# HYDROLOGY AND WATER QUALITY

## TIME TABLE FOR THE SPRING SEMESTER (B)- ACADEMIC YEAR 2018/2019

Students who began their studies on semester **2018/2 or 2019/1** are required to complete one of the courses from the list below during in their first or second semester of studies:

### Offered in the Fall semester:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-7006</td>
<td>Dr. Shai Arnon and</td>
<td>Summarizing, Writing and Presenting Scientific</td>
<td>2</td>
<td>Tue</td>
<td>10:15-12:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**or**

### Offered in the Spring semester:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0153</td>
<td>Dr. Chris Arnusch</td>
<td>Writing a Scientific Paper</td>
<td>2</td>
<td>Mon</td>
<td>09:00-10:45</td>
<td>Sede Boqer</td>
<td>School</td>
<td>1</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td></td>
<td>and Prof. Jack Gilron</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

470-2-0100 The Care and Use of Animals in Research - **MANDATORY** for Students Who Work with Animals

900-5-5001 Educational Software on Getting to Know the Law for the Prevention of Sexual Harassment - **MANDATORY** for all students. The course is in [Hebrew](http://moodle2.bgu.ac.il/?lang=en), [English](https://bgu4u.bgu.ac.il/pls/scwp/lapp.gate?app=csh) and in the moodle system.

900-5-2002 Training in Chemical & Biological Safety - **MANDATORY** for Students Who Work in Chemical and Biological Labs (Students should take the course every year. **Registration for the course is in the first and third semesters.** The course is in [Hebrew](https://moodle2.bgu.ac.il/moodle/) and [English](http://moodle2.bgu.ac.il/?lang=en) in the moodle system.)
# MICROBIOLOGY AND WATER QUALITY

## A. Core Courses:
Students are required to complete all courses from the list below.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0003</td>
<td>Dr. Oded Nir</td>
<td>Chemistry of Water</td>
<td>3</td>
<td>Wed</td>
<td>10:15-13:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar</td>
<td>Exam</td>
</tr>
</tbody>
</table>

* 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).

## B. Seminars Courses - Mandatory Courses:
Students are required to attend Departmental Seminars (one seminar per semester) and Student Seminars (one seminar per year).

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5555</td>
<td></td>
<td>Departmental Seminar A (first year)</td>
<td>0</td>
<td>Wed</td>
<td>13:00-14:00</td>
<td>Sede Boqer</td>
<td>Old Admin. Build.</td>
<td>Seminar</td>
<td>Room</td>
</tr>
<tr>
<td>001-2-5557</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar B (first year)</td>
<td>0</td>
<td>Wed</td>
<td>13:00-14:00</td>
<td>Sede Boqer</td>
<td>Old Admin. Build.</td>
<td>Seminar</td>
<td>Room</td>
</tr>
<tr>
<td>001-2-5556</td>
<td>(Coordinator)</td>
<td>Departmental Seminar A (second year)</td>
<td>0.5</td>
<td>Wed</td>
<td>09:00-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar</td>
<td>Room</td>
</tr>
<tr>
<td>001-2-5558</td>
<td></td>
<td>Departmental Seminar B (second year)</td>
<td>0.5</td>
<td>Wed</td>
<td>09:00-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar</td>
<td>Room</td>
</tr>
</tbody>
</table>

## B. Seminars Courses - Mandatory Courses (Continuation):
In the third and fourth semesters, students must register for Thesis Writing.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-9991</td>
<td></td>
<td>Thesis Writing A</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-9992</td>
<td></td>
<td>Thesis Writing B</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students who have completed the above Thesis Writing courses and who continue their studies for a fifth semester must register for the course.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-1000</td>
<td></td>
<td>Thesis Writing - Continuation</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## C. Mandatory Core Courses Within the Track of Study:
Students are required to complete at least 7 credits.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5005</td>
<td>Prof. Amit Gross,</td>
<td>Laboratory Methods for Environmental</td>
<td>3</td>
<td>An eight-day intensive course offered during the</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5060</td>
<td>Prof. Moshe Herzberg</td>
<td>Biological Processes in Wastewater Treatment</td>
<td>2</td>
<td>Thu</td>
<td>15:15-17:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar</td>
<td>Final Term Paper</td>
</tr>
</tbody>
</table>

