HYDROLOGY AND WATER QUALITY

TIME TABLE FOR THE SPRING SEMESTER (B)- ACADEMIC YEAR 2014/2015

MICROBIOLOGY AND WATER QUALITY

A. Core Courses:

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

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|--------------------|--|---------|-----|-------------|------------|-------------|--------------|
| 001-2-0003 | Dr. Chris Arnusch | Chemistry of Water | 3 | Sun | 13:15-16:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5060 | Dr. Moshe Herzberg | Biological Processes in Wastewater Treatment | 2 | Wed | 10:15-12:00 | Sede Boqer | Water Inst. | Seminar Room |

^{*} 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).

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|-------------------|--------------------------------------|---------|-----|------------|---|-------------|--------------|
| | Dr. Chris Arnusch | Departmental Seminar A (first year) | 0 | Wed | _ | • | • | Seminar Room |
| 001-2-5557 | (coordinator) | Departmental Seminar B (first year) | | | | | | |
| 001-2-5556 | | Departmental Seminar A (second year) | 1 | | | | | |
| 001-2-5558 | | Departmental Seminar B (second year) | 1 | | | | | |
| 001-2-9995 | Prof. Ali Nejidat | Student Seminar (first year) | 0.5 | Wed | 9:00-10:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-9996 | (coordinator) | Student Seminar (second year) | | | | | | |

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

| Course No. | Lecturer | Subject | Credits |
|------------|----------|------------------|---------|
| 001-2-9991 | - | Thesis Writing A | 6 |
| 002-2-9992 | | Thesis Writing B | 6 |

Students who have completed the above Thesis Writing courses and who continue their

studies for a fifth semester must register for the course.

| Course No. | Lecturer | Subject | Credits |
|------------|----------|-------------------------------|---------|
| 001-2-1000 | - | Thesis Writing - Continuation | 0 |

C. Mandatory Core Courses Within the Track of Study:

Students are required to complete at least 5 credits*.

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|---------------------------------------|--|---------|---|-------------|------------|-------------|--------------|
| 001-2-0004 | Prof. Noam Weisbrod | Vadose Zone Hydrology | 2.5 | Sun | 10:15-13:00 | Sede Boqer | Water Inst. | Seminar Room |
| | Prof. Amit Gross, Prof. Zeev Ronen | Laboratory Methods for Environmental Studies | | A 10-day intensive course in the FALL break, 8-12, 15-19.02.2015, 09:00-12:00 (Registration on the SPRING | | | | , |
| | Zeev Kolleli | | | semester) | | | DENTING | |

^{*} 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.

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|------------------------|--|---|--|------------------|--------------|---------------------|---------------|
| 001-2-0009 | Dr. Avraham Be'er | Physics of Bacterial Communities | 2 | Mon | 13:15-15:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0012 | Prof. Daniel Ronen | Selected Issues Related to Groundwater Hydrology: Quality & Quantity (intensive course) | 2 | A 3-day intensive course in the SUMMER break,12- 14.07.2015, 08:30-17:00 (Registration on the SUMMER semester) | | | | |
| 001-2-0015 | Dr. Roy Bernstein | Membrane Preparation and Characterization | 3 | Tue | 13:15-16:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0021 | Dr. Christopher Arnush | Biomimetic Innovation Approaches | 2 | Thu | 15:15-17:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0022 | Dr. Anat Bernstein | Stable Isotope Application in Contaminant Hydrology | A 3-day intensive workshop in the SUMMER break, 18-22.10.2015, 08:00-15:00 (Registration in the SPRING semester). | | | | | |
| 001-2-3021 | Dr. Merav Seifan | Biostatistics: ANOVA and Design of Experiments | 3 | Sun | 10:15-12:00 | Sede Boqer | 48 | 2 |
| | | Exercise | | Sun | 15:15-17:00 | Sede Boqer | Man in the Drylands | Computer Room |
| 001-2-4031 | Prof. Isaak Rubinstein | Topics in Physico-Chemical Hydrodynamics and Electrodiffusion – A | 2 | Flexib | le- according to | the schedule | es of the stud | ents |
| 001-2-4033 | Prof. Isaak Rubinstein | Topics in Physico-Chemical Hydrodynamics and Electrodiffusion – B | 2 | Flexib | le- according to | the schedule | es of the stud | ents |
| 001-2-4047 | Dr. Iris Visoli-Fisher | Surface Science for the Environment | 3 | Mon | 09:15-12:00 | Sede Boqer | Physics | Seminar Room |
| 001-2-5012 | Prof. Zeev Ronen | Biodegradation Process of Synthetic Organic Compound in Water Soil | 2 | Thu | 10:15-12:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5026 | Prof. Ali Nejidat | Nitrogen Transformations and Environmental Quality | 2 | Thu | 08:30-10:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5034 | Prof. Yoram Oren | Environmental Oriented Electrochemistry | 2 | Mon | 11:15-13:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5038 | Prof. Amit Gross | Water Sanitation | 3 | Mon | 08:30-11:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5040 | Dr. Eli Zaady | Soil Microbial Ecology | 2 | Tue | 08:30-10:00 | Sede Boqer | Water Inst. | Seminar Room |

