

Philipps-Universität Marburg
Center for Near and Middle Eastern Studies (CNMS)

Course Outline:

Course Title:	Environmental Economics with Reference to the MENA Region (LV-10-772-756)
Semester:	Summer Semester 2021
Type of Course:	Seminar
Level:	Bachelor and Master
Credits:	6 ECTS
Language:	English
Date:	15 April to 15 July 2021, 16:15 to 17:45 (weekly), except on 13 May and 3 June
Location:	Online via Zoom or BBB
Research Group:	Economics of the Middle East (FB02/CNMS)
Instructor:	Sven Fischer, M.A.
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Course Contents and Objectives:

The Middle East and North Africa (MENA) is a region known to many because of its pivotal position in world politics and its endowment with hydrocarbon resources such as oil. However, pressing issues about the environment have long been ignored in the MENA region and more importantly how ecology and politics in that region is connected to the global political economy of environmental preservation. MENA is one of the world's most vulnerable regions to global warming, reduced precipitation and rise in sea levels. Water scarcity (the highest in the world) will increase, urban coastal areas will become more vulnerable to flooding, and competition for scarcer resources could escalate violence and political turmoil even beyond the region's boundaries.

In this module, we will analyze in depth some environmental and institutional challenges of the MENA region, as well as the factors that have influenced their evolution. This module focuses on selected topics about contemporary environmental and resource economics, and the problems and challenges that result from these issues in the MENA region. Going one step further than the basis modules, students in this module will collect, analyze, and present scientific information on their own and discuss the insights with their peers in the classroom.

At the completion of the course, students will be able to:

- Demonstrate understanding of the economic cause of environmental problems, environmental policy instruments and their economic consequences in MENA.
- To explore and discuss critically specific approaches to economic problems in the region relating to environmental degradation.
- Understand the basic economic and political structures prevalent in the MENA region today, as well as their historic evolution.
- Understand the concept of sustainability transition and identify the challenges in the MENA region
- Explain the main interactions between the environment and the economy , and the practical implications for public policy in MENA region
- Identify links between economics and other issue areas within the MENA region, apply analytical tools from various fields and thus take on an interdisciplinary view.
- Take part in scientific discussions and write an academic paper in English.

Enrollment:

Enrollment for this course via MARVIN. Registration for examinations (presentations and seminar papers) is also via MARVIN. Please make sure not to miss the deadlines of your study programs.

Teaching Timetable:

The course is taught online via Zoom (or an alternative software) in summer semester 2021. The seminar sessions take place **weekly on Thursdays, 16:15 – 17:45, from 15 April – 15 July 2021, except on 13 May and 3 June**. For further information on the different sessions, see the attached seminar plan.

Examination Forms:

The examination has two parts, namely presentation (Referat) and seminar paper (Hausarbeit). With their presentations, students will introduce the topic and research question of their seminar papers to other students. Each presentation should be between 20-25 minutes. The seminar paper should be between 12-15 pages and has to be submitted until **30 August 2021**. Please do not forget to register for both the presentation and the seminar paper in QIS/LSF (or MARVIN). Students should give their presentations via Zoom. Exchange student who only want to receive 3 ECTS points need to write an academic essay and submit it until the above mentioned deadline.

Course Evaluation:

Students from CNMS (e.g., B.A. Orientwissenschaft / Nah- und Mitteloststudien):

The grade in the seminar paper will be your final grade for the course. In addition, you have to give a presentation which will not be graded (Studienleistung). But you have to pass the presentation with an implicit grade of at least 5 points (4.0). In case you will not give a presentation, or the presentation will not be accepted as “passed”, you will NOT pass the course.

Students from FB02 (e.g., B.Sc. Volkswirtschaftslehre / Betriebswirtschaftslehre, M.Sc. Economics and Institutions, M.Sc. Economics of the Middle East) and students who import the FB02 module:

The final grade consists of two parts. The presentation counts 1/3 and the written paper counts 2/3. Depending on your program, it might also be 1/2 and 1/2. Both parts are mandatory for passing the course.

Exchange students:

The grade in your essay will be your final grade for the course. Writing an essay will only provide you with 3 ECTS points. For 6 ECTS points, exchange students have to fulfil the requirements of FB02 students.

