



Stellenbosch

UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT

SCIENCE

EYENZULULWAZI NGEZENDALO

NATUURWETENSKAPPE

Biology 124 – Cell Biology

Short description of the module

This module involves the study of life at cellular level, as well as the study of evolution as an ongoing process on Earth. It consists of four submodules: Biochemistry, Cytology, Genetics and Evolution.

Biologie 124 – Selbiologie

Kort beskrywing van die module

Hierdie module handel oor die studie van lewe op sellulêre vlak, sowel as die studie van evolusie as 'n deurlopende proses op Aarde. Dit bestaan uit vier submodules: Biochemie, Sitologie, Genetika en Evolusie.

Module summary

Name	Biology 124 – Cell Biology
Duration	1st semester
Type	
Academic commitment*	16 credits = 160 notional hours 12 hours per week for lectures, tutorials/practicals and studying.
Scheduled learning opportunities	3 lectures (L) per week 1 tutorial or practical per week
Assessment option	Option 2: A1 (T1 and T2) and A2 each cover different parts of the syllabus; A3 covers the entire syllabus.
Language option	Option 1: lectures, practicals and tutorials are in English or Afrikaans (separate classes).
Mode of offering	Face-2-Face
Corequisites / Prerequisites / Pass prerequisites**	NA

**Notional hours are the learning time that it would take an average learner to meet the outcomes of the module.*

***The onus is on the students to ensure that they meet the prerequisites of the module.*

Module-oorsig

Naam	Biologie 124 - Selbiologie
Duur	1e semester
Tipe	
Akademiese verbintenis*	16 krediete – 160 veronderstelde leerure 12 ure per week vir lesings, tutoriale/praktika en studeer.
Geskeduleerde leergeleenthede	3 lesings (L) per week 1 tutoriaal of prakties per week
Assesseringsopsie	Opsie 2: A1 (T1 en T2) en A2 elk dek verskillende dele van die sillabus. A3 dek die hele sillabus.
Taalopsie	Opsie 1: lesings, praktika en tutoriale is in Engels of Afrikaans (aparte klasse).
Modus van aanbieding	In persoon (face-to-face)
Nowe vereistes / Voorvereistes / Slaagvoorvereistes**	NVT

**Veronderstelde leerure is die tyd wat die gemiddelde leerder aan die module sal moet spandeer om aan die uitkomst van die module te voldoen.*

***Die onus rus op die studente om te verseker dat hulle aan die voorvereistes van die module voldoen.*

Outcomes

After completion of this module, you

- will have a sound knowledge and understanding of the most important biological concepts and processes at cellular level.
- will have knowledge and understanding of evolution as an ongoing process.
- will have acquired certain generic skills during the laboratory practicals and tutorials. Emphasis is placed on light microscopy as a method of observation and interpretation of what is observed. Drawing techniques are also incorporated.

See the study objectives of each sub-module under 'Syllabus' on SUNLearn.

Uitkomst

Na voltooiing van hierdie module,

- sal jy 'n grondige kennis en begrip hê van die mees belangrike biologiese konsepte en prosesse op sellulêre vlak.
- sal jy 'n grondige kennis en begrip hê van evolusie as 'n deurlopende proses.
- sal jy sekere generiese vaardighede aangeleer het tydens die laboratorium praktika en tutoriale. Klem word gelê op ligmikroskopie as 'n metode van observasie en interpretasie van wat waargeneem kan word. Tekentegnieke word ook ingesluit.

Sien die studiedoelwitte van elke submodule onder 'Syllabus' op SUNLearn.

Scheduled learning opportunities

The official timetable indicating all scheduled learning opportunities and their allocated venues can be accessed via [My.SUN](#). For this module students will be subdivided into practical and tutorial groups. These schedules are available on the module page on SUNLearn.

