark.wuddivira@sta.uwi.edu)

***Prof Holman E. Williams***

D.V.M (Tor), MSc (Wis), PhD (Edin), M.R.C.V.S.  
Professor Emeritus, Livestock Science  
Ext. 82090  
Email: [holman.wlliams@sta.uwi.edu](mailto:holman.wlliams@sta.uwi.edu)

***Prof Richard Brathwaite***

BSc (Poona), PhD (UWI)  
Professor Emeritus, Agronomy  
Ext.83320  
Email: [richard.brathwaite@sta.uwi.edu](mailto:richard.brathwaite@sta.uwi.edu)

## ABOUT THE DEPARTMENT

The increasingly globalising research environment can present challenges to many institutions in small-island developing states as it relates to impact. It nevertheless provides an excellent opportunity for such bodies to tailor their research programmes to address those issues that are pertinent to their realities, and so establish themselves as centres of excellence in their respective disciplines. In recognition of this, and in response to key regional issues such as food and nutrition security, competitiveness and sustainability of the agricultural sector, and environmental management, the Department of Food Production offers a diverse and dynamic graduate programme in the areas of Crop Science, Animal Science and Soil Science and Food Safety and Quality Assurance.

The key areas of focus in each of these programmes include:

**CROP SCIENCE** – this programme focuses on increasing productivity, quality and profitability of crop production systems. Agronomic and horticultural experimentation are key components of the crops programme. Additional areas covered include crop genetic improvement, postharvest physiology and tropical commodity utilization.

**ANIMAL SCIENCE** – work is on-going with ducks, dairy cattle and goats, tropical hair sheep, poultry, rabbits and forage production, and the captive rearing of wildlife species, in particular the agouti. Various synchronisation protocols for use in tropical hair sheep, the development and the use of timed artificial insemination protocols for dairy cattle and water buffalypso are also evaluated. Work on the characterisation of the growth and reproductive ability of various neo-tropical animal species and the evaluation and design of management systems for duck and wild birds is also undertaken.

**SOIL SCIENCE** – this programme focuses on the management of soil/plant systems in relation to enhancing nutrient availability with emphasis on nitrogen and phosphorus; soil organic matter dynamics and its role in soil fertility maintenance; soil genesis; land use studies; hillside management; biological nitrogen fixation; pollution abatement; water yield and quality management; fertilizer management and use efficiency; performance and management of cricket pitches; enhancing productivity and efficiency in key regional agro-industries.

**AGRI-FOOD SAFETY AND QUALITY** – the programmes adopt a holistic approach to agri-food safety and quality through the food chain- from farm or sea to plate. The courses relate to food safety and quality assurance in primary agriculture production, animal husbandry, sea-food harvesting and processing, post-harvest, food processing, marketing of products, export trade, food service and distribution to consumers. The programmes target graduates who are farm managers, food processors, food service managers, nutritionists, regulators, public health inspectors, veterinarian, policy makers, importers and exporters who may want to upgrade their skills.

### **PROGRAMME OFFERINGS**

Currently the Department offers four (4) MSc programmes in the following areas, subject to a minimum number of admissions:

- Tropical Animal Science and Production
- Tropical Crop Protection
- Value Addition for Food and Nutrition
- Agri-Food Safety and Quality

It also offers MPhil and PhD degrees in the areas of Crop Science, Horticulture, Livestock Science, Food Quality and Safety, Soil Science.

## PRIZES

### **THE PROFESSOR RICHARD A.I. BRATHWAITHE PRIZE**

*Awarded for the best performing student in the research project of the MSc in Tropical Crop Protection.*

### **THE MINISTRY OF AGRICULTURE, LAND AND FISHERIES PRIZE**

Awarded for the best performing student in the core courses of the Diploma/MSc Agri-Food Safety and Quality Assurance.

### **THE MINISTRY OF AGRICULTURE, LAND AND FISHERIES PRIZE**

Awarded for the best performing student in the mandatory research project of the MSc Agri-Food Safety and Quality Assurance.

# DETAILS OF DEGREE PROGRAMMES

## The MSc Degree in Tropical Animal Science and Production

*Coordinator – Professor Gary Garcia*

### OBJECTIVE

The MSc Degree in Tropical Animal Science and Production is designed to provide the graduate with a deeper knowledge and sensitivity of the needs for the Science of Livestock Production in Developing Tropical Environments with respect to domestic and non-domestic livestock species. The programme offers advanced training in the science of animal production and captive rearing of untamed animals.

Areas covered include Advanced Animal Nutrition, Reproductive Physiology, Advanced Animal Production and Forage Utilisation, Livestock Development and Wildlife (Neo-tropical) Production, Utilisation, Management and Conservation.

### ENTRY REQUIREMENTS

Admission into the MSc programme will normally be available to holders of a Bachelor's Degree of at least Lower Second Class Honours (minimum GPA of 2.0 or equivalent) standing in Agriculture, or any other relevant discipline from recognised institutions.

Candidates who, lack sufficient undergraduate training in Livestock Science, may be required to make up the deficiencies by taking relevant courses from among the undergraduate offerings from the Department of Food Production.

### COURSE OF STUDY

*This programme is offered only as part of the Evening University at the St. Augustine campus.* The programme will normally require 2 years of study, exclusive of the time required for taking departmental prerequisite courses where necessary.

The maximum time limit for completion of the programme is 4 years.

The MSc Degree in Tropical Animal Science and Production will be awarded on the successful completion of FIVE core courses (20 credits), TWO elective courses (10 credits) and a Research Project (12 credits).

### CORE COURSES (4 CREDITS EACH)

#### SEMESTER I

COURSE CODE	COURSE TITLE
AGLS 6001	Tropical Animal Science
AGLS 6002	Advanced Tropical Forage Utilisation
AGLS 6005	Advanced Non-Ruminant Production

#### SEMESTER II

COURSE CODE	COURSE TITLE
AGLS 6003	Tropical Livestock Development
AGLS 6004	Advanced Ruminant Production

#### YEAR LONG

COURSE CODE	COURSE TITLE	CREDITS
AGLS 6006	Research Project (compulsory)	12

### Elective courses (5 credits each)

Electives are offered subject to student registration.

COURSE CODE	COURSE TITLE
AGRI 6901	Product Development
AGLS 6502	Tropical Zoo and Wildlife Production and Management
AGLS 6201	Advanced Animal Nutrition I*
AGLS 6202	Advanced Animal Nutrition II*
AGLS 6203	Advanced Animal Nutrition III*
AGLS 6302	Animal Breeding
AGLS 6401	Reproductive Physiology
AGLS 6402	Environmental Physiology

AGLS 6804 Tropical Commodity Utilisation (Livestock)

**\*NOTE:** Advanced Animal Nutrition courses should be taken sequentially from I to III in that order.

Candidates are required to submit a project proposal for approval by the Department of Food Production within six (6) months of being registered in the programme. The topic of the project must be on the subject matter dealt with in one of the elective courses. Each candidate will be required to present a seminar on the proposed research project before the start of the project.

The research project must be presented in the form of a report of not more than 100 pages. This report must conform to the style approved by the University for MSc project Reports.

The MSc project assessment is based on examination of the report and presentation. To attain a pass on the project the candidate must obtain at least 50% in the assessment of project report and presentation.

For the award of the MSc with Distinction, candidates must have obtained an average of 70% or more in ALL written courses, and at least 70% in the Research Project.

#### **TIME LIMIT**

Candidates who at the end of two years have not completed the programme of study leading to the MSc in Tropical Animal Science and Production will be required to withdraw from the programme unless they have been granted special permission by the Board for Graduate Studies to continue.

#### **AWARD OF THE DEGREE**

To qualify for the award of the degree, candidates must successfully complete all required courses and the project. The degree shall be awarded in 2 categories: Distinction and Pass.

#### **EXAMINATION**

A candidate must attain at least 50% in the coursework and 50% in the final examination in order to secure a passing grade for each course.

#### **COURSEWORK**

The coursework component of each course will be 40%. Coursework assessment may consist of review papers in selected areas and/or in-course tests and reports on practical investigations.

#### **FINAL EXAMINATION**

Candidates will be required to sit a final written examination in each course. The written examination shall consist of one 3-hour paper in each course. Final examination of each course will be held at the end of the semester in which it is offered.

The final examination contributes 60% of the final mark. Candidates, who fail no more than two courses, may be permitted to rewrite examinations only by the Board for Graduate Studies and Research on the recommendation of the Faculty's Board of Examiners. Such examinations will be held during the Semester 3 or July/August Examinations period.

Candidates who fail more than two courses or who fail any course more than twice may be required to withdraw from the programme.

Candidates who do not sit examinations in courses for which they are registered shall be deemed to have failed.

## The Postgraduate Diploma and MSc Degree in Tropical Crop Protection

*Coordinator - Dr Duraisamy Saravanakumar*

### OBJECTIVE

The Postgraduate Diploma and MSc in Crop Protection offer advanced training in Tropical Crop Protection with emphasis on control of pests and weeds and management of tropical diseases of plants. Special emphasis is given to biological control of tropical pests, diseases and pathogens.

### ENTRY REQUIREMENTS

#### **POSTGRADUATE DIPLOMA AND MSc**

Candidates applying for admission to the Postgraduate Diploma and MSc in Tropical Crop Protection are required to satisfy the University's Regulations governing entry to Master's degrees, and should normally hold a Bachelor's degree of at least lower second class Honours (minimum GPA 2.0 or equivalent) in Agriculture or in a related discipline.

### COURSE OF STUDY

The course of full-time study covers a ten-month period from September of one year, to June of the following year for successful completion of the Postgraduate Diploma and a twelve-month period from September of one year, to August of the following year for the completion of the MSc. in Tropical Crop Protection.

### POSTGRADUATE DIPLOMA

#### **CORE COURSES (4 CREDITS EACH)**

##### **SEMESTER I**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6210	Biology, Ecology and Epidemiology of Pests
AGRI 6221	Pesticide Technology
AGRI 6230	Integrated Pest Management

##### **SEMESTER II**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6121	Global Phytosanitary Issues and their Application
AGRI 6222	Molecular Techniques in Crop Protection

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6300	Internship (6 weeks)

#### **ELECTIVE COURSES (6 CREDITS EACH)**

Students are required to select ONE course from the following list of electives.

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6252	Nematology
AGRI 6241	Plant Pathology and Virology
AGCP 6250	Weed Science
AGRI 6250	Applied Entomology

### MSC. DEGREE

#### **CORE COURSES (4 CREDITS EACH)**

##### **SEMESTER I**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6210	Biology, Ecology and Epidemiology of Pests
AGRI 6221	Pesticide Technology
AGRI 6230	Integrated Pest Management
FOSQ 6011	Research and Statistical Skills for Food and Agriculture

##### **SEMESTER II**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6121	Global Phytosanitary Issues and their Application
AGRI 6222	Molecular Techniques in Crop Protection
AGRI 6300	Internship (6 weeks)
AGRI 6200	Research Project (independent study and oral presentation included)

Candidates will be allowed to submit the Research Project/Report, only after successful completion of the core and elective courses.

**Elective courses (6 credits each)**

Students are required to select ONE course from the following list of electives.

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6252	Nematology
AGRI 6241	Plant Pathology and Virology
AGCP 6250	Weed Science
AGRI 6250	Applied Entomology

Candidates who at the end of two years have not completed the programme of study leading to the Postgraduate Diploma or the MSc in Crop Protection will be required to withdraw from the programme unless they have been granted special permission by the Board for Graduate Studies to continue.

**AWARD OF THE DEGREE**

**DIPLOMA PROGRAMME:** The Diploma programme comprises 30 credits of taught courses. The Diploma will be awarded upon successful completion of all the prescribed courses and an internship. This programme does not include a research project. During the end of the second semester break the internship should be completed.

**MSc PROGRAMME:** The MSc programme comprises 34 credits of taught courses and a compulsory 8 credit research project and independent study (based on research discipline), for a total of 42 credits. The M.Sc. degree shall be awarded upon successful completion of all the prescribed courses and the compulsory research project, internship and independent disciplinary study in Tropical Crop Protection.

The degree shall be awarded in two categories - Distinction and Pass. For the award of the degree with Distinction, the candidate must have obtained a minimum average mark of 70% or more in all core and elective courses as well as 70% or more in the Research Project.

**EXAMINATION**

A candidate must attain at least 50% in order to secure a passing grade for each course. For some courses, coursework accounts for 100% of the marks, and there is no final examination.

be of not more than six months duration and candidates will be expected to begin the practical aspect of the project in January and be required to submit the written report on the research project by the 15th July but no later than 15<sup>th</sup> August of the same year.

