

# SCHOOL OF LIFE SCIENCES (Westville campus)

## RULES AND GUIDELINES FOR DEGREES IN THE SCHOOL - 2019

### IMPORTANT NOTICE FOR RETURNING STUDENTS

**Please note that as of 2019, there are some changes in the rules of some qualifications and in prerequisite modules. If you are affected by these, please consult the last page of this document.**

This booklet is a registration guide for new and returning students of the School of Life Sciences, UKZN, and provides systematic information about the qualifications offered by the School, the rules of combinations for the majors and focussed programmes, and various other information that may be useful to you during registration.

There are staff members available for consultation throughout registration. Please ask at the School's administration offices.

You can find all relevant information regarding your qualification and rules of your degree in the 2019 handbook of the College of Agriculture Engineering and Science or visit the website - [http://saa.ukzn.ac.za/Forms\\_proce/Handbooks.aspx](http://saa.ukzn.ac.za/Forms_proce/Handbooks.aspx) to download an electronic copy of the Handbook.

*(If you need assistance with the registration process, you are strongly advised to consult with a staff member prior to the start of term; contact the School's administration office for details of the scheduled consultation sessions)*

### 1. GENERAL

#### a) Students on Good Academic standing (on GREEN)

Most students on good academic standing (GREEN) can register for modules online. Should you need advice, and if you have not passed a pre-requisite to study a higher-level module, please see a member of staff on consultation duty.

#### b) Students with a term decision of RISK, RSK2, FPRR, PROB, RAPB

Students who are at risk (RISK and RSK2) or underperforming (FPRR, PROB, RAPB), as per the University Academic Monitoring and Exclusion Policy (ROBOT system), will receive a LEC (Learning Enhancement Checklist) form via email from the College office. Please print it and take it to an academic staff on consultation duty. S/he will provide advice on module selection, probation requirements, information on academic support programmes in the School, and will sign the LEC form. Then, you need to see a student counsellor in the College office (Oliver Tambo building) and get his/her signature on the LEC form. If you have already done a LEC session in 2016, 2017 or 2018, please take

the LEC report with you when you go to the counsellor for signature. If you have not done the LEC assessment in the previous three years, you will have to book and attend the LEC session. This form must be submitted to the College office for removal of academic hold, after which registration must be done online as mentioned above.

*(If there is a delay in capturing of modules on the system at the college office, keep attending the lectures, practicals and assessments and follow it up with the college office to ensure that your registration is completed for the semester.)*

## 2. QUALIFICATIONS

The qualification for which you are registered is a Bachelor of Science (BSc). This, in turn, can be structured in two ways: either a BSc with major(s) or a BSc in a focused programme, not both.

In our School, on the Westville campus, the majors on offer are Biochemistry, Cellular Biology, Genetics and Microbiology, and the focused programmes are Biological Sciences and Marine Biology.

*(Please note that 'LES' is not a qualification so please ensure that you write your major(s) or programme in all your forms).*

Each qualification has a curriculum that is comprised of modules (courses) which are equal to 16 credits (16C). Some modules are compulsory (core) to the qualification, while others are electives, meaning that you can select from a specified list of module options. Some modules have prerequisite requirements, i.e. a specified mark or a pass in a module or any other condition, which must be met before you are allowed to register for the module. *(Please see 4. and 5. below)*

## 3. GENERAL RULES FOR ALL THE BSc QUALIFICATIONS

### Rule AES-BS1

The qualification requires that you must pass a set of modules totalling 384 credits, subject to the following conditions:

Level 1: 96C (minimum) to 160C (maximum) – of these, 16C can be credits from another College and 16C must be ZULN101 (unless Zulu was taken as a Grade 12 subject).

Level 2: 96C (minimum) to 128C (maximum)

Level 3: 128C

*(As a module is 16C, each degree comprises 24 modules, 8 per year).*

### Rule AES-B5

- a) The normal load per semester is 64C (four modules).
- b) In the first two semesters of registration, students are not allowed to do more than four modules (64C) per semester. After that, they can register for up to five modules (80C) per semester, provided that they are in good academic standing ('on GREEN').