** Mandatory Core Courses can be also selected as Elective Courses (on top of the required 5 credits).
**D. Elective Courses:**
This is a partial list. The student is allowed to select other courses that are related to the area of his/her research with the approval of the supervisor. Students are required to complete at least 10 credits.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0009</td>
<td>Dr. Avraham Be'er</td>
<td>Physics of Bacterial Communities</td>
<td>3</td>
<td>Mon</td>
<td>13:15-16:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0012</td>
<td>Prof. Daniel Ronen</td>
<td>Selected Issues Related to Groundwater Hydrology: Quality &amp; Quantity</td>
<td>2</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-0015</td>
<td>Dr. Roy Bernstein</td>
<td>Membrane Preparation and Characterization</td>
<td>3</td>
<td>Tue</td>
<td>13:15-16:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Mid Term Exam, Lab, Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0021</td>
<td>Dr. Christopher Arnusch</td>
<td>Biomimetic Innovation Approaches</td>
<td>2</td>
<td>Tue</td>
<td>16:00-17:45</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-4031</td>
<td>Prof. Isaak Rubinstein</td>
<td>Topics in Physico-Chemical Hydrodynamics and Electrodiffusion (A)</td>
<td>2</td>
<td>Flexible - according to the schedules of the students</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-4033</td>
<td>Prof. Isaak Rubinstein</td>
<td>Topics in Physico-Chemical Hydrodynamics and Electrodiffusion (B)</td>
<td>2</td>
<td>Flexible - according to the schedules of the students</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5006</td>
<td>Prof. Alex Yakirevitch</td>
<td>Migration Processes in the Unsaturated Zone of Soil</td>
<td>3</td>
<td>Tue</td>
<td>10:15-13:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
<tr>
<td>001-2-5012</td>
<td>Prof. Zeev Ronen</td>
<td>Biodegradation Process of Synthetic Organic Compound in Water Soil</td>
<td>2</td>
<td>Thu</td>
<td>10:15-12:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
<tr>
<td>001-2-5026</td>
<td>Prof. Ali Nejidat</td>
<td>Nitrogen Transformations and Environmental Quality</td>
<td>2</td>
<td>Mon</td>
<td>09:15-11:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5038</td>
<td>Prof. Amit Gross</td>
<td>Water Sanitation</td>
<td>3</td>
<td>Thu</td>
<td>12:15-15:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
<tr>
<td>001-2-5040</td>
<td>Dr. Eli Zaady</td>
<td>Soil Microbial Ecology (upon the request of at least 5 students)</td>
<td>2</td>
<td>Thu</td>
<td>08:30-10:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5062</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Microbial Sociology: From a Single Bacterium to Biofilm and Biofouling</td>
<td>3</td>
<td>Mon</td>
<td>16:15-19:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
</tbody>
</table>
### D. Elective Courses (Continuation):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5063</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Lab-course: New Methods in Biofilm Characterization</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>An intensive course offered during the SUMMER break, 14-19.7.2019, Water Building, Seminar Room. Course registration takes place during the registration period for the SUMMER semester. Final Term Paper and Exam</td>
</tr>
<tr>
<td>001-2-6002</td>
<td>Dr. Aviva Peeters</td>
<td>Theory and Applications of Geographic Information Systems (GIS)</td>
<td>3</td>
<td>Thu</td>
<td>09:15-12:00</td>
<td>Sede Boqer</td>
<td>Man in Drylands</td>
<td>Computer Room</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-5129</td>
<td>Prof. Noam Weisbrod</td>
<td>Rural Water Development (Field Trip) - Prerequisite: Course # 001-2-5029 Rural Water Development</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Field Trip during the Summer Break. Course registration takes place during the registration period for the SPRING semester.</td>
</tr>
</tbody>
</table>

### WATER RESOURCES

#### A. Core Courses:

Students are required to complete all courses from the list below.*

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0003</td>
<td>Dr. Oded Nir</td>
<td>Chemistry of Water</td>
<td>3</td>
<td>Wed</td>
<td>10:15-13:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
</tbody>
</table>

* 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).

#### B. Seminars, Courses - Mandatory Courses:

Students are required to attend Departmental Seminars (one seminar per semester) and Student Seminars (one seminar per year):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5555</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar A (first year)</td>
<td>0</td>
<td>Wed</td>
<td>13:00-14:00</td>
<td>Sede Boqer</td>
<td>Old Admin. Build.</td>
<td>Seminar Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5557</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar B (first year)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5556</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar A (second year)</td>
<td>0</td>
<td>Wed</td>
<td>13:00-14:00</td>
<td>Sede Boqer</td>
<td>Old Admin. Build.</td>
<td>Seminar Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5558</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar B (second year)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-9991</td>
<td>--</td>
<td>Thesis Writing A</td>
<td>6</td>
</tr>
<tr>
<td>001-2-9992</td>
<td>--</td>
<td>Thesis Writing B</td>
<td>6</td>
</tr>
</tbody>
</table>
### B. Seminars, Courses - Mandatory Courses (Continuation):

Students who have completed the above Thesis Writing courses and who continue their studies for a fifth semester must register for the course.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-1000</td>
<td>--</td>
<td>Thesis Writing - Continuation</td>
<td>0</td>
</tr>
</tbody>
</table>