**TIME LIMIT**

The course of full-time study covers a twelve-month period from September of one year, to August of the following year. Candidates will normally be expected to complete all their examinations within one year as full-time students. Part-time students will normally be expected to complete the programme in two (2) years. Candidates must complete all their examinations within two years maximum as full-time students or within four years maximum as part-time students.

**AWARD OF THE DEGREE**

To qualify for the award of the degree, candidates must have successfully completed six (6) courses (5 credits each) and the research project (7 credits).

The degree shall be awarded in two (2) categories – Distinction and Pass. For the award of the degree with distinction, the candidate must have obtained an average of 70% in all courses and in the research project.

**EXAMINATION**

A candidate must attain at least 50% in the coursework and 50% in the final examination in order to secure a passing grade for each course.

**COURSEWORK**

The coursework component is specified for each course. Coursework assessment will consist of all or a combination of the following: preparation of review papers in selected areas, seminar presentations and conduct of and written reports on practical investigations and laboratory sessions.

### FINAL EXAMINATION

Candidates will be required to sit final written examinations in each course. The written examination shall consist of one 3-hour paper. The final examination for each course will be held at the end of the semester in which it is offered. The contribution of the final examination to the total course mark is specified for each course. Candidates, who fail no more than two courses in a given semester, will be permitted to rewrite examinations for those courses, at the next available sitting, on the recommendation of the Faculty's Board of Examiners.

Candidates who fail more than three courses, overall, or who fail any course more than once, will normally be required to withdraw from the programme and may be permitted to continue only on approval of the Board for Graduate Studies and Research, on recommendation by the Faculty's Board of Examiners. Normally, a candidate who does not sit a final examination for a course for which he/she is registered shall be deemed to have failed that course.

## Post-Graduate Diploma and MSc Degree in Agri-Food Safety and Quality Assurance

*Co-ordinator – Professor Neela Badrie*

### OBJECTIVE

The overall objective of these programmes is to provide quality and relevant education, training and research in food safety and quality to graduates who are farm managers, food processors, food service managers, nutritionists, regulators, public health inspectors, policy makers, importers and exporters regionally and world-wide who want to upgrade their skills. The programmes therefore seek to:

- Adopt a holistic approach to agri-food safety that encompasses the whole food chain- from farm or sea to plate and those aspects of food safety related to quality;
- Apply tracing techniques from the primary producers, animal husbandry, through post-harvest treatment, food processing, marketing of products, export trade and distribution to the consumers;
- Adopt a risk-based approach to agri-food control systems;
- Assess the current agri-food safety standards and food safety management programmes throughout the food chain;
- Examine strategic elements such as risk analysis, scientific advice, consumer education in food and agriculture;
- Foster interactive exchange of information and opinions throughout the risk analysis process concerning hazards and risks, risk related factors and risk perceptions among risk assessors, risk managers, consumers, industry, the academic community, policy makers and other interested parties.

Candidates will have the option of pursuing either the postgraduate Diploma or the MSc programmes.

### POST-GRADUATE DIPLOMA

#### ENTRY REQUIREMENTS

In order to be admitted to the postgraduate Diploma, candidates must normally:

- a. Have a first degree in Agriculture, Agri-Business, Natural Sciences, Life Sciences, Medical Sciences, Human Ecology, Public Health, Environmental Sciences, Chemical Engineering, Food Sciences, Veterinary Medicine or any related areas or;
- b. Have previous equivalent level of education and relevant experience which would be acceptable to the University;
- c. Mature students who do not satisfy the above requirements but who have considerable work experience and who are deemed capable of achieving the standard of work required for the programmes may be permitted to enter these programmes at the discretion of the Faculty and the University.

#### COURSE OF STUDY

The Diploma programme comprises of 24 credits of courses as follows:

##### SEMESTER I- FACE TO FACE DELIVERY

COURSE CODE	COURSE TITLE
FOSQ 5001	Agri-Food Safety
FOSQ 5003	Food Quality Assurance & Evaluation of Agri-Food Policies

##### SEMESTER II-ON-LINE DELIVERY

COURSE CODE	COURSE TITLE
FOSQ 5002	Project Management in Food and Agriculture
FOSQ 5004	Agri Food Safety Risk Analysis
FOSQ 5005	Epidemiology and Food-borne diseases
FOSQ 5006	International Trade and Agri-Food Legislation

### **DURATION**

The academic year is divided into two semesters as follows: August to December and January to May.

Diploma full-time: 2 semesters of courses

Diploma part-time: 4 semesters of courses

### **AWARD OF THE DIPLOMA**

To qualify for the award of the Diploma, candidates must successfully take and pass 6 courses (4 credits each) for a total of 24 credits.

### **MSc PROGRAMME**

#### **ENTRY REQUIREMENTS**

In order to be admitted to the M.Sc. programme, candidates must normally:

Have a first degree (minimum grade of a lower second class honours or equivalent) in Agriculture, Agri-Business, Natural Sciences, Life Sciences, Medical Sciences, Human Ecology, Public Health, Environmental Sciences, Chemical Engineering, Food Sciences, Veterinary Medicine or any related areas **OR**;

- Students with a pass degree may gain entry to the M.Sc. programme subject to Departmental support and completion of qualifying courses.

Candidates who have successfully completed the requirements for the Diploma in Agri-Food Safety and Quality Assurance may apply to upgrade to the M.Sc. degree. In the event that such candidates are unable to complete the requirements for the M.Sc., the post-graduate diploma will be awarded on successful completion of the prescribed courses.

M.Sc. students who have been unable to complete the requirements within the maximum time but who have met the requirements for the Diploma may be awarded the Diploma.

Persons initially admitted to the post-graduate Diploma and wishing to transition into the Master's without being awarded the Diploma must complete 24 credits required for the Diploma plus the additional 12 credits from the compulsory courses as required for direct entry into the Master's.

Persons who apply for admission to the Master's within a 5 year award of the post-graduate Diploma will not be exempted from more than 50% of the credits required for the Master's on the basis of credits earned from the Diploma.

Delivery Semester 1 courses by face-to-face

Delivery Semester 2 courses by on-line

**Delivery- Semester 1 courses are face-to-face delivery while semester 2 courses are online.**

#### **COURSE OF STUDY**

The MSc programme comprises 28 credits of courses and a compulsory research project for 8 credits.

#### **SEMESTER I-face to face delivery**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
FOSQ 6001	Agri-Food Safety	4
FOSQ 6003	Food Quality Assurance and Evaluation of Agri-Food Policies	4
FOSQ 6011	Research and Statistical Skills for Food and Agriculture	4

#### **SEMESTER II- ONLINE DELIVERY**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
FOSQ 6002	Project Management in Food and Agriculture	
FOSQ 6004	Agri-Food Safety Risk Analysis	4
FOSQ 6005	Epidemiology and Food-borne Diseases	4
FOSQ 6006	International Trade and Agri-Food Legislation	4

#### **SEMESTER 3 (SUMMER)**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
FOSQ 6010	Research Project on Agri-Food Safety and Quality Assurance	8

### **DURATION**

The academic year is divided into two semesters as follows: August to December and January to May.

**MSc full-time** : 2 semesters of courses and research programme -12 months (minimum) – 15 months (maximum)

**MSc part-time** : 4 semesters of courses and research programme - 24 months (minimum) – 30 months (maximum)

#### **AWARD OF THE MSc. DEGREE**

To qualify for the award of the Degree, candidates must have successfully completed 7 courses (4 credits each) for 28 credits, and the research project in the food safety and quality for 8 credits for a total of 36 credits.

## **MSc Degree Value Addition for Food and Nutrition Security**

*Coordinator – Dr. Lynda Wickham*

#### **OBJECTIVE**

This programme aims to provide further training to graduates of the relevant undergraduate programmes offered by the Faculty of Food and Agriculture during a twelve-month course of study as full-time students, or twenty-four (24) months as part time students, that will equip them to:

- become self-employed as entrepreneurs in their own right;
- provide employment for other individuals;
- apply their training to improving the domestic and regional food supply through the production of value added products that, in turn, will increase utilization of primary agricultural products, provide more secure markets for farmers/primary producers by increasing the demand for raw material for processing, provide products to facilitate import substitution, provide products for export to earn foreign exchange, and ultimately, effect a reduction in the national and regional food import bill, while improving national and regional food and nutrition security.

The objectives are:

- to produce graduates who are work-ready and can contribute to the food and agriculture sector.
- to increase student enrolment at the graduate level by providing an attractive programme that is relevant to the current global, regional and national environment.
- to attract graduates from extra regional areas since the programme is relevant to other Small Island States.

#### **ENTRY REQUIREMENTS**

The general pre-requisite for entry into the MSc. in Value Addition for Food and Nutrition Security is at least a Lower Second Class Honours BSc degree in Agriculture, Human Ecology, Agribusiness or the Biological Sciences (or equivalent qualifications and working experience).

It is expected that the support system for the MSc. TCU will be applied to the replacement programme and that the same facilities will be utilized since the graduate courses are the same with effectively only one new course.

#### **COURSE OF STUDY**

The MSc. in Value Addition for Food and Nutrition Security will normally extend over 12 months of full-time or 24 months of part-time study.

A candidate for the MSc in Value Addition for Food and Nutrition Security will be required to complete seven core courses, and a research project- a total of 45 credits.

Exemptions will be granted where the candidate's postgraduate work experience and other activities demonstrate knowledge equivalent to that which would be gained through completion of the research project. Candidates will be assessed on a case by case basis.

#### **Award of the Degree**

To qualify for the award of the MSc., candidates must pass all core courses and the research project.

Candidates must meet all the requirements for the award of the MSc. with the exception of the research project.

The degree shall be awarded in two categories – Distinction and Pass. For the award of the degree with Distinction, the candidate must have obtained an average mark of 80% or more, across all core courses, and 80% or more in the Research Project.

**POSTGRADUATE DIPLOMA**

**CORE COURSES (5 CREDITS EACH)**

**SEMESTER I**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	
AGRI 6401	Agricultural Value Addition	(5 credits)
AGCP 6101	Postharvest Physiology and Biochemistry	(5 credits)
AGRI 6201	Chemistry of Foods	(5 credits)
AGRI 6301	Food Microbiology	(5 credits)

**SEMESTER II**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	
AGCP 6702	Food Quality and Analysis	(5 credits)
AGCP 6802	Commodity Utilization	(5 credits)
AGRI 6901	Product Development	(5 credits – Year long)
AGCP 6252	Research Project	(10 credits)

**AWARD OF THE DEGREE**

**MSC PROGRAMME:** The MSc programme comprises 35 credits of taught courses and a compulsory 10 credit research project for a total of 45 credits. The M.Sc. degree shall be awarded upon successful completion of all the prescribed courses and the compulsory research project.

The degree shall be awarded in two categories - Distinction and Pass. For the award of the degree with Distinction, the candidate must have obtained a minimum average mark of 70% or more in all core and elective courses as well as 70% or more in the Research Project.

**EXAMINATION**

A candidate must attain at least 50% in order to secure a passing grade for each course. For some courses, coursework accounts for 100% of the marks, and there is no final examination.

**CANDIDATES WILL BE EXPECTED TO BEGIN THE PRACTICAL ASPECT OF THE PROJECT IN JANUARY AND BE REQUIRED TO SUBMIT THE WRITTEN REPORT ON THE RESEARCH PROJECT BY THE 15TH JULY BUT NO LATER THAN 15TH AUGUST OF THE SAME YEAR.**

**TIME LIMIT**

The course of full-time study covers a twelve-month period from September of one year, to August of the following year. Candidates will normally be expected to complete all their examinations within one year as full-time students. Part-time students will normally be expected to complete the programme in two (2) years. Candidates must complete all their examinations within two years maximum as full-time students or within four years maximum as part-time students.

**AWARD OF THE DEGREE**

To qualify for the award of the degree, candidates must have successfully completed seven (7) courses (5 credits each) and the research project (10 credits).

The degree shall be awarded in two (2) categories – Distinction and Pass. For the award of the degree with distinction, the candidate must have obtained an average of 70% in all courses and in the research project.

**EXAMINATION**

A candidate must attain at least 50% in the coursework and 50% in the final examination in order to secure a passing grade for each course.

**COURSEWORK**

The coursework component is specified for each course. Coursework assessment will consist of all or a combination of the following: preparation of review papers in selected areas, seminar presentations and conduct of and written reports on practical investigations and laboratory sessions.