Seminar Plan (Summer Semester 2021)

Session	Date	Contents	Literature
1	15.04.2021	Introductory session - Course organization - Selection of presentation and seminar paper topics - Introduction to the MENA region and environmental economics	<u>Basic reading:</u> Kolstad, 2000 (Chapter 1) Kolstad, 2013 (Chapter 1 & 2)
2	22.04.2021	Introduction to environmental and resource economics - Basic concepts and definitions of sustainability - Growth and environment - Environmental sustainability and green economy	<u>Basic readings:</u> Kolstad, 2013 Hanley et al., 2019
3	29.04.2021	Environmental degradation and natural disasters - Costs of environmental degradation - Man-made “natural” disasters - Governance and environment 3 student presentations (topic areas: natural disasters, climate change, pollution)	<u>Essential reading:</u> Felbermayr and Gröschl, 2014 <u>Additional readings:</u> Croitoru and Sarraf, 2010 Farzanegan and Markwardt, 2018 World Bank, 2014
4	06.05.2021	Renewable energy I - Green growth strategies and the energy sector - Key concepts and terminologies - Energy transition in the Mediterranean 3 student presentations (topic areas: energy transition, technology spillovers, governance)	<u>Essential reading:</u> Fadly, 2019 <u>Additional readings:</u> El-Katiri, 2014 Jalilvand and Westphal, 2017

	13.05.2021	Public holiday: “Christi Himmelfahrt”	
5	20.05.2021	Renewable energy II - Green growth strategies and the energy sector - Key concepts and terminologies - Energy transition in the Mediterranean 3 student presentations (topic areas: energy transition, technology spillovers, governance)	<u>Essential reading:</u> Fadly, 2019 <u>Additional readings:</u> El-Katiri, 2014 Jalilvand and Westphal, 2017
6	27.05.2021	Civil society and environmental protection - The concept of civil society - Environmental activism in the MENA region - Civil societies in disaster scenarios 3 student presentations (topic areas: civil society / environmental activism, culture of environmental protection, role of religion)	<u>Essential reading:</u> Yuan et al., 2018 <u>Additional readings:</u> Edwards, 2020 Kienle, 2011
	03.06.2021	Public holiday: “Fronleichnam”	
7	10.06.2021	Natural resource management I - Rentier state theory - The curse of natural resources - Water security in the MENA region 3 student presentations (topic areas: water scarcity, oil abundance, institutions)	<u>Essential reading:</u> Farzanegan, 2014 <u>Additional readings:</u> Ben Ali et al., 2016 Devlin, 2016

8	17.06.2021	<p>Natural resource management II</p> <ul style="list-style-type: none"> - Rentier state theory - The curse of natural resources - Water security in the MENA region <p>3 student presentations (topic areas: water scarcity, oil abundance, institutions)</p>	<p><u>Essential reading:</u> Farzanegan, 2014</p> <p><u>Additional readings:</u> Ben Ali et al., 2016 Devlin, 2016</p>
9	24.06.2021	<p>Resource productivity</p> <ul style="list-style-type: none"> - Concepts of sustainable production and consumption - Productivity and competitiveness - Benefits of decoupling <p>3 student presentations (topic areas: environmental standards, labor rights, sustainable business concepts)</p>	<p><u>Essential reading:</u> Bleischwitz, 2010</p> <p><u>Additional readings:</u> Dittrich et al., 2012 Flachenecker and Rentschler, 2018</p>
10	01.07.2021	<p>Environmental policy</p> <ul style="list-style-type: none"> - Rational for environmental policy - Environmental policies and GDP growth - International issues in environmental policy - Lobbyism <p>3 student presentations (topic areas: policy evaluation, feasibility study, trade and FDI)</p>	<p><u>Essential reading:</u> Hepburn, 2010</p> <p><u>Additional readings:</u> Coria and Sterner, 2011 Kirchgässner and Schneider, 2003</p>
11	08.07.2021	<p>Emissions trading</p> <ul style="list-style-type: none"> - The idea of emissions trading - The EU ETS - Emissions trading in emerging economies <p>3 student presentations (topic areas: policy evaluation,</p>	<p><u>Essential reading:</u> Löschel et al., 2020</p> <p><u>Additional readings:</u> Yan et al., 2020 Zhang et al., 2020</p>

		feasibility study, emissions trading)	
12	15.07.2021	How to write a paper - guideline - structure of the paper - research plan - writing advices 3 student presentations (mixed topics related to the seminar)	
Paper deadline	30.08.2021		

Teaser questions for the seminar topics:

The questions below are teaser questions that help you to get started with literature research. However, they are NOT research questions for your paper. You have to find an analytical and more specific research question within your topical field.

