

Department of Environmental Sciences and Policy

## **Departmental Student Handbook**



### **MASTERS PROGRAMS**

**Academic Year 2018 - 2019**

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*Dear Student:*

*This document describes the MESP and MESPOM programs in CEU's Department of Environmental Sciences and Policy for the academic year 2018-2019.*

*Every effort has been made to keep the information accurate as of the time of preparation (July 2018). However, in today's dynamic academic environment some changes are bound to occur. Staff and faculty will do their best to communicate any changes and update this document accordingly. However, please do not hesitate to notify us of any inaccuracies.*

*We are looking forward to working with you and wish you a pleasant and exciting academic year!*

*Sincerely,*

*Prof. László Pintér, Head of Department*

*Prof. Brandon P. Anthony, Masters Programs Committee Chair  
on behalf of all Faculty and Staff*

# Table of Contents

Departmental Staff and Contact Details .....	4
Program Details .....	5
<i>MESP Program Data</i> .....	5
<i>MESPOM Program Data</i> .....	5
<i>Aim and objectives</i> .....	5
<i>Learning outcomes and acquired competencies</i> .....	6
Program overview, timing and credit requirements .....	6
1 <sup>st</sup> (Fall) Semester.....	6
2 <sup>nd</sup> (Winter) Semester.....	7
Figure 1: Structure for MESP program.....	8
Table 1: Overview of MESP study program .....	8
Figure 2: Structure for MESPOM program.....	11
Table 2: Overview of MESPOM study program.....	11
Visiting faculty at CEU.....	14
Evaluation and Assessment .....	15
Assignments .....	15
Examinations.....	15
Departmental grading scheme.....	15
Examination and Assignment Re-sits .....	16
Penalties for Late Submitted Work .....	17
The Thesis .....	17
MESPOM students taking the thesis at CEU .....	17
11-month MESP students .....	17
Graduation Requirements.....	18
Award of Distinction and Merit in MESP.....	19
Regulations.....	19
Work and Attendance .....	19
Claims of Mitigating Circumstances.....	19
Academic Dishonesty and Plagiarism .....	20
Appeals.....	20
Health and Safety.....	20
Unsatisfactory Record .....	21
Course and Departmental Management .....	21
Departmental Student Representation .....	21
Teaching Schedule.....	21
Handouts and Readings .....	21
Communication .....	21
Academic Writing Tutor .....	22
PhD Students .....	22
Academic Calendar 2018/2019 .....	23
APPENDIX 1. Mitigating Circumstances Form.....	25
APPENDIX 2. Departmental Policy on Plagiarism .....	27
APPENDIX 3. Departmental Policies on Moderation and Feedback.....	29
APPENDIX 4: University of the Aegean Course Syllabi (MESPOM only; <b>Subject to change</b> ).....	31

## Departmental Staff and Contact Details

The last four digits of all telephone numbers work as internal extension numbers when you are in CEU buildings or CEU Residence Centre. Those starting with 327 can be contacted directly from outside CEU Buildings, while others can only be accessed using the main CEU number. The Country code for Hungary is 36 and area code for Budapest is 1.

Departmental Staff	Room	Telephone	Email
Departmental Phone Number		327 3021	envsci@ceu.edu
Departmental Fax		327 3031	-----
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<a href="#">Dr. Alexios Antypas</a> Associate Professor	N13.103	327 3091	antypasa@ceu.edu
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<a href="#">Dr. Diana Üрге-Vorsatz</a> Professor (on maternity leave)		327 3095	vorsatzd@ceu.edu
<a href="#">Dr. Alan Watt</a> Assistant Professor	N13.107	327 3093	watta@ceu.edu

### *Administrative staff*

<a href="#">Irina Herczeg</a> Academic Coordinator	N13.109	327 3021	herczegi@ceu.edu
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## **Program Details**

### ***MESP Program Data***

Title of Program:	Environmental Sciences and Policy
Qualification Awarded:	Master of Science (MS) (11-month program including two teaching semesters and a 4-month research semester)
Awarding Body:	CEU (registered with New York State Department of Education)
Administrative Institution:	Central European University

### ***MESPOM Program Data***

Title of Program:	Environmental Sciences, Policy and Management
Qualification Awarded:	Master of Science (MS) (22-month program including three teaching periods in different Universities and a 5 month research period)
Awarding Body:	Consortium of Lund University (Sweden), University of Manchester (UK), CEU (Hungarian accreditation), and the University of the Aegean (Greece)
External Examiner:	Dr. Thomas Fischer, University of Liverpool, UK
Administrative Institution:	Central European University, MESPOM Consortium

### ***Aim and objectives***

The MESP and MESPOM programs prepare students for identifying, developing and implementing effective solutions to environmental challenges, especially in an international context. They aim to educate future decision-makers in businesses, government and other organizations. MESP and MESPOM offer comprehensive inter- and multi-disciplinary curricula in environmental studies that challenge students' ability to integrate theory and practice for systematic analysis, holistic understanding, and management of key environmental issues in various social contexts. MESP and MESPOM aim to provide skills for translating environmental knowledge into specific policy and management strategies. In addition to their academic work, students develop research, communication and other professional skills, learn to orient themselves in European and worldwide networks of environmental institutions and elaborate relevant career objectives and strategies.

## ***Learning outcomes and acquired competencies***

The learning outcomes of the programs include knowledge and understanding of a range of environmental topics as well as intellectual, practical and transferable skills and competences, as detailed below. We aim to deliver *globally relevant* learning outcomes that equip graduates to work in various local, national and international contexts. We also aim to instill an appreciation of the need for ethical conduct and integrity.

MESP and MESPOM graduates should be able to:

### (KNOWLEDGE)

- thoroughly understand core concepts and approaches in environmental sciences, policy and management and their relationship to each other;
- demonstrate advanced understanding of several areas<sup>1</sup> of environmental sciences, policy and management (including awareness of the most important issues, contemporary theories and practices, key uncertainties, and practical complexities and dilemmas);
- understand the process of research and knowledge production in a selected environmental topic (including identifying a suitable problem statement and research questions, relevant academic and professional literature, and appropriate methods);

### (SKILLS)

- analyse and critically evaluate contemporary theory and practice in a range of environmental fields;
- contribute to the production of professional and academic knowledge and practical applications in selected fields of environmental science, policy and management;
- communicate complex environmental knowledge effectively in English both orally and in writing to professional and academic audiences, using appropriate communication standards;
- organize effective independent work in environmental sciences, policy and management;
- work effectively in multidisciplinary, multicultural groups to solve environmental problems;

### (VALUES/ATTITUDES)

- appreciate the role and the value of rigorous scientific inquiry (including inter- and multi-disciplinary approaches), sound management practices, and democratic policy-making processes in solving environmental problems, with an awareness of the role and the value of culturally appropriate approaches to environmental management in specific societal contexts;
- uphold values that advance a sustainable and open society, self-reflective critical inquiry, research ethics, and environmental and social care;
- appreciate the potential contribution of multidisciplinary and/or multinational networks to meeting environmental and sustainability challenges.

## **Program overview, timing and credit requirements**

### ***1<sup>st</sup> (Fall) Semester***

During Fall and Winter semesters (Sept 2018 to March 2019), MESP and MESPOM curricula run parallel. The first half of the Fall semester is organized by three introductory *Foundational Courses*:

- 1) Introduction to Environmental Sciences (IES)
- 2) Introduction to Environmental Policy and Society (IEP)
- 3) Introduction to Environmental Management (IEM)

MESP students must select **two** *Foundational Courses*, whilst MESPOM students must take all **three** (IES or IEP may be taken for audit). The main objective of these courses is to 'bridge' various initial competencies of the students and equip them with the skills necessary for further mastering environmental studies, therefore students are strongly advised to select courses that build needed strengths.

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<sup>1</sup>For MESPOM students, these areas will include ecosystem management and either pollution and environmental control or preventative environmental strategies

**Five Advanced Clusters** are introduced in the second half of the Fall semester, namely:

- 1) Energy Transitions and Climate Change (ETC)
- 2) Environmental and Resource Governance (ERG)
- 3) Environmental Justice, Politics and Humanities (JPH)
- 4) Resource Management and Pollution Control (RMP)
- 5) Sustainable Management of Socio-Ecological Systems (SES)

All students must select **two Advanced Clusters** to develop more advanced knowledge in these areas. To build research skills and understanding, all students are required to take *Environmental Research Methods* as well as *Academic Writing* to develop writing skills in an academic context. MESP students are additionally required to take *Thesis Preparation I* which will help students work towards a viable MS thesis topic.

## **2<sup>nd</sup> (Winter) Semester**

The 2<sup>nd</sup> (Winter) Semester has further elective courses grouped in the *Advanced Clusters* as well as a number of *Methodological Tools and Techniques* courses. Here, students can specialize in either one or two clusters, or, in exceptional cases, create a self-design study track:

- Students wishing to specialize in **ONE advanced cluster** must take at least 6 CEU/12 ECTS credits in one advanced cluster, and at least 2 CEU/4 ECTS credits from *Methodological Tools and Techniques* courses.
- Students wishing to specialize in **TWO advanced clusters** must take at least 4 CEU/8 ECTS credits each from both advanced clusters, at least 2 CEU/4 ECTS credits from *Methodological Tools and Techniques* courses, and at least a further 2 CEU/4 ECTS credits from any of the courses offered by the Department in the Winter Semester.
- In exceptional cases, students wishing to create a **self-design study track** must work with their faculty mentor to design and justify a study plan that meets the minimum credit requirement of their program, respects any pre-requisites and/or mandatory courses, and includes at least 2 CEU/4 ECTS credits from *Methodological Tools and Techniques* courses. The study track must be approved by your faculty mentor, a 2<sup>nd</sup> faculty member, and the Masters Programs Committee (MPC).

