

Preliminary teaching programme of the degree programmes at the Faculty of Biological and Environmental Sciences

Degree programme	Code	Name of the course	Scope (cr)	Teaching period	Languages of instruction	Mode of teaching	Additional information
All degree programmes of the Faculty	VIIB-000/ VIIB-000B	Research Practice for Exchange Students in the Faculty of Biological and Environmental Sciences	5-60 cr	any period	English	Work placement	After agreement with a potential supervisor. -000 grading scale 0-5, -000B pass/fail.
BSc in Environmental Sciences	ENV-101	Global environmental problems and their solutions	5 cr	4	English	Blended teaching	Primarily for Liberal Arts and Sciences -students, also others if there is space
BSc in Environmental Sciences	ENV-103	Introduction to environmental policy	5cr	2	Finnish, Swedish, English	Contact teaching	
BSc in Environmental Sciences	ENV-3170	Marine biology	5 cr	2	English	Contact teaching	
BSc in Environmental Sciences	ENV-368	Introduction to systemic approaches to sustainability transformations	5 cr	2	Swedish, English	Contact teaching	
BSc in Environmental Sciences	ENV-369	Basics in urban ecology	5 cr	4	English	Contact teaching	
BSc in Environmental Sciences	ENV-381	Topical Issues in Urban Research	5 cr	3	English	Contact teaching	
BSc in Environmental Sciences	ENV-471	Global development and environment	5 cr	4	English	Distance teaching	Time-bound
BSc in Environmental Sciences	ENV-472	Sustainable development in practice	5 cr	3	Swedish, English	Blended teaching	
BSc in Environmental Sciences	ENV-475	Ecosystem services	5 cr	4	Swedish, English	Contact teaching	
BSc in Molecular Biosciences	MOLE-702	Immunobiology book exam	3-5 cr	any period	English	Literature examination	
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-001	Ecology	5 cr	1 - 2	English	Blended teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-019	Quantitative Methods in Ecology and Evolutionary Biology	5 cr	1	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-020	Evolutionary Biology	5 cr	1 - 2	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-112	Current Topics in Marine Biodiversity	5 cr	3	English	Distance teaching	Time-bound. EEB and ECGS students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-116	Climate Change and Biodiversity: Consequences and Conservation Measures	5 cr	4	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-118	Behavioural Ecology and its Applications	5 cr	3	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-201	Laboratory Methods in Molecular Ecology	5 cr	3	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-203	Eco-Evolutionary Dynamics	5 cr	2	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-204	Speciation theory	5 cr	2	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-301	Fundamentals of Conservation Biology	5 cr	1 - 2	English	Blended teaching	EEB and LYRA students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-308	Biodiversity Research and Assessments	5 cr	3	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-310	Macroecology and Global Change	5 cr	4	English	Contact teaching	EEB students prioritised.
MSc in Ecology, Evolutionary Biology and Biodiversity Conservation	EEB-313	Geoinformatics in Ecology	5 cr	2	English	Contact teaching	EEB students prioritised.
MSc in Environmental Change and Global Sustainability	ECGS-001	Introduction to Sustainability Science	5 cr	1	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-002	Philosophical and Methodological Foundations of Sustainability Science	5 cr	1	English	Contact teaching	ECGS students and philosophy students prioritized
MSc in Environmental Change and Global Sustainability	ECGS-003	Practical application of sustainability science: learning project	5 cr	4	English	Contact teaching	ECGS and AGERE students prioritized
MSc in Environmental Change and Global Sustainability	ECGS-011	Advanced aquatic and sediment biogeochemistry	5 cr	4	English	Blended teaching	
MSc in Environmental Change and Global Sustainability	ECGS-016	Fish research	5 cr	2	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-018	Food webs of aquatic ecosystems	5 cr	1-2	English	Blended teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-023	Functional Marine Ecology	10 cr	4	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-024	Technology in Ecological Research and Environmental Monitoring	5 cr	1	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-034	Seminar in northern ecosystems and environment	5 cr	4	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-036	Arctic and human beings	5 cr	3 - 4	English	Contact teaching	
MSc in Environmental Change and Global Sustainability	ECGS-049	Nature-based Solutions	5 cr	1	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-050	Effective Science Communication	5 cr	2	English	Contact teaching	
MSc in Environmental Change and Global Sustainability	ECGS-051	Aquatic ecosystems in a changing Arctic	5 cr	2	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-052	Arctic climate change in terrestrial ecosystems	5 cr	2	English	Contact teaching	
MSc in Environmental Change and Global Sustainability	ECGS-068A	Past environmental change	5 cr	3	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-068B	Past environmental change, Practicals	5cr	4	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-088	Social study of global environmental risks	5 cr	3	English	Contact teaching	
MSc in Environmental Change and Global Sustainability	ECGS-089	Just Sustainability Transformations	5cr	3	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-091	Knowledge co-production and transformative research	5 cr	3	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-101	Advanced marine ecology	5 cr	2	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-102	Advanced freshwater ecosystems research	10 cr	1	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-103	Function and management of freshwater ecosystems	5 cr	3 - 4	English	Contact teaching	ECGS students prioritised
MSc in Environmental Change and Global Sustainability	ECGS-201	Perspectives on sustainable consumption and production systems	5 cr	1	English	Contact teaching	Open to exchange students if space
MSc in Environmental Change and Global Sustainability	ECGS-202	Sociotechnical (re)construction of consumer society	5 cr	3	English	Contact teaching	Open to exchange students if space
MSc in Environmental Change and Global Sustainability	ECGS-204	Business in the natural environment	5 cr	1	English	Online teaching	Not time-bound. Quota for exchange students is 5.
