CURRICULUM VITAE

PERSONAL DETAILS

NAME: Dr. SAMUEL BONG'ANG'A APIMA, PhD ADDRESS: P.O. BOX 385-50309 Kaimosi, Kenya TELEPHONE: +254 714 295 941/ +254 707 601 556 EMAIL:apimabs@gmail.com/ sapima@kafuco.ac.ke

NATIONALITY: KenyanID NUMBER: 26686613KRA PIN NUMBER: A0062666990DATE OF BIRTH: 3rd July, 1989SEX: MaleMARITAL STATUS: MarriedRELIGION: Christian



CAREER OBJECTIVE

To become an accomplished scholar and trainer in the field of Mathematics; exploring its practical applications in various fields through research.

CAREER SUMMARY

November 2021 – Present: Lecturer, Department of Mathematics and Statistics, Kaimosi Friends University College (KAFUCO)

Key Responsibilities:

- Teaching, examining and supervising postgraduate students in mathematics.
- Teaching and examining undergraduate students in mathematics.
- Administering, supervising and marking examinations and continuous assessment tests.
- Class advisor for BSc. Mathematics with I.T. and BSc. Mathematics and Economics with I.T.
- Advising students on academic matters.

September 2017 – October 2021: **Tutorial Fellow**, Department of Mathematics and Statistics, Kaimosi Friends University College (KAFUCO)

Key Responsibilities:

- Teaching and examining undergraduate students in mathematics.
- Administering, supervising and marking examinations and continuous assessment tests.
- Class advisor for BSc. Mathematics with I.T. and BSc. Mathematics and Economics with I.T.
- Advising students on academic matters.

January 2017 – August 2017: Part-time Mathematics Lecturer, Kaimosi Friends University College (KAFUCO)

Key Responsibilities:

- Teaching and examining undergraduate students in mathematics.
- Administering, supervising and marking examinations and continuous assessment tests.

2014 – 2018: **Part-time Mathematics Lecturer**, Masinde Muliro University Science and Technology **Key Responsibilities:**

- Teaching and examining undergraduate students in mathematics.
- Administering, supervising and marking examinations and continuous assessment tests.

2014 – 2017: **Part-time Mathematics Lecturer**, Kibabii University **Key Responsibilities:**

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- Teaching and examining undergraduate students in mathematics.
- Administering, supervising and marking examinations and continuous assessment tests.

September 2011-Present : Freelance Work

- ✓ Providing Mathematics and Statistical Tutorials
- ✓ ICT consultancy on Mathematical and Statistical Softwares (Matlab, Mathematica, LaTex,) and

Microsoft office packages (MS Word, MS Excel, MS PowerPoint)

January 2011 - August 2011 : B.O.G. Teacher, Motagara Girls High School

Key Responsibilities:

- ✓ Teaching Mathematics and Computer Studies
- ✓ Class Teacher Form 2

Administration and responsibilities

November 2021 – Present: Chair of Department (CoD), & October 2017 – October 2021: Coordinator of Department (CoD), Department of Mathematics and Statistics, KAFUCO

Key Responsibilities:

- Articulating and implementing the mission and objectives of the department
- Convening and chairing departmental board meetings
- Represent the department in the School board, University college Academic board and other boards of the University College as required
- Promoting and maintaining a conducive working environment within the department
- Planning and Budgeting for the department
- Preparing departmental reports
- Overseeing examinations as chief examiner in the department
- Managing academic programmes in the department as required by Senate and University college Academic board
- Supervising and Appraising the performance of academic and other staff in the department
- Making recommendations with respect to discipline, probation, advancement, and promotion of academic staff within the department
- Maintaining asset registers for the department
- Advising students on academic matters.

