

TAKE NOTE OF ALL DATES  
 WITHIN, ESPECIALLY  
 WEEKS 0, 8 and 14.

## SCHOOL OF ECONOMICS, SINGAPORE MANAGEMENT UNIVERSITY

Academic Year 2025 – 2026, Term One

**COR-STAT1202-X, Introductory Statistics X, Held Every Week**

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### FIRST 4 SECTIONS: BY SMU

#### ACADEMIC INTEGRITY

All acts of academic dishonesty (including, but not limited to, plagiarism, cheating, fabrication, facilitation of acts of academic dishonesty by others, unauthorized possession of exam questions, or tampering with the academic work of other students) are serious offences. All work (whether oral or written) submitted for purposes of assessment must be the student's own work. Penalties for violation of the policy range from zero marks for the component assessment to expulsion, depending on the nature of the offence. When in doubt, ask me. The SMU Code of Academic Integrity may be accessed at

<https://smu.sharepoint.com/sites/oasis/SitePages/DOS-WKLSWC/UCSC.aspx>.

#### COPYRIGHT NOTICE

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#### ACCESSIBILITY

SMU strives to make learning experiences accessible for all. If students anticipate or experience physical or academic barriers due to disability, please let me know immediately. Students are also welcome to contact the university's disability services team if you have questions or concerns about academic provisions: [accessibility@smu.edu.sg](mailto:accessibility@smu.edu.sg). Please be aware that accessible tables in the seminar room should remain available for students who require them.

#### DIGITAL READINESS FOR TEACHING AND LEARNING (DRTL)

As part of emergency preparedness, lessons may be conducted online via the Zoom platform during term, to prepare students for online learning. During an actual emergency, students will be notified to access the Zoom platform for their online lessons. The class schedule will mirror the current face-to-face class timetable unless otherwise stated.

### THE REST BY ME

#### COURSE OVERVIEW

Statistics abounds in our everyday lives, from economics to physics, accountancy to medicine, business to technology, geography to law, social science to politics, a veritable all-embracing giant. No discipline does well that disavows it or belittles it. Though many occupations may not require specialized statistics degrees, they demand at least a working understanding of statistics, and able competency with data crunching, statistical software and results management.

#### COURSE DESCRIPTION

The purpose of this course is to introduce the basic concepts of statistics through illustrative use of statistical methods for solving applied problems. Emphasis will be placed on statistical reasoning, rather than derivation of theoretical details. Students will learn to solve common statistical problems using statistical software. This course is designed for students who wish to pursue a non-quantitative major at SMU. Students who intend to pursue a quantitative major should take its companion course, COR-STAT1203 Introduction to Statistical Theory.

#### LEARNING OUTCOMES

This course gives students an introduction from the basics to mid-level statistics and applications in running analyses through manual means plus Excel, with interpretation through practical cases and examples. By the end of this course, students will have mastered descriptive and summary statistics, probability axioms, discrete univariate probability distributions, continuous univariate distributions, regression, means, variance, covariance, sampling distributions, central limit theorems, point v. interval estimations, one-, two-, multiple-sample hypothesis tests. At the basics, students should be able to

- ☑ define, collect, organize, and visualise data
- ☑ conduct simple linear regression analysis
- ☑ understand and apply basic probability concepts
- ☑ understand various probability distributions, including discrete and continuous distributions
- ☑ construct and interpret point and interval estimates
- ☑ conduct hypothesis tests.

## PRE-REQUISITE/CO-REQUISITE/MUTUALLY EXCLUSIVE COURSE(S)

Please use the class search function at OASIS > Study > BOSS > BOSS Bidding (Plan & Bid page > Add to Cart and Perform Course Search) or the course catalogue in OASIS to check the most updated attributes of this course.

## ASSESSMENTS

The assessment will be based on the following **broad criteria**, to be elaborated upon.

Participation:	10 – 15%		Project:	40 – 50%
Tests including CSI Missions:	20 – 25%		Final Paper:	20 – 30%

## BOOK REFERENCES

The notes I give are sufficient. No reference is compulsory. Little prior knowledge beyond everyday, everyman statistics is needed as all will begin from *er..* the beginning. The SMU Li Ka Shing Library holds the list overleaf and other reliable statistics titles (Lind, Bowerman, Doane, etc.)

**Up-To-You's** include:

- a** “Statistics for Managers Using Microsoft Excel” by Levine (Pearson Prentice-Hall, Global Edition with PHSTAT)
- b** “Statistical Techniques in Business and Economics” by Lind, Marchal, Wathen (McGraw-Hill/Irwin, 19th Edition with MEGASTAT)

## MATERIALS COVERED IN TESTS AND EXAMINATION

Besides the chapters in the **Course Schedule**, students are responsible for everything else I give throughout the course.

