1. NOMENCLATURA DEL CURSO Economía de redes

2. CICLO ESCOLAR/SEMESTRE 2020/2021 - 2

3. CLAVE DEL CURSO ME033

4. SERIACIÓN I

5.

Horas de teoría en salón	Horas de trabajo del estudiante fuera de salón	Total de horas	Créditos
3	5	8	8

6. TOTAL HORAS-CLASE POR CURSO 48

7. OBJETIVO GENERAL DE LA ASIGNATURA

La teoría de redes ha cobrado fuerza en las últimas dos décadas para explicar fenómenos económicos en donde la idea subyacente es reconocer que los agentes forman relaciones estratégicas para beneficio propio o para un grupo. Las formas en las que una red puede estar organizada afectan el bienestar de los agentes involucrados en lo individual y en colectivo, para aprovechar la información que una red provee es necesario contar con las herramientas teóricas que permitan entender porqué surgen las conexiones entre agentes y cómo evolucionan.

8. VÍNCULOS DE LA ASIGNATURA CON LOS OBJETIVOS GENERALES DEL CURRÍCULUM

Curso de maestría optativo que se vincula con temas de Microeconomía y Organización Industrial

9. TEMARIO

1. Introducción
a. Introducción a Python
2. Definiciones y métricas
a. Introducción a networkx
b. Análisis de redes con networkx
3. Redes aleatorias
a. El modelo Barabasi-Albert
b. Modelos aleatorios en Python
4. Formación estratégica
5. Difusión en redes
a. Medidas de centralidad en Python
6. Aplicaciones
a. Redes económicas
b. Redes tecnológicas
c. Redes sociales
d. Otras redes

10. BIBLIOGRAFÍA Y OTROS RECURSOS DIDÁCTICOS

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1. Contagio Financiero

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2. Aprendizaje

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Golub, B., & Sadler, E. Learning in Social Networks. In The Oxford Handbook of the Economics of Networks.

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3. Choques y riesgo sistémico

Acemoglu, D., Akcigit, U., & Kerr, W. (2016). Networks and the macroeconomy: An empirical exploration. NBER Macroeconomics Annual, 30(1), 273-335

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4. Herding

Acharya, V. V., & Skeie, D. (2011). A model of liquidity hoarding and term premia in inter-bank markets. Journal of

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6. Negociación

Abreu, D., & Manea, M. (2012). Bargaining and efficiency in networks. Journal of Economic Theory, 147(1), 43-70.

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7. Redes Sociales

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8. Desigualdad

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9. Redes aleatorias

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Erdős, Paul, and Alfréd Rényi. "On the evolution of random graphs." Publ. Math. Inst. Hung. Acad. Sci 5.1 (1960): 17-60.

10. Bases de datos

https://snap.stanford.edu/data/

11. MECANISMOS DE EVALUACIÓN

Dos exámenes teóricos, 25% de la calificación final cada uno. Un trabajo final, 50% de la calificación final. Las instrucciones para el trabajo final se darán por escrito después del primer examen parcial.

12. DRA. ANA COVARRUBIAS VELASCO, COORDINADORA GENERAL ACADÉMICA
DIRECTOR O RESPONSABLE ACADÉMICO