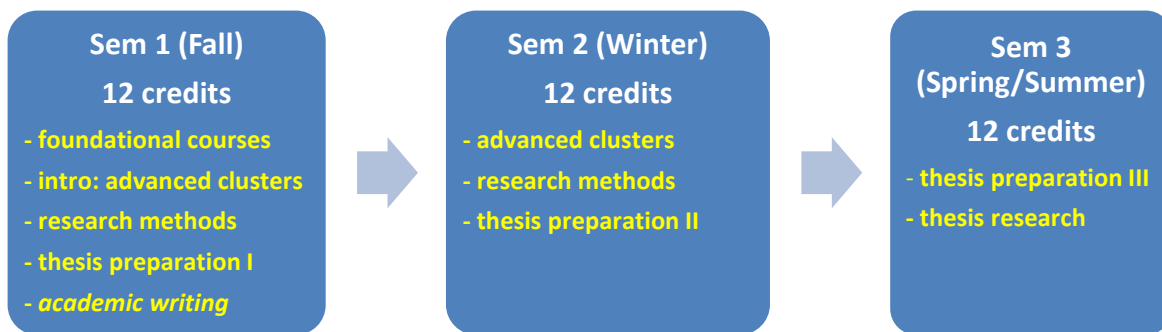
This semester runs until the end of March, after which MESPOM students proceed with the Spring Semester at the University of the Aegean (see Appendix 4), which lasts until early July, while MESP students start their 4-month Research Semester, which may include a research trip abroad for a period of up to one month, if required by the thesis topic. Students in the MESP program must complete 2 CEU/4 ECTS credits of thesis preparation per semester in addition to the other requirements.

Overall, students in the MESPOM program must gain a minimum of 20 CEU/40 ECTS credits from taught courses during the Fall and Winter Semesters at CEU. Students in the MESP program must gain a minimum of 20 CEU/40 ECTS credits from taught courses, 6 CEU/12 ECTS credits of thesis preparation, and complete their Masters thesis (10 CEU/20 ECTS credits). Students are allowed to take a maximum of 2 extra CEU credits for Grade and 2 for Audit from departmental courses in both the Fall and Winter Semesters, in addition to their program requirements.

Courses will generally have 600 minutes classroom contact per CEU credit. In addition to, or instead of, standard classroom hours, professors may offer other teaching and learning activities (group and individual consultations, field trips, etc). Overall student workload (including required reading, assessment writing and preparation, etc.) is approximately 50-60 hours per CEU credit (1 CEU credit = 2 ECTS credits). Figures 1 and 2, and Tables 1 and 2 below illustrate the structure and course requirements for the MESP and MESPOM programs, respectively.

**CEU promotes interdisciplinarity and cross-unit collaboration. Therefore, as a Masters-level student you are allowed to earn up to 4 credits per academic year from courses offered by other academic units without any formal approvals required by the Department of Environmental Sciences and Policy. This is a University-wide regulation endorsed by the CEU Senate. To learn about courses offered at other departments, please visit: <https://courses.ceu.edu>. Courses in other Departments can be taken in addition to the degree requirements for MESP and MESPOM programs.**

**Figure 1: Structure for MESP program**



**Table 1: Overview of MESP study program**

Semester 1 (Fall)			
Module	Courses (no. of CEU /ECTS credits)	Instructor(s)	Notes
Foundational Courses	<a href="#">IES: Introduction to Environmental Sciences</a> (2)	B.P. Anthony, R. Mnatsakanian	2 of 3 must be chosen for Grade
	<a href="#">IEP: Introduction to Environmental Policy and Society</a> (2)	A. Antypas, A. Watt	
	<a href="#">IEM: Introduction to Environmental Management</a> (2)	A. Cherp, K. Farrell	
Advanced Clusters	<a href="#">SES: Sustainable Management of Socio-Ecological Systems</a> (2)	L. Pinter, B.P. Anthony	2 of 5 must be chosen for Grade
	<a href="#">ERG: Environmental and Resource Governance</a> (2)	R. Mnatsakanian, A. Antypas	
	<a href="#">ETC: Energy Transitions and Climate Change</a> (2)	A. Cherp, M. LaBelle	
	<a href="#">JPH: Environmental Justice, Politics and Humanities</a> (2)	T. Steger, G. Aistara	
	<a href="#">RMP: Resource Management and Pollution Control</a> (2)	Z. Illes, V. Lagutov, R. Mnatsakanian	
Environmental Research Methods	<a href="#">EF: Epistemological Foundations</a> (0.5)	T. Steger, B.P. Anthony, V. Lagutov	EF <b>OR</b> TAS + GST <b>OR</b> IGDV + IRM + IQRM
	<a href="#">TAS: How to Think about Science: An Introduction to Philosophy of Science</a> (2.0)	M. Kronfelder et al. [University-wide Course]	
	<a href="#">GST: Geospatial Technologies for Environmental Professionals</a> (0.5)	V. Lagutov	
	<a href="#">IGDV: Introduction to Geospatial Data Visualization</a> (2.0)	V. Lagutov et al. [University-wide Course]	
	<a href="#">IRM: Interpretive Research Methods</a> (0.5)	T. Steger	
	<a href="#">IQRM: Introduction to Quantitative Research Methods</a> (0.5)	B.P. Anthony	
Academic Skills	<a href="#">TP-I: Thesis Preparation I</a> (2)	A. Watt	mandatory
	<a href="#">AW: Academic Writing</a>	A. Watt, E. Timár, V. Eliasova	mandatory
Semester 1: Min. no. of credits = 12 (max. 14 for Grade + 2 for Audit)			



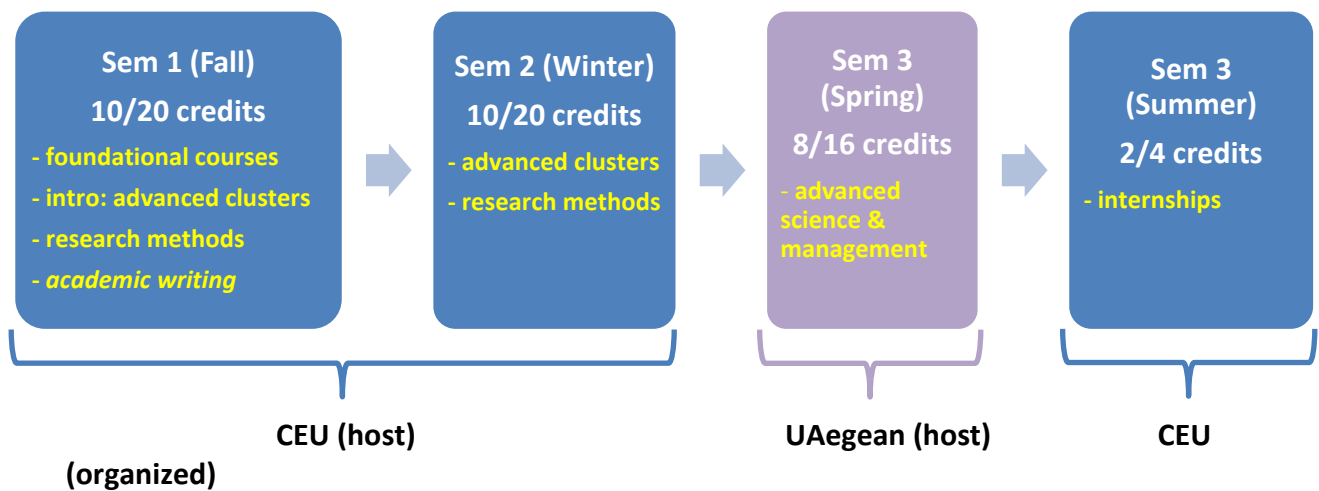
## Semester 2 (Winter)

### Advanced Clusters (students can choose 1 or 2 Clusters).

Cluster [Coordinator]	Courses (no. of CEU credits/ECTS credits)	Instructor(s)	Notes
<b>Sustainable Management of Socio-Ecological Systems (SES)</b> [L. Pinter]  <b>[10 credits offered]</b>	<a href="#">BC: Biodiversity &amp; Conservation</a> (2) Reduced assignment load if taken with <i>Environmental Monitoring</i>	B.P. Anthony	<u>1 Cluster:</u> BC and SDGT + 2 credits from cluster <b>OR</b> BC or SDGT + 4 credits from cluster
	<a href="#">SDGT: Sustainable Development &amp; Global Transitions</a> (2)	L. Pinter, D. Almassy	
	<a href="#">AOGS: Agroecology &amp; Organic Gardening Systems</a> (2)	T. Centofanti, L. Strenchock	<u>2 Clusters:</u> BC and SDGT <b>OR</b> BC or SDGT + 2 credits from cluster
	<a href="#">EMON: Environmental Monitoring</a> (2) Reduced assignment load if taken with <i>Biodiversity &amp; Conservation</i>	B.P. Anthony, T. Kovács	
	<a href="#">AMR: Adaptive Management and Resilience of Socio-ecological Systems</a> (2)	L. Pinter, A. Deri, J. Sendzimir	
<b>Environmental and Resource Governance (ERG)</b> [A. Antypas]  <b>[9 credits offered]</b> <b>+ ADV (2) ADVP (2)</b>	<a href="#">AGEG: Advanced Topics in Global Environmental Governance</a> (2)	A. Antypas	<u>1 Cluster:</u> any 6 credits from cluster <u>2 Clusters:</u> any 4 credits from cluster * can also count as part of RMP cluster
	<a href="#">PST: Policies for Sustainable Transport</a> (2)*	Z. Illes	
	<a href="#">IEL: International Environmental Law</a> (1)	S. Stec	
	<a href="#">SEC: Environment and Security</a> (2)	S. Stec	
	<a href="#">DEM: Environment and Democracy</a> (2)	A. Antypas, A. Watt	
<b>Energy Transitions and Climate Change (ETC)</b> [A. Cherp]  <b>[12 credits offered]</b>	<a href="#">SET: Sustainable Energy Transitions</a> (2)	A. Cherp	<u>1 Cluster:</u> a) EPSM + EMIP + SET/EIL/EAS <b>OR</b> b) EPSM/EMIP + SET + EIL/LEAP/EAS  <u>2 Clusters:</u> a)EPSM/EMIP + SET/EMIP/EAS <b>OR</b> b) EPSM/EMIP + EIL/EAS <b>OR</b> c) SET + LEAP  <b>Students can request other options to be approved by cluster coordinator</b>
	<a href="#">EPSM: Energy Policies and Strategic Management</a> (2)	M. LaBelle	
	<a href="#">EMIP: Energy Markets and Innovation Policies</a> (2)	M. LaBelle	
	<a href="#">EIL: Energy Innovation Lab</a> (2)	M. LaBelle + external organizations	
	<a href="#">LEAP: Energy Data, Models and Scenarios with LEAP Software</a> (2)	A. Cherp, A. Novikova, A. Kelemen	
	<a href="#">EAS: Energy and Society</a> (4; 2 can count towards cluster)	K. Hall (cross-listed)	

