

Programme Title	BSc. (Hons) in Hotel Management / BSc. (Hons) in Tourism Management
Programme Code	24027 / 24028 / 24029 / 24030
Subject Name	Data Analysis
Subject Code	HTM3126
Subject Level	3
Duration	14 weeks
No. of Credits	2 credits
Total Contact Hours	28 hours
Teaching Hours Matrix	1 hour lecture and 1 hour tutorial / laboratory session per week
Prerequisite	None

Subject Descriptions

This subject provides basic knowledge and understanding about the analysis of both qualitative and quantitative data. For qualitative analysis, the fundamentals of content analysis will be examined followed by various secondary techniques used to code, categorise and contextualise such data. Quantitative analysis will cover descriptive and bi-variate statistical techniques. Interpretation of both forms of data is also examined.

Programme Learning Outcomes and Subject Objectives

Knowledge & Intellectual Skills

Students will be able to *identify and discuss* a variety of basic data analysis techniques in interpreting both qualitative and quantitative data in the hospitality and tourism context

Application, Autonomy & Accountability

Students will be able to *apply* elementary data analysis techniques in addressing a tourism or hospitality related problem.

Application, Autonomy & Accountability

Students will be able to *think critically* about the uses and limitations of various data analysis techniques in addressing a tourism and hospitality problem.

Communication, Information Technology & Numeracy

Students will be able to *use* a statistical package and *interpret* the output in addressing a tourism or hospitality related problem.

Major Teaching and Learning Methods

Lectures will be used to present the theoretical background and basic principles of elementary data analysis techniques.

Seminars will reinforce materials covered in lectures and focus on applications of data analysis techniques to tourism and hospitality industry.

Computer-Assisted Teaching and Learning - Students will have access to statistical analysis software packages: Statistical Package for the Social Sciences (SPSS) and the computer lab sessions will be providing step-by-step instructions on how to use SPSS to carry out the data / statistical analysis.

Major Assessment Methods

Two written tests will be used. The questions asked in the tests will be based on material covered in the lectures and seminars. It will assess knowledge of the subject matter through multiple choice, true/false type questions and understanding / application via short answer questions and case study

Problem-based assignments will be assessed. The purpose of this assignment is to demonstrate the student's ability to use SPSS to carry out the data analysis techniques

Assessment Weighting

Continuous assessment 100%

This subject is graded on the basis of course work assessment with use of three pieces of assessment to determine each student's final grade. There will be no final examination.

Assessments Forms	Weighting
Test 1	35%
Test 2	35%
SPSS Assignment Exercise	<u>30%</u>
Total	100%

Due to the special nature of this subject, it is considered not appropriate to employ either an essay or open-book examination as the final assessment. Continuous assessment in the form of tests and SPSS exercises is more suitable in having students learn by doing. The tests and assignments are adequate to assess the expected learning outcomes/objectives and enable students to engage in a variety of data analysis activities.

Key Syllabus

Key topics to be addressed in this subject

References

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|----|--------------------------------------------------------------------|---------------------------------------------------------------------|
| 1 | Introduction and overview of data analysis | Jennings (2005) and
Levin & Rubin (1998) |
| 2 | Probability distribution: normal distribution | Levin & Rubin (1998)
Ch. 5;
Norusis (2000) Ch. 10 |
| 3 | Sampling distributions: mean and difference of means | Levin & Rubin (1998)
Ch. 6;
Norusis (2000) Ch. 10 |
| 4 | Hypothesis testing: Z -test and t -test of a single mean | Levin & Rubin (1998)
Ch. 8;
Norusis (2000) Ch. 11 |
| 5 | Hypothesis testing: Z -test and t -test of difference of means | Levin & Rubin (1998)
Ch. 9
Norusis (2000) Ch 12 &
13 |
| 6 | Hypothesis testing: χ^2 -test of independence/association | Levin & Rubin (1998)
Ch. 11
Norusis (2000) Ch. 18 |
| 7 | Simple linear regression and correlation | Levin & Rubin (1998)
Ch. 12
Norusis (2000) Ch. 19,
20 & 21 |
| 8 | Introduction to multiple regression | Levin & Rubin (1998)
Ch. 13
Norusis (2000) Ch. 22 |
| 9 | Qualitative data analysis | Jennings |
| 10 | Content Analysis | Jennings |
| 11 | Coding | Jennings |
| 12 | Interpreting qualitative data | Jennings |
| 13 | Establishing trustworthiness | Jennings |
| 14 | Review | |

Textbook

- 1 Ap, J., Pine, R., Mok, C. and Heung, V. (2004) Final Year Project Handbook.
- 2 Jennings, G. (2005) Using a Qualitative Methodology for Tourism Research, UK: Elsevier.
- 3 Levin, R.I. & Rubin, D.S. (1998), Statistics for Management, 7th ed., Prentice Hall.
- 4 Norusis, Marija J. (2000), SPSS 10.0 Guide to Data Analysis, Engelwood Cliffs: Prentice Hall.

Suggested Readings

- 1 Jennings, Gayle (2001) Tourism Research, 1st edition. Ft. Worth: John Wiley & Sons Australia, Ltd
- 2 Keller, G. & Warrack, B. (2004) Statistics for Management and Economics, 6th edition, Thomson Learning
- 3 Miles, and Huberman, (1988) Qualitative Data Analysis. NY: John Wile & Sons
- 4 Norusis, Marija (2002) SPSS 11.0 Guide to Data Analysis, Prentice Hall.
- 5 Silverman, D. (2001) Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction, 2nd ed. London: Sage Publications