Groups	Time	Venue
Group 1.1 Afrikaans	Monday 08:00 Wednesday 09:00 Thursday 12:00	All lectures in A203, JC Smuts Building
Group 1.2 English	Monday 08:00 Wednesday 09:00 Thursday 12:00	All lectures in Van der Sterr Building 2121 (Entrance 1)
Group 2.1 Afrikaans	Monday 12:00 Wednesday 08:00 Friday 09:00	All lectures in A203, JC Smuts Building
Group 2.2 English	Monday 12:00 Wednesday 08:00 Friday 09:00	All lectures in Krotoa Building 1001

Lectures

The Bio 124 module will be offered on campus during face-face lectures. See the lecture schedules [here](#).

Tutorials and Practicals

WEEK	DATES	SUBMODULE
1	14, 16 & 17 Feb 2023	NO PRACTICAL or TUTORIAL
2	21, 23 & 24 Feb 2023	Biochemistry Tutorial 1
3	28 Feb; 02 & 03 March 2023	Biochemistry Tutorial 2

Geskeduleerde leergeleenthede

Die amptelike rooster wat al die geskeduleerde leergeleenthede en die toegewysde lokale aandui, is beskikbaar by [My.SUN](#). Vir hierdie module sal studente in praktiese- en tutoriaal-groepe ingedeel word. Hierdie skedules is beskikbaar op die moduleblad op SUNLearn.

Groep	Tyd	Lokaal
Groep 1.1 Afrikaans	Maandag 08:00 Woensdag 09:00 Donderdag 12:00	Alle lesings in A203, JC Smuts Gebou
Groep 1.2 English	Maandag 08:00 Woensdag 09:00 Donderdag 12:00	Alle lesings in Van der Sterr Gebou 2121 (Ingang 1)
Groep 2.1 Afrikaans	Maandag 12:00 Woensdag 08:00 Vrydag 09:00	Alle lesings in A203, JC Smuts Gebou
Groep 2.2 English	Maandag 12:00 Woensdag 08:00 Vrydag 09:00	Alle lesings in Krotoa Gebou 1001

Lesings

Die Bio 124 module sal op kampus aangebied word tydens in-persoon lesings. Sien die lesingskedule [hier](#).

Tutoriale and Praktika

WEEK	DATUM	SUBMODULE
1	14, 16 & 17 Feb 2023	GEEN PRAKTIKA of TUTORIAAL
2	21, 23 & 24 Feb 2023	Biochemie Tutoriaal 1
3	28 Feb, 02 & 03 Maart 2023	Biochemie Tutoriaal 2

4	07, 09 & 10 March 2023	Biochemistry Tutorial 3
5	14, 16 & 17 March 2023	Cytology Practical 1
6	23 & 24 March 2023	Cytology Practical 2
7	28 March 2023	Cytology Practical 2
8	11 & 13 April 2023	Genetics Tutorial A
9	21 April 2023	Genetics Tutorial A
10	25 April 2023	Genetics Tutorial B
11	04 & 05 May 2023	Genetics Tutorial B
12	09, 11 & 12 May 2023	Evolution Tutorial
13	16, 18 & 19 May 2023	NO PRACTICAL or TUTORIAL

4	07, 09 & 10 Maart 2023	Biochemie Tutoriaal 3
5	14, 16 & 17 Maart 2023	Sitologie Prakties 1
6.	23 & 24 Maart 2023	Sitologie Prakties 2
7.	28 Maart 2023	Sitologie Prakties 2
8.	11 & 13 April 2023	Genetika Tutoriaal A
9.	21 April 2023	Genetika Tutoriaal A
10.	25 April 2023	Genetika Tutoriaal B
11.	04 & 05 Mei 2023	Genetika Tutoriaal B
12.	09, 11 & 12 Mei 2023	Evolusie Tutoriaal
13.	16, 18 & 19 Mei 2023	GEEN PRAKTIKA of TUTORIAAL

Study material

Prescribed textbook: Russell, Hertz, McMillan, Biology: The Dynamic Science (5th edition). Cengage Publishers. International Edition.