<b>Environmental Justice, Politics and Humanities (JPH)</b> [T. Steger] <b>[14 credits offered]</b>	<a href="#">JDSM: Justice, Democracy and Social Movements</a> (4)	T. Steger et al. [University-wide Course]	<b>1 Cluster:</b> any 6 credits from cluster <b>2 Clusters:</b> any 4 credits from cluster * can also count as part of ERG cluster
	<a href="#">FPP: Food Policy and Politics</a> (2)	T. Centofanti (cross-listed)	
	<a href="#">ADV: Environmental Advocacy</a> (2)*	T. Steger	
	<a href="#">ADVP: Environmental Advocacy Practicum</a> (2)*	T. Steger	
	<a href="#">PHIL: Environmental Philosophy</a> (2)	A. Watt	
	<a href="#">EAH: Environmental Arts &amp; Humanities</a> (2)	A. Watt, M. & R. Fowkes	
<b>Resource Management and Pollution Control (RMP)</b> [Z. Illes] <b>[9 credits offered]</b> <b>+ PST (2)</b>	<a href="#">DM: Disaster Management</a> (2)	V. Lagutov et al.	<b>1 Cluster:</b> any 6 credits from cluster <b>2 Clusters:</b> any 4 credits from cluster
	<a href="#">EPBR: Environmental Pollution &amp; Biological Remediation Methods</a> (2)	T. Centofanti	
	<a href="#">IHWM: Industrial - Hazardous Waste Management and Pollution Control</a> (2)	Z. Illes	
	<a href="#">SWM: Sustainable Water Management</a> (2)	Z. Illes, V. Lagutov, D. Sigea, D. Cogalniceanu	
	<a href="#">APM: Air Pollution Management</a> (1)	J. Karlik, R. Mnatsakanian	
<b>MTT: Methodological Tools and Techniques (min. 2 credits must be taken)</b>			
<b>[12 credits offered]</b>	<a href="#">SRM: Survey Research Methods</a> (2)	B.P. Anthony	
	<a href="#">IGA: Introduction to Geospatial Analysis</a> (3)	V. Lagutov	
	<a href="#">EMOD: Introduction to Environmental Modelling</a> (2)	V. Lagutov	
	<a href="#">EAP: Environmental Assessment and Planning</a> (2)	A. Cherp M. Gachechiladze-Bozhescu	
	<a href="#">ENPR: Environmental Practicum</a> (2)	V. Lagutov	
	<a href="#">STIA: Stakeholder Identification and Analysis</a> (1)	B.P. Anthony	
<b>Academic Skills</b>	<a href="#">TP-II: Thesis Preparation II</a> (2)	A. Watt	mandatory
<b>Semester 2: Min. No. of Credits = 12 (max. 14 for Grade + 2 for Audit)</b>			
<b>Semester 3 (Spring/Summer)</b>			
<b>Host</b>	<b>Courses (no. of CEU/ECTS credits)</b>	<b>Instructor(s)</b>	<b>Notes</b>
	<a href="#">TP-III: Thesis Preparation III</a> (2)	varies	mandatory
	Thesis Research, Writing & Submission (10)	varies	mandatory
<b>Semester 3: Min. no. of credits = 12</b>			
<b>TOTAL no. of credits = 12 + 12 + 12 = 36</b>			

**Figure 2: Structure for MESPOM program**



**Table 2: Overview of MESPOM study program**

Semester 1 (Fall)			
Module	Courses (no. of CEU /ECTS credits)	Instructor(s)	Notes
Foundational Courses	<a href="#">IES: Introduction to Environmental Sciences</a> (2/4)	B.P. Anthony, R. Mnatsakanian	One must be taken for Grade, the other for Audit
	<a href="#">IEP: Introduction to Environmental Policy and Society</a> (2/4)	A. Antypas, A. Watt	
	<a href="#">IEM: Introduction to Environmental Management</a> (2/4)	A. Cherp, K. Farrell	mandatory
Advanced Clusters	<a href="#">SES: Sustainable Management of Socio-Ecological Systems</a> (2/4)	L. Pinter, B.P. Anthony	2 of 5 must be chosen for Grade
	<a href="#">ERG: Environmental and Resource Governance</a> (2/4)	R. Mnatsakanian, A. Antypas	
	<a href="#">ETC: Energy Transitions and Climate Change</a> (2/4)	A. Cherp, M. LaBelle	
	<a href="#">JPH: Environmental Justice, Politics and Humanities</a> (2/4)	T. Steger, G. Aistara	
	<a href="#">RMP: Resource Management and Pollution Control</a> (2/4)	Z. Illes, V. Lagutov, R. Mnatsakanian	
Environmental Research Methods	<a href="#">EF: Epistemological Foundations</a> (0.5/1)	T. Steger, B.P. Anthony, V. Lagutov	EF <b>OR</b> TAS + GST <b>OR</b> IGDV + IRM + IQRM
	<a href="#">TAS: How to Think about Science: An Introduction to Philosophy of Science</a> (2/4)	M. Kronfelder et al. [University-wide Course]	
	<a href="#">GST: Geospatial Technologies for Environmental Professionals</a> (0.5/1)	V. Lagutov	
	<a href="#">IGDV: Introduction to Geospatial Data Visualization</a> (2/4)	V. Lagutov et al. [University-wide Course]	
	<a href="#">IRM: Interpretive Research Methods</a> (0.5/1)	T. Steger	
	<a href="#">IQRM: Introduction to Quantitative Research Methods</a> (0.5/1)	B.P. Anthony	
Academic Skills	<a href="#">AW: Academic Writing</a>	A. Watt, E. Timár, V. Eliasova	mandatory
<b>Semester 1: Min. no. of credits = 10 CEU / 20 ECTS (max. 12/24 for Grade + 2/4 for Audit)</b>			

## Semester 2 (Winter)

### Advanced Clusters (students can choose 1 or 2 Clusters).

Cluster [Coordinator]	Courses (no. of CEU credits/ECTS credits)	Instructor(s)	Notes
<b>Sustainable Management of Socio-Ecological Systems (SES)</b> [L. Pinter]  <b>[10/20 credits offered]</b>	<a href="#">BC: Biodiversity &amp; Conservation</a> (2/4) Reduced assignment load if taken with <i>Environmental Monitoring</i>	B.P. Anthony	<u>1 Cluster:</u> BC and SDGT + 2 credits from cluster <b>OR</b> BC or SDGT + 4 credits from cluster  <u>2 Clusters:</u> BC and SDGT <b>OR</b> BC or SDGT + 2 credits from cluster
	<a href="#">SDGT: Sustainable Development &amp; Global Transitions</a> (2/4)	L. Pinter, D. Almassy	
	<a href="#">AOGS: Agroecology &amp; Organic Gardening Systems</a> (2/4)	T. Centofanti, L. Strenchock	
	<a href="#">EMON: Environmental Monitoring</a> (2/4) Reduced assignment load if taken with <i>Biodiversity &amp; Conservation</i>	B.P. Anthony, T. Kovács	
	<a href="#">AMR: Adaptive Management and Resilience of Socio-ecological Systems</a> (2/4)	L. Pinter, A. Deri, J. Sendzimir	
<b>Environmental and Resource Governance (ERG)</b> [A. Antypas]  <b>[9/18 credits offered]</b> <b>+ADV (2), ADVP (2)</b>	<a href="#">AGEG: Advanced Topics in Global Environmental Governance</a> (2/4)	A. Antypas	<u>1 Cluster:</u> any 6 credits from cluster <u>2 Clusters:</u> any 4 credits from cluster * can also count as part of RMP cluster
	<a href="#">PST: Policies for Sustainable Transport</a> (2/4)*	Z. Illes	
	<a href="#">IEL: International Environmental Law</a> (1/2)	S. Stec	
	<a href="#">SEC: Environment and Security</a> (2/4)	S. Stec	
	<a href="#">DEM: Environment and Democracy</a> (2/4)	A. Antypas, A. Watt	
<b>Energy Transitions and Climate Change (ETC)</b> [A. Cherp]  <b>[12/24 credits offered]</b>	<a href="#">SET: Sustainable Energy Transitions</a> (2/4)	A. Cherp	<u>1 Cluster:</u> a) EPSM + EMIP + SET/EIL/EAS <b>OR</b> b) EPSM/EMIP + SET + EIL/LEAP/EAS  <u>2 Clusters:</u> a)EPSM/EMIP + SET/EMIP/EAS <b>OR</b> b) EPSM/EMIP + EIL/EAS <b>OR</b> c) SET + LEAP <b>Students can request other options to be approved by cluster coordinator</b>
	<a href="#">EPSM: Energy Policies and Strategic Management</a> (2/4)	M. LaBelle	
	<a href="#">EMIP: Energy Markets and Innovation Policies</a> (2/4)	M. LaBelle	
	<a href="#">EIL: Energy Innovation Lab</a> (2/4)	M. LaBelle + external organizations	
	<a href="#">LEAP: Energy Data, Models and Scenarios with LEAP Software</a> (2/4)	A. Cherp, A. Novikova, A. Kelemen	
	<a href="#">EAS: Energy and Society</a> (4/8; 2/4 can count towards cluster)	K. Hall (cross-listed)	

