

Hydrology and Water Quality

Semester: 2023-A

Desalination and Water Treatment

A

Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-0153	Dr. Chris Arnush, Dr. Scott Hansen	Writing a Scientific Paper	2	Tue	13:15-15:00	Sede Boqer	Water Inst.	15	Students are required to complete the course in their second semester of studies
470-2-0100	prof. Roi Gazit and Dr. Shira Ovadia	The Care and Use of Animals in Research	0						MANDATORY for Students Who Work with Animals once per degree
900-5-2002	Online Program	Training in Chemical & Biological Safety	0						MANDATORY for Students Who Work in Chemical and Biological Labs (Students should take the course every year)
900-5-5001	Online Program	Educational Software on Getting to Know the Law for the Prevention of Sexual Harassment	0						MANDATORY for all students on the first year

B Core Courses: Students are required to complete 13 credits*.

*** Students who previously completed courses that were similar/equivalent to certain courses listed above are required to complete the remainder of the required core course credits by enrolling in courses either from the list of Mandatory Core Courses (C) or from the list of Elective Courses (D) or from a combination of both (with the approval of the student's supervisor and the chairperson of the teaching committee).**

Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-0016	Dr. Roy Bernstein	Physicochemical Technologies for Water Treatment	2	Mon	14:15-16:00	Sede Boqer	Water Inst.	Seminar Room	Frontal Exam

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Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-5033	Prof. Avraham Beer	Introduction to Desalination Processes	3	Thu	12:15 - 15:00	Sede Boqer	Water Inst.	Seminar Room	
001-2-5059	Prof. Osnat Gillor	Water Microbiology	3	Thu	09:15-12:00	Sede Boqer	School	1	
001-2-5159	Prof. Osnat Gillor	Introduction to Microbiology	1						A semi concentrated course during the second week of the first semester for non-biologists who take the 001-2-5059 Water Microbiology course .

C Seminars and Thesis Writing -- Mandatory Courses: Students are required to attend Departmental Seminar 4 tiimes (one seminar per semester).

Students are required to present two seminars (one student seminar per year).

In the third and fourth semesters, students must register for Thesis Writing.

Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-1000		Thesis Writing - Continuation	0						Mandatory for students on study extension
001-2-1011		Writing Thesis - Continuation	0						Mandatory for students on study extension
001-2-5555	Dr. Avner Ronen (Coordinator)	Departmental Seminar	0	Wed	13:00-14:00	Sede Boqer	Old Admin. Build.	Seminar Room	Mandatory each semester. 4 times during the degree
001-2-9991		Thesis Writing - A	6						Mandatory for students on their 3rd semester
001-2-9992		Thesis Writing -B	6						Mandatory for students on their 4rd semester

D Mandatory Core Courses Within the Track of Study: Students are required to complete at least 5 credits*.

*** Mandatory Core Courses can be also selected as Elective Courses (on top of the required 5 credits).**

Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
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Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-5028	Prof. Moshe Herzberg	Microbial Biofilms in Water and Wastewater Treatment Processes (prerequisite: Introduction to Microbiology)	2	Tue	15:15-17:00	Sede Boqer	Water Inst.	Seminar Room	
001-2-5033	Prof. Avraham Beer	Introduction to Desalination Processes	3	Thu	12:15 - 15:00	Sede Boqer	Water Inst.	Seminar Room	

E Elective Courses: Students are required to complete at least 5 credits.

The student is allowed to select other courses that are related to the area of his/her research with the approval of the supervisor.

Elective Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-0017	Prof. Roni Kasher	Polymer Science and Polymeric Membranes	3	Mon	11:15-14:00	Sede Boqer	Water Inst.	Seminar Room	
001-2-2015	Prof. Dina Zilberg, Prof. Amit Gross	Introduction to Aquaculture	3	Tue	12:15-15:00	Sede Boqer	Biology	136	
001-2-2017	Prof. Simon Barak	Plant Perception, Transduction and Response to Environmental Signals (limited to 10 students)	2	Thu	10:15-12:00	Sede Boqer	Biology	32	
001-2-2036	Prof. Gideon Grafi	Molecular Biology and Epigenetics	2	Sun	08:30-10:00	Sede Boqer	Biology	32	Home Exam
001-2-2038	Prof. Naftali Lazarovitch	Soil Physics	3	Tue	15:15-18:00	Sede Boqer	Biology	32	Home Exam
001-2-2040	Prof. Gideon Grafi	Lab Course in Epigenetics	4	12-16.02.2023					A five-day concentrated course offered during the fall break
001-2-2046	Prof. Aaron Fait	Analysis of Biological Networks	2.5	Wed	08:30-11:00	Sede Boqer	Biology	136	
001-2-3001	Prof. Ariel Novoplansky	Evolutionary Ecology of Phenotypic Plasticity. Prerequisite: Introduction to Ecology or Introduction to Biology or Equivalent Courses	3	Tue	17:15-20:00	Sede Boqer	Biology	136	