SUNLearn is the official learning management platform of Stellenbosch University. Each module has a dedicated page on this platform which can be accessed via this link: <https://learn.sun.ac.za/>

Studiemateriaal

Voorgeskrewe Handboek: Russell, Hertz, McMillan, Biology: The Dynamic Science (5th edition). Cengage Publishers. International Edition.

SUNLearn is die amptelike leerbestuursplatform van die Universiteit Stellenbosch. Elke module het 'n toegewysde blad op hierdie platform met toegang via hierdie skakel: <https://learn.sun.ac.za/>

Lecturers

Submodule		Department	Lecturers
1	Biochemistry	Biochemistry JC Smuts Building	Dr A Botes (convener) annelise@sun.ac.za Dr N Sheik Abdul sheikn@sun.ac.za
2	Cytology	Botany and Zoology Natural Science Building	Dr M Mouton (module coordinator and convener) marnel@sun.ac.za Dr J Aylward janneke@sun.ac.za
3	Genetics	Genetics JC Smuts Building	Dr M le Roux (convener) marlonleroux@sun.ac.za Ms L Hess lspring@sun.ac.za
4	Evolution	Botany and Zoology Natural Sciences Building	Prof A Ellis (convener) agellis@sun.ac.za Prof C Matthee cam@sun.ac.za

Dosente

Submodule		Departement	Dosente
1	Biochemie	Biochemie JC Smuts Gebou	Dr A Botes (sameroeper) annelise@sun.ac.za Dr N Sheik Abdul sheikn@sun.ac.za
2	Sitologie	Plant- en Dierkunde Natuurwetenskappe Gebou	Dr M Mouton (module koordineerder en sameroeper) marnel@sun.ac.za Dr J Aylward janneke@sun.ac.za
3	Genetika	Genetika JC Smuts Gebou	Dr M le Roux (sameroeper) marlonleroux@sun.ac.za Ms L Hess lspring@sun.ac.za
4	Evolusie	Plant- en Dierkunde Natuurwetenskappe Gebou	Prof A Ellis (sameroeper) agellis@sun.ac.za Prof C Matthee cam@sun.ac.za

Assessment

The dates for all centrally scheduled assessments are published on [My.SUN](#). This module follows assessment option 2. Please see the [Faculty of Science's assessment guidelines](#) for more details.

The module is assessed through three scheduled invigilated, written assessments (on campus) covering the subject matter of Sub-modules 1, 2, 3 and 4: the A1T1 (Early Assessment), the A1T2 assessment and the A2 assessment. These three assessments contribute 80% to the final mark. The remaining 20%, known as the 'practical mark', comprises quizzes, practical or tutorial assessments (on SUNLearn or face-to-face). A 40% subminimum applies to the practical mark.

The A3 assessment will serve as a sickness test for any (only one) of the A1T1, A1T2 or A2 assessments missed through the semester with an appropriate excuse. Thus, if a student wrote all three assessments (the A1T1, A1T2 and A2) through the semester and achieved a final mark of 50% and higher, you pass the module and do not have to write the A3 assessment (it is optional then). The A3 covers the entire syllabus.

The A3 assessment will also serve as an additional assessment opportunity for:

- students who have not passed the module after the A2 and whose final mark is between 40 and 49%. These students can still pass the module after the A3, but their mark will be capped at 50%.
- any student who have already passed the module after the A2, but who wants to improve their final mark.

In both these cases, the lowest test mark will be replaced by the A3 mark.

Assesserings

Die datums van alle sentraal geskeduleerde assesserings word op [My.SUN](#) gepubliseer. Hierdie module volg assesseringsopsie 2. Raadpleeg die [Fakulteit Natuurwetenskappe se assesseringsriglyne](#) vir meer besonderhede.

