14.46: Innovation Policy and the Economy MIT, Spring 2018

Instructor:	Heidi Williams (heidiw@mit.edu), E52-440
Office hours:	By appointment
Assistant:	Nikhil Basavappa (nbasavap@mit.edu)
Class:	Mondays and Wednesdays, 9-10.30am, 32-124
Recitation:	Fridays, 9-10am, E51-151
Teaching assistants:	Tamar Oostrom (oostrom@mit.edu) and Carolyn Stein (cstein@mit.edu)
Writing advisors:	[TBD]

Course description. Is the patent system helping or hindering innovation? How should the US National Institutes of Health (NIH) allocate its funding across diseases? Would the US benefit from raising caps on the employment of skilled immigrants through the H-1B visa program? This course aims to give you an introduction to the field of economics, through the lens of analyzing questions like these of how to best design innovation policies. Within that topical area, the course focuses on teaching the skills of effective writing, satisfying the CI-H requirement.

Course prerequisites. There are no course prerequisites. The material is meant to be an introduction to how the field of economics can be applied to try to solve some of society's most important problems. Freshmen and students from other fields are welcome.

Course attendance. Attending class and completing the required readings in advance of class is a requirement: if you cannot attend class consistently and arrive on time, you should not take this class.

Course structure. In order to make the class more participatory, the class will be randomly divided into two groups, and in most weeks each group will meet on either Monday (group A) or Wednesday (group B). The lecture schedule below clarifies days in which the two groups will meet together as a full class.

Course readings. There is no textbook for this course. The course website will host all readings (both required and recommended). Valid MIT web certificates are required for full access to the website.

Course assignments. Your grade will be based on full participation in all aspects of the course. This includes three major writing assignments, each of which will be described in detail in class. Your grade will also be based on class attendance and a series of short assignments related to the required course readings (25%). In fairness to students who complete assignments on time, we will not grant extensions for any assignments; late assignments will receive <u>no credit</u>. On an individual basis, I may adjust the weights to reward substantial improvement in performance over the semester. There will be no exams, and nothing will be due during finals week.

Course lecture schedule.

Wed 7-Feb (full class) • Counce information in the one information (10 minutes) Week 2: • Required reading: none Week 2: • Eccture 1: Economics for the Common Good, and an introduction to patents Week 3: • Required reading: Tirole (2017) Introduction and Chapter 1 Week 4: • Required reading: Williams (2017) Week 4: • Required reading: Budish et al. (2015) Week 4: • Note: Monday classes rescheduled to Tuesday due to President's Day Week 5: • Required reading: Stiglitz and Sulston (2010); Epstein (2010) Week 5: • Required reading: Color et al. (2015); Lander (2013); Sampat and Williams (2017) Week 5: • Lecture 4: Patent reform Mon 12-Mar (group B) • Recommended reading: Shapiro (2007); Scott Morton and Shapiro (2016); Jaffe and Lerner (2010) Week 6: • Recommended reading: Colura (2014); Bolden (2015); Nelson (2015) Mon 12-Mar (group B) • Recommended reading: Colura (2017); Macilwain (2010); Sampat et al. (2013) Week 7: • Recommended reading: Acoulty esearch Wed 21-Mar (group A) • Lecture 6: Funding innovative research Wed 22-Apr • Required reading: Councy (2017); Macilwain (2010); Sampat et al. (2013) Spring break: Mon 26-Apr • Required reading: Councy (2017) Week 8	XX71-1	
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	-	 Monday classes cancelled for Patriot's Day; Wednesday class also cancelled
week to:	Week 10:	
Mon 23-Apr (group A) • Lecture 9: Private philanthropy		• Lecture 9: Private philanthropy
• Required reading: Murray (2013)		
Week 11:		
Mon 30-Apr (group A) • Lecture 10: Facts about scientific labor markets		• Lecture 10: Facts about scientific labor markets
Wed 2-May (group B) • Required reading: Stephan (2012) Chapter 7		• Required reading: Stephan (2012) Chapter 7
Week 12:		
Mon 7-May (full class) • Mon 7-May (full class)		
- Lecture 11: Immigration and innovation	. , ,	
- Required reading: Kerr and Lincoln (2010); Doran et al. (2016)		
- Recommended reading: Stephan (2010); Borjas and Doran (2015); Kerr et al. (2015)	Wed 9-May (full class)	
• Wed 9-May (Iun class)		
 Lecture 12: Guest lecture with Professor John Van Reenen Required reading: Bell et al. (2016) 		
Week 13:	Week 13	Teoquired reading. Den et al. (2010)
Mon 14-May (full class) • Mon 14-May (full class)		• Mon 14-May (full class)
- Panel discussion with Professors David Autor, Amy Finkelstein, and Ben Olken		
- Required reading: none		
• Wed 16-May (full class)	Wed 16-May (full class)	
- Lecture 13: Innovation and inequality	,,,,,, ionay (iun class)	
- Required reading: none		
– Recommended reading: Cutler et al. (2012); Lleras-Muney and Lichtenberg (2005)		

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