MSc in Environmental Change and Global Sustainability	ECGS-204	Business in the natural environment	5 cr	3	English	Online teaching	Not time-bound. Quota for exchange students is 5.
MSc in Environmental Change and Global Sustainability	ECGS-205	Sustainable consumption governance	5 cr	2	English	Contact teaching	Open to exchange students if space
MSc in Environmental Change and Global Sustainability	ECGS-302	Sustainability in a diverse society	5 cr	2	English	Contact teaching	
MSc in Environmental Change and Global Sustainability	ECGS-907	Urban Biodiversity	5 cr	3	English	Contact teaching	ECGS students prioritised

MSc in Environmental Change and Global Sustainability	ECGS-909	Global topical issues in urban studies	5 cr	3	English	Blended teaching	Open to exchange students if space
MSc in Environmental Change and Global Sustainability	ECGS-911	Urban pollution	5 cr	1	English	Distance teaching	Time-bound
MSc in Genetics and Molecular Biosciences	GMB-005	Research project	10 cr	any period	English	Work placement	After agreement with a potential supervisor
MSc in Genetics and Molecular Biosciences	GMB-021	Career Planning and Professional Development	5	1-2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-101	Enzymes	3 cr	3-4	English	Online teaching	Not time-bound
MSc in Genetics and Molecular Biosciences	GMB-105	Introduction to structural biology and biophysics	5 cr	3	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-107	Chemical Biology	5 cr	4	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-109	Laboratory Course in Molecular Biology and Biochemistry	5	2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-111	Basics of Bioinformatics	5	Any period	English	Online teaching	Not time-bound
MSc in Genetics and Molecular Biosciences	GMB-110	Structure and function of the cell	5-8	2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-202	Essentials of gene regulation & epigenetics	5 cr	3	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-203	RNA-seq data analysis	5 cr	4	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-204	Population genetics and genomics	5 cr	2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-207	New experimental approaches in genetic and genomics	5 cr	1	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-208	Human and cancer genetics	5 cr	3	English	Blended teaching	
MSc in Genetics and Molecular Biosciences	GMB-214	Applications of genetics	5	2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-215	Plant genetics and genomics	5	1-4	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-217	Laboratory course in plant biotechnology	5	3-4	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-302	Methods in cell biology	5 cr	2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-303	Plant Physiology for a Sustainable Future	5	1	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-304	Methods in functional genetics and development	5 cr	3	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-305	Stem cells and organogenesis	5 cr	3	English	Blended teaching	
MSc in Genetics and Molecular Biosciences	GMB-307	Plant growth and development	5	2	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-331	Mechanisms of regeneration and aging	5	4	English	Contact teaching	
MSc in Genetics and Molecular Biosciences	GMB-901	Introduction to Research Career	2 cr	4	English	Contact teaching	
MSc in in Nature, Society, and Environmental Solutions	LYRA-001	Sustainability and responsibility	3	1	Finnish and English	Contact teaching	
MSc in in Nature, Society, and Environmental Solutions	LYRA-401	Bats of Finland – species identification and survey skills	5	4	Finnish and English	Examination	
MSc in in Nature, Society, and Environmental Solutions	LYRA-402	Bees of Finland	5	3-4	Finnish and English	Examination	
MSc in in Nature, Society, and Environmental Solutions	LYRA-403	Breeding bird species in Finland	5	3-4	Finnish and English	Examination	
MSc in Neuroscience	NEU-103	Systems Physiology and Neuroscience	5 cr	2	English	Blended teaching	
MSc in Neuroscience	NEU-109	Fundamental neurobiology	10 cr	1 - 2	English	Contact teaching	