Die module word geassesseer deur middel van drie geskrewe geskeduleerde assesserings onder toesig (op kampus) oor die vakinhoud van Sub-modules 1, 2, 3 and 4: die A1T1 (Vroeë Assessering), die A1T2 assessering en die A2 assessering. Hierdie drie assesserings dra 80% by tot die finale punt. Die oorblywende 20%, ook bekend as die 'praktiese punt', bestaan uit 'quizzes', praktika of tutoriaal-assesserings (op SUNLearn of in-persoon (face-to-face)). 'n Subminimum van 40% is van toepassing op die praktiese punt.

Die A3 assessering dien as 'n siektetoets vir enige (slegs een) van die A1T1, A1T2 of A2 assesserings gemis deur die loop van die semester met geldige redes. Dus, indien 'n student al drie die assesserings (A1T1, A1T2 en A2) afgelê het tydens die semester, en 'n finale punt van 50% en hoër behaal het, slaag u die module skryf u nie die A3 assessering nie (dit is opsioneel in hierdie geval). Die A3 dek die hele sillabus.

Die A3 assessering sal ook dien as 'n addisionele assesseringsgeleentheid vir:

- studente wie nie die module geslaag het na die A2 nie, en wie se finale punt tussen 40 en 49% val. Hierdie studente kan steeds die module slaag na die A3, maar hulle punte sal beperk word tot 50%.
- enige student wat reeds die module geslaag het na die A2 maar hulle finale punt wil verbeter.

In beide hierdie gevalle sal die laagste toetspunt vervang word met die A3 punt.

Students MUST complete ALL compulsory assessments to pass the module – these assessments are thus mandatory!

Method of assessment	Description and Content	#	Allocated marks	Criteria and Status	Dates
Quizzes, Tutorial and Practical assessments	Weekly online or in-person assessments regarding the content of classes, the tutorial or practical.		20% of final mark	40% subminimum Compulsory assessments will be communicated. Other formative assessments are optional but do contribute to the mark for this component of the final mark	Weekly
A1T1 (Early assessment)	Topic: Biochemistry Scheduled invigilated evening assessment on campus.	1	Biochemistry: 80 marks	Compulsory assessment	28 March 17:30
A1T2 assessment	Topic: Cytology and Genetics. Scheduled invigilated evening assessment on campus.	1	Cytology: 45/80 marks Genetics: 35/80 marks	Compulsory assessment	2 May 17:30
A2 assessment	Topic: Genetics and Evolution. Scheduled invigilated assessment on campus.	1	Genetics: 26/80 marks Evolution: 54/80 marks	Compulsory assessment	5 June 09:00
A3 assessment	Sickness Test and additional assessment opportunity for all four submodules. Scheduled invigilated assessment on campus.	1	This assessment covers the entire syllabus: Biochemistry: 25/80 marks Cytology: 16/80 marks Genetics: 21/80 marks Evolution: 18/80 marks	Optional Additional assessment opportunity for most students	27 June 09:00

Please see the assessments and promotion chapter in the [SU Calendar Part 1 \(General\)](#) for institutional rules regarding assessments.

Studente MOET ALLE verpligte assesserings aflê om die module te slaag – sulke assesserings is dus verpligtend!

Metode van assessering	Beskrywing en Inhoud	#	Punte toegeken	Kriteria en Status	Datums
Quizzes, Tutoriaal en Praktiese assesserings	Weeklikse aanlyn of in-persoon assesserings wat handel oor die inhoud van die klasse, tutoriaal of prakties.		20% van die finale punt	40% subminimum Verpligte assesserings sal gekommunikeer word. Ander formatiewe assesserings is opsioneel maar dra steeds by tot hierdie komponent van die finale punt	Weekliks
A1T1 (Vroeë assessering)	Onderwerp: Biochemie Geskeduleerde aand assessering op kampus onder toesig.	1	Biochemie: 80 punte	Verpligte assessering	28 Maart 17:30
A1T2 assessering	Onderwerp: Sitologie en Genetika. Geskeduleerde aand assessering op kampus onder toesig.	1	Sitologie: 45/80 punte Genetika: 35/80 punte	Verpligte assessering	2 Mei 17:30
A2 assessering	Onderwerp: Genetika and Evolusie. Geskeduleerde assessering op kampus onder toesig.	1	Genetika: 26/80 punte Evolusie: 54/80 punte	Verpligte assessering	5 Junie 09:00
A3 assessering	Siektetoets en addisionele assesseringsgeleentheid vir al vier submodules. Geskeduleerde assessering op kampus onder toesig.	1	Hierdie assessering dek die hele sillabus: Biochemie: 25/80 punte Sitologie: 16/80 punte Genetika: 21/80 punte Evolusie: 18/80 punte	Opsioneel: Addisionele assesseringsgeleentheid vir die meeste studente	27 June 09:00

