



Stellenbosch

UNIVERSITY
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UNIVERSITEIT

SCIENCE

EYENZULULWAZI NGEZENDALO

NATUURWETENSKAPPE

BDE 342: Intergrative Marine Science

This module is presented as five sections that progress from understanding the physical, chemical, geological and biological nature of marine systems to the utilisation, management and protection of marine products systems. Exploration of the physical marine environment focusses specifically on ocean climate and circulation, tides and waves, and coastal and estuarine processes. This is followed by the chemical section, which examines the properties of seawater, focussing on salinity and dissolved gases. The geological section considers plate tectonics, marine provinces and marine sediments. The biological section explores biological life in oceans and adaptations of marine organisms to the different marine environments; productivity and how this feeds into energy and food webs; and benthic, pelagic, island, estuarine and mangrove systems. The final section explores the historical and contemporary reliance of humans on the ocean; consequences of harvesting marine products; the development of marine protected areas and how this often leads to conflict with people who rely on the ocean for their livelihoods or recreation. Throughout the module we will explore skills related to understanding and measuring different processes.

BDE 342: Intergratiewe Mariene Wetenskap

Hierdie module word as vyf afdelings aangebied wat vorder vanaf die begrip van die fisiese, chemiese, geologiese en biologiese aard van mariene stelsels tot die benutting, bestuur en beskerming van mariene produktstelsels. Verkenning van die fisiese mariene omgewing fokus spesifiek op oseaanklimaat en sirkulasie, getye en golwe, en kus- en riviermondingsprosesse. Dit word gevolg deur die chemiese afdeling, wat die eienskappe van seewater ondersoek, met die fokus op soutgehalte en opgeloste gasse. Die geologiese afdeling oorweeg plaattektoniek, mariene provinsies en mariene sedimente. Die biologiese afdeling ondersoek biologiese lewe in oseane en aanpassings van mariene organismes by die verskillende mariene omgewings; produktiwiteit en hoe dit in energie en voedselwebbe invloei; en bentiese, pelagiese, eiland-, riviermondings- en mangrovestelsels. Die laaste afdeling ondersoek die historiese en kontemporêre afhanklikheid van mense op die see; gevolge van die oes van mariene produkte; die ontwikkeling van beskermde mariene gebiede en hoe dit dikwels lei tot konflik met mense wat op die see staatmaak vir hul lewensbestaan of ontspanning. Dwarsdeur die module sal ons vaardighede verken wat verband hou met die verstaan en meet van verskillende prosesse.

Module summary

Name	BDE 342: Intergrative Marine Science
Duration	2nd Semester
Academic commitment*	16 credits = 160 notional hours 6 hours contact time per week
Scheduled learning opportunities	3 lectures per week 1 practical per week
Assessment option	Option 4
Language option	Option 3
Mode of offering	Face-2-Face
Corequisites / Prerequisites / Pass prerequisites**	There are no prerequisites for this course

***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	BDE 342: Intergratiewe Mariene Wetenskap
Duur	2de Semester
Akademiese verbintenis*	16 krediete = 160 veronderstelde ure 6 kontak ure per week
Geskeduleerde leergeleenthede	3 lesings per week 1 prakties elke week
Assesseringsopsie	Opsie 4
Taalopsie	Opsie 3
Modus van aanbieding	In persoon
Neweveistes / Voorvereistes / Slaagvoorvereistes**	Daar is geen voorvereistes vir hierdie kursus nie

***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

- Explain and discuss how climate influences ocean currents, and other oceanographic processes.
- Describe the chemical composition of seawater including its properties and the various factors that affect its composition.
- Define and describe key geological processes underpinning ocean formation and plate tectonics.
- Apply knowledge of biological marine life to broadly group organisms according to taxonomy and their ecological roles in the marine environment.
- Discuss biological concepts such as productivity, trophic webs, carbon storage and the factors that influence these processes.
- Differentiate between a variety of marine environments.
- Critically assess the role of humans in the marine ecosystem.

Uitkomst

- Verduidelik en bespreek hoe klimaat seestrome en ander oseanografiese prosesse beïnvloed.
- Beskryf die chemiese samestelling van seewater insluitend sy eienskappe en die verskeie faktore wat die samestelling daarvan beïnvloed.
- Definieer en beskryf sleutelgeologiese prosesse wat seevorming en plaattektoniek onderlê.
- Kennis van biologiese seelewe toe te pas op 'n breë groepering van organismes volgens taksonomie en hul ekologiese rolle in die mariene omgewing.
- Bespreek biologiese konsepte soos produktiwiteit, trofiese webbe, koolstofberging en die faktore wat hierdie prosesse beïnvloed.
- Onderskei tussen 'n verskeidenheid mariene omgewings.
- Beoordeel die rol van mense in die mariene ekosisteem krities.

