# The Hong Kong Polytechnic University

## **Subject Description Form**

Subject Code	LGT5083
Subject Title	Digital Procurement Management and Analytics
Credit Value	3
Level	5
Normal Duration	1-semester
Pre-requisite / Co-requisite/ Exclusion	Nil
Exclusion	LGT5032 Strategic Procurement Management
Objectives	To ensure that students fully comprehend how digital procurement and supply as key business competences can impact directly on the competitive position and operational efficiency of organizations.  To enable students to understand how digital procurement management can be applied onto the wider economic scenario and the importance of the structures of the supply and value chains in which the organization operates and the power regimes that determine the business options available to them.  To establish awareness of a range of perspectives of digital procurement management, and the importance of managers having knowledge of the range of tools available for business analysis and decision-making and supply chain circumstances, and the ability to understand the most appropriate tools to use in certain contingent circumstances.  To initiate big data analyses into digital procurement management.  To demonstrate how digital procurement can be applied onto modern entrepreneurial management.  This subject contributes to the following Intended Learning Outcomes for the MSc programme(s):  MSc/PgD in Global Supply Chain Management #3 Manage global sourcing and procurement
Intended Learning Outcomes	<ul> <li>Upon completion of the subject, students will be able to:</li> <li>A. Develop digital procurement and supply as a key strategic business competence in an organization.</li> <li>B. Understand and manipulate the economic drivers in the supply and value chain, by using digital procurement management, for the benefits of an organization.</li> <li>C. Apply appropriate digital procurement management tools in contingent</li> </ul>

- D. Use big data analyses in digital procurement management.
- E. Integrate digital procurement into entrepreneurial management.
- F. Know the advantages of data-driven decision-making and be able to apply the decision-making framework question, curate, analyze, and optimize

### Subject Synopsis/ Indicative Syllabus

- Explore ways of thinking about digital procurement and supply chain management from a business perspective and the linkages among business strategy, procurement, and supply competence.
- Consider theories that firms may adopt including transaction costs, asset specificity, organizational competence, business and supply management, and identify the economic drivers of business success.
- Examine the concepts of power and leverage and how they contribute to
  effective digital procurement management through understanding the
  unique structures of supply chains and the power structures embedded in
  them.
- Study the contractual and relational governances for managing buyer-supplier relationships as well as the cultural issues involved.
- Critically look at the strengths and weaknesses in established digital procurement and supply chain management.
- Identify the digital procurement opportunities available to firms and public bodies, through flexible strategies, to reduce costs and add value and quality improvements to existing business processes.
- Consider a wide range of digital and operational procurement and supply chain tools and techniques and understand their appropriate applications in contingent circumstances of particular supply and value chains and power regimes, including business ethics.
- The characteristics of institutional, legal and government purchasing.
- Big data analytics for digital procurement.
- Evaluate the importance of digital procurement in modern entrepreneurial management.

## Teaching/Learning Methodology

## **Teaching and Learning Methods:**

The above course objectives will be achieved through a participative approach. Students are expected to assume a very active role in the learning process and the role of the lecturer will be one of the facilitators. Specifically, students are:

- 1) encouraged to think of real life examples and discuss their management implications with peers in the class and with the lecturer;
- 2) expected to learn from lectures, group discussions, case studies, and interactions with the lecturer and among themselves;
- 3) required to review current supply management related articles to enhance their understanding of the digital procurement management;
- 4) given case studies to understand the important concepts and topic areas covered in the course.

At the end of the course, students are expected to have a clearer understanding of how digital procurement actually works.

The teaching method will be a combination of lecture and class discussion. Lectures will be delivered to introduce students into the foundation of "Digital Procurement Management and Analytics" and an analytical framework for the subject. Class discussion will be used as a vehicle to exchange experiences and ideas in the subject matters. Assigned readings and analytical case studies will be used to consolidate and develop the

students' knowledge, skills, and desire in the subject.

### Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d	e	f
Course Work							
Individual assignment	30%	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>
Quizzes	20%	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>
Class performance	10%	<b>✓</b>	✓	✓	✓	✓	<b>✓</b>
Case study (Team project presentation + individual exercise)	40%	✓	✓	✓	<b>✓</b>	✓	✓
Total	100 %		•			•	•

To reflect the significant technology content in this subject, 10% (or more) of the overall weighting of this subject is based on individual assessment concerning technology-related knowledge

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Individual assignment (30%), quizzes (20%) and class performance (10%) will in total contribute to a weight of the remaining 60% in the course.

Case study with Team Project Presentation and individual exercise will contribute to a weight of 40% in the course.

The objective is for students to review all concepts covered in the course one last time.

Guidelines to Team Project Presentation: The objective of the team project presentation is to help students organize and apply the ideas and concepts learnt from the course in real life settings.

The class is to be divided into teams of 3-7 students in each team. All members in the team are expected to be present in their presentation week for assessment purpose. The week of presentation will be informed to students on or before the 8<sup>th</sup> lecture of the new semester. Team projects are due for submission one week on or before the presentation week. If any individual has not contributed for the team works, s(he) should not append his/her name to the project presentation and report, but submit a separate report on their own. It will also be the team's responsibility to ensure that this happens. Each team member must contribute to the analysis leading to the assessed works in the course.

Student Study Effort Expected	Class contact:					
	■ Lectures / Tutorials 39 Hrs					
	Other student study effort:					
	Revision, doing exercises and cases	87 Hrs.				
	Total student study effort	126 Hrs				
Reading List and References	Schnellbächer, Wolfgang, Weise, Daniel (2020), Jumpstart to Digital Procurement: Pushing the Value Envelope in a New Age, Springer Authors: Schnellbächer, Wolfgang, Weise, Daniel					
	<u>Alexander Batran, Agnes Erben, Franziska Sperl</u> , <u>Ralf Schulz</u> (2017), Procurement 4.0: A Survival Guide in a Digital, Disruptive World Hardcover, Campus					
	Chaffey, Hemphill & Edmundson-Bird, 7th Edition (2019), Digital Business and E-Commerce Management, 7th Edition, Pearson					
	Weele, Arjan A.J. (the latest edition), Purchasing and Supply Chain Management, Cengage Learning.					
	Burt, D.N., Dobler, D.W., and Starling, S.L. (the latest edition) <i>World Class Supply Management: The Key to Supply Chain Management</i> , McGraw Hill.					
	Cousins, P., Lamming, R., Lawson, B., and Squire, B. (the latest edition), <i>Strategic Supply Management: Principles, Theories and Practices</i> , Prentice Hall/ Financial Times, Harlow, England.					
	Cox, A., Sanderson, J. and Watson, G. (the latest edition), <i>Power Regimes: Mapping the DNA of Business and Supply Chain Relationships</i> , Earlsgate Press					
	Erridge, A., Fee, R. and Mcllroy, J. (Eds.) (the latest edition), <i>Best Practice Procurement: Public And Private Sector Perspectives</i> , Gower.					
	Lamming, R. and Cox, A. (the latest edition), <i>Strategic Procurement Management</i> , Earlsgate Press.					
	Luo, Y. (the latest edition) Guanxi and Business, World Scientific, Singapore.					
	Porter, M. (the latest edition), Competitive Advantage, Free Press.					
	Saunders, M. (the latest edition), <i>Strategic Purchasing and Supply Chain Management</i> , Prentice Hall.					
	Wincel, Jeffrey (2004) Lean Supply Chain Management: a strategic procurement, New York NY: Productivity Press.					