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Elective Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-3021	Prof. Itamar Giladi	Biostatistics: Class (can be completed during the program)	3	Tue	08:30-10:00	Sede Boqer	Biology	32	Home Exam.*0 credit points for students in the Ecology and Nature Conservation department. Limited to 17 students
001-2-3021 EX	Prof. Itamar Giladi	Biostatistics: Exersice (can be completed during the program)		Wed	09:15-11:00	Sede Boqer	School	Computer room	Home Exam.*0 credit points for students in the Ecology and Nature Conservation department. Limited to 17 students
001-2-3079	Prof. Ariel Novoplansky	Scientific Presentation (Group A)	2	Wed	11:15-13:00	Sede Boqer	Biology	32	
001-2-3079 GB	Prof. Ariel Novoplansky	Scientific Presentation (Group B)	2	Wed	13:15-15:00	Sede Boqer	Biology	32	
001-2-4012	Prof. Isaak Rubinstein	Electro-Diffusion of Ions and Membrane Desalination Processes	3						schedule will be coordinated between the lecturer and the students
001-2-4022	Prof. Ehud Meron	Pattern Formation and Spatial Ecology	3	Wed	15:15-18:00	Sede Boqer	Physics	Seminar Room	
001-2-5029	Prof. Noam Weisbrod	Rural Water Development)	2	Mon	16:15-18:00	Sede Boqer	Water Inst.	Seminar Room	(minimum 12 students)
001-2-5030	Prof. Nurit Agam	Hydrometeorology	3	Wed	15:00-17:45	Sede Boqer	Biology	32	
001-2-5055	Prof. Naftali Lazarovitch, Prof. Ofer Dahan	Operation and Analysis of Environmental Monitoring Systems	1	19-21.02.2023	09:00-14:00	Sede Boqer			A semi concentrated course offered during the FALL break. Registration period of the spring semester
001-2-5066	Dr. Scott K. Hansen	Introduction to Scientific Computing with Python	3	Tue	10:15-13:00	Sede Boqer	Water Inst.	Seminar Room	

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Elective Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-5068	Dr. Oded Nir	Aqueous Chemistry Modeling with PHREEQC	2	26.02-02.03.23	08:30 - 18:00	Sede Boqer	Water Inst.	Seminar Room	Concentrated workshop offered during the fall break
001-2-5069	MOOC	Water & the Environment: Current challenges and solutions	3						Online course
205-2-5021	Prof. Moshe Kiflawi	Methods in Ecology	3	20-23.02, 26.02-01.03.23		Sede Boqer	AKIS	Computer lab	An eight-day concentrated course offered during the Fall break in Sede Boqer 20-23.02.2023 + 26.02-01.03.2023

F General Courses:

Students are required to complete at least 4 credits.

Elective Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-1200	Prof. Simon Barak & Dr. Buzi Raviv	BGU Radio Academy – Podcast production course	2	12-16.02.2023					A five day concentrated course offered during the fall break
001-2-3001	Prof. Ariel Novoplansky	Evolutionary Ecology of Phenotypic Plasticity. Prerequisite: Introduction to Ecology or Introduction to Biology or Equivalent Courses	3	Tue	17:15-20:00	Sede Boqer	Biology	136	
001-2-3079	Prof. Ariel Novoplansky	Scientific Presentation (Group A)	2	Wed	11:15-13:00	Sede Boqer	Biology	32	
001-2-3079 GB	Prof. Ariel Novoplansky	Scientific Presentation (Group B)	2	Wed	13:15-15:00	Sede Boqer	Biology	32	
001-2-4016	Dr. Leah Orlovsky	Geography of Desertification	2	Sun	12:15-14:00	Sede Boqer	Physics	1	
001-2-4029	Prof. Yosef Ashkenazy	Introduction to statistics and probability using Python	3	Mon	10:15 -13:00	Sede Boqer	Physics	Seminar Room	