Scheduled learning opportunities

The official timetable indicating all scheduled learning opportunities and their allocated venues can be accessed via [My.SUN](#).

Lectures

This course takes place over a period of 13 weeks. Lectures will take place in lecture halls 3005 and 2020 in the Natural Sciences Building during the lecture slots [Mondays (09h10-10h00), Wednesdays (12h10-13h00) and Thursdays (08h10-09h00)].

Practicals

There are 13 practical sessions, which will be held on Fridays (14h10-17h00) in the venues listed in the practical schedule, in the Natural Sciences Building,

Field Trip

There will be a **compulsory field excursion to False Bay on Saturday 03 August**, which forms part of the practical component of the course. We will leave from the front of the Natural Sciences Building at 08:00 on and will return by 17:00.

Study material

Recommended reading:

- Branch, G., Branch, M. 2018. Living shores: Interacting with southern Africa's marine ecosystems. 2nd edition, Penguin Random House South Africa (Pty) Ltd. 336 pp (Print ISBN: 9781431700813; ePublication ISBN: 9781775846307)
- Trujillo, A, Thurman, H. 2019. Essentials of Oceanography. 13th edition. Pearson, 624 pp. ISBN-10: 013489152X; ISBN-13: 978-0134891521
- Aspects of the course are based on the current scientific literature. Selected research papers will be on SUNLearn

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/>

Geskeduleerde leergeleenthede

Die amptelike rooster wat al die geskeduleerde leergeleenthede en die toegewysde lokale aandui, is beskikbaar by [My.SUN](#).

Lesings

Hierdie kursus vind plaas oor 'n tydperk van 13 weke. Lesings vind plaas in lesingsale 3005 en 2020 in die Natuurwetenskappegebou tydens die lesinggleuwe [Maandae (09h10-10h00), Woensdae (12h10-13h00) en Donderdae (08h10-09h00)].

Praktika

Daar is 13 praktiese sessies, wat op Vrydae (14h10-17h00) in die lokale gelys in die praktiese skedule, in die Natuurwetenskappegebou gehou sal word.

Veldekskursie

Daar sal 'n **verpligte velduitstappie na Valsbaai op Saterdag 03 Augustus** wees wat deel vorm van die praktiese komponent van die kursus. Ons vertrek om 08:00 vanaf die voorkant van die Natuurwetenskappegebou en sal terug wees teen 17:00.

Studiemateriaal

Aanbevole leeswerk:

- Branch, G., Branch, M. 2018. Living shores: Interacting with southern Africa's marine ecosystems. 2nd edition, Penguin Random House South Africa (Pty) Ltd. 336 pp (Print ISBN: 9781431700813; ePublication ISBN: 9781775846307)
- Trujillo, A, Thurman, H. 2019. Essentials of Oceanography. 13th edition. Pearson, 624 pp. ISBN-10: 013489152X; ISBN-13: 978-0134891521
- Aspekte van die kursus is gebaseer op die huidige wetenskaplike literatuur. Geselekteerde navorsingsvraestelle sal op SUNLearn wees

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

Course co-ordinator: Prof. Tammy Robinson-Smythe (Room 2054; e-mail: trobins@sun.ac.za)

Prof. Pedro Monteiro (Room 2039C, e-mail: pmsmonteiro@sun.ac.za)

Prof. Carol Simon (Room 2044; e-mail: csimon@sun.ac.za)

Dr Nasreen Peer (Room 2048; e-mail: npeer@sun.ac.za)

Course assistant

Janette Hutton (Room 1006, e-mail: janette@sun.ac.za)

Dosente

Kursus koördineerder: Prof. Tammy Robinson-Smythe (Kamer 2054; epos: trobins@sun.ac.za)

Prof. Pedro Monteiro (Kamer 2039C, epos: pmsmonteiro@sun.ac.za)

Prof. Carol Simon (Kamer 2044; epos: csimon@sun.ac.za)

Dr Nasreen Peer (Kamer 2048; epos: npeer@sun.ac.za)

Kursusassistent

Janette Hutton (Kamer 1006, epos: janette@sun.ac.za)

Assessment

This module follows assessment option 4. Please see the [Faculty of Science's assessment guidelines](#) for more details.