### C. Mandatory Core Courses Within the Track of Study:

Students are required to complete at least 7 credits**.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5005</td>
<td>Prof. Amit Gross, Prof. Zeev Ronen</td>
<td>Laboratory Methods for Environmental Studies</td>
<td>3</td>
<td>Thu</td>
<td>15:15-17:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5060</td>
<td>Prof. Moshe Herzberg</td>
<td>Biological Processes in Wastewater Treatment</td>
<td>2</td>
<td>Thu</td>
<td>15:15-17:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

### D. Elective Courses:

Students are required to complete at least 10 credits.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0012</td>
<td>Prof. Daniel Ronen</td>
<td>Selected Issues Related to Groundwater Hydrology: Quality &amp; Quantity</td>
<td>2</td>
<td>Tue</td>
<td>13:15-16:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-0015</td>
<td>Dr. Roy Bernstein</td>
<td>Membrane Preparation and Characterization</td>
<td>3</td>
<td>Tue</td>
<td>13:15-16:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Mid Term Exam, Lab, Final Term Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-0021</td>
<td>Dr. Christopher Arnusch</td>
<td>Biomimetic Innovation Approaches</td>
<td>2</td>
<td>Tue</td>
<td>16:00-17:45</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-4036</td>
<td>Prof. Georgy Burde</td>
<td>Topics in Environmental Fluid Mechanics - B</td>
<td>3</td>
<td>Flexible</td>
<td>10:15-13:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5006</td>
<td>Prof. Alex Yakirevitch</td>
<td>Migration Processes in the Unsaturated Zone of Soil</td>
<td>3</td>
<td>Tue</td>
<td>10:15-13:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5026</td>
<td>Prof. Ali Nejidat</td>
<td>Nitrogen Transformations and Environmental Quality</td>
<td>2</td>
<td>Mon</td>
<td>09:15-11:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5038</td>
<td>Prof. Amit Gross</td>
<td>Water Sanitation</td>
<td>3</td>
<td>Thu</td>
<td>12:15-15:00</td>
<td>Sede Boqer Water Inst. Seminar Room</td>
<td>Exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Flexible - according to the schedules of the students.

An eight-day intensive course offered during the FALL break 3-7.2.2019 and 10-12.2.2019, 08:30-15:30, Water Building, Seminar Room. Course registration took place by the School Secretariat.

A four-day intensive workshop offered during the SUMMER break, 4-5.9.2019 and 18-19.9.2019, 9:00-16:00. Course registration takes place during the registration period for the SUMMER semester.
### D. Elective Courses (Continuation):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5063</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Lab-course: New Methods in Biofilm Characterization</td>
<td>3</td>
<td></td>
<td>An intensive course offered during the SUMMER break, 14-19.7.2019, Water Building, Seminar Room. Course registration takes place during the registration period for the SUMMER semester.</td>
<td>Final Term Paper and Exam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-6002</td>
<td>Dr. Aviva Peeters</td>
<td>Theory and Applications of Geographic Information Systems (GIS)</td>
<td>3</td>
<td>Thu</td>
<td>09:15-12:00</td>
<td>Sede Boqer</td>
<td>Computer Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5129</td>
<td>Prof. Noam Weisbrod</td>
<td>Rural Water Development (Field Trip) - Prerequisite: Course # 001-2-5029 Rural Water Development</td>
<td>2</td>
<td></td>
<td>Field Trip during the Summer Break. Course registration takes place during the registration period for the SPRING semester.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DESALINATION AND WATER TREATMENT

#### A. Core Courses:

Students are required to complete all courses from the list below*.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0003</td>
<td>Dr. Oded Nir</td>
<td>Chemistry of Water</td>
<td>3</td>
<td>Wed</td>
<td>10:15-13:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
</tbody>
</table>

* 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).

#### B. Seminars, Courses - Mandatory Courses:

Students are required to attend Departmental Seminars (one seminar per semester) and Student Seminars (one seminar per year).

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5555</td>
<td>Dr. Chris Arnusch (Coordinator)</td>
<td>Departmental Seminar A (first year)</td>
<td>0</td>
<td>Wed</td>
<td>13:00-14:00</td>
<td>Sede Boqer</td>
<td>Old Admin. Build.</td>
<td>Seminar Room</td>
</tr>
<tr>
<td>001-2-5557</td>
<td></td>
<td>Departmental Seminar B (first year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5556</td>
<td></td>
<td>Departmental Seminar A (second year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5558</td>
<td></td>
<td>Departmental Seminar B (second year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-9995</td>
<td>Prof. Ali Nejidat (Coordinator)</td>
<td>Student Seminar (first year)</td>
<td>0.5</td>
<td>Wed</td>
<td>09:00-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
</tr>
<tr>
<td>001-2-9996</td>
<td></td>
<td>Student Seminar (second year)</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-9991</td>
<td>--</td>
<td>Thesis Writing A</td>
<td>6</td>
</tr>
<tr>
<td>001-2-9992</td>
<td>--</td>
<td>Thesis Writing B</td>
<td>6</td>
</tr>
</tbody>
</table>
### B. Seminars, Courses - Mandatory Courses (Continuation):

