SCHOOL OF LIFE SCIENCES (Pietermaritzburg campus)

RULES AND GUIDELINES FOR DEGREES IN THE SCHOOL - 2020

IMPORTANT NOTICE

Some modules and qualifications are restricted.

GENT + CHEM major combinations are not advised for B.Sc. LES students due to Time Table clashes at Level 2 and Level 3, which means that the degree will only be completed after 8 semesters.

REGISTRATION PROCESSES FOR SEMESTER 1, 2020

- If you need advice or any help with your registration, please consult a staff member on registration duty for advice. If possible, do this the week before term starts.
- There will be notices outside the School's administrative offices directing students to the staff on duty and procedures to follow.
- Students on RISK or Probation, please follow the instructions on page 9.
- Please ensure that you consult this document before getting advice and/or making changes to your curriculum.

SCHOOL OF LIFE SCIENCES (Pietermaritzburg campus)

RULES AND GUIDELINES FOR DEGREES IN THE SCHOOL

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 if you need to consult one of them.

You can find all relevant information regarding your qualification and rules of your degree in the 2020 handbook of the College of Agriculture Engineering and Science or visit the website - 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. You will also 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 2017, 2018 or 2019, 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 registration venue/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 PMB campus, the majors on offer are Biochemistry, Biology, Ecology, Genetics and Microbiology, and the programmes are Biological Sciences, and Industrial and Applied Biotechnology.

(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), most of which are equal to 16 credits (16C) but a few are 8 credits (8C). 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 isiZulu 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). After that, they can register for five modules (80C), 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 previous 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 previous 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. The other 64C must also be at level 3 from modules for which the student has obtained the specified prerequisites.

5(a). 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 212 {Sem 2}	RDNA 202 {Sem 2}		
YEAR 3	BIOC 311 {Sem 1}	BIOC 315 {Sem 1}		
	BIOC 300 {Sem 2}	BIOC 316 {Sem 2}		

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 1/2}	ZULU 101 {Sem 1/2}
YEAR 2	BIOL 213 {Sem 1}	Any 1 MODULE (16C) from BIOL 204 {Sem 1} ***or*** BIOL 222 {Sem 2} ***or*** RDNA 202 {Sem 2}		
	BIOL 211 {Sem 2}			
YEAR 3	BIOL 305 {Sem 1}	BIOL 324 {Sem 1}		
	BIOL 304 {Sem 2}	BIOL 315 {Sem 2}		

Ecology

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}	ZULU 101 {Sem 1/2}
YEAR 2	BIOL 204 {Sem 1}	BIOL 223 {Sem 1}		
	BIOL 211 {Sem 2} ***or*** BIOL 222 {Sem 2}			
YEAR 3	BIOL 322 {Sem 1}	BIOL 323 {Sem 1}	Any 1 module (16C) from BIOL 305 {Sem 1} ***or*** BIOL 304 {Sem 2} ***or*** BIOL 390 {Sem 1 or 2 }	
	BIOL 325 {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}	BIOL 200 {Sem 1} ***or*** STAT 222 {Sem 2}		
	RDNA 202 {Sem 2}			
YEAR 3	GENE 310 {Sem 1}	GENE 320 {Sem 1}		
	GENE 330 {Sem 2}	Any 1 MODULE (16C) from GENE 350 {Sem 2} ***or*** AGPS 306 {Sem 2} ***or*** 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}	BIOC 201 {Sem 1} ***or*** CHEM 220 {Sem 1}		
	MICR 214 (8C) {Sem 2}	MICR 220 (8C) {Sem 2}	RDNA 202 {Sem 2}	
YEAR 3	MICR 307 {Sem 1}	MICR 320 {Sem 1}		
	MICR 304 {Sem 2}	MICR 360 {Sem 2}		

