# Hydrology and Water Quality

# Semester: 2024-A Desalination and Water Treatment

Α

## Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
	Dr. Chris Arnush, Dr. Scott Hansen	Writing a Scientific Paper	2	Tue	13:15-15:00	Sede Boqer	Water Inst.		Students are required to complete the course in their second semester of studies (or 3rd semester)
	prof. Roi Gazit and Dr. Shira Ovadia	The Care and Use of Animals in Research	0			Online program			
900-5-2002	Online Program	Training in Chemical & Biological Safety	0			Online program			
900-5-5001	Online Program	Educational Software on Getting to Know the Law for the Prevention of Sexual Harassment	0			Online program			

**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	Prof. Roy Bernstein	Physicochemical Technologies for Water Treatment	2	Mon	14:15-16:00	Sede Boqer	Water Inst.	Seminar Room	Frontal Exam
001-2-5059	Prof. Osnat Gillor	Water Microbiology	3	Sunda y	12:15-15:00	Sede-Boqer	Water Institute	Seminar Room	

### Mandatory Courses

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-5159	Prof. Osnat Gillor	Introduction to Microbiology	1						A semi intensive course for non-biologists who take the 001-2-5059 Water Microbiology course . Schedule will be coordinate between the students and the lecturer

C Seminars and Thesis Writing -- Mandatory Courses: Students are required to attend Departmental Seminar 4 tilmes (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 extenstion
	Dr. Avner Ronen (Coordinator)	Departmental Seminar	0	Wed	13:00-14:00	Sede Boqer	Old Admin. Build.	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
001-2-5028	Prof. Moshe	Microbial Biofilms in Water and Wastewater	2	Tue	15:15-17:00	Sede Boqer	Water Inst.	Seminar	
	Herzberg	Treatment Processes (prerequisite:						Room	
		Introduction to Microbiology)							

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 Frontal Exam Room
001-2-0022	Dr. Anat Bernstein	Stable Isotope Application in Contaminant Hydrology	2	Wed	08:30-10:00	Sede Boqer	Water Inst.	Seminar Frontal Exam Room
001-2-0027	Prof. Shai Arnon	Flow and water quality in streams: Theory and practice	2	Sun	10:15-12:00	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	Water Inst.	10
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	17- 21.03. 2024		Sede Boqer	Biology	136 A five-day intensive course offered during the fall break
001-2-2046	Prof. Aaron Fait	Analysis of Biological Networks	2.5	Wed	13:00-16:00	Sede Boqer	Biology	136
001-2-3021	Prof. Itamar Giladi	Biostatistics: Class (can be completed during the program)	3	Tue	08:30-10:00	Sede Boqer	Biology	32 Final exam in a computer lab.*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 Final exam in a room computer lab.*0 credit points for students in the Ecology and Nature Conservation department. Limited to 17 students

### **Elective Courses**

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
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
001-2-5029	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	136	
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	
001-2-5068	Prof. Oded Nir	Aqueous Chemistry Modeling with PHREEQC	2	07- 12.04. 2024	09:00-15:00	Sede Boqer	Water Inst.	Room	Intensive workshop offered during the fall break
001-2-5069	МООС	Water & the Environment: Current challenges and solutions	3						Online course. Frontal Exam
205-2-5021	Prof. Moshe Kiflawi	Methods in Ecology	3	10- 11.04. 2024 14- 16.04. 2024		Sede Boqer	School	lab	An eight-day intensive course offered during the Fall break in Sede Boqer.

### **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
		BGU Radio Academy – Podcast production course	2	14- 19.04. 2024		Sede Boqer	School	1	A five day intensive course offered during the fall break. Registration during the spring registration period. The course will be held contingent upon registration of minimum
									4 students

## **Elective Courses**

Course No	Lecturer	Subject	Credits	Day	Time	Campus	Building	Room	Rem
001-2-4016	Dr. Leah Orlovsky	Geography of Desertification	2	Sun	12:15-14:00	Sede Boqer	Physics	1	
001-2-4029	Prof. Yosef	Introduction to statistics and probability	3	Mon	10:15 -13:00	Sede Boqer	Physics	Seminar	Frontal Exam
	Ashkenazy	using Python						Room	