**FINAL EXAMINATION**

Candidates will be required to sit final written examinations in each course. The written examination shall consist of one 3-hour paper. The final examination for each course will be held at the end of the semester in which it is offered. The contribution of the final examination to the total course mark is specified for each course. Candidates, who fail no more

than two courses in a given semester, will be permitted to rewrite examinations for those courses, at the next available sitting, on the recommendation of the Faculty's Board of Examiners.

Candidates who fail more than three courses, overall, or who fail any course more than once, will normally be required to withdraw from the programme and may be permitted to continue only on approval of the Board for Graduate Studies and Research, on recommendation by the Faculty's Board of Examiners. Normally, a candidate who does not sit a final examination for a course for which he/she is registered shall be deemed to have failed that course.

## THE MPhil AND PHD DEGREES

The Department currently offers MPhil and PhD degrees in the areas of Crop Science, Horticulture, Livestock Science, Food Quality and Safety, Soil Science, and Earth and Environmental Science and Tropical Crop Protection.

### CROP SCIENCE

Students admitted to pursue research degrees in the programme can carry out their research in aspects of crop production and utilisation spanning areas from crop propagation and agronomy to post-harvest physiology and commodity utilisation including tropical products development. The department can also provide training in sustainable farming systems and diversity studies in tropical root crops and selected tropical tree crops.

### FOOD SAFETY AND QUALITY

Students could pursue research degrees on topics of interests related to the supply of safe and wholesome food to consumers globally, food safety and quality management systems which address the farm to fork approach, good governance and national control, legislation and private standards, management of food safety and quality within the supply chain, control of food-related risks using biotechnology tools, food microbiology, research, education, and outreach activities necessary for effectively reducing foodborne illness.

### HORTICULTURE

This programme provides advanced training in tropical horticulture that will equip graduates for careers in research, development and higher education. Research areas include germplasm evaluation, propagation and management of horticultural crops, landscape plants and turfgrasses and management of green spaces.

### LIVESTOCK SCIENCE

Students admitted to pursue research degrees in Livestock Science have the opportunity to choose from a wide range of research activities in Tropical Livestock Science and production. Current departmental research involves research in ruminant production and improvement; poultry production; rabbit production and captive production of the Neo-tropical animals (e.g. agouti, deer, lappe (paca), and peccary).

### SOIL SCIENCE

Students admitted into research programmes in Soil Science may choose to pursue research in one of the following areas:

- Organic waste management and utilisation
- Soil and land use studies
- Soil conservation and erosion management
- Engineering properties of soils
- Soil fertility and plant nutrition

### TROPICAL EARTH AND ENVIRONMENTAL SCIENCE

This programme will train students for careers in research and teaching in Tropical Earth and Environmental Science. A graduate from the MPhil programme could expect to take up a position as a research technician, or apply their skills in consultancy. The PhD graduates of the programme are expected to make a significant contribution to the field. These graduates would be suited as research scientists in forestry, agriculture or the oil industry, environmental consultants, university or college lecturers or other positions requiring sophisticated training at the PhD level.

### TROPICAL CROP PROTECTION

Students admitted to pursue research degrees in Tropical Crop Protection have the opportunity to specialise further in plant pathology and virology, nematology, weed science and entomology. Students may choose the following courses:

### ***MPhil (8 credits) / PhD (10 credits) in Tropical Crop Protection***

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6620	Statistics
AGBU 6301	Research Methodology
AGRI 6400	Internship (3-6 month attachment related to research project)
AGRI 7001	MPhil in Tropical Crop Protection (Thesis only)
AGRI 8001	PhD in Tropical Crop Protection (Thesis with oral examination)

***Optional courses:***

AGRI 6230	Integrated Pest Management
AGRI 6241	Plant Pathology and Virology
AGRI 6250	Advanced Entomology
AGCP 6250	Weed Science
AGRI 6252	Nematology

***Other requirements:***

GRSM 7001-7004: MPhil only

GRSM 8001-8004: PhD only

**DEPARTMENTAL REQUIREMENTS:**

In addition to Faculty requirements, students admitted for advanced research degrees in the department are required to take and pass the following two courses (4 credits each)

<b>COURSE CODE</b>	<b>COURSE TITLE</b>
AGRI 6620	Statistics
AGBU 6301	Research Methodology

All postgraduate research students are required to present at least two seminars on their work at the MPhil level and three seminars at the PhD level. These seminars will be examined and graded on a “pass or “fail” basis.

# DEPARTMENT OF GEOGRAPHY

## **DEPARTMENT OF GEOGRAPHY**

### **HEAD OF DEPARTMENT**

***Dr Kegan Farrick***

Ext: 84130

Email: [kegan.farrick@sta.uwi.edu](mailto:kegan.farrick@sta.uwi.edu)

### **SECRETARY**

**Ms. Cadia Raymond**

Ext. 84129

E mail: [geography@sta.uwi.edu](mailto:geography@sta.uwi.edu)

### **ACADEMIC STAFF**

***Dr Junior Darsan***

BSc, PhD (UWI)

Lecturer, Geography

Ext. 82698

Email: [junior.darsan@sta.uwi.edu](mailto:junior.darsan@sta.uwi.edu)

***Dr Kegan Farrick***

BSc (UWI), MSc (Waterloo), PhD (Western)

Lecturer, Geography

Ext. 84130

Email: [kegan.farrick@sta.uwi.edu](mailto:kegan.farrick@sta.uwi.edu)

**Dr. Gabrielle Thongs**

BSc., MSc., PhD (UWI)

Lecturer, Geography

Ext. 82700

Email : [gabrielle.thongs@sta.uwi.edu](mailto:gabrielle.thongs@sta.uwi.edu)

***Dr Priya Kissoon***

BA, BEd, MA (York), PhD (King's College London)

Lecturer: Geography

Ext. 83612

Email: [priya.kissoon@sta.uwi.edu](mailto:priya.kissoon@sta.uwi.edu)

### **TECHNICAL ASSISTANT**

***Ms Makanzwa Pita***

BSc (UWI)

Ext. 82210

Email: [makanzwa.pita@sta.uwi.edu](mailto:makanzwa.pita@sta.uwi.edu)

# THE MPhil AND PHD DEGREES

The Department currently offers MPhil and PhD degrees in the following areas:

## MPhil & PhD in Geography

This programme provides high quality research training in multi-disciplinary geographical research methods, to facilitate candidates to conduct research in areas of regional importance and international significance, and to produce graduates capable of developing and leading their own research projects, either in academia or industry. The programme allows for study in areas of Geography staff interests and expertise. The MPhil/PhD programme aims to improve the research potential of both the individual candidate and that of the Department. Candidates admitted to the MPhil/PhD programme in Geography will join a rapidly expanding and dynamic, interdisciplinary research community. The programme is used in the investigation of regional problems of geographic nature to the benefit of the region.

### ENTRY REQUIREMENTS

Holders of undergraduate degrees in Geography or other related disciplines will be eligible for admission. Normally, the minimum requirement for admission to the MPhil programme is at least an Upper Second Class Honours degree (minimum GPA of 3.0 or equivalent). For entry to the PhD programme, candidates with any of the following qualifications will normally be eligible for admission:

1. Holders of MPhil degrees awarded from recognized Institutions in Geography or related disciplines;
2. Applicants with taught MSc degrees in Geography or related disciplines with GPA of B+ from recognized Institutions, provided that the MSc programme included a research project worth at least 6 credit hours;
3. Students registered in MPhil programmes of the UWI in Geography who have met the requirements for upgrade in accordance with stipulated guidelines by the Board for Graduate Studies and Research;
4. Applicants possessing such other qualifications and experience as the Board for Graduate Studies and Research may deem acceptable.

**NOTE:** Acceptance of applicants **DIRECTLY INTO THE PHD PROGRAMME** must be approved by the Board for Graduate Studies and Research in accordance with Regulations for Graduate Diplomas and Degrees.

Previous experience in research (e.g. through an undergraduate or MSc project) will be given special consideration in assessing a candidate's suitability for admission. Candidates are expected to develop a research proposal as part of their application, in conjunction with academic staff members in Geography. Applicants with weak undergraduate qualifications or limited exposure to the subject matter in the area of interest for specialization, may, under exceptional circumstances, be required to pursue and complete qualifying courses recommended by Head of Department as a pre-requisite to admission.

Admission to the Geography MPhil/ PhD programme may be subject to an interview by a panel to include the potential supervisor(s) and Head of Department. Only candidates with both the academic ability and appropriate aptitude will be admitted to the programme. Where there is more than one suitable applicant for a particular project, admission will be granted on a competitive basis to the best candidate only.

### COURSE OF STUDY

MPhil students are required to complete a total of at least 6 credits, whereas PhD students should complete at least 9 credits of courses. Appropriate courses for the intended area of research will be assigned by the Head of Department in liaison with the supervisory team. All students are normally required to complete the following course during their first year of study:

Course Code	Course Title	Credits
GEOG 6000	Philosophy and Practice of Research in Geography	3

**PLUS** at least 3 additional approved credits for MPhil students **OR** 6 additional approved credits for PhD students. Candidates must pass the appropriate examinations for assigned courses before being allowed to submit a thesis.

In addition, as per Faculty regulations, all postgraduate research students are required to present at least two seminars at the MPhil level and three seminars at the PhD level. These seminars are assessed components of the programme, and candidates are required to formally register. The course codes for such courses are as follows:

#### **MPHIL COURSES**

<b>Course Code</b>	<b>Course Title</b>
GRSM 7000	Graduate Seminar – MPhil
GRSM 7001	Graduate Research Seminar I (mandatory – no credit)
GRSM 7002	Graduate Research Seminar II (mandatory – no credit)

#### **PHD COURSES**

<b>Course Code</b>	<b>Course Title</b>
GRSM 8000	Graduate Seminar – PhD
GRSM 8001	Graduate Research Seminar I (mandatory – no credit)
GRSM 8002	Graduate Research Seminar II (mandatory – no credit)
GRSM 8003	Graduate Research Seminar III (mandatory – no credit)

#### **PROGRESSION FROM MPHIL TO PHD**

MPhil candidates may be upgraded to PhD under certain conditions. Before being permitted to progress from MPhil to PhD, candidates will be required to submit a report of their research to date which includes a detailed literature review and a plan of research for the PhD. This report will be reviewed and the candidate examined in accordance with relevant University regulations by a panel comprising of one internal examiner and the candidate's supervisor(s). Those candidates who do not meet the requirements for progression to PhD will be invited to submit an MPhil thesis for examination.

#### **THESIS**

Both the MPhil and PhD degrees are examined by thesis and in the case of the PhD also by public oral examination (thesis defence) as per the University regulations. MPhil and PhD candidates must register for and complete either GEOG 7010 (MPhil Thesis – Geography) or GEOG 8010 (PhD Thesis – Geography), respectively. The appropriate degree will be awarded upon completion of the programme which includes the successful completion of all the required courses, seminars and the submission and successful defence of the MPhil/ PhD thesis.

# COURSE DESCRIPTIONS

## DEPARTMENT OF AGRICULTURAL ECONOMICS & EXTENSION

### AGBU

**SEMESTER: 2****COURSE CODE: AGBU 6002****COURSE TITLE: INTERNATIONAL TRADE AND MARKETING****NUMBER OF CREDITS: 4****PREREQUISITE: NONE**

**COURSE DESCRIPTION:** International trade in agricultural commodities, products and natural resources and the impact of international trading arrangements. Partial and general equilibrium models applied to problems in agricultural and natural resource trade and marketing. Analysis of trade and marketing policies of various countries. The impact of macroeconomic policy through exchange rates, interest rates, and inflation on international agricultural and resource markets.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1****COURSE CODE: AGBU 6102****COURSE TITLE: STATISTICS AND MATHEMATICS FOR AGRIBUSINESS****NUMBER OF CREDITS: 4****PREREQUISITE: AGBU 2003 OR AGBU 3005 OR EQUIVALENT OR ECON 2006 OR HUEC 1005**

**COURSE DESCRIPTION:** Probability distributions; mathematical expectations; estimation of parameters; tests of hypotheses; analysis of variance; functions of one and several variables; partial derivatives; total derivatives; matrices and determinants; integrals; constrained optimisation.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2****COURSE CODE: AGBU 6103****COURSE TITLE: SUSTAINABLE RURAL DEVELOPMENT****NUMBER OF CREDITS: 4****PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Advanced concepts of economic growth and sustainable development are covered especially as they relate to agriculture. The use of economic tools and theories to analyse the performance of the agricultural sector and assessing the potential for sustainable development through the wise use of available resources. The Human Development Index as it relates to Caribbean countries. The role of women in the development process is studied in-depth using real-life field situations. Analysis of the principal causes of rural environmental problems in the Caribbean and the provision of solutions to reduce their negative impact.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1****COURSE CODE: AGBU 6201****COURSE TITLE: AGRICULTURAL MARKETING****NUMBER OF CREDITS: 4****PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Marketing Management. Market research and development. Critical appraisal of existing marketing arrangements/institutions for agricultural commodities. The role of the public sector. Location theory.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6202**

**COURSE TITLE: AGRIBUSINESS MANAGEMENT**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Concepts of Management; Forms of Business Organisation; Financial Management for Agribusiness; Production/Operations Management; Business Development; Human Resource Management; Information and Decision-Making; Project Management

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGBU 6301**

**COURSE TITLE: RESEARCH METHODOLOGY**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Critical discussion of the application of scientific methodology of research. The role of inductive and deductive logic in Scientific research in the Caribbean. Preparation of research proposals, theses and research project reports.

