

## M.Sc. in Ecology and Nature Conservation

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- The M.Sc. program in Ecology and Nature Conservation is a two-year program.

### Prerequisites:

- Students are required to have earned a B.Sc. in Life Sciences or an equivalent degree.
- Students without sufficient background will be required to complete individually-prescribed courses for no academic credit, typically yet not exclusively, including the following courses or their equivalents:

Course #	Lecturer	Subject	Credits	Offered in 2020-21
201-1-9431		The Mathematics of Systems 1	0	semester A
204-1-1531 & 204-1-1543	Dr. Arik Mimon  Dr. Barak Akabayov	General Chemistry B  General Chemistry - Laboratory	0	no  semester B
205-1-9011	Prof. Jerry Eichler & Prof. Amir Sagi	The Cell	0	semester A
205-1-1611	Prof. Dan Mishmar & Dr. Ramon Birnbaum	Genetics A	0	semester A
205-1-1221 & 205-1-1223 <b>or</b> 205-1-1021 & 205-1-1031	Prof. Khalil Kashkush Mr. Liron Goren  Prof. Uri Abadi  Prof. Amos Bouskila	Plant science A & Plant Sciences A Laboratory  Invertebrate Zoology & Vertebrate Zoology	0	semester B  semester B  semester A  semester A
205-1-3211	Prof. Ofer Ovadia and Ms. Ella Pachter Zafrir	Ecology B	0	semester A
001-2-3037  <b>or</b> 205-1-3171	Prof. Ariel Novoplansky   Dr. Shimon Bershtein	Tutorial in Evolution (can be completed during the program)   Evolution	0	semester A & semester B  semester A
001-2-3021  <b>or</b> 205-2-9681	Dr. Itamar Giladi   Prof. Ofer Ovadia and	Bio-Statistics - ANOVA and Design of Experiments (can be completed during the program)  Statistical Principles in the Analysis of Research Data	0	semester A   semester A

## Specialization Tracks

Students will pursue one of the following tracks:

- a) Evolutionary Ecology (E)
- b) Nature Conservation (C)

**All students are required to complete the following:**

Subject	Credits
A. Mandatory program courses B. Mandatory track courses C. Limited choice – program courses D. Limited choice – track courses E. Elective courses within the program F. Elective courses outside the program	30
Thesis Writing	12
Total	42

### A. Mandatory Program Courses:

Students are required to attend at least 80% of the Departmental Seminars and Workshops in each semester, throughout their studies.

Course #	Lecturer	Subject	Credits	Offered in 2020-21
001-2-6666	Shirli Bar–David	Departmental Seminar (every semester)	0	semester A & semester B
205-2-2524	Dr. Itamar Giladi & Prof. Yaron Ziv	Workshop in Ecology and Environmental Sciences (Semester 2021-1)	0.5	semester A
205-2-2523	Dr. Itamar Giladi & Prof. Yaron Ziv	Workshop in Ecology and Environmental Sciences (semester 2020-2)	0.5	semester B
001-2-3063	Prof. Burt Kotler	Advanced Topics in Ecology	4	no
205-2-5021	Dr. Moshe Kiflawi	Methods in Ecology (An eight-day intensive course offered during the FALL break)	3	Intensive course during the fall break
205-2-1601	Prof. Ofer Ovadia	Ecology of Populations	3	semester A

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

Course #	Subject	Credits
001-2-9991	Thesis Writing A	6
001-2-9992	Thesis Writing B	6

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

Course #	Subject	Credits
001-2-1000	Thesis Writing – Continuation	0

## B. Mandatory Track Courses

### Evolutionary Ecology Track:

Course #	Lecturer	Subject	Credits	Offered in 2020-21
001-2-3084	Dr. Michal Segoli	Evolutionary Ecology	4	semester A

### Nature Conservation Track:

Course #	Lecturer	Subject	Credits	Offered in 2020-21
001-2-3087	Dr. Oded Berger-Tal	Conservation Ecology	4	semester A
001-2-3085	Dr. Uri Roll	Conservation Biology: Philosophy and Ethics	2	semester A

### Limited Choice Courses:

**List C:** Limited choice – program courses

**List D:** Limited choice – track courses

Students are required to complete at least 2 courses from list C and a total of 4 courses from lists C and D.

### C. Limited Choice – Program Courses

Course #	Lecturer	Subject	Credits	Offered in 2020-21
001-2-3083	Dr. Merav Seifan	Community Ecology	3	no
001-2-3084	Dr. Michal Segoli	Evolutionary Ecology	4	semester A
205-2-8031	Prof. Yaron Ziv	Spatial Ecology	3	no

### D. Limited Choice – Track Courses

(Annotated by track: **E**-Evolutionary Track; **C**-Nature Conservation Track).