- c) Students are not allowed to register for modules that clash on the timetable, even if they have exemption for the practical classes in one of them. If there is a timetable clash, the student will have to do the ‘lower level’ module (and not the higher-level module).
- d) Students must register for all outstanding compulsory (core) modules at the level of the lowest academic year not completed at the time of registration.
- e) Students can only register for level 2 modules if they have been previously registered for two semesters and obtained 64C of which 32C are core to their major or programme.
- f) Students can only register for level 3 modules if they have previously registered for four semesters and obtained 144C of which 32C are at level 2 and have passed all level 1 modules core to their major or programme.
- g) In exceptional circumstances, the Academic Leader for Teaching and Learning (ALT&L) in the School may grant a concession to relax one of these rules, as per 7 below.

#### 4. RULES OF COMBINATION FOR MAJORS

Generally, students opt to obtain their degree with two majors. However, it is also possible to obtain a degree with only one major, in which case 64C at level 1 and 32C at level 2 must be as per the rules of combination of the major. As Rule AES-BS1 states that 128 C must be passed at level 3, the other 64C must also be at level 3 from modules from another discipline for which the student has obtained the specified prerequisites.

##### Core modules for majors

##### Biochemistry

YEAR 1	BIOL 101 (Sem 1)	CHEM 110 (Sem 1)	MATH 150 (Sem 1)	PHYS 131 (Sem 1)
	STAT 130 (Sem 1/2)	CHEM 120 (Sem 2)	ZULN 101 (Sem 1/2)	
YEAR 2	BIOC 201 (Sem 1)	CHEM 220 (Sem 1)		
	BIOC 202 (Sem 2)	RDNA 202 (Sem 2)		
YEAR 3	BIOC 307 (Sem 1)	BIOC 315 (Sem 1)		
	BIOC 308 (Sem 2)	BIOC 316 (Sem 2)		

##### Cellular Biology (Westville)

YEAR 1	BIOL 101 (Sem 1)	CHEM 110 (Sem 1)	MATH 150 (Sem 1)	PHYS 131 (Sem 1)
	BIOL 102 (Sem 2)	CHEM 120 (Sem 2)	STAT 130 (Sem 1/2)	ZULN 101 (Sem 1/2)
YEAR 2	BIOC 201 <i>or</i> BIOC 203			
	RDNA 202 (Sem 2)	BIOL 234 (Sem 2)		
YEAR 3	BIOL 345 (Sem 1)	BIOL 344 (Sem 1) <i>or</i> BIOL 347 (Sem 1) <i>or</i> BIOL 304 (Sem 2)		
	BIOL 316 (Sem 2)	BIOL 350 (Sem 2)		

## Genetics

YEAR 1	BIOL 101 (Sem 1)	CHEM 110 (Sem 1)	MATH 150 (Sem 1)	PHYS 131 (Sem 1)
	BIOL 102 (Sem 2)	CHEM 120 (Sem 2)	STAT 130 (Sem 1/2)	ZULN 101 (Sem 1/2)
YEAR 2	GENE 240 (Sem 1)			
	RDNA 202 (Sem 2)	BIOL 200 (Sem 1) <i>or</i> STAT 222 (Sem 2)		
YEAR 3	GENE 310 (Sem 1)	GENE 320 (Sem 1)		
	GENE 330 (Sem 2)	GENE 340 (Sem 2) <i>or</i> BIOL 304 (Sem 2)		

## Microbiology

YEAR 1	BIOL 101 (Sem 1)	CHEM 110 (Sem 1)	MATH 150 (Sem 1)	PHYS 131 (Sem 1)
	STAT 130 (Sem 1/2)	CHEM 120 (Sem 2)	ZULN 101 (Sem 1/2)	
YEAR 2	MICR 213 (Sem 1)			
	MICR 215 (Sem 2)	RDNA 202 (Sem 2)		
YEAR 3	MICR 307 (Sem 1)	MICR 311 (Sem 1)		
	MICR 304 (Sem 2)	MICR 306 (Sem 2)		