5(b). 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} ***or*** Level 1 *ELECTIVE* {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 *or* 2 *ELECTIVE* {Sem 2}	Level 1 *or* 2 *ELECTIVE* {Sem 2}	Level-2 BIOL MODULE {Sem 2}
YEAR 3	BIOL 300 {Sem 1}	BIOL 321 {Sem 1}	BIOL 324 {Sem 1}	Level-3 BIOL MODULE {Sem 1}
	BIOL 304 {Sem 2}	BIOL 390 {Sem 1 or Sem 2}	Level-3 BIOL MODULE {Sem 2}	Level-3 BIOL MODULE {Sem 2}

Industrial Biotechnology

YEAR 1	BIOL 101 {Sem 1}	CHEM 110 {Sem 1}	MATH 150 {Sem 1} ***or*** MATH 130 {Sem 1/2}	PHYS 110 {Sem 1} ***or*** PHYS 131 {Sem 1}
	STAT 130 {Sem 2}	CHEM 120 {Sem 2}	MATH 143 {8C} {Sem 2} ***and*** PHYS 133 {8C} {Sem 2}	ZULN 101 (Sem 2) ***or*** Level 1 *ELECTIVE* (Sem 2)
YEAR 2	BIOC 201 {Sem 1}	CHEM 220 {Sem 1}	GENE 240 {Sem 1} ***or*** CHEM 210 {Sem 1}	MICR 213 {Sem 1}
	BIOC 212 {Sem 2} ***or*** MICR 214 (8C) {Sem 2} ***and*** MICR 220 (8C) {Sem 2}	CHEM 230 {Sem 2}	CTEC 233 {Sem 2}	RDNA 202 {Sem 2}
YEAR 3	BIOC 311 {Sem 1}	CHEM 330 {Sem 1}	CTEC 333 {Sem 1}	MICR 320 {Sem 1}
	CTEC 343 {Sem 2}	MICR 304 {Sem 2}	MICR 360 {Sem 2}	Any 1 MODULE (16C) from BIOC 300 {Sem 1} or CHEM 320 (Sem 2) or GENE 330 {Sem 2}

6. LIST OF MODULES, SCHOOL OF LIFE SCEICNES (PIETERMARITZBURG)

Module	Name	Semester		Pre-requisite
BIOL 101	Smaller Side of Life	1		None
BIOL 102	Life on Earth		2	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 & at least 40% in STAT 130
BIOL 204	Plant & Animal Ecophysiology	1		64 C @ Level 1; BIOL 101 & BIOL 102
BIOL 211	Plant Diversity and Use		2	64 C @ Level 1 & BIOL 102
BIOL 213	Invertebrate Diversity & Conservation	1		64 C @ Level 1 & BIOL 102