<b>Environmental Justice, Politics and Humanities (JPH)</b> [T. Steger]  [14/28 credits offered]	<a href="#">JDSM: Justice, Democracy and Social Movements</a> (4/8)	T. Steger et al. [University-wide Course]	<b>1 Cluster:</b> any 6 credits from cluster <b>2 Clusters:</b> any 4 credits from cluster <b>* can also count as part of ERG cluster</b>
	<a href="#">FPP: Food Policy and Politics</a> (2/4)	T. Centofanti (cross-listed)	
	<a href="#">ADV: Environmental Advocacy</a> (2/4)*	T. Steger	
	<a href="#">ADVP: Environmental Advocacy Practicum</a> (2/4)*	T. Steger	
	<a href="#">PHIL: Environmental Philosophy</a> (2/4)	A. Watt	
<b>Resource Management and Pollution Control (RMP)</b> [Z. Illes]  [9/18 credits offered] <b>+ PST (2)</b>	<a href="#">EAH: Environmental Arts &amp; Humanities</a> (2/4)	A. Watt, M. & R. Fowkes	<b>1 Cluster:</b> any 6 credits from cluster <b>2 Clusters:</b> any 4 credits from cluster
	<a href="#">DM: Disaster Management</a> (2/4)	V. Lagutov et al.	
	<a href="#">EPBR: Environmental Pollution &amp; Biological Remediation Methods</a> (2/4)	T. Centofanti	
	<a href="#">IHWM: Industrial - Hazardous Waste Management and Pollution Control</a> (2/4)	Z. Illes	
	<a href="#">SWM: Sustainable Water Management</a> (2/4)	Z. Illes, V. Lagutov, D. Sigea, D. Cogalniceanu	
<a href="#">APM: Air Pollution Management</a> (1/2)	J. Karlik, R. Mnatsakanian		
<b>MTT: Methodological Tools and Techniques (min. 2 credits must be taken)</b>			
[10/20 credits offered]	<a href="#">SRM: Survey Research Methods</a> (2/4)	B.P. Anthony	Prerequisite for UAegean course (or equivalent)
	<a href="#">IGA: Introduction to Geospatial Analysis</a> (3/6)	V. Lagutov	
	<a href="#">EMOD: Introduction to Environmental Modelling</a> (2/4)	V. Lagutov	
	<a href="#">EAP: Environmental Assessment &amp; Planning</a> (2/4)	A. Cherp, M. Gachechiladze-Bozhescu	
	<a href="#">STIA: Stakeholder Identification and Analysis</a> (1/2)	B.P. Anthony	
<b>Semester 2: Min. No. of Credits = 10 CEU / 20 ECTS (max. 12/24 for Grade + 2/4 for Audit)</b>			
<b>Semester 3 (Spring/Summer; Subject to change)</b>			
<b>Host</b>	<b>Courses (no. of CEU/ECTS credits)</b>	<b>Instructor(s)</b>	<b>Notes</b>
<b>UAegean: Advanced Environmental Science &amp; Management</b> (See Appendix 4) (04 – 07 2019)	Assessment, Modelling and Scenarios for Ecosystems Management (3/6)	A. Troumbis, A. Kizos, I. Botetzagias, M. Hatziantoniou et al.	mandatory
	Sustainable Tourism (1/2)	I. Spilanis	5 of 6 must be taken
	Aquatic Pollution & Wastewater Management (1/2)	M. Angelidis, M. Aloupi, A. Stasinakis, O. Kalantzi	
	Freshwater Resources: Natural systems, Human Impact and Conservation (1/2)	P. Gaganis, O. Tzoraki	
	Air Pollution & Climate Change (1/2)	C. Pilinis, C. Matsoukas	
	Environmental Applications of GIS: Spatial Analysis and Modelling (1/2); <i>Intro to Geospatial Analysis @ CEU (or equivalent) a prerequisite</i>	T. Kontos	
Applied Ecology (1/2); <i>Introduction to Environmental Sciences @ CEU a prerequisite</i>	P. Dimitrakopoulos, N. Fyllas, A. Galanidis		
<b>CEU (07-08)</b>	Summer internships (2/4)	varies	mandatory
<b>Semester 3: Min. no. of credits = 10 CEU / 20 ECTS</b>			
<b>TOTAL no. of credits = 10/20 + 10/20 + 10/20 = 30 CEU / 60 ECTS</b>			

***Visiting faculty at CEU***

Alan Belward, European Commission JRC, Italy

Tiziana Centofanti, Hungary

Dan Cogalniceanu, Faculty of Natural Sciences, University Ovidius Constanța, Romania

Andrea Deri, Birkbeck College, London, UK

Katherine Farrell, Humboldt-Universität zu Berlin

Maia and Reuben Fowkes, UK

Maia Gachechiladze-Bozhescu, Ecoline International, Ukraine

Jan Karlik, University of California, San Diego

Tibor Kovács, Hungarian Biodiversity Research Society

Alexandra Novikova, Institute for Climate, Energy and Mobility Research, Berlin

Jan Sendzimir, International Institute for Applied Systems Analysis, Laxenburg, Austria

David Sigee, SEAES, The University of Manchester

Stephen Stec, Hungary

## Evaluation and Assessment

Individual course syllabi (available on the [CEU Course Hub](#) and [Departmental E-Learning Site](#)) indicates methods of assessment for each course. Normally this involves graded assignments and sit-in exams, although assessments based on class attendance and participation, take-home exams and other methods are also used in some courses.

### Assignments

Graded assignments could take the form of written essays, oral presentations or reports on practical work or field trips. Assignments must be submitted by deadlines, and late submitted work will be penalised by reductions in the grade awarded, as outlined in the section on “penalties for late submission”. Students will be required to work either individually or in groups: in the latter case students may be divided into teams by the instructors or may decide themselves, depending upon the nature of the course. Most assignments are graded individually, but group grading is also used in some courses. Group grading will not constitute more than 25% of the total marks in any course, unless - for marks above 25% - either a) there is a mechanism for differentiating the grade among members of the group, e.g. through peer evaluation, or b) students can opt for individual assessment on request. In the case of written assignments, the departmental academic writing style regulations must be followed.

### Examinations

- Examinations are in the form of written papers. Exam papers generally consist of essay-type questions, which require in-depth answers on the topics studied. Shorter and more focused questions or take-away exams may be set for some courses. No books, papers, etc., can be taken into examinations unless otherwise permitted. Take-home exams allow students to prepare answers outside the examination room within a short period of time (normally 1 or 2 days), consulting any necessary sources.
- All students are subject to the terms of the *CEU Code of Ethics, Annex 4. (Academic Dishonesty)* and the related *Policy on Plagiarism* regarding conduct during examinations. For take-home examinations, papers will be checked for plagiarism and penalties for plagiarised work will be imposed, which can include failure of the course and even expulsion from the program in serious cases. A standing departmental committee handles all cases of possible/suspected plagiarism (see Appendix 2).

### Departmental grading scheme

All assignments and exams will be graded on the percentage scale given below in Table 3 which can be translated into the overall university grading scheme outlined in the CEU Student Handbook.

Table 3

Percent	Grade	GPA*	ECTS band**	Category
90-100	A	4.00	A	Outstanding
80-89	A-	3.67	B	Excellent
70-79	B+	3.33	C	Very Good
60-69	B	3.00	D	Good
55-59	B-	2.67	E	Satisfactory
50-54	C+	2.33	E	Pass
40-49	F	0.00	FX	Fail (marginal)
0-39	F	0.00	F	Fail (poor)

\* Grade Point Average; \*\* - European Credit Transfer System

As a general guide to the basis for assessment, students can refer to the criteria schematically shown in Table 4. and explained below.

Table 4. Grading criteria

Grade	Addressing the question	Familiarity with lecture material	Good presentation	Additional knowledge and insights
A				
A-				
B+				
B				
B-				
C+				
F (marginal)				
F				

**A (90-100%)** – the paper demonstrates perfect knowledge of the lecture material as well as clear evidence of additional reading and/or insights, data or information. The answer fully covers all aspects of the question. Clear, focused, logical and well-structured presentation, correct usage of terms, no mistakes or other faults.

**A- (80-89%)** – same as “A” but with some minor presentational or other technical faults or mistakes.

**B+ (70-79%)** – the paper fully covers lecture and reading material and addresses all aspects of the question, but fails to demonstrate additional knowledge or insights. Presentation is logical, well-structured and free of major faults.

**B (60-69%)** – the paper covers most aspects of the question and demonstrates good knowledge of the lecture material. It is focused on answering the question and free of major presentational or technical faults.

**B- (55-59%)** – the paper demonstrates partial knowledge of lecture material and satisfactorily addresses the key aspects of the question. It fails to address the question fully or comprehensively and may contain major presentational faults or demonstrate some gaps in understanding.

**C+ (50-54%)** – the paper demonstrates significant gaps in understanding of the lecture material and fails to address some of the key aspects of the question. However, it still shows that the student is familiar with the subject matter.

**This is the minimum pass level.**

**F (marginal) (40-49%)** – the paper addresses the question in an unsatisfactory manner, however can be marginally improved to achieve C+ (pass).

**F (0-39%)** – the answer is so unsatisfactory that it cannot be marginally improved to achieve a pass.

In order to increase objectivity, marking is “blind” (i.e. examiners do not know students’ names) wherever practicable, and marking is moderated by faculty, the Head of Department, and the External Examiner (for MESPO program). The Department keeps records of examiners’ comments on exam papers and assignments.

The results of the assignments, exams, attendance of and participation in classes are combined according to the nature of the course. The principle of grading for each course is at the discretion of the course professor and should be communicated to students. Each course contains either an exam or an assignment or both. Several courses also include marks for class attendance and participation within the overall course assessment. Where there is more than one means of assessment, the weighting of each assessed element in the final grade will be communicated in writing to the students prior to the start of the course. **The pass mark for all examinations and assignments is 50% (C+).** Marks / grades will be posted by the department within 4 weeks of assignment deadlines and exams, and qualitative feedback will also be communicated to students on all written assignments within this time (see Appendix 3 detailing departmental feedback policy).

### Examination and Assignment Re-sits

If a student fails a course as a result of failing an exam or an assignment he or she will be permitted to take the test again in a process known as a re-sit.

Students are only permitted to re-sit exams or assignments once; if a student fails a re-sit for a mandatory course, he/she will not be able to continue to future sections of the course and will therefore be deemed to have failed the course; the same also applies for optional courses if by failing the course the student can no longer achieve the required credit total for the program. The maximum grade that can be obtained for any re-sit (exam or assignment) is the lowest pass grade.



