

**THE UNIVERSITY OF HONG KONG
FACULTY OF BUSINESS AND ECONOMICS**

Economics of AI and Innovation

GENERAL INFORMATION
Instructor: Yanhui Wu Email: yanhuiwu@hku.hk Office: K.K.Leung 931 Phone: 3917 8508 Consultation times: TBD Pre-requisites: Intermediate (undergraduate) microeconomics and macroeconomics; Elementary (undergraduate level) calculus and econometrics
COURSE DESCRIPTION
This course provides rigorous analysis of how the advances in artificial intelligence and digital technology transform the economy and society. It will not only cover conventional topics on the impact of AI on innovation, business strategy, firm dynamics, employment, and economic growth, but also guide students to explore frontier topics related to social media, digital entertainment, gig economy, and algorithmic regulation. The course will be grounded on economic analysis and empirical methods with an emphasis on applications instead of methodological sophistication. Students are expected to master basic analytic and empirical tools to study knowledge, innovation, and AI in economics and management. Students will be assessed based on problem-solving assignments, a business analytical project, and a final exam.
COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE
Part I. Fundamentals 1.1 Digital transformation and the AI awakening 1.2 Economics of ideas and knowledge 1.3 Innovation and creative destruction 1.4 AI, management, and business strategy 1.5 AI, employment, and income distribution Part II. Advanced topics 2.1 Social media 2.2 Digital entertainment 2.3 The gig economy 2.4 Algorithmic regulation
REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)
There is no required textbook for this course. A set of slides and reading material (including academic papers and business articles) will be distributed to students. A list of business bestsellers related to the topics will be recommended to students from time to time.