HYDROLOGY AND WATER QUALITY

TIME TABLE FOR THE SPRING SEMESTER (B)- ACADEMIC YEAR 2017/2018

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 (in Hebrew) - **MANDATORY** for all Israeli students

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

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. Chris Arnusch</td>
<td>Chemistry of Water</td>
<td>3</td>
<td>Sun</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5024</td>
<td>Prof. Ofer Dahan</td>
<td>Groundwater Hydrology</td>
<td>2</td>
<td>Wed</td>
<td>15:15-17:00</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 and Thesis Writing - 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>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></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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5558</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar B (second year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-9995</td>
<td>Prof. Ali Nejidat</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>
<td></td>
</tr>
<tr>
<td>001-2-9996</td>
<td>Prof. Ali Nejidat</td>
<td>Student Seminar (second year)</td>
<td>0.5</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>
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>001-2-0004</td>
<td>Prof. Noam Weisbrod</td>
<td>Vadose Zone Hydrology</td>
<td>2.5</td>
<td>Sun</td>
<td>10:15-13:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5005</td>
<td>Prof. Amit Gross,</td>
<td>Laboratory Methods for Environmental Studies</td>
<td>3</td>
<td>An eight-day intensive course during the SUMMER break, 08:30-15:30, Water Building, Seminar Room. Course registration takes place during the registration period for the SUMMER semester.</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prof. Zeev Ronen</td>
<td></td>
<td></td>
<td></td>
<td></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 Room</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</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</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>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-0015</td>
<td>Dr. Roy Berenstein</td>
<td>Membrane Preparation and Characterization</td>
<td>3</td>
<td>Tue</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Mid Term Exam, Lab, Final Term Paper</td>
</tr>
<tr>
<td>001-2-0020</td>
<td>Prof. Shaul Sorek</td>
<td>Finite Elements Methods for Numerical Approximation</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>Final Term Paper</td>
</tr>
<tr>
<td>001-2-0021</td>
<td>Dr. Christopher Arnush</td>
<td>Biomimetic Innovation Approaches</td>
<td>2</td>
<td></td>
<td>16:00-17:45</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</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</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5010</td>
<td>Prof. Zeev Ronen</td>
<td>Groundwater Microbiology</td>
<td>2</td>
<td>Thu</td>
<td>10:15-12:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</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>001-2-5026</td>
<td>Prof. Ali Nejidat</td>
<td>Nitrogen Transformations and Environmental Quality</td>
<td>2</td>
<td>Mon</td>
<td>11:15-13:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5034</td>
<td>Prof. Yoram Oren</td>
<td>Environmental Oriented Electrochemistry</td>
<td>2</td>
<td>Thu</td>
<td>08:30-10:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
<td></td>
</tr>
<tr>
<td>001-2-5038</td>
<td>Prof. Amit Gross</td>
<td>Water Sanitation</td>
<td>3</td>
<td>Mon</td>
<td>08:30-11:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5040</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 School</td>
<td>1</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</td>
<td>2</td>
<td></td>
<td></td>
<td>Field Trip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5061</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Nexus of the Desalination Industry and the Aquatic Environment</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>001-2-5062</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>

### E. General Courses:

Students are required to complete no more than 2 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>001-2-0153</td>
<td>Ms. Ayla Adler</td>
<td>Academic Writing for Graduate Students (limited to 15 students)</td>
<td>2</td>
<td>Wed</td>
<td>14:15-18:00</td>
<td>Sede Boqer School</td>
<td>1</td>
<td>Final Term Paper</td>
<td></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. Chris Arnusch</td>
<td>Chemistry of Water Inst.</td>
<td>3</td>
<td>Sun</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5024</td>
<td>Prof. Ofer Dahan</td>
<td>Groundwater Hydrology</td>
<td>2</td>
<td>Wed</td>
<td>15:15-17:00</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 and Thesis Writing - 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>
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<th>Building</th>
<th>Room</th>
<th>Final Assignments</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>001-2-5556</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 Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5557</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>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>001-2-9995</td>
<td>Prof. Ali Nejidat</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>
<td></td>
</tr>
<tr>
<td>001-2-9996</td>
<td>Prof. Ali Nejidat</td>
<td>Student Seminar (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 Room</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>
<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Final Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-9991</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.

