

CURRICULUM VITAE (2022)

PERSONAL DETAILS

NAME : Dr. Zablon Maua Muga
DATE OF BIRTH : 9/7/1975
GENDER : Male
MARITAL STATUS : Married
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ACADEMIC AND PROFESSIONAL BACKGROUND

<u>YEAR</u>	<u>INSTITUION</u>	<u>DEGREE OR CERTIFICATE</u>
2013-2016	: JOOUST	: Doctor of Philosophy- Applied Statistics
2006-2010	: Kenyatta University	: Msc. Mathematics -Statistics
1997-2002	: Egerton University	: Bed. Science (Mathematics and Physics)
1992-1995	: Alliance High School	: Kenya Certificate of Secondary Education
1988-1991	: Ndere Boys Boarding Primary	: Kenya Certificate of Primary Education-School
1983-1987	: Maliera Primary Shool	

CAREER AND WORK EXPERIENCE

<u>PERIOD</u>	<u>INSTITUTION</u>	<u>RESPONSIBILITY</u>
June 2016 to date	Jaramogi Oginga Odinga University of Science and Technology	Appointed Lecturer – School of Mathematics and Actuarial Science
November 2011- May 2016	Jaramogi Oginga Odinga University of Science and Technology/ Bondo University College	Appointed assistant Lecturer- Mathematics and Statistics
August 2011	Bondo University College-Kosele Campus	Parttime Lecturer
2006- 2011	Agoro Sare High School	Trained Graduate Teacher 1 - Job Group “L”
2003- 2006	Agoro Sare High School	Graduate Teacher-job group ‘K’

PUBLICATIONS

- 1.** Authors: C.W. Otulo^{1*}, Z. M. Muga², N. B. Okelo³, J.O. Nyakinda⁴ Relative Efficiency of Sum Constructed Automorphic Symmetric Balanced Incomplete Block Designs.
International Journal of Modern Computation, Information and Communication Technology 2020;3(7):56-63. ISSN: 2581-5954

- 2.** Authors: C.W. Otulo^{1*}, Z. M. Muga², N. B. Okelo³, J.O. Nyakinda⁴ Sum Construction of Automorphic Symmetric Balanced Incomplete Block Designs.
International Journal of Scientific Research in Mathematical and Statistical Sciences Volume-7, Issue-4, pp.10-13, August (2020)
E-ISSN: 2348-4519 DOI: <https://doi.org/10.26438/ijrmss/v7i4.1013>

- 3.** Authors: Lydiah Kwamboka, George Otieno Orwa and Zablon Maua Muga
Forecasting monthly sugar cane yields using Box-Jenkin's predictive models in Kenya.
International Journal of Statistics and Applied Mathematics 2019; 4(6): 147-151

- 4.** Authors: Robert Orwenyo Onyoni, George Otieno Orwa and Zablon Maua Muga
Modeling Household Water Demands Using Sinusoidal Models.
International Journal of Statistics and Applied Mathematics 2019; 4(6): 128-132

- 5.** Effect Of Sampling Bias On The Family Of Exponential Random Graph Models.
International Journal of Statistics and Applied Mathematics 2019; 4(2): 31-33
Authors:Paul Wachiuri Warutumo, George Otieno Orwa and Zablon Maua Muga

- 6.** Fitting A Markovian Queuing Model To Bus Park Revenue Collection Point In Kisii Town, Kenya. **International Journal of Statistics and Applied Mathematics 2019; 4(2): 26-30**
Authors: Hudson Ongiri, George Otieno Orwa and Zablon Maua Muga

- 7.** Authors: James Ondulo, Okuto Erick, Muga Maua, Omondi Dickens,Obonyo Charles
Recurrent Malaria In Kenya: Survival Distribution And Equality Of Survival Distribution:
Researchjournal's Journal of Mathematics Vol. 4 | No. 4 December | 2017 ISSN 2349-5375