Energy transition in the MENA region

- How does the MENA region perform in terms of sustainable energy transition compared to other world regions? What are differences among the countries of the region?
- What are the fundamental drivers of energy transition in MENA countries? How can these drivers be identified empirically? What are advantages / disadvantages of the models and methods used in empirical analysis?
- Why is the transition to renewable energy sources deemed to be so important in MENA? Why some countries in MENA are progressing in the adoption of renewable energy technologies while others are lagging behind? What are the possible obstacles?
- How do global energy trends in production and consumption affect the MENA region- and vice versa?

Environmental degradation

- How does the MENA region perform in terms of environmental degradation compared to other world regions? What are the differences among countries of the region? What are the reasons for the environmental problems of MENA countries? What are economic and social consequences of these deficits?
- What are widely used development indices? What do these indices measure? What are their advantages / problems?
- How are environmental degradation and natural disasters connected to economic growth?
- What role does the development of institutions (good governance) or civil society play for environmental protection?

Green economy and environmental policy

- What is the role of international trade and investment in the transition to a green economy in the MENA region?
- What are the political economy constraints in environmental protection in the MENA region?

- What role can market-based environmental policies and other policy initiatives play in enhancing resource productivity in MENA?

Natural resource management

- Which role do hydrocarbon resources play in MENA economies? What is the significance of rent in this context? How does that affect the economic and political development of the region?
- How useful is the Rentier State Theory as an analytical tool to explain the development of the region?
- What role does the development of institutions play in the context of natural resource management?

Seminar Paper Guide:

Your paper should be a research-oriented paper, in which you conduct a scientific analysis of a contemporary issue in Middle East Economics.

The topic / topical field you have been assigned at the beginning of the seminar is too large to constitute your paper topic. By reading articles and books situated within this topical field you will develop ideas about a more specific research question you want to deal with in your paper. Try to formulate a **precise analytical research question** and draw up an **outline** (i.e. an overview of the different chapters you intend to include in your paper). This gives you an idea if the question you found can be dealt with on 12-15 pages. Discuss your research question and outline with the instructor before starting to write your seminar paper.

Here are some general guidelines:

Search for literature thoroughly. Make sure you have covered the major literature on your topic. In addition to the standard readings of the seminar, search the CNMS- or Marburg University library (OPAC-, MARLA- Catalogues), e-databases (EconLit, Academic Search Premier, Jstor; also via Marburg University library), the E-Journal database of Marburg University library and the Internet via online search engines (but: Websites constitute only complementary material. They are mostly of inferior and non-academic quality!).

A good strategy is to search for literature by the „**snowball principle**“: Whenever you found a good book or paper, you might find additional helpful literature in its reference list. You can then get the full texts via Marburg University library (OPAC for books or E-Journal-database for journal articles).

Please note that citing Wikipedia or any other material not verified and published by scientific publishers will NOT be accepted as references! You can use internet pages as references, but these have to be sites of scientific quality (ask us if you are in doubt).

Structure your paper into six parts:

- **Introduction:** Present your topic, explain why it is interesting and relevant in the larger context of Middle East Economics. Formulate a precise analytical (NOT: descriptive or normative) research question.
- **Theory:** Introduce the literature sources that offer theories which can help you to answer your research question (this might be purely theoretical literature or literature that uses theory for empirical analysis). Extract the relevant theories / theoretical propositions and present them in detail. You have to come up with at least two different theoretical answers / hypotheses to your research question (that partly or fully contradict each other in their arguments).
- **Previous studies:** Sum up the main findings of previous studies that dealt with similar research questions. Sketch the theoretical model and assumptions these studies used and indicate what their empirical findings were.
- **Data and methodology:** Present the theoretical propositions / hypotheses (simple variable relations) you are going to test. Indicate which methods you are going to use to test your theoretical propositions. Describe the material/data you have at hand and justify the choice of method from the form of available material/data + the number of observations.

If you can quantify the variables in your research question, if you have access to a suitable large N-dataset, and if you are pretty confident on variable relations, aim for a statistical test of your research question. If you are familiar with linear regression, aim for a multivariate (i.e. include several control variables, based on the theory you presented and/or on the setup of previous studies) or a univariate (just one explanatory variable) setup. Present in detail the measurement of all the variables you are going to use and the structure of the dataset. If you do not feel so comfortable with inductive statistics, just aim for the measurement over time (descriptive statistics) of your independent and your dependent variable and calculate a Pearson-Correlation-Coefficient.