Method of assessment	Description	#	Allocated marks	Dates	Criteria
Test 1	This is the A1 Assessment and will be written during the practical slot	1	25%	30 August, 14h00	All tests and assignments must be written and handed in to pass the module, AND a final mark of at least 50% must be obtained.
Assignments	Report 1 (carbonate chemistry)	2	10%	16 August	
	Report 2 (extreme thermal events)	3	10%	23 August	
	Report 3 (sediment)	4	10%	2 September	
	Popular article	5	10%	11 October	
	Poster	6	10%	25 October	
Final test	The final test will be written during the exam period	7	25%	29 October, 14h00	

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

Assesserings

Hierdie module volg assesseringsopsie 4. Raadpleeg die [Fakulteit Natuurwetenskappe se assesseringsriglyne](#) vir meer besonderhede.

Metode van assessering	Beskrywing	#	Punte toegeken	Datums	Kriteria
Toets 1	Dit is die A1-assessering en sal tydens die prakties geskryf word	1	25%	30 Augustus, 14h00	Alle toetse en werkopdragte moet geskryf en ingehandig word om die module te slaag. EN 'n finale punt van minstens 50% moet behaal word.
Take	Verslag 1 (karbonaatchemie)	2	10%	16 Augustus	
	Verslag 2 (uiterste termiese gebeure)	3	10%	23 Augustus	
	Verslag 3 (sediment)	4	10%	2 September	
	Gewilde artikel	5	10%	11 Oktober	
	Plakkaat	6	10%	25 Oktober	
Finaletoets	Die finale toets sal tydens die eksamenperiode geskryf word	7	25%	29 Oktober, 14h00	

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

Calculation of final marks

Test 1 (25%)
 Report 1 (extreme thermal events) (10%)
 Report 2 (carbonate chemistry) (10%)
 Report 3 (sediment) (10%)
 Popular article (10%)
 Poster (10%)
 Final test (25%)

Final mark100%

Berekening van finale punte

Toets 1 (25%)
 Verslag 1 (uiterste termiese gebeure) (10%)
 Verslag 2 (karbonaatchemie) (10%)
 Verslag 3 (sediment) (10%)
 Gewilde artikel (10%)
 Plakkaat (10%)
 Finale toets (25%)

Finale punt..... 100%

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 consult your lecturer immediately and provide the appropriate evidence as stipulated in the calendar.

Attendance of the fieldtrip is compulsory.

In instances where a deadline or practical is missed, an original doctor's certificate is required, within one week. If a practical is missed for medical reasons, the student still needs to complete the practical in their own time.

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 die betrokke dosent onmiddellik kontak en die toepaslike bewys van rede tot afwesigheid inhandig, soos uiteengesit in die Jaarboek.

Bywoning van die veldekskursie is verpligtend.

In gevalle waar 'n sperdatum of prakties gemis word, word 'n oorspronklike doktersertifikaat binne een week vereis. Indien 'n prakties weens mediese redes gemis word, moet die student steeds die prakties in sy eie tyd voltooi.

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 the course assistant or relevant lecturers (emails listed above)

Addressing challenges

For any complaints, the first port of call is the class representative, the course assistant or the relevant lecturer. If not satisfactorily resolved, it can be escalated to the Head of Department or [Coordinator: Academic and Student Affairs](#).

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** vir alle akademiese verwante kommunikasie te gebruik na aan die kursusassistent of relevante dosente (e-posse hierbo gelys)

Hantering van uitdagings

Vir enige klagtes, is die klasvertegenwoordiger 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](#). The [SU Policy on Plagiarism](#) defines plagiarism as: "The use of the ideas or material of others [including AI generative tools, such as ChatGPT or Bing] without [appropriate] acknowledgement, or the re-use of one's own previously evaluated or published material without acknowledgement (self-plagiarism)." Such acknowledgement would include referencing the source of previously expressed ideas or published materials, or acknowledging the contribution of e.g. the AI tool, as stipulated for a specific assessment or assignment.

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](#).

Die [US Plagiaatbeleid](#) definieer plagiaat as: "Die gebruik van ander se idees of materiaal [insluitend KI generatiewe instrumente, soos ChatGPT of Bing] sonder [toepaslike] erkenning, of die hergebruik van 'n persoon se eie voorheen geëvalueerde werk of gepubliseerde materiaal sonder erkenning (selfplagiaat)." Sodanige erkenning sal insluit die verwysing na die bron van voorheen uitgedrukte idees of gepubliseerde materiaal, of die erkenning van die bydrae van bv. die KI-instrument, soos gestipuleer vir 'n spesifieke assessering of opdrag.