- 8.** Authors: Z. Muga, G. Orwa, N. Ongati
A Mathematical Model For Motorcycle Rider Population Totals Based On Susceptible, Reported And Unreported Accidents: The **East African Journal of Statistics: Volume 7, Number 3, ISSN: 1811-7503. 2016**

- 9.** Authors: Z. Muga, G. Orwa, N. Ongati
On The Effects Of Motorcycle Accidents And Its Trends (A Case Of Kenya) :**The East African Journal of Statistics: Volume 7, Number 2, ISSN: 1811-7503. 2016**

10. Authors: Z. Muga, G. Orwa, R. Odhiambo, L. Odongo
Effects Of Outliers On Estimation Of Finite Population Totals: **IJESM VOLUME 2 ISSUE 1, ISSN: 2320-0294, JUNE 2013**

11. Authors: Z. Muga, G. Orwa, R. Odhiambo, L. Odongo
Comparison Of The Ratio Estimate To The Local Linear Polynomial Estimate Of Finite Population Totals: **IJESM VOLUME 2 ISSUE 1, ISSN: 2320-0294, MARCH 2013**

SUPERVISION OF STUDENTS TO COMPLETION

Completed supervision of One Doctor of Philosophy Student and Four Master of Science students.

1. Otulo Cyrilus Wandera- Doctor of Philosophy -Applied Statistics- JOOUST 2022
2. Lydiah Kwamboka –Msc Applied Statistics- JKUAT- 2021
3. Robert Orwenyo Onyoni- Msc Applied Statistics- JKUAT- 2021
4. Hudson Nyangw'ara Ongiri – Msc. Applied Statistics- JKUAT- 2019
5. Paul Wachiuri Warutumo –Msc Applied Statistics- JKUAT- 2019

RESPONSIBILITIES HELD AT JOOUST

<u>PERIOD</u>	<u>DESCRIPTION</u>
March 2022 to March 2025	Elected as Chairperson Board of Trustees JOOUST-SRBS
April 2021	Serving as Team leader in the development and review of Bsc. Applied Statistics with Computing.
May 2018 to date	Serving as a certified trustee in the JOOUST pension scheme.
May 2017 to July 2017	Acted as chair of Department: Financial Mathematics, Statistics and Acturial Science
September 2016 to October 2016	Acted as chair of Department: Financial Mathematics, Statistics and Acturial Science
March 2016 to date	Timetabling and Examinations coordinator- SMAS/SBPMAS/ASFMA&AS
December 2015 to date	Industrial attachment Coordinator- SMAS/SBPMAS
May 2012 to Date	University Choir Trainer -JOOUST
2015 - 2022	Served in the Entertainment graduation sub-committee- JOOUST

MARKED CONTRIBUTIONS IN CO-CURRICULUM AT JOOUST

<u>PERIOD</u>	<u>DESCRIPTION</u>
August 2012 to August 2019	Trained the University Choir to the National level winning a total of [12] trophies and certificates of award for positions 1,2 and 3. The presence of the University choir at these festivals is a big marketing strategy. All students who have gone through this exercise have a certificate of participation to show.
2014	Composed, trained and launched the University Anthem.
2015 to 2019	Participation in the ASK show

COMMUNITY SERVICE

<u>PERIOD</u>	<u>INSTITUTION</u>	<u>RESPONSIBILITY</u>
January 2022 to date	SDA West Kenya Union Conference	Chairperson Union Music Committee; This Union covers: Luo Nyanza Counties, Uasin Gishu, Bungoma, Kakamega, Vihiga, Busia, Turkana
Jan 2020 to date	SDA Church Oyugis East	First Church Elder, Music Director
March 2016 to date	SDA Church	Secretary- Regional Music Committee. This committee covers the counties of Migori, Homabay, Kisumu, Siaya, Kakamega and Bungoma
Jan 2015 to December 2019	SDA Church Oyugis East	Church Treasurer, Stewardship Director, Music Director.
Jan 2011 to December 2014	SDA Church Oyugis Central	Church Treasurer, Stewardship Director, Music Director.
May 2012 to Date	SDA Church Kenya Lake Conference	Secretary to the Conference Music Committee