MSc in Neuroscience	NEU-207	Regulatory Networks in Metabolism	5 cr	2	English	Blended teaching	
MSc in Neuroscience	NEU-251	Molecular Nutrition	5 cr	any period	English	Online teaching	Not time-bound, except final oral exam
MSc in Neuroscience	NEU-502	Synaptic signaling and plasticity	3-5 cr	4	English	Blended teaching	
MSc in Neuroscience	NEU-505	Exposed animal	5 cr	any period	English	Online teaching	Not time-bound
MSc in Neuroscience	NEU-511	Systems and Cognitive Neuroscience	5 cr	any period	English	Online teaching	Not time-bound
MSc in Neuroscience	NEU-512	Application of animal models for behavioural studies in biomedical research	5 cr	4	English	Blended teaching	
MSc in Neuroscience	NEU-521	Basic mechanisms of nervous system diseases	1 or 5 cr	3	English	Online teaching	Time-bound
MSc in Neuroscience	NEU-531	Developmental and regenerative neuroscience	5 cr	3	English	Contact teaching	
MSc in Neuroscience	NEU-541	Introduction to neurobiophysics	5 cr	3 - 4	English	Blended teaching	
MSc in Neuroscience	NEU-553	Information Processing in Neural Circuits	3-5 cr	3 - 4	English	Contact teaching	
MSc in Neuroscience	NEU-561	Principles of Bioscience Omics	5 or 10 cr	3 - 4	English	Contact teaching	
MSc in Neuroscience	NEU-603A	Course for people carrying out procedures: Theory	2 cr	any period	English	Online teaching	Not time-bound
MSc in Neuroscience	NEU-603B	Course for people carrying out procedures: Hands-on exercises	1 cr	2 & 4	English	Contact teaching	
MSc in Neuroscience	NEU-603C	Course for people designing procedures and projects	2 cr	2	English	Blended teaching	
MSc in Neuroscience	NEU-604	Functional lipidomics seminar	5-10 cr	any period	English	Seminar	Seminars, report and optional presentation
MSc in Neuroscience	NEU-606	Neuroscience seminar series	2 cr	any period	English	Seminar	Seminars and report
MSc in Integrative Plant Sciences	IPS-008	Advanced Training in a Research Group	5-10 cr	any period	English	Work placement	After agreement with a potential supervisor
MSc in Integrative Plant Sciences	IPS-009	Practical Training	5-10 cr	any period	English	Work placement	After agreement with a potential supervisor
MSc in Integrative Plant Sciences	IPS-013	Symposia and Seminars	1-5 cr	any period	English	Blended teaching	
MSc in Integrative Plant Sciences	IPS-153	Flora of Subarctic Europe (web course)	5 cr	any period	English	Online teaching	
MSc in Integrative Plant Sciences	IPS-171	Boreal Bryophytes and Lichens (web course)	5 cr	any period	English	Online teaching	
MSc in Integrative Plant Sciences	IPS-174	Temperate and Tropical Flora (web course)	5 cr	any period	English	Online teaching	
MSc in Integrative Plant Sciences	IPS-177	Fennoscandian Flora (web course)	5 cr	any period	English	Online teaching	
MSc in Integrative Plant Sciences	IPS-178	Threatened Vascular Plants of Finland (web course)	5 cr	any period	English	Online teaching	
MSc in Microbiology and Microbial Biotechnology	MMB-117	Environmental microbiology - lab course	5 cr	3	English	Contact teaching	Primarily MMB students, others if there is space
MSc in Microbiology and Microbial Biotechnology	MMB-127	Exploratory microbial genomics	5 cr	1-2	English	Contact teaching	Primarily MMB students, others if there is space
MSc in Microbiology and Microbial Biotechnology	MMB-201	Microbial ecology	5 cr	3	English	Blended teaching	-

MSc in Microbiology and Microbial Biotechnology	MMB-401	Seminar in evolution of microbial pathogenesis	5 cr	2	English	Contact teaching	Primarily MMB students, secondarily exchange students and students from other degree programmes, if there is space on the course and the student has appropriate previous studies.
MSc in Microbiology and Microbial Biotechnology	MMB-403	Seminar in molecular microbiology	5 cr	3	English	Contact teaching	Primarily MMB students; secondarily exchange students and students from other degree programmes
MSc in Microbiology and Microbial Biotechnology	MMB-805	Viruses lectures	5 cr	3	English	Contact teaching	-
MSc in Microbiology and Microbial Biotechnology	MMB-901	Microbial Metagenomics	5 cr	2	English	Contact teaching	Primarily MMB students, others if there is space