Programa Analítico de Disciplina

ERU 789 - Economia das Mudanças Climáticas e dos Biocombustíveis

Departamento de Economia Rural - Centro de Ciências Agrárias	
Catálogo: 2024	
Número de créditos: 4 Carga horária semestral: 60h Carga horária semanal teórica: 4h Carga horária semanal prática: 0h	Semestres: II

Ementa
1. Mudanças climáticas: impactos setoriais, adaptação e mitigação. 2. Impactos setoriais das mudanças climáticas no Brasil 3. Estratégias adaptativas e mitigadoras na agricultura 4. Economia dos Biocombustíveis

Conteúdo

Unidade	T	P	To
1.**1. Mudanças climáticas: impactos setoriais, adaptação e mitigação.**	12h	0h	12h
2.**2. Impactos setoriais das mudanças climáticas no Brasil** 1.2.1 Impacto no setor agrícola: modelos agronômicos, modelos ricardianos e modelos de efeito fixo. 2.2. Mudanças climáticas e segurança energética 2.3. Fluxo migratório 2.4. Saúde 2.5. Elevação no nível do mar 2.6. Impactos macroeconômicos	16h	0h	16h
3.**3. Estratégias adaptativas e mitigadoras na agricultura** 1.3.1. Irrigação e mudanças no uso da terra 3.2. Estratégias de mitigação no Brasil: custos marginais de abatimento na agricultura 3.3. Análise de custo-benefício	16h	0h	16h
4.**4. Economia dos Biocombustíveis**	16h	0h	16h

1.4.1. Análise do ciclo de vida 4.2. Biocombustíveis, desmatamento e segurança alimentar			
Total	**60h**	**0h**	**60h**

Teórica (T); Prática (P); Total (To);

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Bibliografias básicas	
Descrição	**Exemplares**
Confalonieri, U. (2008). “Mudança climática e a saúde humana no Brasil”. Parcerias Estratégicas, n.27, pp. 323-349.	2
Deschenes, O., M. Greenstone and Jonathan Guryan (2009) “Climate Change and Birth Weight”. American Economic Review, Papers and Proceedings, 99(2): 211-217.	2
Deschenes, Olivier and Michael Greenstone (2007). “The Economic Impacts of Climate Change: Evidence from Agricultural Ouput and Random Fluctuations in Weather”. American Economic Review, 97(1): 354-85.	2
Mendelsohn, R., W. Nordhaus, e D. shaw (1994). The Impact of Global warning on Agriculture: A Ricardian analysis. American economic Review. 84(4): 753-71.	1
Schienker, W., W. M. Hanemann and A. C. Fisher (2005). Agriculture Really Benefit from Global Warming? Accounting for Irrigation in the Hedonic Approach”, American Economic Review (March) 395-406.	1

Bibliografias complementares	
Descrição	**Exemplares**
De Cian, E., E. Lanzi and R. Roson (2007). “The Impact of Climate Change on Energy dDemand A Dynamic Panel Data Analysis”. Centro euro-Mediterraneo per I Cambiamenti Climatici, WP, 10	1
Macedo, I. C., M. R. L. V. Leal, and J. E. A. R. da Silva. “Assessment of Greenhouse Gas Emissions in the Production and Use of Fuel Ethanol in Brazil”, report to the Government of the State of São Paulo, 2004.	1
Pinto, H. S., Assad, E. (2008) Aquecimento Global e Cenários Futuros da Economia Brasileira (Relatório de Pesquisa). Projeto: FC)-GOF, PGL GCC 0214, Campinas, Brasil.	1
Ragajopal, D. and Zilberman, D. (2007). Review of Environmental, Economic and Policy Aspects of Biofuels. World Bank Policy research Working Paper 4341.	1
Schienker, W., W. M. Hanemann and A. C. Fisher (2006). The Impact of Global warming on US Agriculture: An Econometric analysis of Optimal Growing conditions. Review of Economics and Statistics 88(1): 113-125.	1

Syllabus

ERU 789 - Economics of Climate Change and Biofuels

Departamento de Economia Rural - Centro de Ciências Agrárias	
Catalog: 2024	
Number of credits: 4 Total hours: 60h Weekly workload - Theoretical: 4h Weekly workload - Practical: 0h	Period: II

Content
1. Climate change: sectoral impacts, adaptation and mitigation. 2. Sectoral impacts of climate change in Brazil 2. Sectoral impacts of climate change in Brazil2. Sectoral impacts of climate change in Brazil2. Sectoral impacts of climate change in Brazil2. Sectoral impacts of climate change in Brazil 3. Adaptive and mitigating strategies in agriculture 4. Biofuels Economy

Course program

Unit	T	P	To
1.**1. Climate change: sectoral impacts, adaptation and mitigation.**	12h	0h	12h
2.2. Sectoral impacts of climate change in Brazil **2. Sectoral impacts of climate change in Brazil2. Sectoral impacts of climate change in Brazil2. Sectoral impacts of climate change in Brazil2. Sectoral impacts of climate change in Brazil** 2.1 Impact on the agricultural sector: agronomic models, models	16h	0h	16h

Ricardians and fixed effect models. 2.2. Climate change and energy security 2.3. Migratory flow 2.4. Health 2.5. Sea level rise 2.6. Macroeconomic impacts			
3.**3. Adaptive and mitigating strategies in agriculture** 1.3.1. Irrigation and land use changes 3.2. Mitigation strategies in Brazil: marginal costs of rebate in agriculture 3.3. Cost-benefit analysis	16h	0h	16h
4.**4. Biofuels Economy** 1.4.1. Life cycle analysis 4.2. Biofuels, deforestation and food security	16h	0h	16h
Total	**60h**	**0h**	**60h**

Theoretical (T); Practical (P); Total (To);

ERU 789 - Economics of Climate Change and Biofuels

Fundamental references	
Description	**Copies**
Confalonieri, U. (2008). “Mudança climática e a saúde humana no Brasil”. Parcerias Estratégicas, n.27, pp. 323-349.	2
Deschenes, O., M. Greenstone and Jonathan Guryan (2009) “Climate Change and Birth Weight”. American Economic Review, Papers and Proceedings, 99(2): 211-217.	2
Deschenes, Olivier and Michael Greenstone (2007). “The Economic Impacts of Climate Change: Evidence from Agricultural Ouput and Random Fluctuations in Weather”. American Economic Review, 97(1): 354-85.	2
Mendelsohn, R., W. Nordhaus, e D. shaw (1994). The Impact of Global warning on Agriculture: A Ricardian analysis. American economic Review. 84(4): 753-71.	1
Schienker, W., W. M. Hanemann and A. C. Fisher (2005). Agriculture Really Benefit from Global Warming? Accounting for Irrigation in the Hedonic Approach”, American Economic Review (March) 395-406.	1

Complementary references	
Description	**Copies**
De Cian, E., E. Lanzi and R. Roson (2007). “The Impact of Climate Change on Energy dDemand A Dynamic Panel Data Analysis”. Centro euro-Mediterraneo per I Cambiamenti Climatici, WP, 10	1
Macedo, I. C., M. R. L. V. Leal, and J. E. A. R. da Silva. “Assessment of Greenhouse Gas Emissions in the Production and Use of Fuel Ethanol in Brazil”, report to the Government of the State of São Paulo, 2004.	1
Pinto, H. S., Assad, E. (2008) Aquecimento Global e Cenários Futuros da Economia Brasileira (Relatório de Pesquisa). Project: FC)-GOF, PGL GCC 0214, Campinas, Brasil.	1
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