BIOL 222	Vertebrate Biology		2	64 C @ Level 1 & BIOL 102
BIOL 223	Rangeland Plants: Ecology and Management	1		64 C @ Level 2 & BIOL102
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 & (RDNA 202 *or* GENE 240)
BIOL 305	Population & Community Ecology	1		64 C @ Level 2 & BIOL 200
BIOL 315	Applied Biotechnology		2	64 C @ Level 2 & BIOL 101
BIOL321	Plant Growth & Development	1		64 C @ Level 2; BIOL101 & BIOL102
BIOL322	Insect Diversity & Evolution	1		64 C @ Level 2& BIOL102
BIOL323	Advanced Rangeland Ecology	1		64C @ L2 incl. 32C BIOL modules; BIOL223 & (BIOL200 or STAT130)
BIOL324	Evolutionary Animal Physiology	1		64 C @ Level 2 incl. 32C BIOL modules & (BIOL200 or STAT130)
BIOL325	Reproductive & Behavioural Ecology		2	64 C @ Level 2 incl. 32C BIOL modules & (BIOL200 or STAT130)
BIOL390	Biology/Ecology Research Project	1	2	96C@L2 of which 48C in BIOL & (BIOL200 or STAT130)
BIOC 201	Introduction to Biomolecules	1		(BIMI 120 *or* BIOL 101); CHEM 110 & CHEM 120 **May be restricted to students for which this module is core or core elective**
BIOC 212	Signal Transduction and Metabolism		2	40% in (BIMI 120 or BIOL 101)
BIOC 300	Cellular Regulation and Signalling		2	BIOC 201 & BIOC 212
BIOC 311	Biochemical Methods	1		BIOC 201; BIOC 212 & PHYS 131
BIOC 315	DNA Chemistry	1		40% in 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
GENE 330	Genomics and Molecular Diagnostics		2	GENE 240 & RDNA 202
GENE 350	Animal Genetics		2	GENE240
MICR 213	Bacteriology	1		CHEM 110 & (BIMI 120 *or* BIOL 101) **May be restricted to students for which this module is core or core elective**
MICR 214	Introductory Food Microbiology		2	(BIOL 101 *or* BIMI 120) & CHEM 110
MICR 220	Introductory Microbial Ecology		2	(BIOL 101 *or* BIMI 120) & CHEM 110
MICR 304	Microbial Processing		2	MICR 213 & RDNA 202
MICR 306	Advances Applications of Fungi and Viruses		2	MICR 215 & RDNA 202
MICR 307	Environmental Microbial Biotechnology	1		MICR 213

MICR 320	Advanced Micro metabolism & Ecophysiology	1		MICR 213 & (BIOC 201 or CHEM 220)
MICR 360	Death & Control of Microorganisms		2	MICR 213
RDNA 202	Molecular DNA Technology		2	(BIOL 101 *or* BIMI 120); CHEM 110 & CHEM 120 **May be restricted to students for which this module is core or core elective**

Modules from another School but core to Industrial Biotechnology programme

Module	Name	Semester		Pre-requisite
CTEC 233	Chemical Analysis		2	CHEM 110; CHEM 120 & (MATH 130, 150 or 195)
CTEC 323	Materials	1		CHEM210 & CHEM220
CTEC 333	Process Technology	1		CHEM 220
CTEC 343	Industrial Chemistry		2	40% in CHEM 330 & CHEM 230

For more information on the modules (e.g. content), please consult the 2020 AES College Handbook on http://saa.ukzn.ac.za/Forms_proce/Handbooks.aspx

7. OTHER IMPORTANT INFORMATION

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

  (You are strongly advised to get advice and process all required forms before lectures start)

Changes in the registration of modules

After the initial registration, 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 curriculum form and follow the registration procedures.

Extended DP

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. Consequently, 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 ALT&L.

(This is different from a practical concession, please see below)

Concessions

In exceptional cases, the Academic Leader for Teaching and Learning (ALT&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 progress (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 progress.

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 ALT&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 ≥50% AND practical mark ≥60% AND practical test mark ≥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)