**ASSESSMENT:**

Coursework 50%

Final examination 50%

**SEMESTER: 2**

**COURSE CODE: AGBU 6302**

**COURSE TITLE: QUANTITATIVE METHODS I  
(OPERATIONS RESEARCH)**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 3005- QUANTITATIVE METHODS OR EQUIVALENT**

**COURSE DESCRIPTION:** Specification, estimation and interpretation of economic models. Application to empirical problems of agriculture. Use and interpretation of operations research techniques for problems encountered by agricultural economists. Linear programming and its variations such as transportation models, network analysis, spatial equilibrium models.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGBU 6303**

**COURSE TITLE: INVESTMENT ANALYSIS AND FINANCING FOR AGRIBUSINESS**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 3000 - FARM BUSINESS MANAGEMENT OR EQUIVALENT**

**COURSE DESCRIPTION:** Investment/Project Analysis; Capital Acquisition: Methods and Source of Finance; Developing and Evaluating Financing Packages; Managing Debt Portfolio; Business Planning and Development; Case Studies; Project Exercise.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6401**

**COURSE TITLE: ECONOMICS OF FOOD SECURITY**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The course examines economic issues related to food security. Economic concepts and principles are used to examine the relationships between food and nutrition security and agricultural production and food consumption and nutrition, and how these concepts and principles can be utilized in crafting solutions to problems associated with these relationships.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGBU 6402**

**COURSE TITLE: FOOD POLICY AND FOOD SECURITY**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course introduces students to the concepts and to local, regional and international policies of food security. The issues associated with world hunger, food crises and the unsustainable nature of the current food systems make food security an important concern. The impacts of the pace of policy development and the need to identify policies to achieve food security at the individual, household, community, or national level will be explored.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGBU 6501**

**COURSE TITLE: MICROECONOMICS**

**NUMBER OF CREDITS: 4**

**PREREQUISITES: AGBU 2002 OR ECON 2015, ECON 2000 AND ECON 2001 OR EQUIVALENT**

**COURSE DESCRIPTION:** This course provides an advanced treatment of the scope and importance of economic theory, and shows how mathematical methods may be used in microeconomic analysis. It reviews the theory of the consumer: consumer budget, preferences and utility: choice and demand. Consumer surplus and market equilibrium. Theory of production: technology; profit maximisation; profit function; cost minimisation; cost functions; duality. Theory of the firm: competitive markets; monopoly; monopolistic competition; oligopoly. It also reviews welfare analysis, public goods and externalities.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6602**

**COURSE TITLE: QUANTITATIVE METHODS II (ECONOMETRICS)**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Evaluation of statistical estimation and testing of economic models, for use in agricultural policy development, marketing and production research. Emphasis is on the application of the multivariate linear regression model for estimating relationships important for agriculture and agribusiness management. Violations of basic assumptions: multicollinearity; misspecification; heteroskedasticity; autocorrelation. Estimation using panel data. Non-linear least squares. Time Series Modeling. Integrated use of software to support analysis and application to real-world problem solving.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6610**

**COURSE TITLE: ECONOMIC THEORY**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 6501 - MICROECONOMICS**

**COURSE DESCRIPTION:** In-depth Treatment of Selected Topics given under AGBU 6501 (AM 65A). Foundations of macro-economics. Public Sector economics

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6650**

**COURSE TITLE: ECONOMIC DEVELOPMENT AND INTERNATIONAL TRADE**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Main modern development theories. Survey of international trade theories with special reference to problems of small developing economies. Functioning of the international economic system; the new international economic order. Economic integration. International Competitiveness with special reference to Caribbean Agricultural Commodities.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6690**

**COURSE TITLE: ADVANCED AGRICULTURAL MARKETING II**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 6903 - ADVANCED AGRICULTURAL MARKETING I**

**COURSE DESCRIPTION:** Current developments affecting market structure and conduct including effects of contractual arrangements, vertical integration, governmental policies and regulation. Wholesale and retail marketing of food. Strategic marketing behaviour including entry and pricing strategies. Global market research. Supply chain management. Futures markets.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6691**

**COURSE TITLE: ADVANCED AGRIBUSINESS MANAGEMENT I**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Problems, issues, regulations, policies, and procedures relevant to global agribusiness, with specific reference to perishable and storable agricultural commodities and food products. Recent advances in farm and agribusiness management with the focus on firm-level agribusiness concepts, international agribusiness and import and export management.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6692**

**COURSE TITLE: ADVANCED NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 6902 - ENVIRONMENTAL ECONOMICS II**

**COURSE DESCRIPTION:** Static and Dynamic modeling of environmental and natural resources. Environmental governance. Advanced valuation techniques and analysis. Spatial modeling and management of resource use. Applying environmental policy instruments.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6901**

**COURSE TITLE: AGRICULTURAL POLICY AND ANALYSIS**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Conceptual approaches to economic analyses of public policy issues and programmes with emphasis on the relationship among institutes, behaviour of participants and performance.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6902**

**COURSE TITLE: ENVIRONMENTAL ECONOMICS II**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Green national accounts. Macroeconomic policies and the environment. Trade and the environment. Poverty-environment linkages. Resource taxation: Payment for ecosystem services. Global public goods: Theory and practice. Benefit -Cost analysis and valuation techniques. Risk assessment : alternative approaches.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGBU 6903**

**COURSE TITLE: ADVANCED AGRICULTURAL MARKETING I**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 3005 - QUANTITATIVE METHODS OR EQUIVALENT**

**COURSE DESCRIPTION:** An examination of concepts in economic theory and quantitative methods as they are applied to the solution of marketing problems. The focus will be on concepts that enhance abilities to: identify market problems, place these problems in an analytical framework with testable hypotheses, empirically implement the resulting hypothesis tests and draw policy implications from the results of hypothesis tests.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1 & 2**

**COURSE CODE: AGBU 6999**

**COURSE TITLE: RESEARCH PROJECT**

**NUMBER OF CREDITS: 12**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** A research project in the area of specialisation involving field studies at the farm/household/organisational level or related archival investigation to provide experience of the research process and of relevant empirical techniques.

**SEMESTER: CHECK DEPT FOR AVAILABILITY**

**COURSE CODE: AGBU 8000**

**COURSE TITLE: QUANTITATIVE METHODS III**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: AGBU 6602 OR EQUIVALENT**

**COURSE DESCRIPTION:** Detailed treatment of problems associated with single equation estimation: auto-correlation, errors in variables, multi-collinearity, heteroskedasticity, lagged variables. Simultaneous equation system: the concept of identification, structural equations and the reduced form, two-staged econometric models, mathematical programming and simulation application to agricultural economic research.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

## AGEX

### SEMESTER: 1

**COURSE CODE: AGEX 6001**

**COURSE TITLE: PRINCIPLES OF RURAL SOCIOLOGY**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Theoretical perspectives for studying rural communities and developing societies in general. Profiles of rural communities and households in the Caribbean. Sociological variables in development projects. Case studies of rural development projects in the Caribbean and other countries. Field observations and exercises involving rural communities.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

### SEMESTER: 2

**COURSE CODE: AGEX 6002**

**COURSE TITLE: PROGRAMME PLANNING, MONITORING, AND EVALUATION IN AGRICULTURE AND RURAL DEVELOPMENT**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Advanced principles and procedures for planning, conducting, monitoring and evaluating extension programmes in agriculture, natural resource management, community nutrition etc. The roles of the frontline extension worker, the supervisor, and programme manager. The study of some important concepts in programme development-- stakeholder participation involving multidisciplinary teams and other participatory approaches, group dynamics, leadership, motivation. Current models and approaches for developing various types of extension programmes. Field experiences and assignments in various aspects of the course.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

### SEMESTER: 1

**COURSE CODE: AGEX 6003**

**COURSE TITLE: TRENDS AND EMERGING ISSUES IN EXTENSION**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Advanced concepts and current issues in Extension including Agricultural Knowledge and Information System (AKIS), decentralisation, privatisation of Extension systems, role of Extension in poverty-oriented development etc. Analysis of case studies from the Caribbean and worldwide involving Extension reforms. The course includes participation in available email forums and other ongoing events.

**ASSESSMENT:**

Coursework 25%

Final examination 75%

**SEMESTER: 1**

**COURSE CODE: AGEX 6004**

**COURSE TITLE: SOCIOLOGY OF AGRICULTURE & RURAL DEVELOPMENT**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:**

The course introduces students to the field of development sociology as it relates to agriculture & rural development. This introduction provides students with a necessary basic conceptual standpoint to comprehend different dimensions in the field of sociology relevant to agrarian development. This leads to an examination of several themes as applied in agriculture and rural development: agricultural practices, the environment and the community (e.g. biofuel, transgenic crops, pesticides and food safety standards), processes of commoditisation and rights, land redistribution, standards expressing corporate social responsibility, and payments for environmental services. These different dimensions of analysis draw from two broad disciplinary perspectives: i) sociology of development which shares a recognition of human agents' capacity and ability to organise their everyday lives 'critically', encompassing notions of modernity, practices, politics, policies and intervention and ii) the notions of social justice which highlights issues of inequality, poverty, power in social transformation and representation of justice. The contents of the course (literature and resources) focus on application of sociological and social justice concepts and theories to explain social change processes in agricultural and rural communities.

The course uses a blended approach, meaning that students are required to participate online in a substantial proportion of the class. Therefore, it is necessary to have self-organized ability to perform a number of in-course activities such as, reading course materials, participating in online class-discussion, analyzing cases, and critiquing contemporary development practices. Overall, the course uses collaborative and experiential teaching-learning strategies and techniques.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGEX 6005**

**COURSE TITLE: PLANNING & EVALUATION OF AGRICULTURAL AND RURAL DEVELOPMENT PROGRAM**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The course introduces students to theories, approaches and methods used in planning, monitoring and evaluation of agricultural and rural development projects and programs. The course focuses on global perspectives in managing development results (e.g. UNDP, World Bank, CGIAR, GFAR, GRAS, IFAD, FAO) which students can apply in the Caribbean context of interest. The course will provide critical insights into managing development projects in agriculture and other cognate rural development sectors. In this course, planning, monitoring and evaluation are addressed as interrelated and cyclical activities required for managing development results.

Students will be able to critically examine logic based planning, theory of change, learning-based approaches as well as related methods and techniques. The course uses a blended approach, meaning that students are required to participate online for a substantial proportion of the class. Therefore, it is necessary to have self-organized ability to perform a number of in-course activities such as, reading course materials, participating in online class-discussion, analyzing cases, developing proposals, critiquing articles. Overall, the course uses collaborative and experiential teaching-learning strategies and techniques.

**ASSESSMENT:**

Coursework 70%

Final examination 30%

**AGEC 7000 MPhil THESIS AGRICULTURAL ECONOMICS**

**AGEC 8000 PhD THESIS AGRICULTURAL ECONOMICS**

**AGEX 7000 MPhil THESIS AGRICULTURAL EXTENSION**

**AGEX 8000 PhD THESIS AGRICULTURAL EXTENSION**

## HUEC

**SEMESTER: 1**

**COURSE CODE: HUEC 5000**

**COURSE TITLE: ADVANCED FOODSERVICE SYSTEMS MANAGEMENT**

**NUMBER OF CREDITS: 4**

**PREREQUISITES: RESTRICTED TO STUDENTS REGISTERED FOR THE DIPLOMA IN INSTITUTIONAL AND COMMUNITY**

**DIETETICS AND NUTRITION AND THE MPhil/PHD IN HUMAN ECOLOGY. COURSE DESCRIPTION:** A comprehensive review of the organisational management and operational aspects of food service including menu-planning and evaluation; procurement, receiving, storage of food and supplies; human resource needs, quantity food production with regard to recipe standardisation, nutrient and quality preservation, portion and quality control, costs, sanitation and safety; equipment requirements and specifications, layout and design; quality assurance and continuous improvement in Foodservice.