## 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>001-2-0004</td>
<td>Prof. Noam Weisbrod</td>
<td>Vadose Zone Hydrology</td>
<td>2.5</td>
<td>Sun</td>
<td>10:15-13:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<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>An eight-day intensive course offered during the SUMMER break, 08:30-15:30, Water Building, Seminar Room. Course registration takes place during the registration period for the SUMMER semester.</td>
<td></td>
<td></td>
<td></td>
<td>Final Term Paper</td>
<td></td>
</tr>
</tbody>
</table>

* Mandatory Core Courses can be also selected as Elective Courses (on top of the required 5 credits).
### C. Mandatory Core Courses Within the Track of Study (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>001-2-5060</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 Room</td>
<td>Final Term Paper</td>
</tr>
</tbody>
</table>

### 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 supervisory committee.

#### 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>A three-day intensive course offered during the FALL break, 12/2/2018-14/2/2018, 09:00-17:00. Course registration takes place during the registration period for the SPRING semester.</td>
<td>Flexible - according to the schedules of the students</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-0015</td>
<td>Dr. Roy Berenstein</td>
<td>Membrane Preparation and Characterization</td>
<td>3</td>
<td>Tue</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Mid Term Exam, Lab, Final Term Paper</td>
</tr>
<tr>
<td>001-2-0020</td>
<td>Prof. Shaul Sorek</td>
<td>Finite Elements Methods for Numerical Approximation</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>Final Term Paper</td>
</tr>
<tr>
<td>001-2-0021</td>
<td>Dr. Christopher Arnush</td>
<td>Biomimetic Innovation Approaches</td>
<td>2</td>
<td>Tue</td>
<td>16:00-17:45</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-0027</td>
<td>Dr. Shai Amon</td>
<td>Flow in streams: Theory and practice</td>
<td>1</td>
<td>Sun</td>
<td>09:15-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</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>A three-day intensive course offered during the FALL break, 12/2/2018-14/2/2018, 09:00-17:00. Course registration takes place during the registration period for the SPRING semester.</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</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</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>11:15-13:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-5034</td>
<td>Prof. Yoram Oren</td>
<td>Environmental Oriented Electrochemistry</td>
<td>2</td>
<td>Thu</td>
<td>08:30-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5038</td>
<td>Prof. Amit Gross</td>
<td>Water Sanitation</td>
<td>3</td>
<td>Mon</td>
<td>08:30-11:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
</tr>
<tr>
<td>001-2-5055</td>
<td>Prof. Naftali Lazarovitch, Prof. Ofer Dahan</td>
<td>Operation and Analysis of Environmental Monitoring Systems</td>
<td>1</td>
<td>1 A semi intensive course offered during the FALL break. Another day for presentations will be determined during the course. Course registration takes place during the registration period for the SPRING semester</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>001-2-5061</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Nexus of the Desalination Industry and the Aquatic Environment</td>
<td>3</td>
<td>Thu</td>
<td>12:15-15:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</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>001-2-5129</td>
<td>Prof. Noam Weisbrod</td>
<td>Rural Water Development (Field Trip) - Prerequisite: Course # 001-2-5029</td>
<td>2</td>
<td>Field Trip</td>
<td>Field Trip</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### E. General Courses:
Students are required to complete no more than 2 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>001-2-0153</td>
<td>Ms. Ayla Adler</td>
<td>Academic Writing for Graduate Students (limited to 15 students)</td>
<td>2</td>
<td>Wed</td>
<td>14:15-18:00</td>
<td>Sede Boqer</td>
<td>School</td>
<td>1</td>
<td>Final Term Paper</td>
</tr>
</tbody>
</table>
## 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. Chris Arnusch</td>
<td>Chemistry of Water</td>
<td>3</td>
<td>Sun</td>
<td>13:15-16:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Exam</td>
</tr>
<tr>
<td>001-2-5024</td>
<td>Prof. Ofer Dahan</td>
<td>Groundwater Hydrology</td>
<td>2</td>
<td>Wed</td>
<td>15:15-17:00</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 and Thesis Writing - 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>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>0.5</td>
<td>Wed</td>
<td>09:00-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5556</td>
<td>Dr. Chris Arnusch</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 Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5558</td>
<td>Dr. Chris Arnusch</td>
<td>Departmental Seminar B (second year)</td>
<td>0.5</td>
<td>Wed</td>
<td>09:00-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td></td>
</tr>
<tr>
<td>001-2-9995</td>
<td>Prof. Ali Nejdat</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>
<td></td>
</tr>
<tr>
<td>001-2-9996</td>
<td>Prof. Ali Nejdat</td>
<td>Student Seminar (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 Room</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>