F. General Courses:

Students are required to complete no more than 2 credits

| Students are r | ocudents are required to complete no more than 2 credits. | | | | | | | | | |
|----------------|---|--|---|-----------------|-------------------|---|--|--|--|--|
| 001-2-0153 | Ms. Avla Adler | Academic Writing for Graduate Students | 2 | Wed 14:15-18:00 | Sede Boger School | 1 | | | | |

WATER RESOURSES

A. Core Courses:

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

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|--------------------|--|---------|-----|-------------|------------|-------------|--------------|
| 001-2-0003 | Dr. Chris Arnusch | Chemistry of Water | 3 | Sun | 13:15-16:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5060 | Dr. Moshe Herzberg | Biological Processes in Wastewater Treatment | 2 | Wed | 10:15-12:00 | Sede Boqer | Water Inst. | Seminar Room |

^{*} 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):

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|-------------------|---|---------|-----|-------------|------------|-------------------|--------------|
| 001-2-5555 | Dr. Chris Arnusch | epartmental Seminar A (first year) | | Wed | 13:00-14:00 | Sede Boqer | Old Admin. Build. | Seminar Room |
| 001-2-5557 | (coordinator) | rdinator) Departmental Seminar B (first year) | | | | | | |
| 001-2-5556 | | Departmental Seminar A (second year) | | | | | | |
| 001-2-5558 | | Departmental Seminar B (second year) | | | | | | |
| 001-2-9995 | Prof. Ali Nejidat | Student Seminar (first year) | 0.5 | Wed | 9:00-10:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-9996 | (coordinator) | Student Seminar (second year) | | | | | | |

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

| Course No. | Lecturer | Subject | Credits |
|------------|----------|------------------|---------|
| 001-2-9991 | | Thesis Writing A | 6 |
| 002-2-9992 | | Thesis Writing B | 6 |

Students who have completed the above Thesis Writing courses and who continue their

studies for a fifth semester must register for the course.

| Course No. | Lecturer | Subject | Credits |
|------------|----------|-------------------------------|---------|
| 001-2-1000 | | Thesis Writing - Continuation | 0 |

C. Mandatory Core Courses Within the Track of Study:

Students are required to complete at least 5 credits*.

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|--|-----------------------------------|---------|-----|-------------|------------|-------------|--------------|
| 001-2-0004 | Prof. Noam Weisbrod | Vadose Zone Hydrology | 2.5 | Sun | 10:15-13:00 | Sede Boqer | Water Inst. | Seminar Room |
| | Prof. Ofer Dahan, Prof. Noam Weisbrod | Field Methods in Hydrology | 3 | Sun | 16:15-19:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5100 | Dr. Genadi Carmi | Introduction to Surface Hydrology | 2 | Sun | 08:30-10:00 | Sede Boqer | Water Inst. | Seminar Room |

^{*} 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.

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|------------------------|--|---------|---|-------------|------------|---------------------|---------------|
| 001-2-0012 | Prof. Daniel Ronen | Selected Issues Related to Groundwater Hydrology: Quality & Quantity (intensive course) | 2 | A 3-day intensive course in the SUMMER break,12-14.07.2015, 08:30-17:00 (Registration on the SUMMER semester) | | | | |
| 001-2-0015 | Dr. Roy Berenstein | Membrane Preparation and Characterization | 3 | Tue | 13:15-16:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0021 | Dr. Christopher Arnush | Biomimetic Innovation Approaches | 2 | Thu | 15:15-17:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0022 | Dr. Anat Bernstein | Stable Isotope Application in Contaminant Hydrology | 2 | A 3-day intensive workshop in the SUMMER break, 18-22.10.2015, 08:00-15:00 (Registration in the SPRING semester). | | | | |
| 001-2-0023 | Prof. Yoseph Yechieli | Salination of Coastal Aquifers – Monitoring, Understanding and Managing | 2 | A 3-day intensive workshop in the SUMMER break, 10-12.08.2015, 9:00-17:00 (Registration in the SPRING semester). | | | | |
| 001-2-3021 | Dr. Merav Seifan | Biostatistics: ANOVA and Design of Experiments | 3 | Sun | 10:15-12:00 | Sede Boqer | 48 | 2 |
| | | Exercise | | Sun | 15:15-17:00 | Sede Boqer | Man in the Drylands | Computer Room |