- ▲ Quizzes, tests and the final are on **covered** content, all given way in advance and hence in more than good time.

## POLICY ON ATTENDANCE

**Students are not allowed to work on projects or assignments during lectures.**

**Policy for fairness is that all late submissions and missed assessments due to unexcused or unofficial absences receive zero.**

Active participation is essential, barring illnesses or other excused absences. Missing a class means forfeiting opportunities to contribute to discussions and activities. As a result, every missed session, with the exception of an “**Excused Absence**”, may erode the class participation grade.

**Excused Absence:** an absence covered by any one of the following:

- ▲ A medical certificate (M.C.) or a doctor’s letter
- ▲ A letter from your school, superior or parties relevant, for reasons of absence, submitted directly to me *in advance*, stating clearly what will be missed. (test/quiz/class/rehearsal)
- ▲ If absence for any assessments is a valid “**Excused Absence**”, the student is responsible for seeking my advice about the missed assessments.
- ▲ Never should there be any overlap of any other course, module or activity with that of the regular weekly statistics class. If ever in doubt, make a bee-line for me.

## COR-STAT1202-X COURSE SCHEDULE:

*This is a rough guide. I will inform you **well in advance** of key dates.*

The project is a real-world, hands-on, social mission with partners in the fulfillment of a meaningful cause where we will collect survey responses and analyse the data. Depending on the theme yet to be confirmed at the time of this document, engaging with a sensitive theme may cause discomfort or distress. Training will be provided at the start to support you. All guidance and helplines will be given, including many external national helplines like SOS. If you find yourself in any discomfort or distress, please approach me, or consider enrolling in a regular, non-STAT-X course.

## STAT-X PLAN

<b>Week 0:</b> Anytime from 11 to 15 August 2025 (TBC)	<b>MANDATORY</b> Mass introduction, release of STAT-X project, meeting with STAT-X partners
Weeks 1-5: 18 August – 19 September 2025	Start of data collection, statistical training
Week 6-7: 20 September – 7 October 2025	Data cleaning & dossier release by Sitting Chief
<b>Week 8:</b> <b>10 October 2025</b>	<b>MANDATORY</b> <b>Half-term meeting with partner</b>
Week 12: 6 November 2025	Project submission to Sitting Chief Engager
Week 13: 10 November – 15 November 2025	Final lessons & rehearsals, including full-dress rehearsal
<b>Week 14:</b> <b>Monday, 17 November 2025</b>	<b>MANDATORY</b> <b>Exhibition &amp; Finalé</b>
Week 15:	Final Examination

**COURSE SCHEDULE:** *This is a rough guide, with key dates informed well in advance.*

Week	Date	Topics
<b>0</b>	From 11 to 15 August 2025 (TBC)	<b>MANDATORY</b> Meeting with Partners Priming and start of PROJECT STAT-X
<b>1</b>	18 Aug 25	Data Types & Graphs → Chance
<b>2</b>	25 Aug 25	Categorical Data → One Sample Continued from Week 1
<b>3</b>	01 Sep 25	Categorical Data → Two Samples → Multiple Samples Continued from Week 2
<b>4</b>	08 Sep 25	Numerical Data → Continuous → One Sample Continued from Week 3
<b>5</b>	15 Sep 25	Numerical Data → Continuous → Two Samples Continued from Week 4, survey winding up, all data submitted by end of Week 5
<b>6</b>	22 Sep 25	Numerical Data → Continuous → Multiple Samples Students' rest from project Mass data cleaning and preparation by Sitting Chief Donkey
<b>7</b>	29 Sep 25	Sample Size Determination Students' rest from project Mass data cleaning and preparation by Sitting Chief Donkey
<b>8</b>	10 Oct 25	<b>Term Break</b> Students' statistics dossier released <b>MANDATORY</b> Formal Half-term with Partners 10 October 2025
<b>9</b>	13 Oct 25	Numerical Data → Discrete
<b>10</b>	18 Oct 25 20 Oct 25	<b>MANDATORY</b> <b>TERM TEST (Classes As Usual)</b> <b>Saturday morning 18 October 2025, 0900 hours</b> <b>Format: F2F</b> In class: Numerical Data → More Continuous
<b>11</b>	27 Oct 25	Training → Onwards to the Finalé
<b>12</b>	03 Nov 25	Training → Onwards to the Finalé
<b>13</b>	10-15 Nov 25	<b>Catch-Up Week (Classes As Usual)</b> Rehearsals, including full-dress rehearsal
<b>14</b>	17 Nov 25	<b>MANDATORY</b> <b>FINALÉ</b> Monday, 17 November 2025, 1200 – 1730 hours
<b>15</b>	24 Nov – 01 Dec 25	<b>FINAL EXAMINATION</b>

## **Statistics Project Information Sheet: National Survey on Sensitive Topics in Singapore**

This is an information sheet of possible STAT Project themes in AY2025/2026 Term 1. It may involve a deep look into perceptions amongst Singaporeans towards autism, disabilities, death to name a few.