2009 to 2011	Rachuonyo South District	Secretary to the District Secondary Schools' Music steering committee.
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CONFERENCES AND WORKSHOPS SINCE JUNE 2016

<u>PERIOD</u>	<u>INSTITUTION</u>	<u>ACTIVITY</u>
OCTOBER 12 TH – 15 TH , 2021	Institute of Pension Management.	3 RD Annual Pension Conference
SEPTEMBER 27 TH - 28 TH , 2021	Ministry of Sports, Culture and Heritage Department of Culture	National Capacity Building Workshop for Performing Artists and Administrators
JUNE 16 TH – 18 TH ,2021	Octagon Africa	Workshop on Dynamic Approach in Managing Pension Schemes
FEBRUARY 26 TH – 28 TH ,2020	Institute of Pension Management.	Workshop on Securities market and alternative investments for Retirement Benefit Schemes.
NOVEMBER 15 TH - 16 TH , 2018	Institute of Pension Management.	Audit committee trustee workshop
SEPTEMBER 24 TH - 28 TH ,2018	JOOUST	Professional training on Statistical computing and Data Analysis with R and SPSS
SEPTEMBER 3 RD - 7 TH ,2018	College of Insurance-Nairobi	Trustee Development Program Kenya. Training and Certification.
APRIL 17 TH -21 ST , 2018	Ministry of Education-Tom Mboya Labour College	Kenya Music Festival Trainers'and Adjudicators' Workshop.
JUNE 19 TH – 23 RD , 2017	Strathmore University	4 th International Mathematics Conference.
NOVEMBER 21 ST – 25 TH ,2016	Kenya Medical Research Institute-Nairobi	Workshop on Applied linear regression and logistic regression.
JULY 6 TH – 9 TH ,2016	University of Nairobi- Chiromo Campus	Practical workshop on R and STATA

RESPONSIBILITIES HELD BEFORE JOINING SERVICES AT THE UNIVERSITY

<u>PERIOD</u>	<u>INSTITUTION</u>	<u>RESPONSIBILITY</u>
Jan to Dec 2011	Agoro Sare High School	Director of Studies
Jan to Dec 2010	Agoro Sare High School	Associate Director of Studies- Academic performance.
2008- 2009	Agoro Sare High School	Scouts' Master
2004 - 2011	Agoro Sare High School	Director School choir
2004 - 2007	Agoro Sare High School	Class Teacher
1997 - 2002	Egerton University	Music Director and Chairman-University SDA society
1995	Alliance High School	SDA group Chairperson, School Games' Captain, School choir Director.

EXAMINATION OF THESIS

1. Doctor Of Philosophy Thesis Examination: Title: Mathematical Modeling Of Credit Scoring Risks For Commercial Banks – Bakker Daniel Kiche W161/4224/2014. June 2021.
2. Master Of Science Thesis Examination: Title: Jump Diffusion Logistic Brownian Motion With Dividend Yielding Asset – Opondo Mark Ochieng W151/4162/2018. November 2020.
3. Doctor Of Philosophy Thesis Examination: Title: Extension Of Stage Based Projection Matrices In Population Modeling Of Cestrum Aurantiacum – Ojung'a Samson Okoth W161/4090/2014. November 2020.
4. Doctor of Philosophy In Mathematics [Statistics Option]. Title: Non Parametric Estimation Of Conditional Expected Shortfall In Heteroscedastic Time Series. By Emmanuel Torsen –Ms 400-0005/17. 1st September, 2019
5. Doctor of Philosophy In Mathematics [Statistics Option]. Title: Bayesian Inference In Joint Models For Longitudinal And Time To Event Data In Clinical Trials. By Josua Mwanyekange –Ms 400-0005/16. 21st March, 2019.
6. Doctor of Philosophy In Mathematics [Statistics Option]-Title: Robust Variance Estimation for Poverty Indicators Using Linearization Techniques. By Jakperik Dioggban –MS 400-0004/17. 24th February, 2019
7. Master of Science In Mathematics [Financial Mathematics]-Title: Pricing Barrier Contracts Under Heavy-Tailed Distributions. By George Korir Kiprop –Ms300-0004/17. 24th October, 2018