**ASSESSMENT:**

Final Examination 100%

**SEMESTER: 1**

**COURSE CODE: HUEC 5020 COURSE TITLE: ADVANCED CLINICAL NUTRITION**

**NUMBER OF CREDITS: 4**

**PREREQUISITES: RESTRICTED TO STUDENTS REGISTERED FOR THE DIPLOMA IN INSTITUTIONAL AND COMMUNITY DIETETICS AND NUTRITION AND THE MPhil/PHD IN HUMAN ECOLOGY.**

**COURSE DESCRIPTION:** A comprehensive review of the principles of nutritional care process as it relates to specified diseases and needs; the role of drugs in nutritional care, disease of the upper and lower gastrointestinal tract, endocrine and metabolic disorders, energy balance, hepatic and biliary system, disorders of the skin and skeletal system; physiological stress and hyper metabolic conditions; neoplastic diseases, AIDS; cardiovascular, nervous and respiratory systems; nutritional support and counselling techniques.

**ASSESSMENT:**

Final Examination 100%

**SEMESTER: 1**

**COURSE CODE: HUEC 5040**

**COURSE TITLE: ADVANCED COMMUNITY NUTRITION**

**NUMBER OF CREDITS: 4**

**PREREQUISITES: RESTRICTED TO STUDENTS REGISTERED FOR THE DIPLOMA IN INSTITUTIONAL AND COMMUNITY DIETETICS AND NUTRITION AND THE MPhil/PHD IN HUMAN ECOLOGY.**

**COURSE DESCRIPTION:** Providing nutrition services in primary care; promoting and protecting the health of women, infants and children; promoting the health of adults, older adults; safeguarding the food supply; maintaining nutrition and food service standards in group care; planning and evaluating community nutrition services.

Computer-aided Food and Nutrition applications; hands-on learning experience with computer software in food and nutrition surveillance, health analysis, diet/exercise analysis, growth and development in childhood and pregnancy, menu-planning, and food and nutrition planning. Practical experience in preparing nutrition information for delivery through the various media (radio, print, graphics). Project development: the process of developing a project (proposal) is outlined with clearly defined objectives, implementation strategy, costing, time analysis, and evaluation. Individual practice is gained in developing a nutrition-related project, using one of the models presented, for a seminar presentation at the end of the programme.

**ASSESSMENT:**

Final Examination 100%

**SEMESTER:** *CHECK DEPT FOR AVAILABILITY*

**COURSE CODE:** HUEC 7001

**COURSE TITLE:** EPIDEMIOLOGY FOR HUMAN ECOLOGY

**NUMBER OF CREDITS:** 4

**PREREQUISITES:** UNDERGRADUATE COURSE IN STATISTICS. PROGRAMME RESTRICTED TO GRADUATE STUDENTS.

**COURSE DESCRIPTION:** Epidemiology for Human Ecology introduces the basic concepts of epidemiology and biostatistics as applied to problems in human ecology. Emphasis is placed on the principles and methods of epidemiologic investigation, appropriate summaries and displays of data, and the use of classical statistical approaches to describe the issues of interest among populations. Topics include the; usage of rates, ratios and proportions; methods of direct and indirect adjustment. Various epidemiologic study designs for investigating associations between risk factors and disease outcomes are also introduced, culminating with criteria for causal inferences. Students would be trained to do simple analyses on data sets using STATA 12.0 or other appropriate statistical packages

**ASSESSMENT:**

Coursework 50%

Final Examination 50%

**SEMESTER:** *CHECK DEPT FOR AVAILABILITY*

**COURSE CODE:** HUEC 7002

**COURSE TITLE:** NUTRITIONAL EPIDEMIOLOGY

**NUMBER OF CREDITS:** 4

**PREREQUISITES:** COURSE RESTRICTED TO GRADUATE STUDENTS.

**COURSE DESCRIPTION:** Deciphering the links between nutrition, physical activity and disease requires an evidence-based approach to the acquisition of new information. This course in nutritional epidemiology provides the methodological framework for the collection analyses and interpretation of the requisite data. It builds on the materials taught in EPIDEMIOLOGY FOR HUMAN ECOLOGY and is geared towards providing a hands-on approach to the acquisition of fundamentals skills. The characterization of various exposures to food/nutrient intakes and their relationship to disease shall be the major thrust of the course.

**ASSESSMENT:**

Coursework 50%

Final Examination 50%

**SEMESTER:** *CHECK DEPT FOR AVAILABILITY*

**COURSE CODE:** HUEC 7003

**COURSE TITLE:** ADVANCED NUTRITION IN HEALTH AND DISEASE 1

**NUMBER OF CREDITS:** 4

**PREREQUISITES:** ANY ADVANCED UNDERGRADUATE COURSE IN BIOCHEMISTRY OR PHYSIOLOGY. COURSE RESTRICTED TO GRADUATE STUDENTS.

**COURSE DESCRIPTION:** There are close to two hundred peer review journals devoted to food and nutrition and a further 100 (e.g. JAMA, BMI, Lancet etc.) which carry a substantial number of articles on food and nutrition. This demonstrates the large body of evidence linking diet to health and wellbeing. An understanding of these links requires in-depth analyses of how nutrition advances are made and the physiological and biochemical basis of their effects on human health and wellbeing. This course provides a thorough grounding in the issues and evidence linking diet to health and disease conditions such as hypertension, coronary heart disease, diabetes, obesity, and cancer.

**ASSESSMENT:**

Coursework 50%

Final Examination 50%

**SEMESTER:** CHECK DEPT FOR AVAILABILITY

**COURSE CODE:** HUEC 7004

**COURSE TITLE:** PUBLIC HEALTH NUTRITION

**NUMBER OF CREDITS:** 4

**PREREQUISITES:** COURSE RESTRICTED TO GRADUATE STUDENTS.

**COURSE DESCRIPTION:** Public Health Nutrition is an area of concentration emphasizing the application of food and nutrition knowledge, policy, and research to the improvement of the health of populations. It therefore focuses on the promotion of good health through nutrition and the primary prevention of nutrition related illness in the population. In this course, students shall focus on the critical social, behavioral, and food and nutrition-related factors that affect health. Students would be given the opportunity to design, implement programmes aimed at improving the nutritional status of selected populations. They will also learn to formulate and analyse global, local and regional analyse food and nutrition-related that affect the health of populations.

**ASSESSMENT:**

Coursework 40%

Final Examination 60%

**SEMESTER:** CHECK DEPT FOR AVAILABILITY

**COURSE CODE:** HUEC 7005

**COURSE TITLE:** SELECTED TOPICS IN HUMAN ECOLOGY 1

**NUMBER OF CREDITS:** 2

**PREREQUISITES:** COURSE RESTRICTED TO GRADUATE STUDENTS.

**COURSE DESCRIPTION:** This student-run class seeks to enhance graduate students' understanding of the current state of affairs in the subjects critical to Human Ecology by provide experience in reviewing and critiquing research articles. Students will critically evaluate peer-reviewed articles for class discussion that reinforce the principles of various research approaches and analytical methods. Students will be graded on their presentation, contribution to the discussion and reports by a panel of experts in the discipline. The primary format of this course will be student-selected presentations of recent publications. These publications will be preselected and randomly assigned to the student. Students will be required to give two PowerPoint presentations, and submit to the class a one-page summary that addresses the study aims, methods and results, and provides a critical assessment of the article. Presentation dates will be selected at the beginning of the semester. This course will also include two introductory faculty-led lectures on: (a) developing the skills and knowledge essential to understanding and critiquing research reports and (b) effectively communicating the relevant supporting material, results, and conclusions of primary research reports.

**ASSESSMENT:**

Coursework 100%

## DEPARTMENT OF FOOD PRODUCTION

### AGCP

**SEMESTER: YEAR LONG**

**COURSE CODE: AGCP 6100**

**COURSE TITLE: RESEARCH PROJECT**

**NUMBER OF CREDITS: 7**

**PREREQUISITE: COMPLETION OF OTHER COURSES IN THE PROGRAMME**

**COURSE DESCRIPTION:** This course provides the avenue for students to apply the principles of commodity utilisation studied throughout the programme to the development of a value added product of potential commercial significance.

**ASSESSMENT:**

Written Project Report      100%

**SEMESTER 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGCP 6101**

**COURSE TITLE: POST-HARVEST PHYSIOLOGY AND BIOCHEMISTRY**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The physiology and biochemical processes in fresh tropical crop produce which influence postharvest behaviour and storage potential are emphasised. Topics covered include: maturation and maturity indices, ripening and senescence, stress metabolism, dormancy and growth regulation. The physiology, including membrane function, and biochemistry of stored crop produce, including effects of environmental modifications, are studied.

**ASSESSMENT:**

Coursework      40%

Final examination      60%

**SEMESTER: 2**

**COURSE CODE: AGCP 6250**

**COURSE TITLE: WEED SCIENCE**

**NUMBER OF CREDITS: 6**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course introduces students to: the role of weeds in crop ecosystems; weed biology; dissemination; cultural, chemical and biological control of important weed species of tropical crops. All topics have particular reference to Caribbean agriculture. Practicals and field trips are included.

**ASSESSMENT:**

Coursework      100%

**SEMESTER: I OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGCP 6251**

**COURSE TITLE: CROP PRODUCTION I**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course provides a broad scope of physiology of vegetative and reproductive growth, and production technology of some of the most important perennial crops of economic importance in the tropics including: coffee, citrus, cocoa, banana, palms, pineapple and a number of popular tree fruits (e.g. guava, mango and cashew). Current tree crop management research and research needs for tropical species are emphasised.

**ASSESSMENT:**

Coursework      40%

Final examination      60%

**SEMESTER: I OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGCP 6252**

**COURSE TITLE: CROP PRODUCTION 2**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The crops dealt with in this course include the cereals, root crops, sugarcane, oil seeds and pulses, tobacco, fibre and vegetable crops. A description of the technology of production of the most important short-term crops cultivated in the tropics is provided.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: I OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGCP 6252**

**COURSE TITLE: RESEARCH PROJECT**

**NUMBER OF CREDITS: 10**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course is the research project of the M.Sc. in Value Addition for Food and Nutrition Security. The course facilitates students' use of product development principles to add value to a selected commodity by developing a food product starting from fresh, locally available, raw materials. It allows the application of all food production, storage, quality and safety principles addressed in other courses in the programme to the execution of the research project. The final outcome of the course is a product that is market-ready with an accompanying business plan so that graduates have the potential to become entrepreneurs and employers contributing to the national and regional food and agriculture sector.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

## AGLS

**SEMESTER: 1**

**COURSE CODE: AGLS 6001**

**COURSE TITLE: TROPICAL ANIMAL SCIENCE**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course covers the different aspects involved in improving output from Tropical livestock, including through breeding, health, feeding and housing programmes integrated in animal production systems and aspects of processing livestock products. The course also exposes the students to the concept of matching the animal to the available resources.

**ASSESSMENT:**

Coursework 40%

(3 review papers and 3 seminars on the review papers)

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGLS 6002**

**COURSE TITLE: ADVANCED TROPICAL FORAGE UTILISATION**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This is a course emphasising the nutrition of ruminants with particular reference to forage utilisation. Included here are those factors affecting forage utilisation and production, and methods of forage utilisation, including hay and silage production and feeding. Pasture management including the use of electric fencing is looked at, as a tool to improve utilisation. Forage tree crop and multipurpose tree crop production and utilisation. Production and utilisation schedules of selected forages. Fodder budgeting.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGLS 6005**

**COURSE TITLE: ADVANCED NON-RUMINANT PRODUCTION**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The use of innovative techniques for arriving at improvements in and increased production of meat, plumage and hides from poultry, pigs and rabbits are dealt with in this course. This focuses on such areas as: Management for breeding; Management of the housing and environment to alleviate heat and humidity stress; Physiology of heat stress management of non-ruminants; Unconventional methods of feeding non-ruminants; elements of feed milling and mixing.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGLS 6003**

**COURSE TITLE: TROPICAL LIVESTOCK DEVELOPMENT**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Areas covered in this course include: What is Livestock Development? Sustainable Livestock Development. Agricultural Diversification and Livestock Development, Factors influencing Livestock Development - Globally, in the tropics and in the Caribbean. Some technical imperatives are also discussed including; demand for livestock products; efficiency criteria; choice of production technology. Livestock Production Systems - Pastoralism ranching, intensive and extensive production systems; landless livestock production systems, integrated systems. The nature of livestock products and market for livestock products. Government and the Livestock Sector, the Private Sector's and Government's role in Livestock Development, International Trade and the effect of GATT on Livestock Development in the Developing Tropics.