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.

Lecture programme: This course consists of 13 weeks of lectures held on Mondays (09h10 - 10h00, 3005), Wednesdays (12h10 - 13h00, 2020) and Thursdays (08h10 - 09h00, 2020)

Week	Date		Lecture	Content	Lecturer
1	22-26 Jul	Mon	1	Introduction	TBR
		Wed	2	Physical and biogeochemical properties of sea water	PM
		Thurs	3	Air – sea CO ₂ and Oxygen fluxes	PM
2	29 Jul - 2 Aug	Mon	4	Global circulation: how it frames regional oceanography	PM
		Wed	5	Regional Oceanography: Benguela, Agulhas and Southern Ocean Systems	PM
		Thurs	6	Regional primary production and carbon cycle	PM
3	5-9 Aug	Mon	7	Future: can ocean biology be tinkered to mitigate global warming?	PM
		Wed	8	Understanding tides	TBR
		Thurs	9	Ocean waves	TBR
4	12-16 Aug	Mon	10	Coastal processes	TBR
		Wed	11	Understanding extreme thermal events	TBR
		Thurs	12	Extreme thermal events: the South African context	TBR
5	19-23 Aug	Mon	13	Plate tectonics	TBR
		Wed	14	Marine geology	TBR
		Thurs	15	Ocean sediments	TBR
6	26-30 Aug	Mon	16	Life in the ocean	TBR
		Wed	17	Life in the ocean	TBR
		Thurs	18	Primary productivity I	TBR
7	2-6 Sep	Mon	19	Primary productivity II	TBR
		Wed	20	Energy and food webs	TBR
		Thurs	21	Guest lecture - Hendre van Rensberg: Stable isotope analysis	TBR
7-15 Sept: University Recess					
8	16-20 Sep	Mon	22	Benthic subsystems	CAS
		Wed	23	Benthic subsystems	CAS
		Thurs	24	Benthic subsystems	CAS

9	23-27 Sep	Mon	25	Guest lecture – Erin Ross-Marsh: Introduction to marine acoustics	TBR
		Wed	26	Multivariate analyses and community structure	TBR
		Thurs	27	Pelagic subsystems: Physical adaptations	TBR
10	30 Sep - 4 Oct	Mon	28	Pelagic subsystems: Behavioural adaptations	TBR
		Wed	29	Pelagic subsystems: ESO events	TBR
		Thurs	30	Pelagic subsystems: Emerging technology	TBR
11	7-11 Oct	Mon	31	Islands: formation, colonisation, biodiversity	CAS
		Wed	32	Estuaries: zonation, functions	CAS
		Thurs	33	CVEs	NP
12	14-18 Oct	Mon	34	People and the Sea - an introduction	NP
		Wed	35	Marine livelihoods	NP
		Thurs	36	The Sustainable Blue Economy	NP
13	21-25 Oct	Mon	37	MPAs in a social context	NP
		Wed	38	People and the Sea - the future	NP
		Thurs	39	Course wrap-up	NP

Practical programme: Practicals are held on Friday afternoons from 14h10 - 17h00 in various venues. **ALL** practicals are compulsory.

Date	Topic	Lecturer	Venue
26-Jul	Prep for field trip	TBR	1030
02-Aug	No prac	TBR	No Prac
03-Aug	Field trip to False bay - COMPULSORY	ALL	
05-Aug	Carbonate chemistry Report 1	TBR	1060
16-Aug	Thermal extremes. Report 2	TBR	VDS 3051
23-Aug	Sediment analysis prac. Report 3	TBR	1060
30-Aug	Test 1	TBR	1030
06-Sep	Reading and prep work for next weeks prac	TBR	No Prac
20-Sep	ID spp on the plates	CAS	1060

27-Sep	Analysis of community data	TBR	VDS 3051
04-Oct	Popular article: introduction	TBR	1030
11-Oct	Finalise and submit popular article	CAS	No Prac
18-Oct	Mapping the future	NP	VDS 3051
25-Oct	Mapping the future	NP	1030

(VDS 3051 = Van Der Sterr 3051)

Lesingsprogram: Hierdie kursus bestaan uit 13 weke se lesings gehou op Maandae (09h10 - 10h00, 3005), Woensdae (12h10 - 13h00, 2020) en Donderdae (08h10 - 09h00, 2020)

