

**List of SMU Courses for Sharing AY2020-2021 Term 1**

No.	Course Code	Course Title	Course Units	Class Timetable	Pre-requisites	Short write-up on the Course/Course Description
<b>School of Accounting</b>						
1	ACCT702	Introduction to Accounting Research	1.0	TBC	NIL	This is a 1.0 credit unit (CU) course designed to introduce you to the basic topics in accounting research, with a particular emphasis on the role of accounting information in capital markets. The objective of this course is to not only provide an overview of this important stream of accounting research, but also to develop your basic understanding of common research designs used in accounting studies and to identify interesting potential research questions. We will begin with the seminal studies which relate accounting numbers to capital markets and discuss various topics including positive accounting theory, value relevance, earnings management, voluntary disclosure, accounting conservatism, efficient contracting, etc.
2	ACCT704	Financial Accounting	1.0	TBC	NIL	This is a 1.0 credit unit (CU) course. The main objective of this course is to introduce you to a broad set of financial accounting topics. We select the studies that are, we believe, either of high impact or representative of a broader genre that you should know about. We will cover topics including earnings management, voluntary disclosure, the role of financial intermediaries (e.g., financial analysts, institutional investors), and corporate governance. Our goal is not only to review the existing research, but also to stimulate new work in the area and to help you develop your own research. We will do two things to achieve this goal. First, for each topic, we will discuss both seminal work and recently published studies or working papers that represent the recent development in the field. Second, we include some of our own papers. This inclusion not only reflects our research interests, but also enables us to discuss

						<p>many important dimensions of conducting research that you do not see from the ultimate published version, such as how to generate research ideas and how to address concerns raised by reviewers.</p> <p>Due to the sheer size of the literature, we are unable to cover many topics and omit many important papers. Some of the topics were covered in the previous seminars. Still you should not assume that this course together with other seminars can give you adequate coverage of financial accounting research. Our objective is to get you hooked on this stuff and leave the rest to you.</p>
3	ACCT7xx	Research Topics in Accounting	1.0	TBC	NIL	<p>This is a 1.0 credit unit (CU) course designed to introduce you to various accounting research topics. The objective of this course is to provide an overview on current research topics and to develop an understanding of research design commonly used. The topics covered in the course include the following, organized by instructor.</p> <p><b>An-Ping Lin:</b> Research on financial analysts and credit rating agencies</p> <p><b>Sterling Huang:</b> Research on executive compensation, supply contracts and interpretation of contracts</p> <p><b>Samuel Tan:</b> Research on law and accounting, network analysis</p> <p><b>Rencheng Wang:</b> Research on reporting and disclosure</p> <p><b>Yoonseok Zang:</b> Selected topics in auditing</p>

School of Economics						
4	ECON601	Microeconomics I	1.0	TBC	Intermediate Microeconomics	This course aims at providing a number of basic frameworks and tools of microeconomics, which can be used in any graduate economics course and even useful for your future research.
5	ECON621	Microeconomics II	1.0	TBC	Intermediate Microeconomics	The course is the second part of a graduate level introduction to microeconomics. The objective is to provide students with a thorough grounding in the analytical methods of microeconomic theory.
6	ECON611	Econometrics I	1.0	TBC	Familiarity with probability, statistics, econometrics, and matrix algebra at the undergraduate level is assumed.	This course is designed for graduate students in economics and finance who want to take the first solid course in advanced econometrics and lay down the foundation for theoretical work in econometrics and applied research in economics and finance.
7	ECON724	International Trade	1.0	TBC	Microeconomics, Macroeconomics and Econometrics	This course provides a graduate-level introduction to the field of international trade. It will cover the theories and empirics of international trade and policy.
8	ECON717	Empirical Industrial Organisation	1.0	TBC	NIL	
9	ECON739	Microeconometrics	1.0	TBC	NIL	

School of Social Science						
10	PSYC 601	Research Methods in Psychology	1.0	TBC	NIL	The course will expose students to various empirical methods in the psychological sciences. Students will learn the conceptual and technical foundations of descriptive and inferential statistics. The course covers the basics of creating and interpreting experiments, ethical issues, measuring and evaluating variables, and eliminating or controlling for confounding factors. By the end of the course, students should be able to design an experiment to address an empirical question, identify and apply appropriate data analytic techniques to the data, interpret statistical analyses, and present findings in clear language using APA style.
11	PSYC 603	General Linear Modeling	1.0	TBC	NIL	This course covers both theory and application of techniques such as univariate analysis of variance and covariance, nonparametric methods, correlations, and linear regression. Students will learn about the underlying assumptions of each statistical model as well as significance testing, estimating effect sizes, and statistical power.
12	PSYC 606	Social Psychology	1.0	TBC	NIL	This course covers the major theories in social psychological research including but not limited to topics such as attitudes, group behavior, stereotyping, the self, and interpersonal relationships.

13	PSYC 727	Cognition and Development	1.0	TBC	NIL	This course offers an advanced introduction to the fundamental topics in advanced cognitive and developmental psychology. Drawing on both theoretical and empirical studies with a particular focus on cognition and developmental phenomena, the module aims to examine how cognitive and developmental theories and methodologies can be used to promote our understanding of various aspects of important cognitive functioning and development across the lifespan. Topics include social issues that concern various developmental contexts (family, school, community, society, and culture), developmental assessments and interventions for both children, young adults, and ageing population. The course ultimately aims to provide a thorough immersion into the said topics and to serve as a foundation for new research in related and applied fields.
School of Computing and Information Systems						
14	IS715	Systems Security	1.0 CU	TBC	NIL	This course introduces graduate students to advanced topics in systems security, which includes: <ul style="list-style-type: none"> <li>- Software vulnerability and exploitation</li> <li>- User authentication in modern operation systems</li> <li>- Denial of service attacks and defenses</li> <li>- Intrusion detection</li> <li>- Common networking protocol security and Internet routing security</li> </ul>

15	CS701	Deep Learning and Vision	1.0 CU	TBC	Requires basics of linear algebra, probability theory, and programming skills	<p>Deep Learning and Vision is focused on deep convolutional neural network (DCNN) based algorithms that automatically learn visual patterns and train recognition models from visual data (images and videos). Example applications are image classification, object detection, image generation and semantic segmentation.</p> <p>This course covers both the basic concepts and the practical implementations of deep learning models for computer vision tasks. <b>First</b>, we will cover the fundamentals in pre-processing images, such as normalization and augmentation, as well as in constructing DCNN, such as pooling, batch normalization and activation functions. <b>Second</b>, we will focus on the training and visualization methods of DCNN based on the most typical visual task, i.e., image classification. <b>Last</b>, we will cover a variety of deep learning models specifically designed for advanced visual tasks such as object detection, semantic segmentation, and image generation.</p> <p>The intended audience for this course is graduate students. In addition to regular lectures and tutorials, students are exposed to the academic literature via critical reading and class presentations. The objective is to provide students with sufficient foundation to evaluate and learn from deep learning based academic papers. Besides, students are required to take part in a course project by applying the training and visualization methods of DCNN in computer vision tasks.</p>
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