**ASSESSMENT:**

Coursework 40%  
(1 project 10% and 3 seminars - 30%)  
Final examination 60%

**SEEMSTER: 2**

**COURSE CODE: AGLS 6004**

**COURSE TITLE: ADVANCED RUMINANT PRODUCTION**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Here, those techniques used for providing improvements in and increased production of meat, milk and hides from sheep, goats, dairy and beef cattle, including water buffalo are studied. This includes management of the housing and environment to alleviate stresses. Heat stress management, non-conventional methods of feeding ruminants.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGLS 6201**

**COURSE TITLE: ADVANCED ANIMAL NUTRITION I - ELECTIVE**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** More in-depth hands-on experience of laboratory techniques and experimental designs in animal nutrition research are exposed to students in this course.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGLS 6202**

**COURSE TITLE: ADVANCED ANIMAL NUTRITION II - ELECTIVE**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: AGLS 6201**

**COURSE DESCRIPTION:** Energy and protein metabolism in farm animals.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGLS 6203**

**COURSE TITLE: ADVANCED ANIMAL NUTRITION III - ELECTIVE**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: AGLS 6201 & AGLS 6202**

**COURSE DESCRIPTION:** Mineral and vitamin nutrition in farm animals.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGLS 6302**

**COURSE TITLE: ANIMAL BREEDING - ELECTIVE**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Reproductive efficiency in farm livestock; methods of selection and rates of genetic improvement.

Progeny and Sib-testing for one or more characters. Genetic environment interactions. In-breeding, line breeding and cross breeding. Resistance to pests and diseases, techniques of control.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGLS 6401**

**COURSE TITLE: REPRODUCTIVE PHYSIOLOGY - ELECTIVE**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The course will entail a discussion of the concepts underlying reproductive physiology in male and female farm animals. In particular, it explores the reproductive physiology of bovines, including water buffalo, sheep, goats, pigs, rabbits, dogs, poultry and equines. Semen collection and evaluation, artificial insemination techniques, induction and synchronisation of ovulation and embryo transfer in selected animal species.

**ASSESSMENT:**

Coursework 30%

Final examination 70%

**SEMESTER: 2**

**COURSE CODE: AGLS 6502**

**COURSE TITLE: TROPICAL ZOO AND WILDLIFE - ELECTIVE**

**PRODUCTION AND MANAGEMENT**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The history and role of zoos in the world with particular reference to the tropics, the history of domestication, and the Neo-tropics and Neo-tropical animals. The management of non-domestic animals in captivity. Approaches to the management of zoos. What is Wildlife Management? Strategies and Methods used in Wildlife Management. Endangered species and the CITIES accord. Local laws for the protection of wildlife and endangered species. A practical on-site investigation is included. Includes an exciting 2 nights and 3 day camp in one of the Natural Ecosystems in Trinidad and Tobago. This is designed to bring the student in touch with nature and her many splendours, while learning about the fragility of these systems.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGLS 6804**

**COURSE TITLE: TROPICAL COMMODITY - ELECTIVE  
UTILISATION (LIVESTOCK) - ELECTIVE**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Alternative methods of utilising of tropical crop and animal products for food and other uses from the foundation of this course, including utilisation of culls.

Factors affecting availability are studied, as are processing, options and their effect on food quality and commodity utilisation. Relationships among technical and socio-economic factors of production, availability, processing, marketing and utilisation are focused on. A practical project is a significant part of this course.

**ASSESSMENT:**

Coursework 40%

(2 practical Investigations and 2 research seminars)

Final examination 60%

## AGRI

**SEMESTER: 2**

**COURSE CODE: AGRI 6121**

**COURSE TITLE: GLOBAL PHYTOSANITARY ISSUES AND THEIR APPLICATION**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course covers some of the major current global issues in crop protection, particularly with regard to their impact on international trade in agricultural commodities. It aims to provide modern-day plant protection specialists with the information and tools to deal with some of the key issues which they will encounter in their day-to-day work situations, especially in the role of plant protection officer whether in the private or public sector. Also and equally importantly, the course will provide an understanding of a country's Phytosanitary obligations under the major international agreements such as the International Plant Protection Convention and the WTO Agreement on the Application of Sanitary and Phytosanitary Measures, as well as provide some insight into other contemporary issues such as invasive alien species and the impact of climate change on agriculture and crop pests

**ASSESSMENT**

Coursework 100%

**SEMESTER: YEAR LONG**

**COURSE CODE: AGRI 6200**

**COURSE TITLE: RESEARCH PROJECT**

**NUMBER OF CREDITS: 8**

**PREREQUISITE: SUCCESSFUL COMPLETION OF CORE COURSES AND ELECTIVE**

**COURSE DESCRIPTION:** Candidates who successfully complete the core courses, the elective course and research papers in the MSc Tropical Crop Protection, will be allowed to undertake a 13-week independent research project. This project may involve field, greenhouse and/or laboratory investigations in some aspect of crop protection and may be conducted anywhere in the region providing suitable arrangements can be made. At the end of the project, students are required to do an oral examination.

**SEMESTER: 1**

**COURSE CODE: AGRI 6201**

**COURSE TITLE: CHEMISTRY OF FOODS**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The chemistry of crop and animal produce relating to their compositional and other characteristic, functional properties that are important in their manufacture into food products are studied, with emphasis on tropical commodities.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: AGRI 6210**

**COURSE TITLE: BIOLOGY, ECOLOGY AND EPIDEMIOLOGY OF PESTS**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** An introduction to: ecological principles and the concept of the ecosystem; cropping systems and the pest concept; the ecological origins of pest status; crop yields and assessment methods in relation to an effective crop protection programme; biology, ecology and epidemiology of plant pathogens including the classification, symptomatology and pathogenesis; abiotic diseases; the biology, ecology and recognition of insects, mites, rodents, birds and other crop pests; biology, ecology and recognition of weeds, weed identification and weed surveys.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 1**

**COURSE CODE: AGRI 6221**

**COURSE TITLE: PESTICIDE TECHNOLOGY**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Practical and Chemical control, pesticide chemistry, bioassays, formulations and application equipment, pesticide selectivity, consequences of pesticide abuse, resistance and environmental impact and human health, legislative control, mechanisms of resistance to pest attack.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGRI 6222**

**COURSE TITLE: MOLECULAR TECHNIQUES IN CROP PROTECTION**

**NUMBER OF CREDITS: 4**

**PREREQUISITS: NONE**

**COURSE DESCRIPTION:** Introduction to the molecular and immunological tools used in plant disease, pest and weed diagnosis and identification. This includes a brief introduction to nucleic acid and protein based technologies, discussion of the relevance to population and diversity studies, sampling strategies and quarantine implications. The lab component will allow the development of skills in nucleic acid extraction, PCR and hybridisation techniques, sequencing and sequence analysis and the bases of serological techniques.

**ASSESSMENT**

Coursework 100%

**SEMESTER: 1**

**COURSE CODE: AGRI 6230**

**COURSE TITLE: INTEGRATED PEST MANAGEMENT (IPM)**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The principles of Integrated Pest Management (IPM) and the applications of these principles for pest management in crop production are presented. The essential building blocks for the creation of IPM programs are considered; these include surveys of pests, diseases and weeds, alternative practices and non-chemical means of control, monitoring and forecasting methods, and strategies for management and their implementation. The course concludes with some examples of existing IPM programs in practice. This course provides a holistic view of pest management, emphasizing the integration of different methods for maintaining pests, diseases and weeds below damaging levels, with the goal of minimizing the use of chemical pesticides that disrupt the environment.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGRI 6241**

**COURSE TITLE: PLANT PATHOLOGY AND VIROLOGY**

**NUMBER OF CREDITS: 8**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The importance, etiology, epidemiology and control of crop diseases under different farming systems in the Caribbean is studied here, including those caused by fungi, bacteria, viruses, nematodes, mycoplasma and abiotic agents. Strategies for disease control examine the merits and demerits of chemical, cultural, integrated and other cheap and practical measures. Practicals include field trips to farmers' fields and a plant disease clinic where students learn to recognise, diagnose and control disease.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGRI 6250**

**COURSE TITLE: APPLIED ENTOMOLOGY**

**NUMBER OF CREDITS: 8**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The major topics covered in this course are: population dynamics and the regulation of insect populations; introduction to insect toxicology; profit analysis and LD50 measurements; description and identification of major pest groups including mites; biology and control of pests of important crop groups in the tropics with special reference to the Caribbean. Practical classes and field trips are included.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGRI 6252**

**COURSE TITLE: NEMATOLOGY**

**NUMBER OF CREDITS: 6**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The biology of plant-pathogenic nematodes and their economic importance in plant protection; current methods and techniques in plant nematology; the ecological factors that influence nematode populations and disease development; alternative management systems for the control of plant parasitic nematodes; use of nematodes for the biological control of insect pests of crops and as indicators of environmental pollution.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGRI 6300**

**COURSE TITLE: INTERNSHIP**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Students can gain experience in crop protection through different responsibilities in the world of work in the crop protection field. Gives students the opportunity to apply and visualise the link between their theoretical knowledge and the world of work.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: AGRI 6400**

**COURSE TITLE: INTERNSHIP**

**NUMBER OF CREDITS: 2**

**COURSE DESCRIPTION:** This internship is recommended for MPhil. and PhD. students and can be conducted in different areas of crop protection, industry, departmental research, consulting. It is recommended that it include the Distance Education in Plant Diagnostic Certificate in Plant Diagnostic Technology with the University of Florida for MPhil students (duration 3-months) and 3-6 months training in a laboratory facility in relation to the students' disciplinary choice (plant pathology, virology, nematology or entomology only). The aim of the internship is to give students insight into the working life and help them acquire further practical and application-oriented knowledge at the international level. Students must write an internship report and conduct a seminar.

**ASSESSMENT:**

Written report	80 %
Seminar	20 %

**SEMESTER: 1**

**COURSE CODE: AGRI 6401**

**COURSE TITLE: AGRICULTURAL VALUE ADDITION**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course covers the principles and practices of value addition in the context of their relevance to food and nutrition security. Its focus is increased utilization of domestically produced food through production of value added products that result in increased availability, reduced postharvest losses, imported product substitution and expanded avenues for utilization.

**ASSESSMENT:**

Coursework	100%
------------	------

**SEMESTER: 1**

**COURSE CODE: AGRI 6301**

**COURSE TITLE: FOOD MICROBIOLOGY I**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course explores the nature and function of micro-organisms in tropical foods. This includes post-harvest pathology; food borne illness; effects of food processing, storage and distribution on food microorganisms; techniques for isolation and identification of microorganisms from foods; factors governing microbial changes in tropical foods; bacterial fermentations; modern concepts in quality assurance programmes; problem-solving in the food industry. A practical project is included.

**ASSESSMENT:**

Coursework	40%
Final examination	60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGRI 6620**

**COURSE TITLE: STATISTICS**

**NUMBER OF CREDITS: 4**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Overview of statistics, analysing continuous data-one and two samples problems, analyzing attribute data; experiment design and analysis of variance with applications to the agricultural and medical sciences; regression and correlation analyses with agriculture, medical and related applications.

