

CURRICULUM VITAE FOR DR. JOHN L. SIRENGO

1.0 PERSONAL DATA

NAME:	Dr. John L. Sirengo (Ph.D)
DATE OF BIRTH:	12 th August, 1969
NATIONALITY:	Kenyan
RELIGION	Christian
MARITAL STATUS:	Married with Children
CURRENT DESIGNATION:	Lecturer and Examination/Timetable coordinator, Department of Mathematics, Faculty of Science
ADDRESS:	Kibabii University P. O Box 1699 – 50200 Bungoma
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CAREER OBJECTIVE

Motivated to advance statistical education by combining rigorous research, innovative curriculum design, and interdisciplinary collaboration

RESEARCH INTEREST

Committed to elevating statistical education through innovative research, advanced curriculum development, and scholarly contributions

COMPETENCY PROFILE

Highly skilled statistics lecturer with advanced expertise in quantitative research methodologies, comprehensive statistical instruction, interdisciplinary research collaboration, and innovative curriculum development. Proficient in statistical software, computational techniques, and academic mentorship with a proven track record of scholarly contributions.

2.0 ACADEMIC QUALIFICATIONS

Certificate in Data Protection	2024	Strathmore University
D.Phil.	2021	Kibabii University, Bungoma
MSc	2013	Masinde Muliro University, Kakamega
PGDE	2004	Egerton University, Nakuru
BSc	1993	Kenyatta University, Nairobi
KACE (A – LEVEL)	1988	Bokoli Boys High School, Bungoma
KCE (O – LEVEL)	1986	Kibabii Boys High School, Bungoma
CPE	1982	Mabanga R. C Primary School, Bungoma

3.0 PROFESSIONAL EXPERIENCE

2021 – To date:	Lecturer (Statistics), Department of Mathematics, Kibabii University
2015 – 2021:	Tutorial Fellow (Statistics), Department of Mathematics, Kibabii University
2013 – 2015:	Part Time Lecturer Jomo Kenyatta University, Masinde Muliro University and Kibabii University.
2013 – 2015:	Head of Mathematics Section, Chesamisi Boys High School
2002 – 2012:	Registrar, Kitale National Polytechnic

4.0 LEADERSHIP AND MANAGEMENT ROLES

November 2020 – to date:	Examination/Timetable Coordinator, Mathematics Department,
Sept – October 2023:	Ag. COD Mathematics, Kibabii University

5.0 UNIVERSITY RESPONSIBILITIES

- i. Chairman social welfare Faculty of Science
- ii. Career, guidance, mentorship and placement committee member.

6.0 PUBLICATIONS

- i. **Sirengo John Luca** (2024). Mathematical Modelling of Prevention Measures of HIV and Aids in Kenya. *IRE (Iconic Research and Engineering) Journal*, Vol 8 no. 5,.124 – 133
- ii. **Sirengo John Luca** (2024). Application of Survival Analysis Techniques Using Product Limit Method (PL) to Support Breast Cancer Survivalists. *IRE (Iconic Research and Engineering) Journal*, Vol 8 no. 5,.528 – 536
- iii. **Sirengo John Luca** (2024). An Enhanced Methodology for Estimating Disease Infection Rates in Plants Using an Equal Group Size. *IRE (Iconic Research and Engineering) Journal*, Vol 8 no. 6

- iv. Wafula P. W., Aywa S. and **Sirengo J. L.** (2024). Equivalent Characterizations of Isometrically Bounded Operators with Circular Numerical Ranges. *IRE journal* Vol. 8 Issue 1. 315 - 321
- v. Lubokha S. K., Munir and **Sirengo J. L.** (2024). Accounting Output Innovation Approaches and Financial Sustainability of Tier One Banks in Kenya. *IRE journal* Vol 6 Issue 1. 363 - 369
- vi. **Sirengo L. J** (2022). Efficient Method for Estimating the presence of a Viral Infectious Disease and How to Control its Rapid Spread in a Population. *IRE (Iconic Research and Engineering) Journal*, Vol 6 no. 6,.61 – 66
- vii. Amwayi, N. E., **Sirengo L.J.** and Kati, R. O. (2022). Markovian Modeling of Students Performance by Cohorts in Secondary Schools. *IRE (Iconic Research and Engineering) Journal*, Vol 6 no. 5,.134 – 140
- viii. **Sirengo L. J.**, Nyongesa L. K., Aywa O. S. (2020). Estimation of Multiple Traits in an M-Stage Group Testing Model. *Applied Mathematical Sciences*, 14, 2020, no. 5, 235 - 243
- ix. **Sirengo L. J.**, Nyongesa L. K., Aywa O. S. (2020). An M-Stage Hierarchical Group Testing model for Estimating Multiple Traits in a Population. *IOSR Journal; of Mathematics*. Volume 16 Issue 3, 29 – 34.
- x. **Sirengo L., J. (2017)**. Towards a Cost Effective Method for Estimation Disease Infection Rates in Plants. *International Journal of Advanced Scientific Research*. Volume 2, No. 4, 70 – 80
- xi. **Sirengo L., J. (2015)**. School Factors as Correlates of Secondary Students' Achievement in Mathematics in Bungoma County, Kenya. *International journal of educational investigations*. ISSN: 2410 – 3446, Vol 2, No. 6