Course #	Lecturer	Subject	Credits	Offered in 2020-21
<b>E</b> 001-2-3001	Prof. Ariel Novoplansky	Evolutionary Ecology of Phenotypic Plasticity	3	semester A
<b>E</b> 205-2-7031	Prof. Amos Bouskila	Mathematical Models for the Study of Animal Behavior	3	no
<b>E</b> 001-2-3335	Prof. Ariel Novoplansky	Camp Evolution	2	no
<b>C</b> 001-2-3089	Dr. Oded Berger-Tal	Animal Behavior in Conservation Biology	3	semester B
<b>C</b> 001-2-3093	Dr. Michal Segoli	Arthropod Behavior and Agroecology	2	Intensive course (29/3-2/4/2021)
<b>C</b> 001-2-3045	Dr. Shirli Bar-David	Conservation Genetics	3	semester B
<b>E, C</b> 001-2-3020	Dr. Merav Seifan	The Ecology of Plant-Animal Interactions	3	semester B
<b>E, C</b> 001-2-3039	Prof. Boris Krasnov	Evolutionary Ecology of Parasitism	3	semester A
<b>E, C</b> 001-2-3082	Dr. Itamar Giladi	Ecology and Evolution of Dispersal	3	no
<b>E, C</b> 001-2-3086	Dr. Hadas Hawlena	Microbial Ecology	3	semester B

**E. Elective Courses within the Program:**

Course #	Lecturer	Subject	Credits	Offered in 2020-21
001-2-3023	Prof. Carmi Korine & Prof. Berry Pinshow	Echolocation and Bat-Insect Interactions in Desert Habitats	3	Intensive course during the summer break
001-2-3035	Prof. B. Pinshow, Dr. N. Agam, Prof. Scott Turner and Dr. Eugene Marais	Biophysical Ecology in the Namib Desert: Online Course and Field Workshop	4	no
001-2-3036	Prof. Bertrand Boeken	Agroecology	3	no
001-2-3034	Prof. Bertrand Boeken	Vegetation Ecology	3	no
001-2-3041	Prof. Burt Kotler	Topics in Ecology	2	no
001-2-3078	Prof. Ariel Novoplansky	Personal Projects in Evolutionary Ecology	3	semester A
001-2-3090	Dr. Shirli Bar-David	Introduction to Molecular Ecology	2	semester B
001-2-3091	Dr. Merav Seifan	Contemporary Topics in Israeli Nature Conservation –Workshop	3	Intensive course during the Passover break + five sessions during semester B
001-2-3092	Dr. Oded Berger-Tal	The use of animal cognition principles in conservation	3	no
001-2-3333	Prof. Boris Krasnov	Guided Reading on the Ecology of Parasites and Parasitism	2	semester A
001-2-3344	Dr. Shirli Bar-David	Guided Reading on Molecular Ecology	2	semester B
001-2-3355	Dr. Hadas Hawlana	Guided Reading in Microbial Ecology	2	semester B
205-2-2281	Prof. Amos Bouskila	Behavioral Ecology of Equids	3	semester B
205-2-4162	Dr. Michal Segoli	Insect Ecology	3	no
205-2-7031	Prof. Amos Bouskila	Mathematical Models for the Study of Animal Behavior	3	no
205-2-7031	Prof. Amos Bouskila	Solving Problems with R	2	semester A

**Courses from the Interuniversity Institute for Marine Sciences at Eilat (IUI):**

You may participate in one course per semester and in no more than two courses during the 2-year program. Students might register to more elective courses in the IUI, with the recommendation of the advisor and the approval of the teaching committee.

For more information please refer to: <http://www.iui-eilat.ac.il/Courses/Courses.aspx>

Courses are in Hebrew except international courses.

**F. Elective Courses outside the Program**

<b>Course #</b>	<b>Lecturer</b>	<b>Subject</b>	<b>Credits</b>	<b>Offered in 2020-21</b>
001-2-3079	Prof. Ariel Novoplansky	Scientific Presentation	2	semester A
001-2-0153	Prof. Shai Arnon and Dr. Chris Arnush	Writing a Scientific Paper	2	semester A & semester B
001-2-4022	Prof. Ehud Meron	Pattern Formation and Spatial Ecology	3	semester A
001-2-4028	Prof. Arnon Karnieli	Remote Sensing for Agriculture, Rangelands, and Forestry (no prerequisites required)	3	semester A
001-2-2038	Prof. Naftali Lazarovitch	Soil Physics	3	semester A
001-2-4029	Prof. Yosef Ashkenazi	Introduction to Statistics and Probability	3	semester A
001-2-5041	Dr. Menachem Sklartz	Practical Bioinformatics for Environmental Studies	3	no
001-2-7007	Prof. Amos Zemel	Statistical Methods	3	no
001-2-7010	Dr. Menachem Sklartz	Hands-on Introduction to R: Programming, Graphing and Statistical Exploration	2	no
001-2-6002	Dr. Aviva Peeters	Theory and Applications of Geographic Information Systems (GIS)	3	semester B
205-2-9531	Dr. Tal Shai and Dr. Alal Eran	Introduction to Bioinformatics	3	semester A