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 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>Mon</td>
<td>08:30-11:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</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 Room</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 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 Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0015</td>
<td>Dr. Roy Berenstein</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>001-2-0020</td>
<td>Prof. Shaul Sorek</td>
<td>Finite Elements Methods for Numerical Approximation</td>
<td>3</td>
<td>Wed</td>
<td>10:15-13:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-0021</td>
<td>Dr. Christopher Arnush</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>001-2-5006</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>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5010</td>
<td>Prof. Zeev Ronen</td>
<td>Groundwater Microbiology</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>11:15-13:00</td>
<td>Sede Boqer Water Inst.</td>
<td>Seminar Room</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5034</td>
<td>Prof. Yoram Oren</td>
<td>Environmental Oriented Electrochemistry</td>
<td>2</td>
<td>Thu</td>
<td>08:30-10:00</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>Tue</td>
<td>08:30-10:00</td>
<td>Sede Boqer School</td>
<td>1</td>
<td>Final Term Paper</td>
<td></td>
</tr>
<tr>
<td>001-2-5055</td>
<td>Prof. Naftali Lazarovitch, Prof. Ofer Dahan</td>
<td>Operation and Analysis of Environmental Monitor</td>
<td>1</td>
<td>A semi intensive course offered during the FALL break. Another day for presentations will be determined during the course. Course registration takes place during the registration period for the SPRING semester.</td>
<td>Final Term Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001-2-5061</td>
<td>Dr. Edo Bar-Zeev</td>
<td>Nexus of the Desalination Industry and the Aquatic Environment</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>001-2-5062</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>
<tr>
<td>001-2-5129</td>
<td>Prof. Noam Weisbrod</td>
<td>Rural Water Development (Field Trip) - Prerequisite: Course # 001-2-5029</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<td>Field Trip</td>
<td></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>001-2-0012</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>Final Term Paper</td>
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</tbody>
</table>
E. General Courses (Continuation):

Students are required to complete no more than 4 credits.

<table>
<thead>
<tr>
<th>Code</th>
<th>Instructor</th>
<th>Course Description</th>
<th>Credits</th>
<th>Day(s)</th>
<th>Time</th>
<th>Location</th>
<th>Credits</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-1103</td>
<td>Dr. Hadas Hawlana</td>
<td>Introduction to Dryland Ecology</td>
<td>4</td>
<td>Wed</td>
<td>08:30-12:00</td>
<td>Sede Boqer</td>
<td>School</td>
<td>1 Final Term Paper</td>
</tr>
<tr>
<td>001-2-0153</td>
<td>Ms. Ayla Adler</td>
<td>Academic Writing for Graduate Students (limited to 15 students)</td>
<td>2</td>
<td>Wed</td>
<td>14:15-18:00</td>
<td>Sede Boqer</td>
<td>School</td>
<td>1 Final Term Paper</td>
</tr>
</tbody>
</table>