 21^{st} April 2021 – 18^{th} May 2021 & 20^{th} May 2021 – 24^{th} June 2021: Acting Dean, School of Science, KAFUCO

Key Responsibilities:

- Convening and chairing regular school board meetings.
- Articulating a leadership vision and strategic plan for evaluating the academic programs and curriculum with the program committees, faculty, staff and students
- Providing oversight and support for national wide student recruitment and retention activities
- Providing leadership in development, implementation and review of school academic programmes
- Managing teaching and learning resources in the school
- Supervising overall teaching, learning and examinations in the school
- Providing leadership in research, innovation and community outreach programs
- Providing mentorship and advisement to faculty
- Processing students for graduation
- Preparing and submitting school budget for approval by University College Management Board
- Representing the school on University College Academic Board, Senate, Deans Committee and other boards of the University College as required

Maintaining asset registers for the school

Email: apimabs@gmail.com/sapima@kafuco.ac.ke EDUCATION BACKGROUND

Institution: Certificate: Thesis topic:	Masinde Muliro University of Science and Technology (MMUST) Doctor of Philosophy in Applied Mathematics Date : 2014 – 2020 A predator-prey model with logistic growth for constant and density-dependent delayed migration	
Institution:	Masinde Muliro University of Science and Technology (MMUST)	
Certificate:	Masters of Science in Applied Mathematics Date: 2011 – 2014	
Thesis topic:	A predator-prey model incorporating delay in migration	
Institution:	University of Eastern Africa, Baraton (UEAB)	
Certificate:	BSc. Mathematics (Major) and Computer Science (Minor)	
Date:	2007 – 2010 Grade: Second Class, Upper division	
Institution:	Kamagambo High School	Date: 2003 – 2006
Certificate:	Kenya Certificate of Secondary Education (KCSE)	Grade: B-
Institution:	Riomego Primary School	Date: 1995 – 2002
Certificate:	Kenya Certificate of Primary Education (KCPE)	Grade: A –

PUBLICATIONS IN REFEREED JOURNAL

- Samuel B. Apima and Jacinta M. Mutwiwa (2020) An SEIQR mathematical model for the spread of COVID-19. Journal of Advances in Mathematics and Computer Science, 35(6), 35-41, ISSN: 2456-9968.
- Apima B. Samuel, (2020). A Predator-Prey Model with Logistic Growth for Constant Delayed Migration. Journal of Advances in Mathematics and Computer Science, 35(3), 51-61, ISSN: 2456-9968.
- Samuel A.B., George L.O., and Kagendo N.J., (2019) Rosenzweig-MacAurther Model with Holling type II Predator Functional Response for Constant Delayed Migration. Asian Research Journal of Mathematics, 15(1)1-14, ISSN: 2456-477X.
- Apima S.B., Lawi G.O., and Kagendo N.J., (2019) Density Dependent Delayed Migration for Rosenzweig-MacAurther Model with Holling Type II Predator Functional Response. Asian Research Journal of Mathematics, 15(3)1-12, ISSN: 2456-477X.
- Mabwago, A., George, L., Samuel, A., and Otieno, J., (2019) Modelling delay in migration for constant predator and predator-density-dependent prey migration. Journal of Advances in Mathematics and Computer Science, 33(6), 1-11, ISSN: 2456-9968.
- Wasike A.M., Bong'ang'a A.S., Lawi G.O., Nyukuri M.O., (2014) A Predator-Prey Model with a Time Lag in the Migration Applied Mathematical Science Vol. 8 No. 75: 3721-3732

Conference Paper

 Samuel B. Apima and Jacinta M. Mutwiwa (2019) A seir model for the spread of influenza, Kibabii University 4th International Conference, 12th – 14th June, 2019, Kibabii University, Bungoma, Kenya

WORKSHOPS, CONFERENCES & SEMINARS ATTENDED

Exploring Biophysics Diversity for Sustainable Industrial and Economic Development, 3rd – 4th July, 2019, Masinde Muliro University of Science and Technology, Kakamega, Kenya