Students who have completed the above Thesis Writing courses and who continue their studies for a fifth semester must register for the course.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-1000</td>
<td>--</td>
<td>Thesis Writing - Continuation</td>
<td><strong>0</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C. Mandatory Core Courses Within the Track of Study:

Students are required to complete at least 8 credits**.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5038</td>
<td>Prof. Amit Gross</td>
<td>Water Sanitation</td>
<td>3</td>
<td>Thu</td>
<td>12:15-15:00</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
<tr>
<td>001-2-5044</td>
<td>Dr. Shai Arnon</td>
<td>Biogeochemical Processes in Surface Water System</td>
<td>3</td>
<td>Wed</td>
<td>14:15-17:00</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
</tbody>
</table>
| 001-2-5060 | Prof. Moshe Herzberg | Biological Processes in Wastewater Treatment | 2       | Thu   | 15:15-17:00   | Sede Boqer | Seminar Room | Final Term Paper | **Mandatory Core Courses can be also selected as Elective Courses (on top of the required 8 credits).**

### D. Elective Courses:

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

Students are required to complete at least 7 credits.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0009</td>
<td>Dr. Avraham Be'er</td>
<td>Physics of Bacterial Communities</td>
<td>3</td>
<td>Mon</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0012</td>
<td>Prof. Daniel Ronen</td>
<td>Selected Issues Related to Groundwater Hydrology: Quality &amp; Quantity</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-0015</td>
<td>Dr. Roy Bernstein</td>
<td>Membrane Preparation and Characterization</td>
<td>3</td>
<td>Tue</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Mid Term Exam, Lab, Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0021</td>
<td>Dr. Christopher Arnusch</td>
<td>Biomimetic Innovation Approaches</td>
<td>2</td>
<td>Tue</td>
<td>16:00-17:45</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0032</td>
<td>Dr. Chris Arnusch</td>
<td>Advanced Chemistry in Water Technologies</td>
<td>3</td>
<td>Sun</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Two Lab Assignments and Exam</td>
<td></td>
</tr>
<tr>
<td>001-2-5006</td>
<td>Prof. Alex Yakirevitch</td>
<td>Migration Processes in the Unsaturated Zone of Soil</td>
<td>3</td>
<td>Tue</td>
<td>10:15-13:00</td>
<td>Sede Boqer</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
</tbody>
</table>
### D. Elective Courses (Continuation):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5063</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Lab-course: New Methods in Biofilm Characterization</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Term Paper and Exam</td>
</tr>
<tr>
<td>001-2-5040</td>
<td>Dr. Eli Zaady</td>
<td>Soil Microbial Ecology (upon the request of at least 5 students)</td>
<td>2</td>
<td>Tue</td>
<td>08:30-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-5062</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Microbial Sociology: From a Single Bacterium to Biofilm and Biofouling</td>
<td>3</td>
<td>Mon</td>
<td>16:15-19:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5064</td>
<td>Prof. Jack Gilron and Dr. Oded Nir</td>
<td>Unit operations in water treatment processing</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A six-day intensive course offered during the FALL break 13-14/2/2019 and 17-19/2/2019, 21/2/2019, 08:30-14:30, Water Building, Seminar Room. Course registration takes place during the registration period for the SPRING semester. Submission of written report to the course supervisors for each process studied</td>
</tr>
<tr>
<td>001-2-6002</td>
<td>Dr. Aviva Peeters</td>
<td>Theory and Applications of Geographic Information Systems (GIS)</td>
<td>3</td>
<td>Thu</td>
<td>09:15-12:00</td>
<td>Sede Boqer</td>
<td>Man in Drylands</td>
<td>Computer Room</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-5129</td>
<td>Prof. Noam Weisbrod</td>
<td>Rural Water Development (Field Trip) - Prerequisite: Course # 001-2-5029 Rural Water Development</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Field Trip during the Summer Break. Course registration takes place during the registration period for the SPRING semester.</td>
</tr>
</tbody>
</table>

### E. General Courses:

Students are required to complete no more than 4 credits.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Lecturer</th>
<th>Subject</th>
<th>Credits</th>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-1103</td>
<td>Dr. Hadas Hawlena</td>
<td>Introduction to Dryland Ecology</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Term Paper</td>
</tr>
</tbody>
</table>