

SIT 227: Research Methods

Pre-requisites

None

Purpose of the course

To equip students with the necessary tools to undertake a scientific research in Information Technology sector and integrate it with other sectors such as business, health, among others.

Expected Learning Outcomes

By the end of the course, students should be able to:

- i. Develop skills of finding and analyzing data
- ii. Explain and criticize approaches to the construction of knowledge
- iii. Select appropriate research methods and sources for an identified research topic.
- iv. Develop a viable research proposal.

Course Content

Introduction: meaning and purpose of research; basic and applied research and scientific methodology overview of the research process; Basic terms in research: Identification and definition of a research problem: Identifying a research problem, stating the research problem, purpose, objectives, hypothesis/research questions, significance of the study, limitation of the study. Literature review: Purpose and Scope, steps and sources of literature review, sources of information and tips for good reviewing of literature. Method: Research design, population and sample, developing research instruments, piloting/pre-testing the instrument, data collection procedures – primary versus secondary data, plans for data analysis and interpretation; Data management, Data analysis: Tools of qualitative analysis and statistical analysis, interpretation, conclusions and recommendations; Issues in Research Quality – reliability, objectivity, validity. Writing research proposal and report.

Mode of Delivery

Use of lectures

Tutorials

Case Studies.

Instructional Materials and/or Equipment

Projectors

White boards

Marker pens

Computers

Assessment:

Type

Continuous Assessment

Examination

Weighting

30 %

70 %

Total

100 %

Course Texts

- i. Walliman, N. (2018). Research methods : the basics (Second Ed.). Routledge, an imprint of the Taylor & Francis Group.
- ii. Adams, K. A., & Lawrence, E. K. (2019). Research methods, statistics, and applications (Second Ed.): Sage Publications.
- iii. Kothari, C.R.,et al(2014). Research Methodology.3rd ed. New Age International Publishers,New Delhi.
- iv. Cooper D. R. & Schnidler (2008) Business Research Methods. Tata Mc Graw- Hill, New Delhi.
- v. Bryman, A. (2012). Research Methods for Business.5th ed. Oxford University Press
- vi. Cooper D. R. & Schnidler (2008) Business Research Methods. Tata Mc Graw- Hill, New Delhi.
- vii. Mathooko Jude, et al. (2007) Academic Proposal Writing 1st ed. Amu Press
- viii. Saunders, M. Lewis, P. Thornbill, A. (2009) Research Methods for Business Students. Financial Times Prentice Hall
- ix. Olive Mugenda & Abel Mugenda (2001) Quantitative and Qualitative Research Methodology

Recommended Reference Materials

- i. Kenneth S. Bordens and Bruce B. Abbott, (2011). Research Design and Methods: A Process Approach, 8th edition, McGraw-Hill,
- ii. W. Lawrence Neuman, (2006). Social Research Methods: Qualitative and Quantitative Approaches, 6th edition, Pearson Education, French's Forest.
- iii. Veal, A.J. (2005). Business Research Methods: a Managerial Approach. (2nd Edition). Pearson Education, French's Forest.
- iv. Edgar, T. W., & Manz, D. O. (2017). Research methods for cyber security: Syngress, an imprint of Elsevier.
- v. Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). Research methods for business students (Eighth). Pearson
- vi. Ingram, J., & Elliott, V. F. (2020). Research methods for classroom discourse: Bloomsbury Academic.
- vii. Lazar, J., Feng, J. H., & Hochheiser, H. (2017). Research methods in human computer interaction (Second Ed.): Morgan Kaufmann Publishers, an imprint of Elsevier.

Journals

- i. Journal of Research and Practice in Information Technology ISSN: 1443458X
- ii. Journal of Information Technology Research ISSN: 19387857