7.0 THESES PUBLISHED

- i. Estimation of Multiple Traits in a Population using an M-Stage Group Testing Model (PhD Thesis, 2021 – KIBU).
- ii. A Cost Effective Method for Estimating Disease Infection Rate in Plants (MSc Thesis, 2013 – MMUST).

8.0 MEMBERSHIP OF PROFESSIONAL BODY

- i. Kenya National Statistical Society, M/No. 0699
- ii. Kenya Mathematical Society M/No.027

9.0 COMMUNITY SERVICE

- i. Chairman Catholic Men Association, St. Ponsiano, Kitale Diocese since 2019 up to date
- ii. Chairman, Development Committee, St. Joseph the Worker Sawali Sub Parish, Bukembe Parish, Bungoma Diocese between 2019 to date.
- iii. Chairman of Kenneth Lusaka Secondary School, Chengwali Management Board
- iv. Chairman, Academic Committee St. Thomas Aquinas secondary School, Namgoi

10.0 CONFERENCES, SEMINAR, WORKSHOPS AND TRAINING

- 2024: Attended a certificate course in Data Protection at Strathmore University
- 2024: Attended a Quality Assurance and Competence Based Curriculum Training.
- 2023: Participated in the Africa Health Economic Study Group (AfHESG) a one day training on “Measuring Socio-economic status – a focus on principal component analysis”.
- 2021: Participated in Kibabii University 5th International Conference held in June 2021 and presented a paper.
- 2018: Participated in Educational workshop on Enhancing Learning outcomes through Application of 21st century Pedagogies in the provision of University Education.
- 2018: Attended a Statistics workshop on Bayesian Statistics at Jomo Kenyatta University of Agriculture and Technology
- 2016: Participated in Kibabii University 1st International Conference held in June 2016 and presented.
- 2008: Capacity Building on the usage of ICT in administration and teaching
- 2007: Attended a Management workshop organized by Commonwealth Association of Polytechnics in Africa (CAPA) and Kenya Association of Technical Training Institutions (KATTI).

11.0 INTERNAL EXAMINATION

- 2022: Appointed as an Internal Examiner for Owuor, Lucas Otieno (MSC/AM/006/19) master’s thesis. Title: A Mathematical Model of Chlorine Concentration in Contact Tanks using Numerical solution of a One-Dimensional Convection-Diffusion Equation
- 2022: Appointed as an Internal Examiner for Sirma, Purity Chepkoech (MSC/AM/001/18) master’s thesis. Title: Mathematical Model for Nutrients, Gases and Wastes Exchange in the Fetoplacental circulation.

12.0 SUPERVISION

- 2024: Supervised Phillip Wafula Mulongo (MSC/AMT/001/14) master’s thesis to completion. Title: Isometrically Equivalent Norms in a Banach Space.
- 2024: Supervised Samuel Kitui Lubokha (MBA/012/21) master’s thesis to completion. Title: Accounting Innovation Approaches on Financial Sustainability of Tier One Banks in Kenya.
- 2023: Supervised Everlyne Amwayi Nyangano (MSC/STA/005/13) master’s thesis to completion. Title: Markovian Modeling of Students Performance by Cohorts in Secondary Schools

13.0 ACADEMIC REFEREES

1. Dr. Vincent Marani, COD – Mathematics, Kibabii University
P. O Box 1699 – 50200
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Cellphone: 0716211787

2. Dr. Lucy Chikamai, Dean Faculty of Science, Kibabii University
P. O Box 1699 – 50200
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