## Penalties for Late Submitted Work

So that students who submit assessed work in a timely manner are not penalised, the department will impose penalties for late submitted assignments and take-home exams along the following lines:

- *For written assignments:* In the first week, 4 penalty percentage points will be deducted per day late – including weekends and holidays - (e.g. if the assignment is submitted 3 days late, the mark will be reduced by -12%). If the work is submitted within a week of the deadline it will be awarded at least a minimum pass (50%) so long as the marker awarded a passing mark prior to the calculation of penalty. If the work is submitted substantially (more than a week) late it will be awarded a fail (F – 0%) and at the discretion of the course director either the original assignment will be considered for retake pass (maximum 50%) or a new assignment and deadline will be set. Substantial late submission is also considered “Unsatisfactory record” and could result in suspension of any financial support the student is receiving or expulsion from the program (see section on “Unsatisfactory record” below).
- *For take-home exams:* Late submitted take-home exams will be penalised according to the formula: “(hours late/hours allocated to take-home exam) x 100”, e.g. if a paper is submitted 4 hours late for a 48-hour take-home exam the penalty will be -8% (4/48 x 100). The exam paper will be awarded at least 40% if it is submitted before the penalty formula reaches -100% (or submitted within a week for take-home exams with a time allocation of over a week), so long as the marker awarded a passing mark prior to the calculation of penalty. If the paper is submitted after the penalty formula reaches 100% (or after a week for a take-home exam with a time allocation of more than a week), the student will receive 0% for the paper and will be required to sit a new take-home exam with a new deadline for a “retake pass” [maximum 50%]. Substantially late submission of this type is also considered “Unsatisfactory record” and could lead to suspension of financial support or expulsion from the program.

## The Thesis

### MESPOM students taking the thesis at CEU

Most details of the MESPOM thesis process are covered by the MESPOM Handbook, which should be consulted carefully. Students writing their thesis with CEU as the host institution should follow the *MESPOM thesis regulations 2019*, available on the Moodle e-learning site under “MESP/MESPOM administrative documents”. A template for the thesis can also be found there. Style and referencing should follow the standard departmental guidelines, as contained in the department’s *Departmental Style Guide 2018-2019*. Note: the failure and resubmission policy for 11-month MS students (below) also applies for MESPOM students taking their thesis at CEU.

### 11-month MESP students

The thesis period for the 11-month MS runs from early April to late July, with a final submission deadline of 31 July 2019.

Prior to the start of the thesis semester, students are required to submit a short research proposal (usually in late January), which includes the proposed thesis topic, summary of the planned methodological approach, and proposed supervisor. Students will then work with their supervisor to refine the methodological approach and develop the literature base for their research prior to any field research undertaken during the thesis semester. There will also be an opportunity (usually in February) to apply for small research grants to help cover the costs of any planned field research. MESP students will gain credits for thesis preparation work conducted throughout the academic year, which includes developing a thesis topic, establishing contact with a supervisor, learning about the department’s requirements and expectations for master’s theses, and developing a concrete research plan.

During the thesis semester, students are expected to maintain regular contact with their supervisor and to submit any progress reports as required by him/her. All students are required to spend the first two weeks and the final month of the thesis semester in Budapest. Exceptions to this rule can only be granted following a written appeal to the supervisor and Head of Department, stating the grounds for the request for absence, and submitted as soon as the reason for proposed absence becomes known.

Unless an alternative agreement is reached between student and supervisor, a full first draft of the thesis should be submitted to the supervisor 3 weeks prior to the final deadline for thesis submission, to give the supervisor time to provide feedback which can be incorporated into the final version of the thesis. Supervisors are under no obligation to provide feedback prior to final thesis submission on drafts received later than this deadline.

Students should follow the *1-year MSc thesis regulations 2019*, available on the Moodle e-learning site under "MESP/MESPOM administrative documents". A template for the thesis can also be found there. Style and referencing should follow the standard departmental guidelines, as contained in the department's *Departmental Style Guide 2018-2019*. Both an electronic and one hard copy of the thesis must be submitted to the department.

**Late submission without prior permission.** Theses submitted after the deadline and without permission for late submission (based on mitigating circumstances) being sought prior to the deadline will be liable to receive a fail (F) grade. In any such case, the Program Director will make a recommendation to the Examination Board, which will determine the final penalty imposed.

**Permission for late submission and Mitigating Circumstances Board.** If, prior to the deadline, the student becomes aware of mitigating circumstances which are likely to prevent the thesis being submitted on time, he/she should immediately contact the supervisor and Head of Department in writing to explain the mitigating circumstances and to request a deadline extension, and should return a completed mitigating circumstances form (Appendix 1) to the department as soon as possible. See also the section on "Claims of mitigating circumstances" below. If the Head of Department (after consulting with the student's supervisor) grants such an extension, the student will usually be required to submit a draft version of the thesis by the deadline in electronic form. All cases of late submission involving claims for mitigating circumstances will be reviewed by a Mitigating Circumstances Board prior to the next Examination Board, which will recommend to the Examination Board whether any penalty should be imposed.

Theses submitted substantially late (after mid-September) will usually only be accepted for examination in the following academic year, even where mitigating circumstances are involved. In line with CEU rules, under no circumstances can a thesis be accepted for examination if it is submitted more than 2 years after the completion of coursework.

**Marking of theses.** All MESP theses are double-marked, by the student's supervisor (or *one* of the supervisors if he/she is co-supervised) and one other member of departmental faculty. A third marker is appointed in exceptional cases, where there is substantial divergence between the first two examiners' marks. Final grades for the thesis are agreed at the Examination Board which takes place in late September or early October.

**Failure and resubmission policy.** In case a thesis is awarded a "fail" grade, the student will be informed of the result and, in most circumstances, offered the opportunity to resubmit (for a retake pass). This resubmission must take place at the latest within 2 years of the completion of all coursework on the program, or earlier if another deadline is specified in writing to the student. Only one resubmission is allowed; a second failure is final.

### ***Graduation Requirements***

In order to be awarded the CEU MS degree, students must successfully complete and pass all teaching modules and all assigned coursework, including examinations, participation in mandatory field trips and completion of their thesis with the minimum pass. Students must also achieve an average GPA of 2.66 for the program as a whole in order to receive their MS degree.

Students successfully completing all taught courses but failing or not submitting the thesis will receive an academic transcript from CEU. Detailed requirements for the MESPOM degree are specified in the MESPOM Handbook.

### **Award of Distinction and Merit in MESP**

*Distinction* is awarded to students on the MESP program with a final cumulative grade point average (CGPA) of 3.67 or above. *Merit* is awarded to students with a CGPA between 3.33 and 3.66. (See MESPOM handbook for rules on award of distinction for MESPOM students.)

### **Regulations**

#### **Work and Attendance**

- The Head of the Department, on behalf of the Department of Environmental Sciences and Policy, will monitor the work and attendance of all students. This is for the benefit of the students and helps to ensure that you are coping with the work and are managing to complete the assignments given to you satisfactorily and on schedule.
- Unless otherwise noted in course descriptions, students are expected to attend all scheduled classes of all mandatory units and those for which they have registered, and must be familiar with their contents. For those courses which have different attendance policy, professors communicate this to students in advance.
- Students must produce coursework by the specified deadlines as required in the program and attendance at all examinations is compulsory.
- MESP students must submit their final thesis in both electronic and hard copy form to the Departmental Secretariat no later than Wednesday, July 31, 2019, 12:00 noon CET. Students who fail to do so run the risk of their thesis not being accepted and receiving a 'fail' grade, as detailed in the "thesis" section above.
- The use of personal computers with keyboards by students in the classroom during lectures and seminars is allowed, unless explicitly forbidden by the lecturer teaching that class.

#### **Claims of Mitigating Circumstances**

##### **Documentation of mitigating circumstances leading to absence/ late submission/ impaired performance**

Any valid reasons for absence, late submission or impaired performance, should be reported to the Course Director(s) of the affected course(s) and to the Departmental Secretariat as soon as possible, and wherever feasible before the absence takes place, and a "mitigating circumstances form", along with appropriate supporting documentation, should be filled out and returned to the departmental office (see Appendix 1). Details of acceptable and unacceptable circumstances are given in the notes accompanying the form: generally speaking they must be unforeseeable and unpreventable circumstances that could have a significant adverse effect on academic performance, e.g. illness, bereavement or other serious personal or family problem. In case of mitigating circumstances likely to afflict the student for a longer period, the student may apply to the Head of Department for a leave of absence from the program.

##### **Handling of mitigating circumstances claims**

Whenever the department receives a form claiming mitigating circumstances, the Head of Department will review it and make an initial judgement whether the circumstances are allowable and, if so, what the response should be (e.g. waiving of late submission penalty). This judgement will be reported to the student as soon as feasible, normally within a week. All mitigating circumstances claims will also be reviewed prior to the subsequent examination board by a mitigating circumstances committee composed of departmental faculty. This committee makes recommendations to the examination board about what action to take in each case. **Note that no claim for mitigating circumstances will be considered unless a completed form and supporting documentation is returned to the department.**

## Academic Dishonesty and Plagiarism

### Definitions

Academic dishonesty involves acts which may subvert or compromise the integrity of the educational process at CEU. This includes any act by which a student succeeds or attempts to gain an academic advantage for himself or herself or another person by misrepresenting his or her or another person's work or by interfering with the completion, submission or evaluation of work. These include, but are not limited to, accomplishing or attempting any of the following acts:

1. Altering of grades or official records.
2. Using any materials that are not authorised by the instructor for use during an examination.
3. Copying from another student's paper during an examination.
4. Collaborating during an examination with any other person by giving or receiving information without the specific permission of the instructor.
5. Stealing, buying or otherwise obtaining restricted information about an examination to be administered.
6. Collaborating on laboratory work, take-home examinations, homework or other assigned work when instructed to work independently.
7. Substituting for another person or permitting any other person to substitute for oneself in taking an examination.
8. Submitting as one's own any theme, report, term paper, essay, other written work, speech, totally or in part by another author.
9. Submitting work that has been previously offered for credit in another course, except with prior written permission of the instructors of both courses.
10. Plagiarising, that is, the offering as one's own work of the words, ideas, or arguments of another person without appropriate attribution by quotation, reference or footnote. Plagiarism occurs both when the words of another are reproduced without acknowledgement or when the ideas or arguments of another are paraphrased in such a way as to lead the reader to believe that they originated with the writer. It is the responsibility of all university students to understand the methods of proper attribution and to apply those principles in all materials submitted.
11. Sabotaging of another student's work.
12. Falsifying or committing forgery on any university form or document.
13. Submitting altered or falsified data as experimental data from laboratory projects, survey research, or other field research.
14. Committing any wilful act of dishonesty that interferes with the operation of the academic process.
15. Facilitating or aiding in any act of academic dishonesty.