**ASSESSMENT:**

Coursework	40%
Final examination	60%

**SEMESTER: 2**

**COURSE CODE: AGRI 6702**

**COURSE TITLE: FOOD QUALITY AND FOOD ANALYSIS**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course examines the physiological and biochemical basis of quality in fresh tropical produce. Topics covered include the physical, chemical and biochemical properties of foods; effects of storage and processing on the fundamental attributes of flavour, odour, colour, texture and nutrition; pathological effects; Assessment of analytical methods and instruments in order to understand their principles, application and limitations in the analysis of food and food products with particular reference to the chemical, physical, nutritional and organoleptic qualities of food is included.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

**SEMESTER: 1 OR 2 (BASED ON REGISTRATION NUMBERS)**

**COURSE CODE: AGRI 6720**

**COURSE TITLE: AGRICULTURAL ENGINEERING**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** Inferential tools for simple sample and two samples problems are introduced. Students are grounded in farm power, tractor and implement mechanics are the major topics covered here. Important control systems, internal and external hydraulics, and traction and traction aids. The theory of cultivations, including design of soil engaging implements, selection of implements for tillage and cultivation operations under different soil physical conditions are areas also focussed on in this course.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGRI 6802**

**COURSE TITLE: TROPICAL COMMODITY UTILISATION**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course is a study of alternative methods of utilisation of tropical crop and animal products for food. Topics covered include: utilisation of culls; factors affecting raw material availability; processing options and their effect on food quality and commodity utilisation. Relationships among technical and socio-economic factors of production, availability, processing, marketing and utilisation are explored.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

**SEMESTER: 2**

**COURSE CODE: AGRI 6902**

**COURSE TITLE: PRODUCT DEVELOPMENT**

**NUMBER OF CREDITS: 5**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** A study of the elements that are important in the development of tropical food products for local and international markets. Topics covered include: strategies, processes and methods needed to accelerate and optimize new product development; generation and management of new ideas and quality traits that drive successful research for innovative products; sensory and consumer research in food product development; container development; labelling. A research project.

**ASSESSMENT:**

Coursework 50%  
Final examination 50%

## FOSQ

### SEMESTER: 1

**COURSE CODE: FOSQ 5001**

**COURSE TITLE: AGRI-FOOD SAFETY**

**NUMBER OF CREDITS: 4**

**DELIVERY OF COURSE: FACE –TO-FACE**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course focuses on the application of modern scientific principles for the inspection systems, based on good agricultural and manufacturing practices and the analysis of hazards and critical control points along the food chain. ISO 22000:2005 specifies requirements for a food and agriculture safety management system where an organization in the food chain needs to demonstrate its ability to control food safety hazards in order to ensure that food is safe at the time of human consumption. It is applicable to all organizations, regardless of size. The course is comprised of two assignments and a final exam.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

### SEMESTER: 1

**COURSE CODE: FOSQ 5003**

**COURSE TITLE: FOOD QUALITY ASSURANCE AND EVALUATION OF AGRI-FOOD POLICIES**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: FACE TO FACE**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The course covers areas such as agricultural produce and food quality, food quality assurance, total quality management, agriculture and food quality management systems, fertilizer use and sustainable pesticide management, genetically modified biosafety and quality standard systems, formulation, implementation, evaluation of agricultural and food public policies from domestic and international trade perspectives. The socio-economic and environmental change and its influence on public policies' viability are examined. The course also describes the process of food security public policy formulation, implementation, monitoring and evaluation. The role and functions of institutions and other stakeholders involved in the process of public policy formulation and implementation as it relates to food safety and quality. The role of international trade in agricultural and food safety, current debates about the effect of globalization on developing countries and evolution of trade policies. The course comprises of two assignments, laboratory practical and a final exam.

**ASSESSMENT:**

Coursework 40%  
Final examination 60%

### SEMESTER 2

**COURSE CODE: FOSQ 5002 (DIPLOMA PROGRAMME);**

**COURSE TITLE: PROJECT MANAGEMENT IN FOOD AND AGRICULTURE**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: NONE**

**COURSE DESCRIPTION:** The course Project Management in Food and Agriculture will introduce the students to the rationale, context and methods of planning and assessing food and agriculture management projects. Management issue will be the starting point to explore deeply into the necessary processes for the successful preparation and management of the projects. It will create a common basis from the project definitions and the project management and form the relation between this and other administrative disciplines, and with other related efforts. The understanding of the phases and the life cycle of a project, the identification of the "stakeholders" – those project-related individuals or institutions – and the organizational and socioeconomic influences to which the project is subject, will be achieved with the study of the project management context. It will make possible to establish the usefulness of the project management to among other things, satisfy the users' needs to ensure that the available resources are used in the most efficient possible way, and to plan, implement and control the management of company and government strategies. The financial and investment analysis as well as general processes for managing of food projects will be included. The course will provide supplementary reading material, case studies and the presentation of project management-related issues by students. The objective of the learning experiences is to promote the critical thinking with a view to solving the current problems in the project management field. The course is comprised of assignments and assessments.

**ASSESSMENT:**

Coursework 100%

**SEMESTER 2**

**COURSE CODE : FOSQ 5004**

**COURSE TITLE: AGRI-FOOD SAFETY AND RISK ANALYSIS**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: AGRI-FOOD SAFETY**

**COURSE DESCRIPTION :** This course entails identification of the elements of food safety systems, some safety risk in agriculture, food production and processing optimizing systems, general risk analysis, management and communication in food systems, monitoring and review, microbiological and chemical risk assessments, water quality standards and food waste management, sustainable and fertilizer management and Hazard Analysis and Critical Control Points (HACCP). This course is comprised of assignments and assessments.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: FOSQ 5005**

**COURSE TITLE: EPIDEMIOLOGY AND FOOD-BORNE DISEASES**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: NONE**

**COURSE DESCRIPTION:** The course includes epidemiological methods and concepts of food borne diseases that are critical in the evaluation, analysis and interpretation of data related to public health. To get around the problems posed by such under-reporting and describe disease burden more adequately, a number of innovative and creative approaches have been used in recent years for some food-borne diseases from various causes. These include the use of active surveillance and field studies, risk assessment methods, and epidemiological disease modelling. Students have the opportunity to work on exercises and case studies as related to the topics. The topics include epidemiological surveys, investigating food-borne illness outbreaks, basic epidemiological methods and food borne diseases. The course would be examined by various assignments and assessments.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: FOSQ 5006**

**COURSE TITLE: International Trade and Agri-Food Legislation**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: NONE**

**COURSE DESCRIPTION:** The course covers International Trade and Food Legislation in food and agriculture produce safety and quality. Current debates about the effect of globalization on food and agriculture produce safety and quality on developing countries. The course examines some guidelines for strengthening the national food control systems, food bioterrorism, the new Food Safety Modernization Act 2011, trade theories and international trade agreements, International Food Safety Systems such as World Trade Organization, applications of Sanitary and Phytosanitary Measures, Technical Barriers to Trade, Codex Alimentarius, Agreement on Agriculture and the harmonization of food and agriculture legislation for world food trade, and the consequences of food safety in world food trade. The course would be examined by various assignments and assessments

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 1**

**COURSE CODE: FOSQ 6001**

**COURSE TITLE: AGRI-FOOD SAFETY**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: FACE TO FACE**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** This course focuses on the application of modern scientific principles for the inspection systems, based on good agricultural and manufacturing practices and the analysis of hazards and critical control points along the food chain. ISO 22000:2005 specifies requirements for a food and agriculture safety management system where an organization in the food chain needs to demonstrate its ability to control food safety hazards in order to ensure that food is safe at the time of human consumption. It is applicable to all organizations, regardless of size. The course is comprised of two case study assignments and a final exam.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: FOSQ 6003**

**COURSE TITLE: FOOD QUALITY ASSURANCE AND EVALUATION OF AGRI-FOOD POLICIES**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: FACE TO FACE**

**PREREQUISITE: NONE**

**COURSE DESCRIPTION:** The course covers areas such as agricultural produce and food quality, food quality assurance, total quality management, agriculture and food quality management systems, fertilizer use and sustainable pesticide management, genetically modified biosafety and quality standard systems, formulation, implementation, evaluation of agricultural and food public policies from domestic and international trade perspectives. The socio-economic and environmental change and its influence on public policies' viability are examined. The course also describes the process of food security public policy formulation, implementation, monitoring and evaluation. The role and functions of institutions and other stakeholders involved in the process of public policy formulation and implementation as it relates to food safety and quality. The role of international trade in agricultural and food safety, current debates about the effect of globalization on developing countries and evolution of trade policies. The course comprises of two assignments, laboratory practical and a final exam.

**ASSESSMENT:**

Coursework 40%

Final examination 60%

**SEMESTER: 1**

**COURSE CODE: FOSQ 6011**

**COURSE TITLE: RESEARCH AND STATISTICAL SKILLS FOR FOOD AND AGRICULTURE**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: FACE TO FACE**

**PREREQUISITE: NONE**

This course involves the use of research tools and appropriate statistical packages for data processing and presentation. It is anticipated that those enrolled in the course would be able to read and critique research papers in published journals particularly for the living sciences, microbiology, food science, animal/livestock science, crop sciences, human and veterinary medicine. The topics covered are types of research methods, planning research projects, writing reports and research papers and statistical methods and applications by descriptive analysis, estimation techniques, correlation, multiple regression, analysis of variance, non-parametric statistics, multivariate analysis and principal component analysis. The course will be taught using a blended approach through computer packages, face to face lectures, myeLearning, Webinars and videos. The course comprises two in course assignments and a final exam.

**ASSESSMENT**

Coursework 60%

Final examination 40%

**SEMESTER 2**

**COURSE CODE: FOSQ 6002 (DIPLOMA PROGRAMME**

**COURSE TITLE: PROJECT MANAGEMENT IN FOOD AND AGRICULTURE**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: NONE**

**COURSE DESCRIPTION:** The course Project Management in Food and Agriculture will introduce the students to the rationale, context and methods of planning and assessing food and agriculture management projects. Management issue will be the starting point to explore deeply into the necessary processes for the successful preparation and management of the projects. It will create a common basis from the project definitions and the project management and form the relation between this and other administrative disciplines, and with other related efforts. The understanding of the phases and the life cycle of a project, the identification of the “stakeholders” – those project-related individuals or institutions – and the organizational and socioeconomic influences to which the project is subject, will be achieved with the study of the project management context. It will make possible to establish the usefulness of the project management to among other things, satisfy the users’ needs to ensure that the available resources are used in the most efficient possible way, and to plan, implement and control the management of company and government strategies. The financial and investment analysis as well as general processes for managing of food projects will be included. The course will provide supplementary reading material, case studies and the presentation of project management-related issues by students. The objective of the learning experiences is to promote the critical thinking with a view to solving the current problems in the project management field. The course is comprised of assignments and assessments.

**ASSESSMENT:**

Coursework: 100%

**SEMESTER 2**

**COURSE CODE : FOSQ 6004**

**COURSE TITLE: AGRI-FOOD SAFETY AND RISK ANALYSIS**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: AGRI-FOOD SAFETY**

**COURSE DESCRIPTION:** This course entails identification of the elements of food safety systems, some safety risk in agriculture, food production and processing optimizing systems, general risk analysis, management and communication in food systems, monitoring and review, microbiological and chemical risk assessments, water quality standards and food waste management, sustainable and fertilizer management and Hazard Analysis and Critical Control Points (HACCP). This course is comprised of assignments and assessments.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: FOSQ 6005**

**COURSE TITLE: EPIDEMIOLOGY AND FOOD-BORNE DISEASES**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: NONE**

**COURSE DESCRIPTION:** The course includes epidemiological methods and concepts of food borne diseases that are critical in the evaluation, analysis and interpretation of data related to public health. To get around the problems posed by such under-reporting and describe disease burden more adequately, a number of innovative and creative approaches have been used in recent years for some food-borne diseases from various causes. These include the use of active surveillance and field studies, risk assessment methods, and epidemiological disease modelling. Students have the opportunity to work on exercises and case studies as related to the topics. The topics include epidemiological surveys, investigating food-borne illness outbreaks, basic epidemiological methods and food borne diseases. The course would be examined by various assignments and assessments.

**ASSESSMENT:**

Coursework 100%

**SEMESTER: 2**

**COURSE CODE: FOSQ 6006**

**COURSE TITLE: INTERNATIONAL TRADE AND AGRI-FOOD LEGISLATION**

**NUMBER OF CREDITS: 4**

**DELIVERY MODE: ON-LINE**

**PRE-REQUISITE: NONE**

**COURSE DESCRIPTION:** The course covers International Trade and Food Legislation in food and agriculture produce safety and quality. Current debates about the effect of globalization on food and agriculture produce safety and quality on developing countries. The course examines some guidelines for strengthening the national food control systems, food bioterrorism, the new Food Safety Modernization Act 2011, trade theories and international trade agreements, International Food Safety Systems such as World Trade Organization, applications of Sanitary and Phytosanitary Measures, Technical Barriers to Trade, Codex Alimentarius, Agreement on Agriculture and the harmonization of food and agriculture legislation for world food trade, and the consequences of food safety in world food trade. The course would be examined by various assignments and assessments

**ASSESSMENT:**

Coursework            100%

**SEMESTER: SUMMER & SEMESTER 3**

**COURSE CODE: FOSQ 6010**

**COURSE TITLE: RESEARCH PROJECT ON AGRI-FOOD SAFETY AND QUALITY ASSURANCE**

**NUMBER OF CREDITS: 8**

**PREREQUISITE: COMPLETION OF ALL WRITTEN COURSES**

The chosen project could link to job description and interest and should contribute to knowledge and application in managing safety and quality in food and agriculture. The project would draw upon previous knowledge and experience gained in the courses completed in the MSc degree programme. The project will be based on an oral presentation and an examination on submission of written project. Students must obtain at least 50% to pass the project component.

