

SDSC3014: INTRODUCTION TO SHARING ECONOMY

Effective Term

Semester A 2024/25

Part I Course Overview

Course Title

Introduction to Sharing Economy

Subject Code

SDSC - School of Data Science

Course Number

3014

Academic Unit

School of Data Science (DS)

College/School

School of Data Science (DS)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

Sharing economy decentralizes traditional way of organizing economic activities, especially in property markets and service industry, examples include taxi services like Uber and Didi, home-shares via Airbnb, and peer-to-peer lending like Zopa and Lending Club, all of which have millions of enthusiastic users but also are facing intense critics. This course provides an introduction that describes and analyse the underlying mechanism and prevailing practice of the peer-to-peer businesses. We will cover the functioning of various sharing platforms related to housing services, transportation services, and p2p lending services, different matching mechanism and pricing strategies employed by platforms, social welfare issues and the impact on labour market, as well regulatory developments and policy matters.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Acquire fundamental principles of sharing economy and develop the ability to assess specific methods to approach sharing economy problems.	25	x		
2	Understand important features of existing forms of sharing-economy markets.	15	x	x	
3	Learn the critical thinking skills to assess prevailing practices in sharing economy and identify approaches that improve the existing practices.	30	x	x	
4	Develop the capability to construct suitable principles and effective methods to solve given practical problems in sharing economy.	30	x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs	Brief Description	CILO No.	Hours/week (if applicable)
Lectures and in-class discussions	Learning through teaching is carried out primarily through in-class lectures, together with Q&As and discussions in order to implement CILOs 1-4.	1, 2, 3, 4	39 hours per semester

2	Tutorial and/or case studies	Learning through tutorial and case studies targets questions that may arise from the lectures, issues in the homework assignments, analysis of the case studies, etc.	2, 3, 4	In or after classes
3	Assignments and/or consultation hours.	Learning through assignments aims at allowing students to practice on problem solving. If needed, consultation hours facilities further individualized discussions about homework and topics related to the course.	1, 2, 3	In or after classes

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)	
1	Homework assignments	1, 2, 3, 4	20	20%-40%
2	Mid-term test (in-class exam or project)	1, 2, 3	20	0%-20%

Continuous Assessment (%)

40

Examination (%)

60

Examination Duration (Hours)

2

Additional Information for ATs

Note: To pass the course, apart from obtaining a minimum of 40% in the overall mark, a student must also obtain a minimum mark of 30% in both continuous assessment and examination components.

Assessment Rubrics (AR)**Assessment Task**

Homework assignments

Criterion

In the form of submitted written work. Ability to understand and apply common industry practices of business analytics.

Excellent (A+, A, A-)

High. For all 4 CILOs, strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good (B+, B, B-)

Significant. For at least 3 out of 4 CILOs, evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Fair (C+, C, C-)

Moderate. For at least 3 out of the 4 CILOs, evidence that student is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

Marginal (D)

Basic. For at least 3 out of the 4 CILOs, sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

Failure (F)

Not evident. Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

Assessment Task

Mid-term test

Criterion

Either in the form of in-class exam or group project with written report and presentation. Ability to learn the basic concepts, apply methods of business analytics, and design relevant studies for industry applications.

Excellent (A+, A, A-)

High. For all 4 CILOs, strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good (B+, B, B-)

Significant. For at least 3 out of 4 CILOs, evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Fair (C+, C, C-)

Moderate. For at least 3 out of the 4 CILOs, evidence that student is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

Marginal (D)

Basic. For at least 3 out of the 4 CILOs, sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

Failure (F)

Not evident. Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

Assessment Task

Examination

Criterion

In the form of submitted written work. Ability to solve conceptual and operational questions using social media analytics.

Excellent (A+, A, A-)

High. For all 4 CILOs, strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good (B+, B, B-)

Significant. For at least 3 out of 4 CILOs, evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Fair (C+, C, C-)

Moderate. For at least 3 out of the 4 CILOs, evidence that student is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

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Basic. For at least 3 out of the 4 CILOs, sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

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Part III Other Information

Keyword Syllabus

Peer-to-peer networks,
 Traditional rental markets,
 Business model via sharing platforms,
 Housing market sharing
 Transportation service sharing
 Peer-to-peer lending
 Other forms of service sharing via online marketplaces,
 Matching mechanism, e.g. one for one, pooling,
 Pricing strategies, e.g. surge pricing, subsidy strategies,
 Revenue management, e.g. proportional vs fixed
 Social welfare,
 Labour market,

Reading List**Compulsory Readings**

Title	
1	Major compulsory materials will be in the form of lecture notes and slides provided by the instructor.

Additional Readings

Title	
1	Arun Sundararajan (2017), <i>The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism</i> , The MIT Press
2	Alex Stephany (2015), <i>The Business of Sharing: Making it the New Sharing Economy</i> , Palgrave Macmillan
3	Geoffrey G. Parker and Marshall W. Van Alstyne (2017), <i>Platform Revolution: How Networked Markets are Transforming the Economy and How to Make Them Work for you</i> , W. W. Norton & Company
4	Rachel Botsman and Roo Rogers (2010), <i>What's Mine is Yours: The Rise of Collaborative Consumption</i> , Harper Business
5	David S. Evans and Richard Schmalensee (2016), <i>Matchmakers: The New Economics of Multisided Platforms</i> , Harvard Business Review Press
6	"The sharing economy: new opportunities, new questions" , Credit Suisse, Investor Strategy and Research, 2015 https://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf
7	Other relevant online learning material will also be provided by the instructor.