Medical and Death certificates

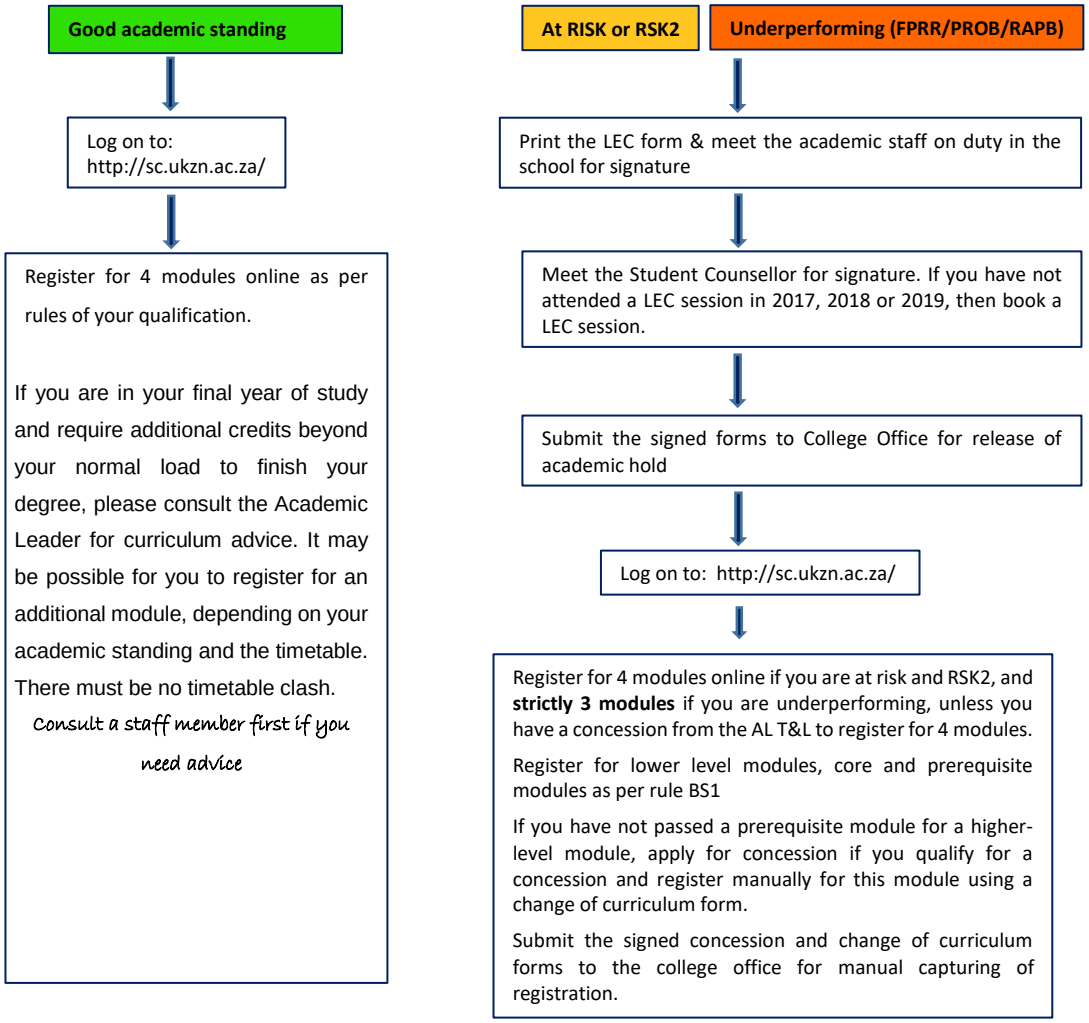
As per UKZN rules, only medical or death of close family member are acceptable reasons for missing compulsory activities. Medical and Death certificates must be submitted (***only*** to the admin office of the School) within one week of the missed practical or test. Students admitted to medical facilities need to submit a medical certificate on the first day after being discharged. All medical certificates will be confirmed for authenticity (see below).

(Please note that fraudulent medical certificates and other reports will be forwarded to the university proctor for disciplinary action. This is considered a serious offence requiring university action.)

Mark changes/corrections to tests and practical reports

These will only be considered within one week of the results having been released to students. It is the student's responsibility to check his/her marks regularly on Student Central. The School will not consider any late requests for mark changes or corrections. The university policy for changes to exam marks will be strictly applied**.**

QUICK STEP-BY-STEP REGISTRATION



IMPORTANT INFORMATION

- **Change of qualifications – this applies to students at Level 1, Level 2 and Level 3**

Students wishing to transfer from other Schools into SLS: approval will depend on having a valid curriculum for the semester and on module restrictions. There may be restrictions to entry into some qualification – in this regard, please consult the NOTICES TO THIS WILL BE POSTED OUTSIDE THE SCHOOL'S OFFICE.

B. Varghese & P. Watt
School of Life Sciences, UKZN (updated 22 October 2019)