## 5. RULES OF COMBINATION FOR FOCUSED PROGRAMMES

### Core modules and elective credits

#### Biological Sciences

YEAR 1	BIOL 101 (Sem 1)	CHEM 110 (Sem 1)	MATH 150 (Sem 1)	PHYS 131 (Sem 1)
	BIOL 102 (Sem 2)	CHEM 120 (Sem 2)	STAT 130 (Sem 2)	ZULN 101 (Sem 2) <i>or</i> Level 1 <i>ELECTIVE</i> (Sem 2)
YEAR 2	BIOL 200 (Sem 1)	BIOL 204 (Sem 1)	GENE 240 (Sem 1)	Level-2 BIOL MODULE (Sem 1)
	RDNA 202 (Sem 2)	Level 1 <i>or</i> Level 2 <i>ELECTIVE</i> (Sem 2)	Level 1 <i>or</i> Level 2 <i>ELECTIVE</i> (Sem 2)	Level-2 BIOL MODULE (Sem 2)
YEAR 3	BIOL 300 (Sem 1)	BIOL 347 (Sem 1)	Level-3 BIOL MODULE (Sem 1)	Level-3 BIOL MODULE (Sem 1)
	BIOL 304 (Sem 2)	BIOL 348 (Sem 2)	BIOL 390 (Sem 1/2)	Level-3 BIOL MODULE (Sem 2)

#### Marine Biology

YEAR 1	BIOL 101 (Sem 1)	CHEM 110 (Sem 1)	MATH 150 (Sem 1)	PHYS 131 (Sem 1)
	BIOL 102 (Sem 2)	CHEM 120 (Sem 2)	STAT 130 (Sem 2)	ZULN 101 (Sem 2) <i>or</i> Level 1 <i>ELECTIVE</i> (Sem 2)
YEAR 2	BIOL 200 (Sem 1)	BIOL 204 (Sem 1)	BIOL 214 (Sem 1)	Level-2 SLS MODULE (Sem 1)
	RDNA 202 (Sem 2)	BIOL 231 (Sem 2)	Level 1 <i>or</i> Level 2 <i>ELECTIVE</i> (Sem 2)	Level 1 <i>or</i> Level 2 <i>ELECTIVE</i> (Sem 2)
YEAR 3	BIOL 300 (Sem 1)	BIOL 341 (Sem 1)	Level-3 BIOL MODULE (Sem 1)	Level-3 BIOL MODULE (Sem 1)
	BIOL 304 (Sem 2)	BIOL 342 (Sem 2)	BIOL 343 (Sem 2)	BIOL 391 (Sem 1/2)

## 6. LIST OF MODULES

Module	Name	Semester		Pre-requisite
BIOL 101	Smaller Side of Life	1		None
BIOL 102	Life on Earth		2	None
BIOL 103	Introductory Biology for Health Sciences	1		None
BIOL 195	Smaller Side of Life (Augmented)	1		None
BIOL 196	Life on Earth (Augmented)		2	None
BIOL 200	Biological Sciences Toolkit	1		64 C @ Level -1 & BIOL 101; BIOL 102 & 40% in STAT 130
BIOL 204	Plant & Animal Ecophysiology	1		64 C @ Level -1 & BIOL 101 & BIOL 102
BIOL 212	Angiosperm Evolution & Diversification	1		64 C @ Level -1 & BIOL 102
BIOL 214	Invertebrate Diversity & Ecology	1		64 C @ Level -1 & BIOL 102
BIOL 231	Marine Environment		2	64 C @ Level -1 & (MATH 150 or MATH 151) & (BIOL 102 or GEOL 102)
BIOL233	Immunology			64 C @ Level -1 & BIOL 101; BIOL 102
BIOL 234	Cytology & Cellular Biology		2	64 C @ Level -1 & BIOL 101; BIOL 102
BIOL 300	Professional Communication for Biologists	1		64 C @ Level -2 including 32 C BIOL at level 2 & (STAT 130 or BIOL 200)
BIOL 304	Evolution & Systematics		2	64 C @ Level-2 & BIOL 200 & BIOL 205 or RDNA 202 or GENE 240
BIOL 305	Population & Community Ecology	1		64 C @ Level-2 & BIOL 200
BIOL 316	Animal & Plant Biotechnology		2	64 C @ Level -2 incl 32C BIOL; BIOL 205 & (STAT 130 or BIOL 200)
BIOL 341	Marine Systems	1		64 C @ Level -2 incl 32C BIOL & (STAT 130 or BIOL 200) <b>May be restricted to students registered for Marine Biology and Biological Sciences*</b>
BIOL 342	Marine Ecophysiology		2	64 C @ Level -2 incl 32C BIOL; BIOL 204 & (STAT 130 or BIOL 200)
BIOL 343	Applied Marine Biology		2	64 C @ Level-2 & BIOL 200; BIOL 231 <b>May be restricted to students registered for Marine Biology and Biological Sciences*</b>
BIOL 344	Parasites & People	1		64 C @ Level-2 & BIOL 101; BIOL 102
BIOL 345	Functional Cell Architecture	1		64 C @ Level-2 & BIOL 205
BIOL 347	Pollution & Remedial Biology	1		64 C @ Level -2 incl 32C BIOL; (STAT 130 or BIOL 200)
BIOL 348	Applied Plant Physiology		2	64 C @ Level -2 incl 32C BIOL; BIOL 200 or STAT 222 & BIOL 204
BIOL 349	Seeds & Vegetative Propagation	1		64 C @ Level-2 & STAT 130 or BIOL 200
BIOL 350	Developmental Biology		2	64 C @ Level -2 incl 32C BIOL; BIOL 205 & (STAT 130 or BIOL 200)
BIOL 390	Biology/Ecology Research Project	1	2	96 C @ Level -2 incl 48 C BIOL & (STAT 130 or BIOL 200)
BIOL 391	Marine Biology Research Project	1	2	96 C @ Level -2 incl 48 C BIOL & (STAT 130 or BIOL 200)
BIMI 200	Biochemistry for Optometry	1		(BIOL 101 or BIOL 103) & CHEM 110
BIOC 201	Introduction to Biomolecules	1		(BIMI 120 or BIOL 101); CHEM 110 & CHEM 120 <b>May be restricted to students registered for qualifications for which this module is core or core elective*</b>