If you cannot quantify the variables in your research question, if you do not have access to a dataset with the necessary quantifications, or if you have little knowledge on variable relations, you should aim for a qualitative analysis. The focus in this seminar is on the case study. Plan to conduct either a single case study or a comparison of two cases. Indicate which cases (e.g. which countries) you are going to use for your analysis and justify your selection.

If you can quantify the variables in your research question, if you have a suitable dataset at hand, and if there is additional qualitative material available, aim at a mixed-methods approach, i.e. start with a statistical analysis (either a multivariate or univariate regression) and re-check your results with the qualitative material (through a single case study or a case comparison).

The chapter Data and Methodology thus presents your PLAN for the analysis, now you implement it in the Empirics – chapter.

- **Empirics:** First, substantiate the relation of your independent and your dependent variable which you stated in your research question (show us that what you stated in your research question has some preliminary empirical justification). If your variables are quantifiable you should present some descriptive statistics (i.e. how did the values of both variables change over time). If they are not, justify your statement by recurring to qualitative material (e.g. journal articles, books, newspaper articles etc., which postulate that the variable relation is such).

Second, make a statistical analysis if your variables are reasonably quantifiable. If you are advanced, conduct a multivariate analysis. If you do not feel comfortable with a multivariate regression, make a univariate regression (Microsoft-Excel can do that for you). Test the theoretical model and its hypotheses which you presented in the “Data and methodology” chapter. Alternatively, you can stick to descriptive statistics and calculate a Pearson-Correlation-Coefficient between your independent and your dependent variable. Show how the statistical results accord with or contradict the theoretical propositions.

Third, to re-check your statistical results, proceed with the case study (single case study or case comparison). Analyze your qualitative material (books, journal articles, newspaper articles, internet pages). Test the theoretical propositions which you presented in the “Theory” chapter on your chosen cases. Show how the empirical facts of the cases accord with or contradict the theoretical propositions.

- **Conclusion:** Summarize your findings. Evaluate how well the theories / theoretical propositions explain the empirical observations. If you did a comparative case study, carve out the factors that, according to your results, might be responsible for the different accuracy of the theoretical propositions in each case.

On this basis you come to a qualified answer to your research question. Give a short outlook on open questions, research gaps or the relevance of your findings to contemporary debates.

Please notice: Your paper should have a point to it. **You have to answer your research question, although your conclusions will always be tentative** (indicate the weaknesses in your arguments)!

Minimize the errors in spelling and grammar using the spelling and grammar checkers in your word processing software.

Use tables and graphs only when appropriate, i.e. when the reader has an additional benefit after reading the text. For example, you might use them if the matter you describe in your text is very complex and can be presented more easily in a graph. Or you might give the reader additional information not contained in your text. Always refer to your graphs in your written text.

The **body of your seminar paper**, excluding title page, bibliography, tables and graphs has to be **12-15 pages** (DIN A4, 1.5 spaced, 12-point font, Arial, Margins: Left-hand 2cm, Right-hand 3cm, Upper 2,50cm, Lower 2,00cm). Your paper should also include an **Abstract** (4-8 lines), summarizing the research question and the main points you make in the paper.

At the end of your paper, you have to attach a “**Declaration in lieu of an oath**” (**Eidesstattliche Erklärung**), stating that the paper is your own work.

If you run into any other problems while drawing up or writing your paper, do not hesitate to contact the course instructor. The grade will only depend on the final product.

Your seminar paper has to be submitted to the course instructor via email at the **specified deadline at 23:59, meaning before the start of the next day**. Papers sent after this date will not be accepted (which means you have failed the course).

After the course, feel free to come to the office hours to get **feedback** on your paper!

IMPORTANT NOTICE:

In the seminar paper, always indicate if you got an information from an author other than yourself (e.g. from books, articles, websites, unpublished work)!

Stealing body of work or ideas (i.e. NOT indicating its source and displaying it as your own) is PLAGIARISM. This is both unethical and illegal!

Failure to comply will be considered as fraud and result in grading down your work to 0 points = 5.0 which means you have failed the course. In addition, your case will be forwarded to the Prüfungsausschuss for academic prosecution.

Presentation Guide:

Work with a **presentation software** to present the topical field you have been assigned in class. Presentation time is 15-20 minutes maximum (calculate 2-3 minutes per slide). The slides do not have to be sophisticated, much more important is content, a logical structure and the way how you present the contents to the class. You will find a template presentation in the ILIAS folder of this course.