**ASSESSMENT**

Oral presentation    10%

Written project       90%

The project will be based on an oral presentation and an examination on submission of written project. The written project will be examined by internal and external examiners.

## DEPARTMENT OF GEOGRAPHY

### GEOG

**SEMESTER: 1**

**COURSE CODE: GEOG 6000**

**COURSE TITLE: THE PHILOSOPHY AND PRACTICE OF RESEARCH IN GEOGRAPHY**

**NUMBER OF CREDITS: 3**

**PREREQUISITES: RESTRICTED TO STUDENTS REGISTERED IN A POSTGRADUATE PROGRAMME IN GEOGRAPHY. OTHER STUDENTS UNDERTAKING RESEARCH DEGREES IN RELATED TOPICS MAY REGISTER WITH THE APPROVAL OF THE HEAD, DEPARTMENT OF GEOGRAPHY.**

**COURSE DESCRIPTION:** This course aims to develop students as professional Geography scholars, equipped with the tools and techniques to undertake and publish geographic research in a range of sub-disciplines. The course covers a range of Geographical research disciplines, focussing on areas relevant for student research projects and areas of research expertise for Geography academic staff. As part of the course, with guidance from academic staff, students are expected develop and present detailed research proposals and reflect on the academic process which leads to the generation, conduct, presentation and publication of academic research, thus preparing the student for the successful completion of an MPhil or PhD thesis. Students benefit from the expertise of staff members in a range of sub-disciplines, whilst sharing group awareness of issues in geography. The course is designed to prepare incoming post-graduate students, in a range of Geography sub-disciplines, for the process of undertaking research and publishing/disseminating the results up to the thesis level. As an introductory course it is normally scheduled for semester 1 and is based on weekly lectures and discussion seminars with pre-reading and academic tasking, assessed by coursework, designed to prepare the student for the main aim of completing an MPhil/PhD thesis.

**ASSESSMENT:**

Coursework 100%

## BUSINESS DEVELOPMENT UNIT

THESE COURSES ARE NOT BEING OFFERED FOR 2018 / 2019

### AGPD

**COURSE CODE: AGPD 6000**

**COURSE TITLE: RESEARCH METHODS AND DATA ANALYSIS**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course covers two main areas of interest to students of developing countries, one focusing on research methods, the other concerned with statistical techniques relevant to social scientists. The first part introduces the student to the nature and role of research in developing countries, including how to identify and formulate research problems, as well as the use of secondary information. In addition, a variety of research and data collection methods are explored, emphasising both qualitative and quantitative approaches. The second part of the course, which begins with an examination of formal sampling design and methods, focuses on techniques of data analysis, including hypothesis testing, measures of association and correlation, and an introduction to regression analysis.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6001**

**COURSE TITLE: AGRICULTURAL ECONOMICS FOR DEVELOPMENT**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course is one that students are strongly recommended to take in their first year. The first part of the course covers production economics, including production functions and technical change. The second part focuses on supply and demand, including the analysis of market structures. The third part deals with welfare economics, and introduces the analysis of international trade in agricultural commodities, and of food and agricultural policy.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6002**

**COURSE TITLE: MANAGING AGRICULTURAL DEVELOPMENT**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course examines the main theoretical approaches used to study organisations and management and demonstrates where and how these are relevant to agricultural development. It investigates management practices in different activities concerned with agricultural development and discusses how management may be improved or reformed. Part one examines the structure and behaviour of organisations and the main tasks of management, while Part two looks at these tasks in more detail and questions the applicability of management theory. Part three is concerned with the application of management theory and practice in relation to specific areas of activity, while Part four considers the current issues in reforming and improving the management of agricultural development.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6003**

**COURSE TITLE: AGRICULTURAL POLICY ANALYSIS**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course focuses is concerned with policy in the agriculture and food sectors of developing countries. The first part introduces agricultural policy analysis and incorporates a case study of a country undergoing economic reforms. The second part examines macroeconomic influences on the agricultural sector, with consideration of expenditure revenue, monetary, balance of payments and exchange rate issues. The third part is concerned with trade, agricultural and food sector policies. Part four deals with policy analysis techniques. Finally, Part five covers issues in policy reform in the agricultural and food sectors including adjustment programmes, theory and evidence on the economic and social effects of adjustment and problems in the transition of the formerly centrally planned economies.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGDP 6004**

**COURSE TITLE: BUSINESS MANAGEMENT FOR AGRICULTURAL ENTERPRISES**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course is concerned with the rationale and methods of business management as used in agricultural enterprises, with the main emphasis on the principles and practice of financial management and planning. Part one of the course focuses on the process of business organisation and management, and Part two is concerned with the various types of financial accounting. Part three demonstrates methods of budget construction and explains the role of budgetary control, while Part four is concerned with procedures for optimising resource use within agricultural businesses, and the role of operations research.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6005**

**COURSE TITLE: PROJECT PLANNING, MONITORING AND EVALUATION**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course considers the planning and management of public investment in the agricultural sector. It teaches economic concepts for project identification, preparation and appraisal and the methodologies of logical framework, and financial and economic cost benefit analysis. Detailed financial analysis from the viewpoint of the farmer, project organisation and government is explained. Exercises are used at each stage to reinforce understanding of techniques. Social and environmental issues in planning are identified and approaches for their more effective integration into project appraisal reviewed. The course also provides guidelines for the design and management of project monitoring and evaluation, essential activities for effective project monitoring and implementation and the project cycle. It concludes by assessing the relation of agricultural projects to their wider macroeconomic and policy context.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6006**

**COURSE TITLE: THE SOCIOLOGY OF AGRARIAN TRANSFORMATION AND RURAL DEVELOPMENT**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** Is a new course about the sociology of development within agrarian and rural societies. The course is divided into six parts. The first and second parts introduce the basic sociological concepts and definitions and discuss various theoretical perspectives on development, particularly those that are more relevant to developing societies. Part three gives a historical overview of agriculture and rural development, followed by Part four, which identifies the historical and contemporary approaches, models and strategies for development for agrarian/rural communities. The next section describes the socio-cultural and economic profiles of rural people and communities. The course concludes with part six, which address policy issues important for future agriculture and/or rural development particularly the generation and transfer of appropriate technologies, nutrition and food security, credit, marketing and trade agreements

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6007**

**COURSE TITLE: FINANCE INVESTMENT AND CREDITS FOR AGRIBUSINESS AND RURAL DEVELOPMENT**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This new course was designed to meet the need for training by bankers and rural development personnel in the areas of business, finance, credit and investment. The course provides a general background to financial management and relevant institutions servicing the rural community. Sections on financial management of the farm business and financial planning discuss issues on land control, estate management, valuation of stocks, shares and debt financing. The latter sections develop the area of credit management, commercial credit, asset valuation and inflation accounting issues. The course concludes with section on capital investment appraisals and planning, monitoring and evaluation of development projects.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6500**

**COURSE TITLE: ECONOMICS OF WATER RESOURCES**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course focuses on how economic concepts can be used to inform policy decisions regarding the use of surface and groundwater in developing economies. The first part of the course reviews recent and current trends in the water sector both globally and regionally, exploring in detail the reasons for its increasing scarcity. In Part two, a framework, within which a number of policy approaches are explained, is developed allowing the assessment of alternative policy responses to a given situation. The third part of the course considers the possibilities for improving irrigation system performance by examining the relative advantage of agency and farmer management. Finally, the political and social dimensions of water use at project, sectoral and international levels are discussed.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6501**

**COURSE TITLE: AGRICULTURAL AND FOOD MARKETING IN DEVELOPING COUNTRIES**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course explores the various activities involved in the marketing of agricultural and food products. Two main approaches are followed. The first concerns the analysis of markets from an economic perspective. After defining the subject matter and its relationship to economic development, a framework for the economic analysis of markets is developed, together with analytical methods for assessing market system performance. These are elaborated with reference to case studies of performance analysis and an exploration of policy issues. The second approach focuses on the adoption of a business orientation to marketing. The introduction to key concepts of marketing management such as marketing research and market strategies and planning, is followed by case studies which explore the practice of marketing management by different institutional types.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6502**

**COURSE TITLE: LAND DEGRADATION AND SUSTAINABILITY**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course sets out to explain the wide variety of ways in which the productive capacity of land is being reduced. It critically reviews the mechanical and biological means by which land degradation might be controlled and sometimes reversed. It suggests longer term changes in land use and management, by which agriculture and forestry may continue more or less indefinitely. The overall context in which this takes place is that of human societies and ideologies within which conservation and the sustainable use of land has to be achieved. The course is extensively illustrated with case study materials.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6503**

**COURSE TITLE: GENDER ISSUES IN AGRARIAN AND ENVIRONMENTAL CHANGE**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course demonstrates the importance of understanding the interrelationships between gender relations and environmental and agrarian change. It focuses on the ways in which the outcomes of development programmes are affected by gender relations and, in turn, the ways in which development programmes themselves affect and change the roles and responsibilities of men and women. The first module of the course provides an introduction by looking at the extent to which women's work is often ignored or undervalued in agrarian and environmental development. The second module focuses on issues of policy and practice, looking critically at the ways in which gender analysis has been incorporated into environmental and agrarian policy, and including practical frameworks for gender analysis. The third module looks at gender analysis and practice in specific sectors and the final section is concerned with research and needs analysis methods for gender issues.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6504**

**COURSE TITLE: APPLIED ECONOMETRICS FOR AGRICULTURAL AND FOOD SECTOR**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** This course is concerned with the application of econometric methods to the estimation and testing of the unknown parameters of economic relationships. Priority is given to both the statistical reasoning underlying the methodology and the practical considerations involved in using this methodology with a variety of models and real data. The focus of the course is on the classical linear regression model, and the content spans the principles of regression analysis and its statistical foundations; simple and multiple regression models; non-classical disturbances; dynamic modelling and aspects of model specification. A feature of the course is the practical exercises designed to reinforce each stage of the learning. For this purpose, the Microsoft software package is provided together with detailed, step by step guides to assist students in its use.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6505**

**COURSE TITLE: CROP PRODUCTION FOR DEVELOPMENT**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** Is a new course written to complement the revised course on Livestock Development. The first section describes the importance of specific tropical crops in terms of production, trade and production systems as well as the factors, which contributed to their development and the crop's development process. The second section discusses the economic, policy, social and technical factors which determine the potential for crop development and provide guidelines for the design of appropriate production systems. The final section addresses issues on the sustainability of cropping systems and consideration for consumer health.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6506**

**COURSE TITLE: LIVESTOCK DEVELOPMENT FOR SMALL STATES**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** The Course on Livestock Development has been completely rewritten to include issues specifically related to small states and the recent advances in livestock development. The specific needs of small states have been highlighted. The livestock industry in small states is explored including the role, functions and production systems of traditional livestock. A new section on the role and potential of non-traditional livestock has been included. The next section discusses the factors affecting livestock development including economic and financial issues and their relationship between trade (local and international) and the stakeholders in the industry. The course concludes with a module on the approaches to livestock development for small states beyond the year 2000, by linking the units with each of the step suggested for developing the strategies.

**ASSESSMENT:**

Final examination 100%

**COURSE CODE: AGPD 6507**

**COURSE TITLE: RESEARCH PROJECT**

**NUMBER OF CREDITS: 6**

**COURSE DESCRIPTION:** For the research project, students will be expected to illustrate their ability to apply research and problem-solving techniques to the analysis of a problem in their workplace or country of residence. This exercise should draw upon previous knowledge and experience gained in the courses completed in the MSc degree Programme. In addition to local supervision, provision is made for limited travel of campus-based project supervisors to the location of both the project and the candidate for discussions related to the student's work.

**ASSESSMENT:**

Final examination 100%



**UWI**  
ST. AUGUSTINE  
CAMPUS