BIOC 202	Bioenergetics and Integrated Metabolism		2	BIMI 120; CHEM 110 & CHEM 120 <b>May be restricted to students registered for qualifications for which this module is core or core elective*</b>
BIOC 203	Biochemistry for Biologists	1		64 C @ Level -1 & CHEM 110; BIOL 101 & BIOL 102
BIOC 307	RNA Chemistry for Gene Expression	1		40% in CHEM 220; BIOC 201; BIOC 202 & RDNA 202
BIOC 308	Physiological Biochemistry		2	BIOC 201; BIOC 202; CHEM 220 & RDNA 202
BIOC 315	DNA Chemistry	1		40%CHEM 220; BIOC 201; (BIOC 202 or BIOC 212) & RDNA 202
BIOC 316	Immune and Protein Chemistry		2	BIOC 201; (BIOC 202 or BIOC 212); CHEM 220 & RDNA 202
GENE 240	Introductory Genetics	1		(BIOL 101 or BIMI 120) & MATH 150
GENE 310	Population and Quantitative Genetics	1		GENE 240 & (STAT 222 or BIOL 200)
GENE 320	Bioinformatics	1		GENE 240 or RDNA 202 or BIOL 205
GENE 330	Genomics and Molecular Diagnostics		2	GENE 240 & RDNA 202
GENE 340	Integrated Human Genetics		2	GENE 240
MICR 213	Bacteriology	1		CHEM 110 & (BIMI 120 or BIOL 101) <b>May be restricted to students registered for qualifications for which this module is core or core elective*</b>
MICR 215	Introduction to Fungi and Viruses		2	BIMI 120 & MICR 213; co-requisite RDNA 202 <b>May be restricted to students registered for qualifications for which this module is core or core elective*</b>
MICR 304	Microbial Processing		2	MICR 213 & RDNA 202
MICR 306	Advanced Applications of Fungi and Viruses		2	MICR 215 & RDNA 202
MICR 307	Environmental Microbial Biotechnology	1		MICR 213
MICR 311	Advanced Bacteriology	1		MICR 213
RDNA 202	Molecular DNA Technology		2	(BIOL 101 or BIMI 120); CHEM 110 & CHEM 120 <b>May be restricted to students registered for qualifications for which this module is core or core elective*</b>