For further information, please refer to the university's *Code of Ethics* (Appendix 4).

Academic dishonesty may be a reason for disciplinary action as specified in relevant CEU policies. Such action can include failure of the course, a warning appearing on the student's record, and even immediate expulsion from the program in serious cases.

*The Department uses 'Turnitin' plagiarism prevention software to detect plagiarism in written papers including Masters theses.*

### Appeals

Assessment for all courses is subject to moderation procedures assuring the objectivity of marking. Students have a right to feedback on all assessed work which should include explanation for the grade awarded. The grades approved by the Examination Board (consisting of the whole faculty) are final and cannot be subject to appeal on academic grounds. Appeals on other grounds (e.g. personal discrimination) are covered by CEU's *Code of Ethics* and should follow the procedures set out there.

### Health and Safety

In any laboratory classes, field visits and practical research projects students may come across potential hazards. To minimise the risks to themselves and others students must follow the guidelines laid down in the health and

safety requirements of CEU. Fieldwork and project work must be carried out according to the particular guidelines for that project.

### **Unsatisfactory Record**

Students must make satisfactory progress in order to maintain any financial aid they are receiving and to retain their place on the program. A student's enrolment will be terminated if:

- a) he/she is found to have seriously plagiarised in an assignment, exam, or the thesis;
- b) he/she fails a resit examination/assignment (after an initial failure) on a mandatory course
- c) he/she fails a resit examination/assignment (after an initial failure) on an elective course, if as a result of the failure the student cannot gain enough credits to complete the program.

A student's enrolment or financial aid may also be terminated if:

- d) He/she is absent from classes for more than a week without permission or persistently misses classes
- e) He/she submits an assignment or take-home examination substantially late (as defined in "penalties for late submitted work", above) without justifiable cause<sup>1</sup>.
- f) He/she fails multiple courses (even if resits are passed).

The decision regarding termination of studies for unsatisfactory record is made by the head of department. Students have the right to appeal a decision to terminate studies to the Provost.

## **Course and Departmental Management**

### ***Departmental Student Representation***

- Student representatives are elected by the student body to act as spokespersons for giving feedback to the course director on course management and academic content. Meetings will be held approximately once a month during the teaching period and students will be made aware of the dates of such meetings ahead of time. Student representatives are regularly invited to attend departmental meetings.
- Questionnaires are also used to solicit information / feedback after each semester from the student body on the organisation, delivery and content of individual course units, and there is a general face-to-face feedback session for each program where students can voice their overall views of the program.

### ***Teaching Schedule***

The teaching schedule of the Department is available on the e-learning site through a linked Google calendar. The Department aims to keep alterations to the schedule to a minimum, and students will be given as much notice as possible should alterations to the schedule be necessary.

### ***Handouts and Readings***

Electronic copies of handouts and key readings accompanying each unit will be made available for all registered students. Hard copies of handouts may be made available to all students registered for a particular course at the beginning of each lecture.

### ***Communication***

Due to the large number of students in the department and the busy nature of the course schedule, it is essential that students make efforts to keep in regular contact with the department and check their mail boxes. The department uses email to distribute urgent notices and so students should login to their accounts at least on a daily basis to check for urgent messages sent to their personal account.

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<sup>1</sup> See section on mitigating circumstances above and Appendix 1 for more detail regarding acceptable (and unacceptable) reasons for late submission.

***Academic Writing Tutor***

One Academic Writing Tutor has been appointed for the department (Dr. Alan Watt). He serves as the departmental advisor on academic writing techniques, style and format as well holding advice tutorials and classes throughout the course.

***PhD Students***

Each year the department has five or more first-year PhD students who may participate as mentors in a teaching assistantship capacity. Teaching Assistants work closely with professors in a variety of ways that may include designing course exercises or syllabi, providing student assistance on course requirements and content including reviewing drafts of work, helping with grading and evaluation, etc. PhD students may also mentor the MESP program students on their thesis, where synergies exist between their research interests.

## Academic Calendar 2018/2019

September 3, Monday	Orientation week begins
September 10, Monday	Zero Week begins (until September 14, Friday) Registration for Fall Term begins (until September 30, Sunday)
September 10-21	Student Union elections in departments and schools
September 14, Friday	5:00 Opening ceremony Zero Week ends
September 17, Monday	Fall Term begins (until December 7, Friday)
September 27, Thursday	First Student Union Assembly meeting
September 30, Sunday	Registration for Fall Term ends
October 22, Monday	Special day off, CEU is officially closed
October 23, Tuesday	Hungarian National Holiday, CEU is officially closed
November 1, Thursday	All Saints' Day, CEU is officially closed
November 2, Friday	Special day off, CEU is officially closed
November 5, Monday	Departments and schools to submit updated schedule and cross-listed courses for Winter Term to the Students Record Office
December 3, Monday	Registration for Winter Term begins (until January 13, Sunday)
December 6, Thursday	<b>TOWN HALL MEETING</b>
December 7, Friday	Fall Semester ends. <b>Examination period at the Environmental Sciences Department begins.</b>
December 14, Friday	<b>Exam Period at the Environmental Sciences Department ends. Student Conference day.</b>
December 17-23	Offices with skeleton team, Library and Labs on weekend schedule
December 24, Monday	Christmas Eve, CEU is officially closed
December 25, Tuesday	Christmas Day, CEU is officially closed
December 26, Wednesday	Christmas Day, CEU is officially closed
December 27-30	Offices with skeleton team, Library and Labs on weekend schedule
December 31, Monday	New Year's Eve, CEU is officially closed

## 2019

<b>January 7, Monday</b>	<b>Winter Term begins</b> (until March 29, Friday) Visiting and Exchange Students Welcome Event Deadline for submission of Fall Term grades
<b>January 10, Thursday</b>	Research and Travel Grants application deadline (students)
<b>January 13, Sunday</b>	Registration for Winter Term ends
<b>March 7, Thursday</b>	Research and Travel Grants application deadline (students)
<b>March 15, Friday</b>	Hungarian National Holiday, CEU is officially closed
<b>March 18, Monday</b>	Registration for Spring Terms begins (until April 7, Sunday)
<b>March 29, Friday</b>	<b>Winter Term ends</b>
<b>April 1, Monday</b>	<b>Spring Term begins (until June 14, Friday)</b>
<b>April 7, Sunday</b>	Registration for Spring Term ends
<b>April 19, Friday</b>	Good Friday, CEU is officially closed
<b>April 21, Sunday</b>	Easter Sunday, CEU is officially closed
<b>April 22, Monday</b>	Easter Monday, CEU is officially closed
<b>May 1, Wednesday</b>	Labor day, CEU is officially closed
<b>May 31, Friday</b>	Deadline for submission of the Spring Term grades of graduating students
<b>June 6, Thursday</b>	Research and Travel Grants application deadline (students)
<b>June 14, Friday</b>	COMMENCEMENT
<b>July 31, Wednesday</b>	<b>Academic Year ends</b>





## GROUNDS FOR MITIGATION

### Possible examples of mitigating circumstances include:

- Significant illness or injury
- The death or critical illness of a close family member
- Family crises or major financial problems leading to acute stress
- Absence for jury service or maternity, paternity or adoption leave

### Circumstances which will NOT normally be regarded as grounds for mitigation include:

- Holidays and events which were planned or could reasonably have been expected
- Assessments which are scheduled closely together
- Misreading the timetable or misunderstanding the requirements for assessments
- Inadequate planning and time management
- Failure, loss or theft of a computer or printer that prevents submission of work on time: students should back up work regularly and not leave completion so late that they cannot find another computer or printer
- Consequences of paid employment
- Exam stress or panic attacks not diagnosed as illness.

### Note:

While pregnancy is not in itself grounds for mitigation, events may arise during a pregnancy which might constitute mitigating circumstances and will need to be judged on an individual basis.

### LATE SUBMISSION

Please note that if you are unable to meet a deadline due to mitigating circumstances, you must submit your work as soon as you possibly can after the deadline. You should *not* wait for your case to be considered by the Departmental Head and Mitigating Circumstances Committee, or until after the decision concerning approval of mitigating circumstances has been communicated, to submit your work.

Absence from the University during the semester for any period of 5 working days or less will not normally be regarded as grounds for mitigation unless the absence occurred for good cause within a two-week period immediately preceding a formal University examination or the deadline for submitting a piece of assessed course work or delivering an assessed presentation.

## APPENDIX 2. Departmental Policy on Plagiarism

This policy outlines the department's procedures for handling cases of suspected plagiarism. It does not specify definitions and likely penalties for plagiarism, which are outlined in CEU's "Policy on Plagiarism", available on CEU's website at <http://www.ceu.edu/documents>

1. The department has a standing plagiarism committee, which will review all cases of suspected plagiarism in assessed written work submitted towards any of the department's degree programs. The committee's decisions and any penalties they choose to impose will be considered the department's final decision on the case. The student does however have the right to appeal against the decision to the University Disciplinary Committee.
2. The committee shall normally consist of 3 members, of whom one will be the Head of Department. The Head of Department appoints the two other members to the committee, for an initial period of two years. At the end of the two-year period, and after each subsequent 2-year period, a faculty meeting will determine whether to change or retain the committee's composition, taking into consideration the wishes of the committee members to continue and/or other faculty members to serve on the committee.
3. The Head of Department will chair the committee and communicate its results to students, except in cases where he/she is not participating due to conflict of interest (see point 10 below).
4. Individual professors, including visiting professors, are responsible for ensuring that their own graded assignments and take-home exams are checked via the Turnitin software and for conducting a preliminary screening of Turnitin reports, in consultation with Irina Herczeg. The Turnitin reports can be generated automatically via the e-learning site when students upload their work; instructions on how to do this are available for both professors and students on the site under "Miscellaneous". Masters theses automatically generate turnitin reports when they are uploaded to the ETD, and for these a committee member will conduct the initial screening.
5. The screening professor should screen at least all turnitin reports with a score above 25%, and may choose to screen all reports. In case there is any suspicion of plagiarism, the professor should refer the case to the committee for review, which can be done by forwarding the report to the committee chair and Irina Herczeg with a recommendation for review. Reports with a score of 25% or above should automatically be reported to the committee chair, even if the screening professor does not believe that the work involves plagiarism.
6. Professors should screen Turnitin reports and make recommendations for committee review within 1 week of an assignment or take-home examination deadline, to ensure that the committee review procedure can be concluded without delaying the feedback process.
7. A professor may also choose to recommend for committee review any paper where he/she strongly suspects "ideas only" plagiarism, i.e. use of original data (but not words) from other authors without acknowledgement. In this case he/she should inform the committee that the suspicion is based on other grounds than the Turnitin report, and indicate what those grounds are.
8. The screening professor does not make any recommendation on penalty; it is up to the committee to determine that, which it will do based on the CEU guidelines and in light of past departmental precedent.
9. The committee will judge the case as soon as possible, and at any rate prior to the deadline for grades and feedback on the exam/assignment to be returned to students, and if it is deemed serious enough that a grade penalty or more is likely to be imposed, the student and course professor/supervisor will be informed immediately by the chair, and given details of the case. The student has the right to make a written submission to the committee or request a personal hearing with the chair (and other committee members, if available). Such a submission or request should be made within 48 hours of the student receiving notification that he or she may be penalised.