The work will help non-profit organisations, understand the thoughts, feelings and experiences regarding oft-taboo areas of discussion, contributing to greater education and programs for such topics in Singapore, where little is still known of the prevailing situation in these areas.

As we delve into this hands-on exercise in collecting survey responses and analysing the data, engaging with sensitive topics will provide valuable insights into the attitudes of local citizenry and help the Singapore government in its efforts to engage Singaporeans in these areas, but may cause discomfort or distress.

All responses are safeguarded, are anonymous and confidential, will only be used for statistical analysis and reported in aggregated form only. Everyone will analyse a separate recoded file with all identifying information deleted and irretrievable.

Thank you very much for your extremely valuable contribution towards making an impact in Singapore in these areas where few dare to go.

### **Objectives:**

- To understand the methodologies involved in conducting national surveys
- To develop skills in data collection and analysis
- To critically engage with sensitive topics and understand their broader implications for societal good

### **Outline:**

#### **1. Introduction to Research:**

- Overview of past national surveys
- Importance and ethical considerations in research

#### **2. Data Collection:**

- Survey implementation
- Participant recruitment and data gathering techniques

#### **3. Data Analysis:**

- Statistical methods for analysing cleaned, anonymised data provided
- Interpretation of results and reporting of findings

**Ethical and Emotional Considerations:**

- Understanding the impact of working with sensitive topics
- Strategies for managing stress, discomfort, distress, emotional exhaustion

**4. Support and Resources:**

- Separate training sessions at the start of the course by STAT Partners, MWKLSWC
- Guidance and access to many helplines, including SOS

**Support and Well-being:**

The project will be an extremely hands-on exercise with field work on the topic. We will be involved in the recruitment of participants, collecting survey responses, analysing the data. Engaging with a sensitive topic may cause discomfort or distress. Non-clinical researchers working on taboo topics may experience feelings of vulnerability, emotional exhaustion, stress, greater awareness of the fragility of life and the need for safety. However, other studies highlight possible benefits such as increased empathy, heightened altruism, a sense of purpose, and fulfillment derived from contributing to raised quality of life, increased control of one's life and reassurance in having decisive control, suggesting that engaging in such studies may lead to personal growth of researchers and a greater education and understanding of such topics. Training will be provided at the start of the course to support you in this course. If you find yourself in discomfort or distress, please approach me or SOS or the Student Wellness Centre.

**Training and Resources:**

- **Initial Training Session:**
  - Introduction to the survey process
  - Techniques for managing stress and emotional responses
- **Ongoing Support:**
  - Regular check-ins and debriefing sessions
  - Access to mental health resources and counselling services
- **Helplines and Contacts:**
  - Internal support through MWKLSWC
  - External support through national SOS helplines

## Evaluation and Assessment:

- Participation in data collection, analysis activities and fun and inclusive classroom environment
- Submission of a final report of findings and reflections
- Engagement in discussions with partner and me about topic, emotional impact, follow-up

## Contact Information:

- **Faculty:** Rosie Ching Ju Mae, [rosieching@smu.edu.sg](mailto:rosieching@smu.edu.sg), , 6828 0587
- **Student Wellness Centre:** Mrs Wong Kwok Leong Student Wellness Centre, [counselling@smu.edu.sg](mailto:counselling@smu.edu.sg), 6828 0786

## Helplines (also inside survey):

### **SAMARITANS OF SINGAPORE (SOS)**

1767

(24-hour telephone hotline)

WhatsApp: 9151 1767 (24-hour CareText)

<https://www.sos.org.sg>

### **TOUCHLINE**

#### **BY TOUCH COMMUNITY SERVICES**

1800 377 2252 (9 am – 6 pm, weekdays)

<https://www.touch.org.sg/about-touch/our-services/counselling-services>

### **HEAR4U**

#### **BY CARE SINGAPORE**

69782728 (WhatsApp Chat , 10 am – 5 pm, weekdays)

<https://care.sg/hear4u>

### **SAF HOTLINE**

#### **(FOR SAF PERSONNEL)**

1800 278 0022 (24-hour hotline)

<https://www.healthhub.sg/a-z/support-groups-and-others/20/call-on-these-when-you-need-help>

### **NATIONAL CARE HOTLINE**

#### **GOV.SG**

1800 202 6868 (8 am – 12 midnight daily)

<https://www.gov.sg/article/call-these-helplines-if-you-need-emotional-or-psychological-support>

### **ECOUNSELLING CENTRE**

#### **(EC2)**

Online chat for youths (10 am – 12 pm, 2– 5 pm)

<https://fycs.org/ec2-sg>