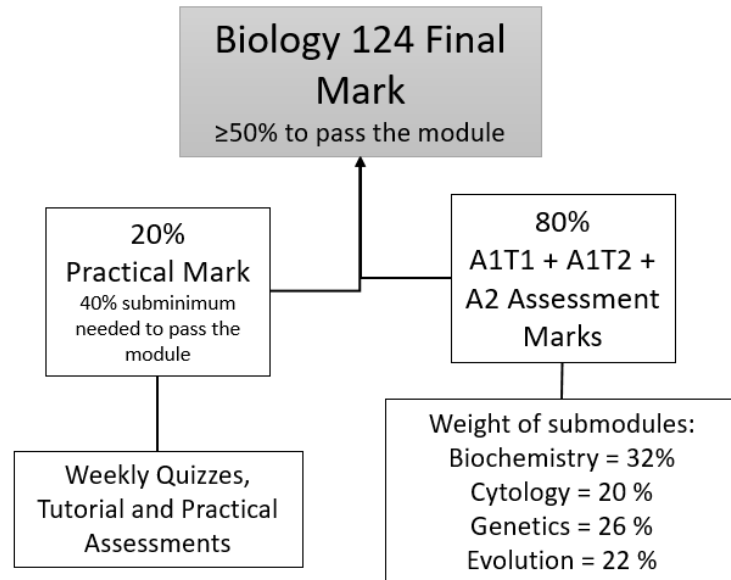
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Raadpleeg die hoofstuk oor assessering en promovering in [Deel 1 \(Algemeen\) van die US Jaarboek](#) vir institusionele reëls oor assesserings.

Calculation of final marks

You pass the module if:

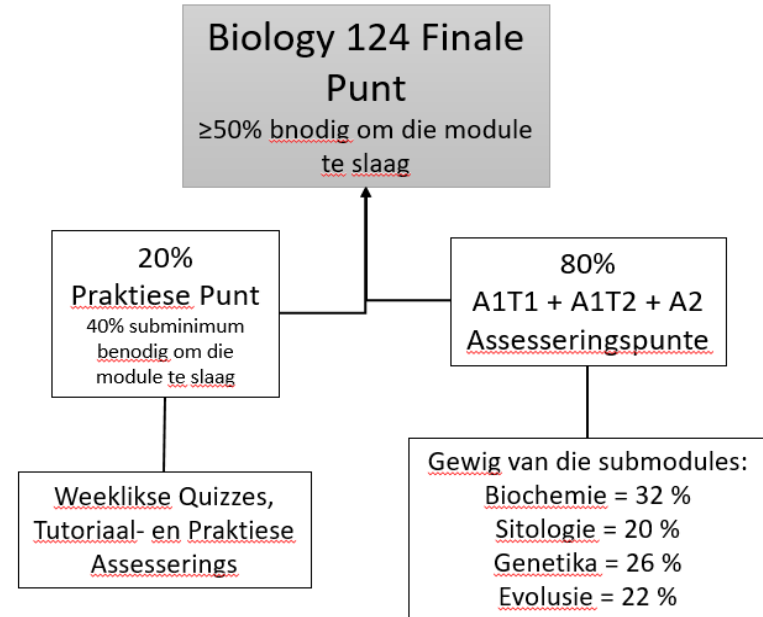
- Your final mark is 50% or more, AND
- You achieve a 40% subminimum for the practical component.



