# Environmental and Aquatic Microbiology

## A

### Mandatory Courses

<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>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-0153</td>
<td>Dr. Chris Arnush, Dr. Scott Hansen</td>
<td>Writing a Scientific Paper</td>
<td>2</td>
<td>Tue</td>
<td>13:15-15:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>15</td>
<td>Students are required to complete the course in their second semester of studies</td>
</tr>
<tr>
<td>470-2-0100</td>
<td>prof. Roi Gazit and Dr. Shira Ovadia</td>
<td>The Care and Use of Animals in Research</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MANDATORY for Students Who Work with Animals once per degree</td>
</tr>
<tr>
<td>900-5-2002</td>
<td>Online Program</td>
<td>Training in Chemical &amp; Biological Safety</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MANDATORY for Students Who Work in Chemical and Biological Labs (Students should take the course every year)</td>
</tr>
<tr>
<td>900-5-5001</td>
<td>Online Program</td>
<td>Educational Software on Getting to Know the Law for the Prevention of Sexual Harassment</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MANDATORY for all students on the first year</td>
</tr>
</tbody>
</table>

## B

### Core courses (12 credit points)

### Mandatory Courses

<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>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-3021</td>
<td>Prof. Itamar Giladi</td>
<td>Biostatistics: Class (can be completed during the program)</td>
<td>3</td>
<td>Tue</td>
<td>08:30-10:00</td>
<td>Sede Boqer</td>
<td>Biology</td>
<td>32</td>
<td>Home Exam.*0 credit points for students in the Ecology and Nature Conservation department. Limited to 17 students</td>
</tr>
</tbody>
</table>
Mandatory Courses

<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>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-3021</td>
<td>Prof. Itamar Giladi</td>
<td>Biostatistics: Exercise (can be completed during the program)</td>
<td>EX</td>
<td>Wed</td>
<td>09:15-11:00</td>
<td>Sede Boqer</td>
<td>School</td>
<td>Computer room</td>
<td>Home Exam.*0 credit points for students in the Ecology and Nature Conservation department. Limited to 17 students</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>05-14.02.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>An eight-day concentrated course offered during the fall break</td>
</tr>
<tr>
<td>001-2-5011</td>
<td>Prof. Zeev Ronen</td>
<td>Environmental Microbiology</td>
<td>3</td>
<td>Thu</td>
<td>15:15 - 18:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5059</td>
<td>Prof. Osnat Gillor</td>
<td>Water Microbiology</td>
<td>3</td>
<td>Thu</td>
<td>09:15-12:00</td>
<td>Sede Boqer</td>
<td>School</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>001-2-5159</td>
<td>Prof. Osnat Gillor</td>
<td>Introduction to Microbiology</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A semi concentrated course during the second week of the first semester for non-biologists who take the 001-2-5059 Water Microbiology course.</td>
</tr>
</tbody>
</table>

C Seminars and Thesis Writing -- Mandatory Courses: Students are required to attend Departmental Seminar 4 times (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

<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>Rem</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>Mandatory for students on study extension</td>
</tr>
<tr>
<td>001-2-1011</td>
<td></td>
<td>Writing Thesis - Continuation</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mandatory for students on study extension</td>
</tr>
</tbody>
</table>
Environmental and Aquatic Microbiology

**Mandatory Courses**

<table>
<thead>
<tr>
<th>Course No</th>
<th>Lecturer</th>
<th>Subject</th>
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<th>Day</th>
<th>Time</th>
<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5555</td>
<td>Dr. Avner Ronen</td>
<td>Departmental Seminar</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>Mandatory each semester. 4 times during the degree</td>
</tr>
<tr>
<td>001-2-9991</td>
<td>Thesis Writing - A</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mandatory for students on their 3rd semester</td>
</tr>
<tr>
<td>001-2-9992</td>
<td>Thesis Writing -B</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mandatory for students on their 4th semester</td>
</tr>
</tbody>
</table>

**Elective Courses:** Students are required to complete at least 8 credits. The student is allowed to select other courses that are related to his/her area of research with the approval of the supervisor.

