課程資訊 (Course Information)					
科號 Course Number	11120KEC 503300	學分 Credit	3	人數限制 Class Size	50
中文名稱 Course Title	國際能源治理				
英文名稱 Course English Title	Global Energy Governance				
任課教師 Instructor	楊宗翰(YANG, CHUNG-HAN) *more information*				
上課時間 Time	WaWbWc	上課教室 Room	Nanda南大1311		

提醒您：請遵守智慧財產權，勿使用非法影印教科書
Please respect the intellectual property rights, do not use illegal copies of textbooks.

此科目對應之系所課程規畫所欲培養之核心能力 Core capability to be cultivated by this course	

課程簡述 (Brief course description)

Energy issues have always been important in international relations, but may have become even more so in recent years than in the past due to widespread awareness of the existing limits of energy sources and the negative impact on the climate. This seminar provides an introduction to the theoretical and practical understanding of how energy and climate policies are conceived, designed, advocated and implemented. The seminars will look at global trends in energy consumption and production, various available scenarios for possible developments in the coming decades, the availability of oil reserves and the development of the oil industry. The topic of natural gas is then discussed and the differences between oil and gas are highlighted. Renewable energy, nuclear energy and energy policies in different countries are also covered. The aim of the course is to provide students with a solid background knowledge of energy, technology and economic realities that will enable

課程大綱 (Syllabus)

Course keywords:
energy, global governance, international law, climate change, electricity, geopolitics, technology

● 指定用書 (Text Books)

Goldthau, A., & Witte, J. M. (Eds.). (2010). Global energy governance: The new rules of the game. Brookings Institution Press.

Global Energy and Climate Policy (2022) University of London SOAS online course materials, Coursera

● 參考書籍 (References)

Andreas Tuerk, Elizabeth Zelljadt (2016), The Global Rise of Emissions Trading, Climate Policy Info Hub, 11 April 2016.

BP Energy Outlook.

Couture, Toby D. et al. (2015), The next generation of renewable electricity policy: How rapid change is breaking down conventional policy categories, Clean Energy Solutions Center

Colburn, Kenneth et al. (2013), Integrating energy and environmental policy, RAP: Global Power Best Practice Series. http://www.raponline.org/wp-content/uploads/2016/05/rap-colburngerhard-integratingenergyenvironmentalpolicy-2012-dec-31.pdf

Fischedick, Manfred et al. (2011), Towards global energy governance strategies for equitable access to sustainable energy, Stiftung Entwicklung und Frieden, Policy Paper 34. https://www.researchgate.net/publication/285267324_Towards_global_energy_governance-strategies_for_equitable_access_to_sustainable_energy

Frankel, David et al. (2014), The disruptive potential of solar power,

McKinsey Quarterly

International Energy Agency (IEA) (2014), The climate-energy security nexus: Exlporing impacts of a changing climate on the energy sector and options for resilience-building, Nexus Forum Summary Document. https://www.iea.org/media/workshops/2014/5thnexusforum/NexusForumSummaryDocMarch2014.pdf

Kucharski, Jeffrey and Hironobu Unesaki (2015), A policy-oriented approach to energy security, Procedia Environmental Sciences, 28, pp. 27-36. http://www.sciencedirect.com/science/article/pii/S1878029615002170

Lehtveer, Mariliis and Fredrik Hedenus (2015), Nuclear power as a climate mitigation strategy - technology and proliferation risk, Journal of Risk Research, 18(3), pp. 273-290. http://dx.doi.org/10.1080/13669877.2014.889194

Levitan, Dave (2016), Is nuclear power our energy future - or a dinosaur in a death spiral?, Ensia. https://ensia.com/features/is-nuclear-power-our-energy-future-or-a-dinosaur-in-a-death-spiral/

LSE (2019), How do emissions trading systems work? https://www.lse.ac.uk/granthaminstitute/explainers/how-do-emissions-trading-systems-work/

PwC (2016), Electricity beyond the grid - Accelerating access to sustainable power for all https://www.pwc.com/gx/en/energy-utilities-mining/pdf/electricity-beyond-grid.pdf

University of Cambridge Institute for Sustainability Leadership (2016), A new climate for business: Planning your response to the Paris Agreement on climate change, Business Briefing. http://www.cisl.cam.ac.uk/publications/publication-pdfs/A-New-Climate-for-Business.pdf

WWF (2016), Lessons in climate smart policies: A framework for integrated low carbon resilient development, WWF Report. https://d2ouvy59p0dg6k.cloudfront.net/downloads/lessons_in_climate_smart_policies___a_framework_for_integrated_low_carbon_resilient_deve.pdf

● 教學方式 (Teaching Methods)

This course combines lectures, seminars, and reading groups. Students will also have policy dialogues with policymakers and conduct study field-trips to the governmental agencies, think tank, private consulting firms, companies, and NGOs. At the end of this semester, all the class participants will be required to present their own policy projects for solving practical energy governance issues in Taiwan and/or across the regions.

● 教學進度 (Syllabus)

1. Introduction to global energy trends and scenarios
2. The future of fossil fuels in a carbon-constrained world
3. The nuclear option: the solution to the energy/climate conundrum?
4. Up-scaling renewable energy: policy incentives
5. Energy and climate governance: two become one?
6. Climate change and energy security: resolving a tri-lemma
7. What next for energy policy with the Paris Agreement on climate change?
8. The economics and geopolitics of natural gas
9. Energy and development
10. Mid-term review, Assignment, Presentations and/or Study Field-tripd
11. Stakeholders and Political Considerations in the Energy Business
12. Strategic Analysis of Energy Business Opportunities
13. Guest lecture: Electricity
14. Guest lecture: Energy innovation
15. Guest lecture: Taiwan's Energy Law and Markets

16. Student's presentation
17. Student's presentation
18. Student's presentation and course conclusion

● 成績考核 (Evaluation)

Class participation and discussion 20%
Mid-term presentation and a written paper/project proposal 30%
Final project 50%