D. Elective Courses (Continuation):

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|--|---|---------|---|------------------|-------------|----------------|--------------|
| 001-2-4036 | Prof. Georgy Burde | Topics in Environmental Fluid Mechanics – B | 3 | Flexib | le- according to | the schedul | es of the stud | ents |
| 001-2-4047 | Dr. Iris Visoli-Fisher | Surface Science for the Environment | 3 | Mon | 09:15-12:00 | Sede Boqer | Physics | Seminar Room |
| 001-2-5005 | Prof. Amit Gross, Prof. Zeev Ronen | Laboratory Methods for Environmental Studies | 3 | A 10-day intensive course in the FALL break, 8-12, 15-19.02.2015, 09:00-12:00 (Registration on the SPRING semester) | | | | |
| 001-2-5006 | Prof. Alex Yakirevitch | Migration Processes in the Unsaturated Zone of Soil | 3 | Sun | 09:00-12:00 | Sede Boger | School | 1 |
| 001-2-5034 | Prof. Yoram Oren | Environmental Oriented Electrochemistry | 2 | Mon | 11:15-13:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5038 | Prof. Amit Gross | Water Sanitation | 3 | Mon | 08:30-11:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5044 | Dr. Shai Arnon | Biogeochemical Processes in Surface Water Systems | 3 | Thu | 12:15-15:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5055 | Prof. Ofer Dahan, Dr. Naftali Lazarovitch | Operation and Analysis of Environmental Monitoring Systems | 1 | A semi intensive course in the FALL break, 22-24.02.2015, 9:00-13:00 (Registration in the SPRING semester). | | | | |
| 001-2-5129 | Prof. Noam Weisbrod | Rural Water Development | 2 | Field | Trip | | | |

E. General Courses:

Students are required to complete no more than 2 credits.

| | • | | | | | | | |
|------------|----------------|--|---|-----|-------------|------------|--------|---|
| 001-2-0153 | Ms. Ayla Adler | Academic Writing for Graduate Students | 2 | Wed | 14:15-18:00 | Sede Boqer | School | 1 |

DESALINATION AND WATER TREATMENT

A. Core Courses:

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

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|--------------------|--|---------|-----|-------------|------------|-------------|--------------|
| 001-2-0003 | Dr. Chris Arnusch | Chemistry of Water | 3 | Sun | 13:15-16:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5060 | Dr. Moshe Herzberg | Biological Processes in Wastewater Treatment | 2 | Wed | 10:15-12:00 | Sede Boqer | Water Inst. | Seminar Room |

^{*} 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).

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|-------------------|--------------------------------------|---------|-----|-------------|------------|-------------------|--------------|
| 001-2-5555 | Dr. Chris Arnusch | Departmental Seminar A (first year) | 0 | Wed | 13:00-14:00 | Sede Boqer | Old Admin. Build. | Seminar Room |
| 001-2-5557 | (coordinator) | Departmental Seminar B (first year) | | | | | | |
| 001-2-5556 | | Departmental Seminar A (second year) | | | | | | |
| 001-2-5558 | | Departmental Seminar B (second year) | | | | | | |
| 001-2-9995 | Prof. Ali Nejidat | Student Seminar (first year) | 0.5 | Wed | 9:00-10:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-9996 | (coordinator) | Student Seminar (second year) | | | | | | |

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

| Course No. | Lecturer | Subject | Credits |
|------------|----------|------------------|---------|
| 001-2-9991 | | Thesis Writing A | 6 |
| 002-2-9992 | | Thesis Writing B | 6 |

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

| Course No. | Lecturer | Subject | Credits |
|------------|----------|-------------------------------|---------|
| 001-2-1000 | | Thesis Writing - Continuation | 0 |

C. Mandatory Core Courses Within the Track of Study:

Students are required to complete at least 6 credits*.

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|----------------|---|---------|-----|-------------|------------|-------------|--------------|
| | | Water Sanitation | 3 | / | _ | | | Seminar Room |
| 001-2-5044 | Dr. Shai Arnon | Biogeochemical Processes in Surface Water Systems | 3 | Thu | 12:15-15:00 | Sede Boqer | Water Inst. | Seminar Room |
| | | | | | | | | |

^{*} 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 7 credits.