Berekening van finale punte

U slaag die module indien:

- U finale punt 50% en hoër is, EN
- U die 40% subminimum vir die praktiese komponent behaal het.



Absenteeism (Missed opportunities)

Please see the section 11 of the [SU Calendar Part 1 \(General\)](#) for the institutional rules regarding absence from classes and or tests.

Take note that for any absence from the university *for more than one* teaching, learning or assessment opportunity, for whatever reason, students need to apply for leave of absence from the Registrar's office.

If you are absent for exactly one teaching, learning or assessment opportunity you need to contact **Mrs Nel** (acnel@sun.ac.za) immediately and provide the appropriate evidence as stipulated in the calendar.

Afwesigheid (die misloop van 'n leergeleentheid)

Raadpleeg asseblief afdeling 11 in [Deel 1 \(Algemeen\) van die US Jaarboek](#) vir die institusionele reëls met betrekking tot afwesigheid van klasse en of toetse.

Neem kennis dat studente by die Registrateur moet aansoek doen vir verlof tot afwesigheid, vir watter rede ook al, van *meer as een* onderrig-, leer-, of assesseringsgeleentheid,

Indien jy afwesig is van presies een onderrig-, leer-, of assesseringsgeleentheid, moet jy onmiddellik vir **Mev Nel** (acnel@sun.ac.za) kontak en die toepaslike bewys van rede tot afwesigheid inhandig, soos uiteengesit in die Jaarboek.

Communication

The **announcement forum on the SUNLearn module page** is the only official platform that will be used to make announcements relevant to this module. Please check this regularly.

For communication with individual students, lecturers, support staff and peer-to-peer facilitators will only use students' official SUN email addresses.

Students are also requested to use their official **SUN email addresses** for all academic related communication to: **Mrs Nel at** (acnel@sun.ac.za).

Kommunikasie

Die **aankondigingsforum op die SUNLearn moduleblad** is die enigste amptelike platform wat gebruik sal word om aankondigings, wat relevant is vir hierdie module, te maak. Kontroleer dit asseblief gereeld.

Vir kommunikasie met individuele studente, sal dosente, steunpersoneel en eweknie-fasiliteerders slegs studente se amptelike SUN-e-posadresse gebruik.

Studente word ook versoek om hul amptelike **SUN-e-posadresse** te gebruik vir alle akademiese verwante kommunikasie te gebruik aan: **Mev Nel by** (acnel@sun.ac.za).

Addressing challenges

For any complaints, the first port of call is the class representative, Mrs Nel (acnel@sun.ac.za) or the lecturer. If not satisfactorily resolved, it can be escalated to the Head of Department or [Coordinator: Academic and Student Affairs](#).

Hantering van uitdagings

Vir enige klagtes, is die klasvertegenwoordiger, Mev Nel (acnel@sun.ac.za) of dosent die eerste plek om hulp te soek. Indien die probleem nie bevredigend opgelos word nie, kan dit na die Departementshoof of [Koördineerder: Akademiese- en Studentesake](#) verwys word.

Academic Misconduct

Academic misconduct includes plagiarism, collusion, cheating and fabrication as stipulated in the [Disciplinary code for students of Stellenbosch University](#).

Plagiarism is regarded as a serious offence. More serious cases are handled as set out in the [Stellenbosch University procedure for the investigation and management of allegations of plagiarism document](#). Less serious cases are dealt with by the module coordinator and respective department as set out by the procedures of the faculty.

Akademiese Wangedrag

Akademiese wangedrag sluit plagiaat, samespanning, bedrog en versinsel in, soos bepaal in die [Dissiplinêre kode vir studente van die Universiteit Stellenbosch](#).