10. The committee will make a final decision on the case, including any penalty to be awarded, within 2 working days of a student's written submission or personal hearing (or within 2 working days of the deadline for such a submission/request, if none is received), and the chair will communicate it immediately to the course professor and student.

11. The committee may recommend that serious cases of malpractice be referred upwards to the University Disciplinary Committee.

12. If the case involves a student thesis supervised by one of the committee members, he/she will excuse him-/herself from the review and if possible another faculty member will be found to constitute a third reviewer of the case. If this refusal involves the Head of Department, another member of the committee will act as chair in the case.

13. Students penalised for plagiarism in the first year of a joint program with another university shall be informed that the nature and severity of the offence will be conveyed to the institution hosting the student in year two.

## APPENDIX 3. Departmental Policies on Moderation and Feedback

This document sets out departmental policy on moderation and feedback on assessed work in the department's masters programs. The policy sets out minimum standards which faculty involved in the programs (both internal and visiting) are expected to adhere to. Faculty are welcome to do more than the minimum set out here in terms of content, quantity and timing.

The policy will be publicised to students and included in subsequent editions of the department's student handbook. The policy will be subject to periodic review and possible amendment at future departmental meetings in the light of practice.

### **Moderation of Assessed Work.**

**1. Scope.** All written examinations, whether take-home or sit-in, should be subject to moderation. In addition, all written assignments in graded courses worth 50% or more of the final mark should be moderated. Moderation is also encouraged for written assignments worth less than 50%, where both first marker and moderator agree to it. The policy applies to taught courses and does not include student theses, which are always double marked.

**2. Definition of the moderation process.** Moderation is understood to mean review of assessed work by a second faculty member – not the course director. In case a PhD student TA is involved in assessment, moderation is in addition to and separate from any 2<sup>nd</sup> marking/moderating by the TA. It takes place after the work has been graded by the first marker, and the moderator should have the first marker's marks, comments and answer tips available when he/she reviews the assessed work. The moderator samples a proportion of the assessed work to check that the initial marker's grading is consistent with the comments justifying the grade and with the department's grading criteria. At a minimum, the moderator should review 10% of papers (and at least 3 papers in courses with fewer than 30 students), though if time allows the moderator is encouraged to review up to 20% of the papers. The moderator should select for review papers at the high, middle and low end of the marking range so that he/she can also comment on whether the range of marks reflects the range of quality of answers.

**3. Appointment of moderators.** Moderators will be appointed by the Head of Department, in consultation with course directors, for each for-grade Masters course. Wherever possible, faculty members with research/teaching interests close to those of the course content will be selected, but consistent with a roughly even share of the burden among faculty (and bearing in mind the load of first marking).

**4. Timescale for moderation.** Since we aim to deliver grades and other feedback to students within a month (see below), moderation should be completed within 1 week of receipt of the first marker's scripts/comments. The first marker should submit marks and comments to the departmental office and the moderator within 2 ½ weeks of the examination or assignment deadline. If a moderator is unable to moderate a piece of work within the required timeframe due to travel, illness, etc., he/she should immediately inform the department and the Head of Department will appoint a temporary replacement.

**5. Answer tips.** Professors should supply brief "answer tips" alongside their exam questions and assignments requiring moderation, indicating any particular features they are looking for in a good answer over and above the department's general grading criteria.<sup>1</sup> These should be sent to Irina Herczeg, who will forward a copy to the moderator; (they are also sent to the external examiner along with the questions, for his review).

**6. Other practicalities.** A form will be made available for use by moderators. One should be completed electronically for each examination or assignment that receives moderation, and be sent to Irina Herczeg and to the Head of Department.

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<sup>1</sup> It is recognised that for some complex questions it may not be possible to give very concrete answer tips. In such cases, professors should still give general guidelines on the qualities they are looking for in a good answer.

**7. Moderation by Head of Department.** The list of marks (not scripts) received from the first marker should be forwarded to the Head of Department by Irina Herczeg or Kriszta Szabados. In case the range of marks and/or the average mark deviates significantly from the norm, the Head of Department will contact the first marker and moderator to invite their comment, and based on this discussion may recommend adjusting the marks awarded for the assessment. Any such adjustments will be communicated to the external examiner prior to review of the scripts, and to the examination board.

**8. Procedure in case of moderator expressing concern.** In case the moderator's report indicates any concerns regarding the marking, the Head of Department will contact the first marker and moderator to discuss the assessment in question, and may ask to review some of the scripts himself or appoint a second moderator if there is substantial difference of opinion between first marker and moderator. Based on this review, the Head of Department may recommend adjusting the marks awarded for the assessment. Any such adjustments will be communicated to the external examiner prior to review of the scripts, and to the examination board.

### **Feedback to students.**

**1. General principles.** Feedback to students is the quantitative (grade) and qualitative (comment) assessment of their work. Feedback should be provided in a timely manner that helps students understand (i) the marks or grades they have received for the work submitted, and (ii) how their performance might be improved in future. Feedback should be as personal as possible to the individual student to enable reflection on individual skills and performance. All assessed work should receive comments as well as grades, and for moderated assessments these comments must be in written, preferably electronic form. Students should automatically receive these comments except in the case of written examinations (see point 3 below).

**2. Timing of feedback.** For work involving moderation, marks and other feedback must be made available within 1 month of the examination or the assignment deadline [a CEU requirement]. For work that does not involve moderation, feedback (grades and comments) should be provided within 3 weeks of the work being submitted.

**3. Qualitative feedback for examinations.** Qualitative feedback on written examinations is not normally issued to students, though individual professors may choose to do so, at their discretion. However, the student in any case has a right, if he/she wishes, to request access to qualitative comments and to discuss them with the professor. The student cannot appeal against the grade on academic grounds.

**4. Qualitative feedback on other assessed work.** Students should automatically be provided with qualitative feedback as well as grades for all assessed work apart from examinations. For assignments involving moderation this must be in written form; for non-moderated assignments it is up to the individual professor's discretion whether this feedback is oral or written. Emphasis should be on constructive criticism, with indications wherever possible of how the student can improve his/her performance.

## APPENDIX 4: University of the Aegean Course Syllabi (MESPOM only; **Subject to change**)

### Assessment, Modelling and Scenarios for Ecosystems Management

**Coordinator:** A. Troumbis

**Lecturers/Instructors:** A. Troumbis, A. Kizos, I. Botetzagias, M. Hatziantoniou et al.

**ECTS Credits:** 6

**Duration:** May - June 2019

**Pre-requisites:** none

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

#### **Aims, Objectives and Learning Outcomes: *Scenarios and trends in insular adaptation***

The course aims at developing in-depth understanding of interactions of Ecological Modernization Theory (EMT) and concrete applications of Ecosystem Management (EM) concepts, through field experience and lectures on a problem-solving approach. **The 2018 EM project** refers to the adaptation potential of the regional/insular economy sectors to sustainability transition(s) of Lesvos Island social-economic system (LSES) to mainstream global strategies such as Aichi 2020 targets, SDGs and IPCC scenarios. Student groups will be in charge of developing scenarios in core nature and biodiversity preservation, wise use and equitable distribution of profits. Lesvos Island encapsulates versions of the EM problem especially concerning multiple/overlapping scales of problem-definition; further, data bases are available and local networks of collaborators are clearly identified.

Learning Outcome	Assessment	Activities	Estimated Workload
1. Understand and use basic concepts of EMT, EM and LSES.	Students will be individually graded based on:  1. Individual Assessment (computer-based examination) (40%) 2. Evaluation of group assignment and presentation (60%)	Lectures	35 h
2. Understand the complexity, meaning and evolution of Man/ Nature interactions.		Reading assignment	27 h
3. Handle and utilize available ecological data sets to identify critical elements, to reach conclusions and to make decisions for ecosystem management		Class discussion	8 h
		Field Trip	30 h
		Group Assignment	45 h
		Public presentation	5 h
Total hours 150			150 h

## Sustainable Tourism

**Coordinator:** I. Spilanis

**Lecturers/Instructors:** I. Spilanis, N. Zouros,

**ECTS Credits:** 2

**Duration:** June – July 2019

**Pre-requisites:** none

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

### Aims, Objectives and Learning Outcomes

The main objective of the course is to provide students with an understanding about the different components of tourism activity. The assessment of potentials (tourism attractions), tourism trends, strategies and obstacles regarding the application of policies and the role (responsibility) of different stakeholders in achieving development goals is going to be used as the necessary framework for policy development. The students will be assigned in groups to review the present situation of a specific area, to interview stakeholders and discuss potentials, limitations and development strategies in relation to the implementation of a Tourism Observatory.

