ECON30027 Economics of Innovation

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	This subject is not offered in 2014.
Time Commitment:	Contact Hours: Two 1-hour lectures and a 1-hour tutorial per week Total Time Commitment: 12 hours per week
Prerequisites:	The following:

Subject	Study Period Commencement:	Credit Points:
ECON20002 Intermediate Microeconomics	Summer Term, Semester 1	12.50

Corequisites:	None
Recommended Background Knowledge:	Please refer to Prerequisites and Corequisites.
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Subject Overview:	Innovation is one of the main sources of economic development. Improving their innovative capacity is a major challenge for countries in both the developed and developing world. The key questions in the economics of innovation as a field are which innovations to encourage, how to reward them, and how to encourage their diffusion. This subject considers the different methods for rewarding innovation, such as prizes, intellectual property, and contests. We will study formal microeconomic models analysing the advantages and disadvantages of each method in the creation of knowledge. As an example, we will analyse how encouraging investment in neglected diseases, such as malaria and tuberculosis, may be different from encouraging investment in mobile technologies. The benefits of public vs. private sponsorship will also be investigated. In the case of intellectual property, we will evaluate what the available tools of protection are and how they meet the challenges posed by the cumulative nature of innovation. Our discussion will include different innovative environments, ranging from open source communities to research joint ventures. Finally, we will consider how the domains of intellectual property protection and antitrust policy may complement and contradict each other. Throughout the course, our discussion will be guided by practical examples and case studies. We will tackle some contemporary policy questions, such as whether genes should be patented.
Learning Outcomes:	On successful completion of this subject, students should be able to: • identify the market failures which characterize innovative environments; • describe the main models economists have developed to analyse optimal reward structures for the creation of knowledge; • describe the differences between different ways of rewarding innovation (patens, contests, prizes, etc.); • identify the virtues of decentralized vs. centralized decision-making in innovative environments; • describe the policy challenges posed by the cumulative nature of innovation; • identify the different ways of measuring innovative activity; • describe the legal tools we have for rewarding innovation and shortcomings • Apply the theory of economic policy and business decision making;

Assessment:	A 2-hour end-of-semester examination (50% or 60%), a 1-hour mid-semester exam (20% or 30%), and an in-course assignment of 2000 words (20%). The final mark will be calculated by weighting the end-of-semester exam at 50% and the mid-semester exam at 30% OR by weighting the end-of-semester exam at 60% and the mid-semester exam at 20%, whichever gives the higher mark to the student.
Prescribed Texts:	Scotchmer, S., Innovation and Incentives, 2004, MIT Press
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2014/B-ARTS)** # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2014/B-BMED)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2014/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2014/B-MUS)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2014/B-SCI)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2014/B-ENG)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	• High level of development: evaluation and synthesis of ideas, views and evidence critical thinking, strategic thinking, problem-solving skills; written communication. • Moderate level of development: Oral communication; accessing economic and other information; collaborative learning and team work.