Plagiaat word as 'n ernstige oortreding beskou. Ernstiger gevalle word hanteer soos uiteengesit in die [Universiteit Stellenbosch se dokument oor die prosedure vir die ondersoek en bestuur van bewerings van plagiaat](#). Minder ernstige gevalle word deur die modulekoördineerder en betrokke departement hanteer soos uiteengesit in die fakulteitsprosedures.

Repeaters

Students who have to repeat this module will be granted practical exemption if a practical mark of 50% and above was obtained in the previous year of studying this module. If not, then all the practical components and assessments will have to be repeated to pass the module.

However, you **have to apply for practical exemption** with Mrs Nel (acnel@sun.ac.za) **before** the end of February.

Herhalers

Studente wat hierdie module herhaal sal vrystelling van prakties verleen word indien 'n praktiese punt van 50% en hoër behaal was in die vorige jaar wat die module geneem was. Indien nie, sal die praktiese komponente en assesserings herhaal moet word om die module te slaag.

U moet egter **aansoek doen om praktiese vrystelling** by Mev Nel (acnel@sun.ac.za) **voor** die einde van Februarie.

2023 BIOLOGY 124: Lecture Calendar

WEEK	LECTURE	DATE AND TIME	Sub-Module
1	1	Mon 13 Feb. (08:00 and 12:00)	INTRODUCTIO N
	2	Wed 15 Feb. (08:00 and 09:00)	Biochemistry 1
	3	Thurs 16 Feb. (12:00) and Fri 17 Feb. (09:00)	Biochemistry 2
2	4	Mon 20 Feb. (08:00 and 12:00)	Biochemistry 3
	5	Wed 22 Feb. (08:00 and 09:00)	Biochemistry 4
	6	Thurs 23 Feb. (12:00) and Fri 24 Feb. (09:00)	Biochemistry 5
3	7	Mon 27 Feb. (08:00 and 12:00)	Biochemistry 6
	8	Wed 1 March (08:00 and 09:00)	Biochemistry 7
	9	Thurs 2 March (12:00) and Fri 3 March (09:00)	Biochemistry 8
4	10	Mon 6 March (08:00 and 12:00)	Biochemistry 9
	11	Wed 8 March (08:00 and 9:00)	Biochemistry 10
	12	Thurs 9 March (12:00) and Fri 10 March (09:00)	Biochemistry 11
5	13	Mon 13 March (08:00 and 12:00)	Cytology 1
	14	Wed 15 March (08:00 and 09:00)	Cytology 2
	15	Thurs 16 March (12:00) and Fri 17 March (09:00)	Cytology 3
6	16	Mon 20 March (08:00 and 12:00)	Cytology 4
	17	Wed 22 March (08:00 and 09:00)	Cytology 5
	18	Thurs 23 March (12:00) and Fri 24 March (09:00)	Cytology 6
	19	Mon 27 March (08:00 and 12:00)	Cytology 7

2023 BIOLOGIE 124: Lesing Kalender

WEEK	LESING	DATUM EN TYD	Sub-Module
1	1	Ma 13 Feb. (08:00 en 12:00)	INLEIDING
	2	Wo 15 Feb. (08:00 en 09:00)	Biochemie 1
	3	Do 16 Feb. (12:00) en Vr 17 Feb. (09:00)	Biochemie 2
2	4	Ma 20 Feb. (08:00 en 12:00)	Biochemie 3
	5	Wo 22 Feb. (08:00 en 09:00)	Biochemie 4
	6	Do 23 Feb. (12:00) en Vr 24 Feb. (09:00)	Biochemie 5
3	7	Ma 27 Feb. (08:00 en 12:00)	Biochemie 6
	8	Wo 1 Maart (08:00 en 09:00)	Biochemie 7
	9	Do 2 Maart (12:00) en Vr 3 Maart (09:00)	Biochemie 8
4	10	Ma 6 Maart (08:00 en 12:00)	Biochemie 9
	11	Wo 8 Maart (08:00 en 9:00)	Biochemie 10
	12	Do 9 Maart (12:00) en Vr 10 Maart (09:00)	Biochemie 11
5	13	Ma 13 Maart (08:00 en 12:00)	Sitologie 1
	14	Wo 15 Maart (08:00 en 09:00)	Sitologie 2
	15	Do 16 Maart (12:00) en Vr 17 Maart (09:00)	Sitologie 3
6	16	Ma 20 Maart (08:00 en 12:00)	Sitologie 4
	17	Wo 22 Maart (08:00 en 09:00)	Sitologie 5
	18	Do 23 Maart (12:00) en Vr 24 Maart (09:00)	Sitologie 6
7	19	Ma 27 Maart (08:00 en 12:00)	Sitologie 7
	20	Wo 29 Maart (08:00 en 09:00)	Genetika 1
	21	Do 30 Maart (12:00) en Vr 31 Maart 09:00	Genetika 2