**\*Please refer last page of this document**

For more information on the modules (e.g. content, DP & other requirements), please consult the 2019 AES College Handbook on [http://saa.ukzn.ac.za/Forms\\_proce/Handbooks.aspx](http://saa.ukzn.ac.za/Forms_proce/Handbooks.aspx)

## 7. OTHER IMPORTANT INFORMATION

*Students must attend lectures and practicals for all modules while awaiting to register. You are strongly advised to get advice and process all required forms before lectures start.*

Please note:

- ZULN101 must be passed to complete the degree (rule BR9) UNLESS competent through prior learning, in which case, must get exemption and substitute ZULN101 with another 16 credit elective (rule BR9).
- It is the students' responsibility to collect all types of signed forms from the School's office and submit them to the College office for capturing.

- For modules offered by other Schools (e.g. STAT, ZULU, etc.), students must go to the relevant School for advice and signatures.

### **Changes in the registration of modules**

After the initial registration and within the stipulated date, students may withdraw from some modules and register for others, provided that they are not core modules or modules that impact on progress of the degree. Use a change of curriculum form and follow the registration procedures.

### **Extended DP**

With the consent of the school board, the DP certification may be extended to the relevant subsequent semester, in which case the student may be allowed to retain the relevant class mark (Rule GR16c). This is only for a module being repeated and this registration means that students only pay a small proportion of the fee to write the exam, i.e. students do not attend lectures and practical classes, and do not write tests. This is only allowed under very special circumstances (e.g. last outstanding module for the degree). Please collect the relevant form from the School's office and hand it in for consideration by the AL: T&L. *(This is different from a practical concession, please see below)*

### **Concessions**

In exceptional cases, the Academic Leader for Teaching and Learning (AL: T&L) may allow the relaxing of an element of Rule AES-B5. Applications must be submitted at the start of the relevant semester.

#### *Criteria:*

- a) To take a module without having met its prerequisite(s):

This is usually only awarded in the last three semesters before completion of the degree; student must have attempted the module before and obtained at least 40% in the prerequisite module; the concession promotes progression (i.e. 'saves a semester'); student is not on Probation; student will not be registered for more than 64C; there is no timetable clash.

*(Please note that you still need to pass the prerequisites).*

- b) Relaxing of other components of the rule: Must make academic sense and promote academic progression.

#### *Procedures:*

Please collect the relevant form from the School's administration offices and submit the completed form at the School's office for consideration by the AL T&L. It is strongly advised that you first consult a staff member on duty to discuss your options.

### **Practical exemptions**

Students who are repeating a module may apply for exemptions from repeating the practical classes, provided that they meet the criteria below. However, please note that no concession will be given if there has been a change in the content of the practical classes.

#### *Criteria:*

Previous class mark  $\geq 50\%$  AND practical mark  $\geq 60\%$  AND practical test mark  $\geq 60\%$  (if applicable for the module).