**Elective Courses**

<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>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-2015</td>
<td>Prof. Dina Zilberg, Prof. Amit Gross</td>
<td>Introduction to Aquaculture</td>
<td>3</td>
<td>Tue</td>
<td>12:15-15:00</td>
<td>Sede Boqer</td>
<td>Biology</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td>001-2-2017</td>
<td>Prof. Simon Barak</td>
<td>Plant Perception, Transduction and Response to Environmental Signals (limited to 10 students)</td>
<td>2</td>
<td>Thu</td>
<td>10:15-12:00</td>
<td>Sede Boqer</td>
<td>Biology</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>001-2-2025</td>
<td>Prof. Dina Zilberg</td>
<td>Practical Fish Disease Diagnosis (A) (Prerequisite: Theoretical fish diseases course)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for schedule please contact the lecturer</td>
</tr>
<tr>
<td>001-2-2026</td>
<td>Prof. Dina Zilberg</td>
<td>Practical Fish Disease Diagnosis (B) (Prerequisite: Theoretical fish diseases course)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for schedule please contact the lecturer</td>
</tr>
<tr>
<td>001-2-2027</td>
<td>Prof. Dina Zilberg</td>
<td>Practical Fish Disease Diagnosis (C) (Prerequisite: Theoretical fish diseases course)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for schedule please contact the lecturer</td>
</tr>
<tr>
<td>001-2-2036</td>
<td>Prof. Gideon Grafi</td>
<td>Molecular Biology and Epigenetics</td>
<td>2</td>
<td>Sun</td>
<td>08:30-10:00</td>
<td>Sede Boqer</td>
<td>Biology</td>
<td>32</td>
<td>Home Exam</td>
</tr>
<tr>
<td>001-2-2038</td>
<td>Prof. Naftali Lazarovitch</td>
<td>Soil Physics</td>
<td>3</td>
<td>Tue</td>
<td>15:15-18:00</td>
<td>Sede Boqer</td>
<td>Biology</td>
<td>32</td>
<td>Home Exam</td>
</tr>
<tr>
<td>001-2-2040</td>
<td>Prof. Gideon Grafi</td>
<td>Lab Course in Epigenetics</td>
<td>4</td>
<td></td>
<td>12-16.02.2023</td>
<td></td>
<td></td>
<td></td>
<td>A five-day concentrated course offered during the fall break</td>
</tr>
<tr>
<td>001-2-2046</td>
<td>Prof. Aaron Fait</td>
<td>Analysis of Biological Networks</td>
<td>2.5</td>
<td>Wed</td>
<td>08:30-11:00</td>
<td>Sede Boqer</td>
<td>Biology</td>
<td>136</td>
<td></td>
</tr>
</tbody>
</table>
## Elective Courses

<table>
<thead>
<tr>
<th>Course No</th>
<th>Lecturer</th>
<th>Subject</th>
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<th>Day</th>
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<th>Room</th>
<th>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-2290</td>
<td>Prof. Dina Zilberg</td>
<td>Guided Reading on Aquatic Animal Health</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Guided reading course - limited to two students</td>
</tr>
<tr>
<td>001-2-5028</td>
<td>Prof. Moshe Herzberg</td>
<td>Microbial Biofilms in Water and Wastewater Treatment Processes (prerequisite: Introduction to Microbiology)</td>
<td>2</td>
<td>Tue</td>
<td>15:15-17:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td></td>
</tr>
<tr>
<td>001-2-5029</td>
<td>Prof. Noam Weisbrod</td>
<td>Rural Water Development</td>
<td>2</td>
<td>Mon</td>
<td>16:15-18:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td>(minimum 12 students)</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>19-21.02.2023</td>
<td>09:00-14:00</td>
<td>Sede Boqer</td>
<td></td>
<td></td>
<td>A semi concentrated course offered during the FALL break. Registration period of the spring semester</td>
</tr>
<tr>
<td>001-2-5066</td>
<td>Dr. Scott K. Hansen</td>
<td>Introduction to Scientific Computing with Python</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></td>
</tr>
<tr>
<td>205-2-5021</td>
<td>Prof. Moshe Kiflawi</td>
<td>Methods in Ecology</td>
<td>3</td>
<td>20-23.02, 26.02-01.03.23</td>
<td>Sede Boqer</td>
<td>AKIS Computure lab</td>
<td></td>
<td></td>
<td>An eight-day concentrated course offered during the Fall break in Sede Boqer 20-23.02.2023 + 26.02-01.03.2023</td>
</tr>
</tbody>
</table>

## Elective Courses II:

Students are required to complete at least 3 credits. The student is allowed to select other courses that are related to his/her area of research with the approval of the supervisor.
### Elective Courses

<table>
<thead>
<tr>
<th>Course No</th>
<th>Lecturer</th>
<th>Subject</th>
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<th>Day</th>
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<th>Campus</th>
<th>Building</th>
<th>Room</th>
<th>Rem</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-2-5072</td>
<td>Dr. Max Kolton</td>
<td>Discussions in microbial ecology</td>
<td>1</td>
<td>Wed</td>
<td>09:15-10:00</td>
<td>Sede Boqer</td>
<td>Water Inst.</td>
<td>Seminar Room</td>
<td></td>
</tr>
</tbody>
</table>

**F  General Courses: Students are required to complete up to 4 credits.**

### Elective Courses

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