7	20	Wed 29 March (08:00 and 09:00)	Genetics 1				
	21	Thurs 30 March (12:00) & Fri 31 March 09:00	Genetics 2				
RECESS 3-10 April				RESES 3-10 April			
8		Mon 10 April Public Holiday				Ma 10 April Publieke Vakansie	
	22	Wed 12 April (08:00 and 09:00)	Genetics 3	8	22	Wo 12 April (08:00 en 09:00)	Genetika 3
	23	No class on Thurs 13 April Fri 14 April (Monday timetable: 08:00 and 12:00)	Genetics 4		23	Geen klas op Do 13 April Vr 14 April (Maandag rooster: 08:00 en 12:00)	Genetika 4
9	24	Mon 17 April (08:00 and 12:00)	Genetics 5		24	Ma 17 April (08:00 en 12:00)	Genetika 5
	25	Wed 19 April (08:00 and 09:00)	Genetics 6	9	25	Wo 19 April (08:00 en 09:00)	Genetika 6
	26	Thurs 20 April (12:00) & Fri 21 April (09:00)	Genetics 7		26	Do 20 April (12:00) en Vr 21 April (09:00)	Genetika 7
10	27	Mon 24 Aril (08:00 and 12:00)	Genetics 8		27	Ma 24 Aril (08:00 en 12:00)	Genetika 8
	28	Wed 26 April (08:00 and 09:00)	Genetics 9	10	28	Wo 26 April (08:00 en 09:00)	Genetika 9
		Thurs 27 April Public Holiday, No class on Fri 28 April				Do 27 April Publieke Vakansie, Geen klas op Vr 28 April	
11		Mon 1 May Public Holiday				Ma 1 Mei Publieke Vakansie	
	29	Wed 3 May (08:00 and 09:00)	Evolution 1	11	29	Wo 3 Mei (08:00 en 09:00)	Evolusie 1
	30	Thurs 4 May (12:00) & Fri 5 May (09:00)	Evolution 2		30	Do 4 Mei (12:00) en Vr 5 Mei (09:00)	Evolusie 2
12	31	Mon 8 May (08:00 and 12:00)	Evolution 3		31	Ma 8 Mei (08:00 en 12:00)	Evolusie 3
	32	Wed 10 May (08:00 and 09:00)	Evolution 4	12	32	Wo 10 Mei (08:00 en 09:00)	Evolusie 4
	33	Thurs 11 May (12:00) and Fri 12 May (09:00)	Evolution 5		33	Do 11 Mei (12:00) en Vr 12 Mei (09:00)	Evolusie 5
13	34	Mon 15 May (08:00 and 12:00)	Evolution 6		34	Ma 15 Mei (08:00 en 12:00)	Evolusie 6
	35	Wed 17 May (08:00 and 09:00)	Evolution 7	13	35	Wo 17 Mei (08:00 en 09:00)	Evolusie 7
	36	Thurs 18 May (12:00) & Fri 19 May (09:00)	Evolution 8		36	Do 18 Mei (12:00) en Vr 19 Mei (09:00)	Evolusie 8