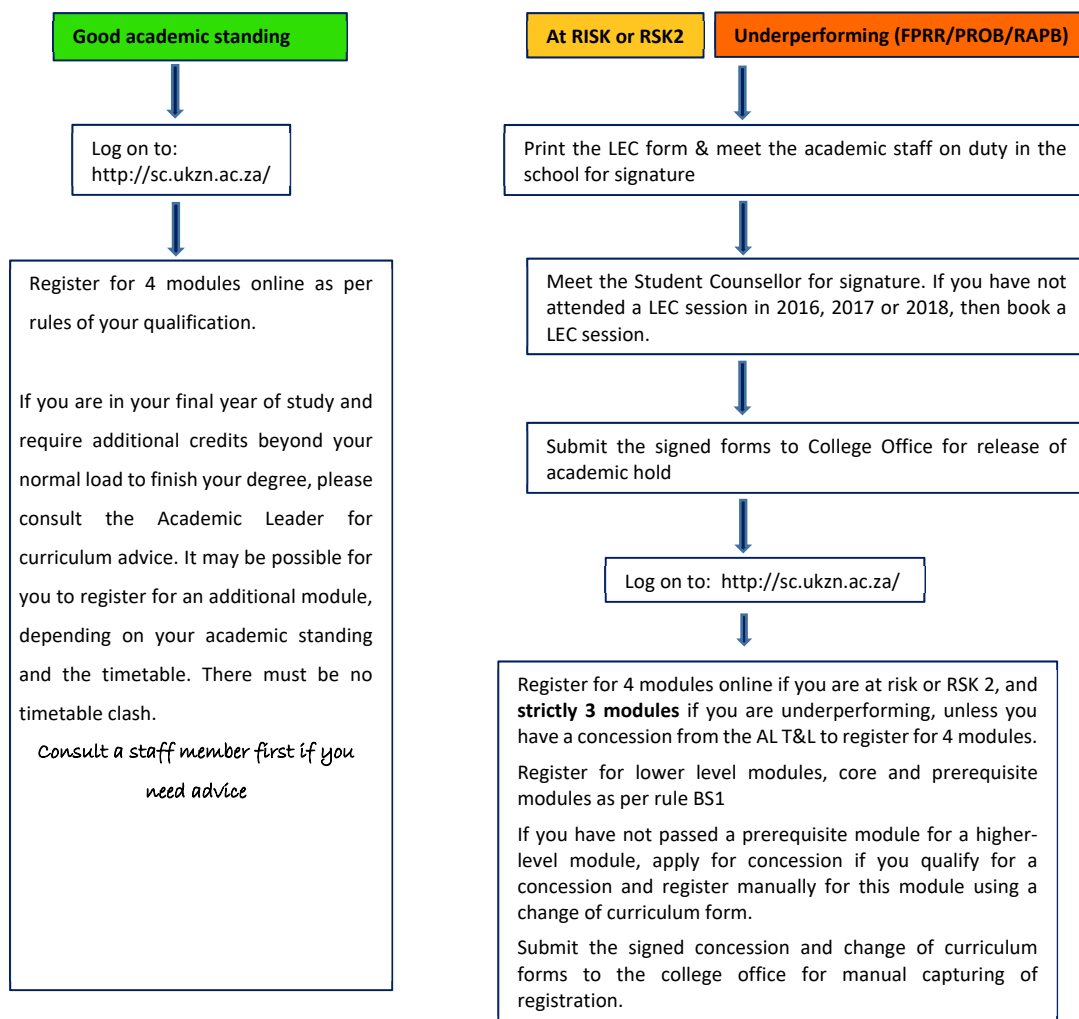
*Procedures:*

Please collect the relevant form from the School’s administration offices and submit the completed form at the School’s office for consideration of the module coordinator. Completed forms have to be submitted as early as possible during the registration period.

*(Please note that you must continue to attend practical classes until you are officially informed that your application was approved)*

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### QUICK STEP BY STEP REGISTRATION





## **RETURNING STUDENTS**

- **Students who wish to change their qualifications to Microbiology and/or Biochemistry majors and students who wish to register for ‘restricted modules’ (as per Table in 6. List of Modules) to serve as elective module(s)**

Please look for affixed signs and/or ask at the School’s Offices for instructions.

- **Students who have not completed 128C at Level 1:**

Register for the outstanding core modules for your degree, as per the rules of combination in 2018. However, if you still need Level 1 credits to make-up 128-160C, you should register for the new core modules:

STAT130 if you are doing Biochemistry and/or Microbiology majors;

PHYS131 and/or CHEM120 if you are doing Cell Biology major;

PHYS131 and/or BIOL102 if you are doing Genetics major;

PHYS131 and/or CHEM120 Biological Sciences;

CHEM120 if you are doing Marine Biology.

- **Students who wish to register for a module that has BIM1 as a pre-requisite module.**

If you have passed BIOL101 but have either failed BIM1 or you have not registered for BIM1 in the past few years – apply for a concession.

If you have failed BIOL101 you must repeat this module, even if you passed BIM1.

- **Students who wish to register for RDNA202 that from 2019 has CHEM120 as a pre-requisite /core module for the degree.**

If you do not have credit for CHEM120 – apply for a concession.

- **Students who wish to register for a module that has BIOL205 as a pre-requisite module.**

If you have failed BIOL205 but passed RDNA202 – apply for a concession.

If you have not passed BIOL205 and don’t have credit for RDNA202 – you must register for RDNA 202.

B. Varghese & P. Watt

School of Life Sciences, UKZN, 4/10/2017, updated 2/11/2018