8. Master of Science In Mathematics [Finance Option]Title: Robust Optimal Portfolio And Bank Capital Adequacy Management. By Irene Irakoze-Ms300-0001/17. 4th October, 2018
9. Doctor of Philosophy- Title: Semi-Stochastic Mixture Model For Predicting The Rate Of Road Carnages In Kenya. By Odhiambo Fredrick Ochieng. 28th August,2018
10. Doctor of Philosophy in Applied Statistics- Title: Binomial Mixtures Based On Beta Prior Distributions And Their Generalizations. By Otwande Andrea – W161/4068/2015. 20th July, 2018
11. Msc. Pure Mathematics- Title: On Norms Of Normally Represented Elementary Operators. By Mwambu Anthony Wafula – W261/4159/2016. 20th July, 2018.
12. Master of Science (Mathematics-Statistics Option).Title: Estimation of Population Variance Using the Coefficient of Kurtosis and Median of An Auxilliary Variable under Simple Random Sampling Ms300-0006/16-Tonui Kiplangat Milton. 21st January, 2018
13. Master of Science (Mathematics-Statistics Option) .Title: Approximation of Finite Population Totals Using Lagrange Polynomial. Ms300-0007/16-Lamin Kabareh. 21st January, 2018

PROGRAMES REVIEWED

1. Pan African University Institute of Basic Sciences, Technology and Innovation 10TH -12TH January,2018
 - i. Curriculum For Degree Of Master Of Science In Mathematics
 - ii. Curriculum For Degree Of Doctor Of Philosophy In Mathematics
 - iii. Curriculum For The Degree Of Doctor Of Philosophy In Data Science
2. Pwani University 15th -21st August, 2018: Master Of Science In Statistics

TEACHING EVALUATION FEEDBACK BY STUDENTS AT JOOUST

SEMESTER/ACADEMIC YEAR	COHORT	UNIT	EVALUATION SCORE
2018-2019	YEAR 2 SEMESTER 2	PRINCIPLES OF STATISTICAL INFERENCE	97.41
2018-2019	YEAR 1 SEMESTER 2	PROBABILITY AND DISTRIBUTION THEORY 1	98.67
MAY -AUGUST 2018	YEAR 1 SEMESTER 2	PROBABILITY AND DISTRIBUTION THEORY	97.15

MAY -AUGUST 2018	YEAR 3 SEMESTER 2	ANALYSIS OF EXPERIMENTAL DESIGNS	92.67
MAY -AUGUST 2018	YEAR 2 SEMESTER 2	PRINCIPLES OF STATISTICAL INFERENCE	95.44
2019-2020	YEAR 1 SEMESTER 1	INTRODUCTION TO PROBABILITY THEORY	85.07
AVERAGE SCORE			94.4017

SOCIETIES

1. Registered member of **Kenya National Statistical Society [KNSS]** serving as the Regional Coordinator- Western Region.
2. Registered member of **Operational Research Society of Kenya** where I served as an official in the capacity of Treasurer between 2019 and 2021 and is currently the Vice Chairperson of the Society.

REFEREES

1. Dr.Titus Aminer -
SBPMAS-JOUST
Box 210 -Bondo
0720-352006
2. Prof. George Orwa-
Deputy Principal
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3. Pastor. Meshack Mbago
Stewardship Director,
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