Please hand in your presentation by email one week before your presentation in class, if you want feedback before. This is recommended for Bachelor students. After your presentation in the seminar, please feel free to contact the course instructor to get feedback on it.

What's the relation between seminar topic / topical field, presentation topic, and paper topic?

In the introductory meeting for the seminar, you have to select your seminar topic / topical field (see list above). In the presentation, you should give a broad overview of this topical field. For the paper, you have to find a **MORE SPECIFIC** niche within the broad topical field and develop a precise, tightly focused **RESEARCH QUESTION**. You then have to write an **INDIVIDUAL PAPER** which analyzes this specific research question.

Basic Literature:

Ben Ali, M. S., Cockx, L., and Francken, N., 2016. The Middle East and North Africa: Cursed by Natural Resources?, In: Ben Ali, M. S., 2016. Economic Development in the Middle East and North Africa: Challenges and Prospects, Palgrave Macmillan, pp. 71-93.

Bleischwitz, R., 2010. International Economics of Resource Productivity - Relevance, Measurement, Empirical Trends, Innovation, Resource Policies, *International Economics and Economic Policy*, 7, pp. 227-244.

Coria, J. and Sterner, T., 2011. Natural Resource Management: Challenges and Policy Options, *Annual Review of Resource Economics*, 3, pp. 203-230.

Croitoru, L., Sarraf, M. (2010). The cost of environmental degradation: case studies from the Middle East and North Africa. *The World Bank*.

Devlin, J. C., 2016. "Water Scarcity in the MENA Region", In: Devlin, J. C., 2016. Economics of the Middle East: Development Challenges, World Scientific Publishing, pp. 85-110.

Dittrich, M., Giljum, S., Lutter, S., and Polzin, C., 2012. Green economies around the world. Implications of resource use for development and the environment, Vienna.

Edwards, M., 2020. Civil Society, 4th Edition, Polity Press.

El-Katiri, L., 2014. A Roadmap for Renewable Energy in the Middle East and North Africa, Oxford Institute for Energy Studies.

Fadly, D., 2019. Low-carbon transition: Private sector investment in renewable energy projects in developing countries, *World Development*, 122, pp. 552-569.

Farzanegan, M. R., 2014. Can oil-rich countries encourage entrepreneurship?, *Entrepreneurship & Regional Development*, 26, pp. 706-725.

Farzanegan, M.R., Markwardt, G. (2018). Development and Air Pollution in the Middle East and North Africa: Democracy Matters. *Journal of Policy Modeling*, 40, 350-374.

Felbermayr, G., and Gröschl, J., 2014. Naturally negative: The growth effects of natural disasters, *Journal of Development Economics*, 111, pp. 92-106.

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Hanley, N., Shogren, J., and White, B., 2019. Introduction to Environmental Economics, Third Edition, Oxford University Press.

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Jalilvand, D. R., and Westphal, K., (Eds.) 2018. The Political and Economic Challenges of Energy in the Middle East and North Africa, Routledge.

Kienle, E., 2011. Civil Society in the Middle East, The Oxford Handbook of Civil Society.

Kirchgässner, G., and Schneider, F., 2003. On the political economy of environmental policy, *Public Choice*, 115, pp. 369-396.

Kolstad, C. D., 2000. Environmental Economics, Oxford University Press.

Kolstad, C. D., 2013. Intermediate Environmental Economics, International Second Edition, Oxford University Press.

Löschel, A., Lutz, B. J., and Managi, S., 2020. The impacts of the EU ETS on efficiency and economic performance – An empirical analyses for German manufacturing firms, *Resource and Energy Economics*, 56, pp. 71-95.

World Bank, 2014. Natural Disasters in the Middle East and North Africa: A Regional Overview, Report No. 81658, Urban, Social Development and Disaster Risk Unit.

Yan, Y., Zhang, X., Zhang, J., and Li, K., 2020. Emissions trading system (ETS) implementation and its collaborative governance effects on air pollution: The China story, *Energy Policy*, 138.

Yuan, Y., Zomorodian, S., Hashim, M., and Lu, Y., 2018. Devastating earthquakes facilitating civil societies in developing countries: a cross-national analysis, *Environmental Hazards*, pp. 1-19.

Zhang, W., Li, J., Li, G., and Guo, S., 2020. Emission reduction effect and carbon market efficiency of carbon emissions trading policy in China, *Energy*, 196.