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|-------------|--|--|---------|--|---|------------|---------------------|---------------|
| 001-2-0009 | Dr. Avraham Be'er | Physics of Bacterial Communities | 2 | Mon | 13:15-15:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0012 | Prof. Daniel Ronen | Selected Issues Related to Groundwater Hydrology: Quality & Quantity (intensive course) | 2 | | ay intensive co .2015, 08:30-1 ster). | | | |
| 001-2-0015 | Dr. Roy Bernstein | Membrane Preparation and Characterization | 3 | Tue | 13:15-16:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0021 | Dr. Christopher Arnush | Biomimetic Innovation Approaches | 2 | Thu | 15:15-17:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-0022 | Dr. Anat Bernstein | Stable Isotope Application in Contaminant Hydrology | 2 | | ay intensive wo .2015, 08:00-1 ster). | • | | |
| 001-2-0023 | Prof. Yoseph Yechieli | Salination of Coastal Aquifers – Monitoring, Understanding and Managing | 2 | A 3-day intensive workshop in the SUMMER break, 10-12.08.2015, 9:00-17:00 (Registration in the SPRING semester). | | | | |
| 001-2-2036 | Prof. Gideon Grafi | Molecular Biology and Epigenetics | 2 | Thu | 12:15-14:00 | Sede Boqer | Biology | 32 |
| 001-2-2040* | Prof. Gideon Grafi | Lab Course in Epigenetics | 4 | | ay intensive wo .2015, 9:00-17 ster). | • | | |
| 001-2-3021 | Dr. Merav Seifan | Biostatistics: ANOVA and Design of Experiments | 3 | Sun | 10:15-12:00 | Sede Boqer | 48 | 2 |
| | | Exercise | 1 | Sun | 15:15-17:00 | Sede Boqer | Man in the Drylands | Computer Room |
| 001-2-5004 | Prof. Ofer Dahan, Prof. Noam Weisbrod | Field Methods in Hydrology | 3 | Sun | 16:15-19:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5006 | Prof. Alex Yakirevitch | Migration Processes in the Unsaturated Zone of Soil | 3 | Sun | 09:00-12:00 | Sede Boqer | School | 1 |
| 001-2-5012 | Prof. Zeev Ronen | Biodegradation Process of Synthetic Organic Compound in Water Soil | 2 | Thu | 10:15-12:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5026 | Prof. Ali Nejidat | Nitrogen Transformations and Environmental Quality | 2 | Thu | 08:30-10:00 | Sede Boqer | Water Inst. | Seminar Room |

D. Elective Courses (Continuation):

| Course No. | Lecturer | Subject | Credits | Day | Time | Campus | Building | Room |
|------------|--|--|---------|---|-------------------|--------------|-------------|--------------|
| 001-2-5034 | Prof. Yoram Oren | Environmental Oriented Electrochemistry | 2 | Mon | 11:15-13:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5040 | Dr. Eli Zaady | Soil Microbial Ecology | 2 | Tue | 08:30-10:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5055 | Prof. Ofer Dahan, Dr. Naftali Lazarovitch | Operation and Analysis of Environmental Monitoring Systems | | A semi intensive course in the FALL break, 22-24.02.2015, 9:00-13:00 (Registration in the SPRING semester). | | | | , |
| 001-2-5100 | Dr. Genadi Carmi | Introduction to Surface Hydrology | 2 | Sun | 08:30-10:00 | Sede Boqer | Water Inst. | Seminar Room |
| 001-2-5129 | Prof. Noam Weisbrod | Rural Water Development | 2 | Field ⁻ | Trip (registratio | n on 2015/3) | - | • |

E. General Courses

Students are required to complete no more than 4 credits.

| 001-2-0153 | Ms. Ayla Adler | Academic Writing for Graduate Students | 2 | Wed | 14:15-18:00 | Sede Boqer | School | 1 |
|------------|----------------|--|---|-----|-------------|------------|--------|---|

^{*}The course constitutes of three sessions of field tour (around 4 h each), which will take place during the Spring semester, for collecting annual and perennial desert plants nearby the campus and processing the samples, that is nuclei preparation and fixation. These materials will be used during the one-week-lab course at the semester break for the analysis of epigenetic constraints employed by desert plants in their natural habitats. REGISTRATION FOR THE COURSE ON THE SPRING SEMESTER.