Learning Outcome	Assessment	Activities	Estimated Workload
<ul style="list-style-type: none"> <li>Understand the overall concept of sustainable tourism.</li> <li>Be familiar with the present trends in tourism development (demand, supply, organization of the market)</li> <li>Learn about different methods for measuring and evaluating economic, ecological and social factors for sustainable tourism development.</li> <li>Be familiar with basic principles and related indicators to measure performance and impacts or/and progress (tourism observatory).</li> <li>Recognize the different policy instruments and tools available for entrepreneurs and policy makers</li> <li>Be familiar with the different steps to be followed from the creation of a tourism product up to its commercialization</li> </ul>	Students will be individually graded based on: <ol style="list-style-type: none"> <li>Individual assessment (written exam on lecture material) (40%)</li> <li>Evaluation of Group written report and oral presentation – case study (60%)</li> </ol>	Lectures Seminars Case study	16h 16h 28h
Total hours 60			60



# Aquatic Pollution and Wastewater Management

**Coordinator:** M. O. Angelidis

**Lecturers/Instructors:** Michael O. Angelidis, Maria Aloupi, Athanasios Stasinakis, Olga-Ioanna Kalantzi

**ECTS Credits:** 2

**Duration:** April - May 2019

**Pre-requisites:** none

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

## Aims, Objectives and Learning Outcomes

The main objective of the course is to provide students with an understanding about the key concepts of pollution, the major classes of chemical water pollutants, their sources, transport and fate in the aquatic environment, as well as their impact to human health and the aquatic ecosystem. The course will also provide students with an understanding about the characteristics of municipal wastewater and the basic treatment processes. The key EU Legislation to assess the status of freshwater and marine environments, and the quality of municipal wastewater will also be presented.

Learning Outcome	Assessment	Activities	Estimated Workload
After successfully completing this course, the students will be able to understand: <ul style="list-style-type: none"> <li>• The sources of major groups of contaminants</li> <li>• The modes of transport and transformation of pollutants in the aquatic environment</li> <li>• The ecological and public health effects of major water pollutants</li> <li>• The fundamentals of wastewater treatment</li> <li>• The common physical, chemical and biological unit operations encountered in treatment process</li> <li>• The EU statutory and regulatory approaches to water quality management, water quality standards and criteria and wastewater management</li> <li>• The principles of water and wastewater quality monitoring</li> <li>• The key international and regional Conventions for contaminants in the aquatic environment</li> </ul>	Students will be individually graded based on: <ul style="list-style-type: none"> <li>• Individual assessment (written exam on lecture material) (40%)</li> <li>• Evaluation of group written report– case study (60%)</li> </ul>	Lectures Field trips Independent work/ study	16h 2h 32h
Total hours 50			50

## Content outline:

- Introduction to water pollution: key concepts of pollution; major classes of chemical water pollutants; sources, transport and fate in the aquatic environment; impact to human health and the aquatic ecosystem
- Biodegradable organic matter – oxygen demanding wastes; nutrients and eutrophication; petroleum hydrocarbons; heavy metals; persistent organic pollutants; emerging contaminants; marine litter and microplastics
- Legislation and agreements: EU Water Framework Directive (Directive 2000/60/EC); EU Marine Strategy Framework Directive (Directive 2008/56/EC); Stockholm Convention on Persistent Organic Pollutants, Minamata Convention on Mercury; Regional Seas Conventions (OSPAR, HELCOM, MAP)
- Introduction to aquatic toxicology: effects on the cellular, tissue and organ level; sublethal toxicity; acute and chronic lethal toxicity; aquatic toxicity testing
- Health effects of water pollution: effects on populations, communities and ecosystems; basic concepts of environmental epidemiology; water quality and water-borne diseases
- Municipal Wastewater Treatment and Reuse: characteristics, basic processes and legislation
- Sewage Sludge Treatment and Reuse: methods and legislation
- Field trip: Visit to the municipal Wastewater Treatment Plant of Mytilene

## Freshwater Resources: Natural systems, Human Impact and Conservation

**Coordinator:** P. Gaganis

**Name of lecturers:** Petros Gaganis, Ourania Tzoraki

**ECTS credits:** 2

**Duration:** April - May 2019

**Pre-requisites:** none

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

### Aims, Objectives and Learning Outcomes

The course aims to provide knowledge and understanding of the characteristics of surface water and groundwater natural systems (and their interaction), the impact of human activities on water availability/quality, and the strategies for water conservation and preservation. Topics covered include the: (i) factors and processes that control the water flow and availability in natural hydrosystems; (ii) human activities and their impact on surface water and groundwater ecosystems, water availability and water quality; (iii) natural processes and pollutant properties that control the fate of pollutants and the role and effectiveness of natural attenuation; (iv) prevention and conservation tools and strategies; and (v) sample applications using a conceptual hydrologic model and an interactive numerical groundwater model.

Learning Outcomes	Assessment	Activities	Estimated Workload
<ul style="list-style-type: none"> <li>understand the basic characteristics of surface water and groundwater systems and their interaction</li> <li>understand the factors and processes that control the quantity and quality of flows in natural hydrosystems</li> <li>be able to assess the effect of human activities and natural processes on water availability and quality in surface and groundwater systems.</li> <li>understand the role of natural attenuation processes in water quality management</li> <li>discuss water conservation tools and strategies</li> <li>be able to use simple models</li> </ul>	Students will be graded based on: <ul style="list-style-type: none"> <li>Assignments (2) 50%</li> <li>Final exam / Final project 50%</li> </ul>	In-class activities (lectures, seminars)  Workshops  Self-study and independent work (reading, assignments, projects)	18h  4h  28h
Total hours			50h

## Air Pollution and Climate Change

**Coordinator:** C. Matsoukas and C. Pilinis

**Name of lecturers:** Christodoulos Pilinis, Christos Matsoukas

**ECTS credits:** 2

**Duration:** April - May 2019

**Pre-requisites:** Basic knowledge in Physics and Chemistry

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

### Aims, Objectives and Learning Outcomes

The course aims to provide knowledge and understanding of the physical and chemical processes that drive atmospheric pollution, greenhouse gases concentration increases, and climate change. Because of the interdisciplinary background of students, these processes will be examined on the introductory level. The scope of the course will cover all ground from local to planetary problems. During the first week, we will focus more on local and regional air quality. The second week is devoted to climate change, its physicochemical mechanisms, timescales and impact based on various scenarios. During the third week, the students will work in groups on small projects. The instructors will organize workshops for the groups. The projects will produce a written report and an oral presentation on the final day.

Learning Outcomes	Assessment	Activities	Estimated Workload
<ul style="list-style-type: none"> <li>• Understanding of the basic air pollutants, their sources and interaction in the atmosphere</li> <li>• Understanding of the various processes that affect air quality and acid deposition.</li> <li>• Understanding of the sources of atmospheric particles, their influence on health and climate</li> <li>• Basic understanding of the complexity of the climate system</li> <li>• Understanding of why climate has changed in the past and how these changes are related to current ones</li> <li>• Understanding of the natural and anthropogenic influences on the climate system for various time-scales</li> <li>• Hands-on experience with introductory climate models developed in a spreadsheet environment</li> <li>• Application of statistical tests on climate time-series for the detection of temporal trends</li> </ul>	Students will be graded based on: <ul style="list-style-type: none"> <li>• 25% from exam at the end of week 1</li> <li>• 25% from exam at the end of week 2</li> <li>• 35% from written project report</li> <li>• 15% from presentation evaluation</li> </ul>	In-class activities (lectures, seminars)  Self-study and independent work (reading)  Group assignment	20h  18h  12h
Total hours			50h

## Environmental Applications of GIS: Spatial Analysis and Modeling

**Coordinator:** Dr Themistoklis Kontos

**Lecturers/Instructors:** Dr Themistoklis Kontos

**ECTS Credits:** 2

**Duration:** April - May 2019

**Pre-requisites:** Spatial Analysis with GIS in Winter Semester @ CEU (or equivalent)

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

### Aims, Objectives and Learning Outcomes

The aim of the course "Environmental Applications of GIS: Spatial Analysis and Modeling" is to introduce the students to environmental applications using Spatial Analysis and Modeling. The content outline of the course comprises of the following lectures and laboratories:

- Spatial Analysis of Vector Data
- Spatial Analysis of Raster Data
- Spatial Modeling: Model Builder
- Environmental Application of GIS: Delineation of Climatic Zones and Trends

The students will be assigned in groups to develop spatial models to analyze timeseries of large-scale spatial data, in order to assess the trend of climatic parameters and to delineate the climatic zones.

Learning Outcome	Assessment	Activities	Estimated Workload
<ul style="list-style-type: none"> <li>• Understand the overall concept of spatial analysis</li> <li>• Be familiar with large-scale spatio-temporal data</li> <li>• Learn about different techniques for spatial modeling using GIS tools and scripting languages</li> <li>• Learn about different methods for assessing trends in spatial variables</li> </ul>	Students will be individually graded based on: <ul style="list-style-type: none"> <li>• Individual Assessment of Laboratory Exercises (30%)</li> <li>• Evaluation of Group Written Report and Oral Presentation – Case Study (70%)</li> </ul>	Lectures Laboratories Case study	10h 10h 30h
Total hours 50			50

## Applied Ecology

**Coordinators:** P. Dimitrakopoulos, N. Fyllas

**Lecturers/Instructors:** P. Dimitrakopoulos, N. Fyllas, A. Galanidis

**ECTS Credits:** 2

**Duration:** April - May 2019

**Pre-requisites:** *Introduction to Environmental Sciences* in Fall Semester @ CEU

**Course e-learning site:** <https://aegeanmoodle.aegean.gr>

### Aims, Objectives and Learning Outcomes

The aim of the course is to familiarize students with the current methods of measuring plant diversity and understanding its patterns along different environmental conditions. The course will be structured on a small number of lectures and a student's research project (SRT). This will be a hands-on course that will involve introductory lectures on biodiversity patterns, plant functional traits and strategies, and description of the objectives of the SRT. All students will measure plants in the field and gather plant material for additional measurements in the lab. Students will analyze their own data aiming to explore the patterns of species richness and functional diversity across gradients or environments. At the end of the course, students will be evaluated through writing and presenting a report to summarize their findings.

Learning Outcome	Assessment	Activities	Estimated Workload
Students will be able to <ul style="list-style-type: none"><li>Choose the appropriate sampling or experiment design to address an ecological topic.</li><li>Understand different measures of species richness and functional diversity</li><li>Familiarize with basic ecological fieldwork methods including: measurement protocols, functional traits measurements, vegetation description etc</li><li>Apply statistical analyses to ecological data</li><li>Draw up key findings and assess their implementation on ecological issues or problems.</li></ul>	Students will be graded based on: Project assessment (100%)	Lectures Field & Lab Work Statistical Analyses, and Report Writing	5 h 40h 15h
Total hours 60			60