Week	Datum		Lesing	Inhoud	Dosent
1	22-26 Jul	Maan	1	Inleiding	TBR
		Woens	2	Fisiese en biogeochemiese eienskappe van seewater	PM
		Don	3	Lug – see CO ₂ en suurstof vloeie	PM
2	29 Jul - 2 Aug	Maan	4	Globale sirkulasie: hoe dit streekoseanografie omraam	PM
		Woens	5	Streekoseanografie: Benguela-, Agulhas- en Suidelike Oseaan-stelsels	PM
		Don	6	Plaaslike primêre produksie en koolstofsiklus	PM
3	5-9 Aug	Maan	7	Toekoms: kan oseaanbiologie gepeuter word om aardverwarming te versag?	PM
		Woens	8	Verstaan van getye	TBR
		Don	9	Oseaan golwe	TBR
4	12-16 Aug	Maan	10	Kusprosesse	TBR
		Woens	11	Verstaan van uiterste termiese gebeure	TBR
		Don	12	Ekstreme termiese gebeure: die Suid-Afrikaanse konteks	TBR
5	19-23 Aug	Maan	13	Plaattektoniek	TBR
		Woens	14	Mariene geologie	TBR
		Don	15	Oseaan sedimente	TBR
6	26-30 Aug	Maan	16	Lewe in die see	TBR
		Woens	17	Lewe in die see	TBR
		Don	18	Primêre produktiwiteit I	TBR

7	2-6 Sep	Maan	19	Primêre produktiwiteit II	TBR
		Woens	20	Energie en voedselwebbe	TBR
		Don	21	Gaslesing - Hendre van Rensberg: Stabiele isotoopanalise	TBR
7-15 Sept: Universiteits Vakansie					
8	16-20 Sep	Maan	22	Bentiese substelsels	CAS
		Woens	23	Bentiese substelsels	CAS
		Don	24	Bentiese substelsels	CAS
9	23-27 Sep	Maan	25	Gaslesing – Erin Ross-Marsh: Inleiding tot mariene akoestiek	TBR
		Woens	26	Meerveranderlike ontledings en gemeenskapstruktuur	TBR
		Don	27	Pelagiese sub sisteem: Fisiese aanpassings	TBR
10	30 Sep - 4 Okt	Maan	28	Pelagiese sub sisteem: Gedragsaanpassings	TBR
		Woens	29	Pelagic subsystems: ESO events	TBR
		Don	30	Pelagiese substelsels: ESO-gebeure	TBR
11	7-11 Okt	Maan	31	Eilande: vorming, kolonisasie, biodiversiteit	CAS
		Woens	32	Riviermondings: sonering, funksies	CAS
		Don	33	CVEs	NP
12	14-18 Okt	Maan	34	Mense en die see - 'n inleiding	NP
		Woens	35	Mariene lewensbestaan	NP
		Don	36	Die Volhoubare Blou Ekonomie	NP
13	21-25 Okt	Maan	37	MPA's in 'n sosiale konteks	NP
		Woens	38	Mense en die see - die toekoms	NP
		Don	39	Kursus afsluiting	NP

Praktiese program: Prakties word op Vrydagmiddae vanaf 14h10 - 17h00 in verskeie lokale gehou. **ALLE** praktika is verpligtend.

Date	Topic	Lecturer	Venue
26-Jul	Vorbereiding vir veldekskursie	TBR	1030
02-Aug	Geen prakties	TBR	Geen prakties
03-Aug	Velduitstappie na Valsbaai - VERPLIGTEND	ALL	
05-Aug	Karbonaatchemie. Verslag 1	TBR	1060
16-Aug	Termiese uiterstes. Verslag 2	TBR	VDS 3051
23-Aug	Sediment analise prak. Verslag 3	TBR	1060
30-Aug	Toets 1	TBR	1030
06-Sep	Lees en voorbereidingswerk vir die volgende week	TBR	Geen prakties
20-Sep	ID spp op die plate	CAS	1060
27-Sep	Ontleding van gemeenskapsdata	TBR	VDS 3051
04-Oct	Gewilde artikel: inleiding	TBR	1030
11-Oct	Finaliseer en dien gewilde artikel in	CAS	Geen prakties
18-Oct	Kartering van die toekoms	NP	VDS 3051
25-Oct	Kartering van die toekoms	NP	1030

(VDS 3051 = Van Der Sterr 3051)