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- Kibabii University 4th International Conference, 12th 14th June, 2019, Kibabii University, Bungoma, Kenya
- 2nd Research Capacity Building Seminar on Grant Proposal Writing, 7th February, 2019, Kaimosi Friends University College, Vihiga, Kenya
- Odel Training Workshop, 23rd 28th May, 2018, Kaimosi Friends University College, Vihiga, Kenya
- CIMPA School Kenya, <u>Mathematical Modeling and Analysis of Complex Systems</u>, 20th to 31st July, 2015, Lake Naivasha Panorama Park, Naivasha, Kenya.
- First Kenyatta University Workshop on <u>Mathematical Modeling</u>, 17th 21st June, 2013, Kenyatta University, Nairobi, Kenya

PRESENTATIONS

- Exploring Biophysics Diversity for Sustainable Industrial and Economic Development, 3rd 4th July, 2019, Masinde Muliro University of Science and Technology, Kakamega, Kenya

 Apima B.S, Lawi G.O., Kagendo J.N, Oganga D.O, Mobisa B, Mawakat H
 Topic: A Predator-Prey Model with logistic growth for constant delayed migration
 Mawakat H, Lawi G.O., Akinyi C.O. Oganga D.O, Mobisa B, Apima B.S
 Topic: Dynamics of a fishery model with Allee effects in population growth
 Mobisa B, Lawi G.O., Kagendo J.N, Oganga D.O, Apima B.S, Mawakat H
 Topic: Modelling in Vivo HIV dynamics under combined antiretroviral treatment

 Apima B, Samuel and Jacinta M, Mutwiwa, Kibabii University 4th International Conference, 12th 14th
- Apima B. Samuel and Jacinta M. Mutwiwa. Kibabii University 4th International Conference, 12th 14th June, 2019, Kibabii University, Bungoma, Kenya Topic: An SEIR Model for the spread of Influenza

Supervision

- 1. Christine Wakwabubi– Rotavirus Infection Model with Delayed Vaccination and Treatment, Kibabii University (ongoing, 2021-Present)
- 2. Isaac Barasa Mathematical modelling of alcoholsm incorporating awareness as a treatment strartergy, Kaimosi Friends University College (ongoing, 2022-Present)
- 3. Celestine Muchika Mathematical modelling of alcoholsm incorporating awareness as a treatment strartergy, Kaimosi Friends University College (ongoing, 2022-Present)

OTHER RESPONSIBILITIES

- E-Learning Champion, School of Science Kafuco, April 2020 date
- Chairman, inspection and acceptance AD HOC committee for the removal of asbestos lot I-IV, 2019, KAFUCO
- ✓ Member, Fifth KAFUSO electoral Commission, 2019, KAFUCO
- ✓ Member, Student Disciplinary appeals committee, 2019, KAFUCO
- ✓ Member, Student Disciplinary appeals committee, 2018, KAFUCO
- Member, Inspection and acceptance AD HOC committee for proposed supply, delivery and installation of KVA standby generator, 2019, KAFUCO
- Presiding Officer, Independent Electoral and Boundaries Commission, West Mugirango Constuency, Kiang'inda BED primary polling station II, 8th August, 2017

COMMUNITY SERVICE

- ✓ First Church Elder, KAFUCO SDA, 2021-Present
- ✓ Facilitator, Tente SDA Youth Camp, 28th December 2020 to 2nd January 2021, Tente SDA church, Nyamira County, Kenya

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 - ✓ Patron, KAFUCO SDA, 2018-2021
 - ✓ Patron, KAFUCO Wildlife Club, 2019
 - ✓ Church Assistant Youth Leader, Tente SDA Church, 2017
 - Organised, participated and presented at the Tente SDA Ambassadors' camporee, December 2016, Tente SDA church, Nyamira County, Kenya
 - ✓ Organised and participated at the Tente SDA Youth Camp-out, 10th April to 17th April 2011, Tente SDA church, Nyamira County, Kenya

KEY I.T SKILLS

- ✓ Mathematical and Statistical Softwares (Matlab, Mathematica, LaTex)
- Microsoft office packages (MS Word, MS Excel, MS PowerPoint)

REFEREES

Prof. George Lawi

Associate Professor, Department of Mathematics - MMUST P.O. Box 190, Kakamega Mobile Phone: +254-722-292 635, e-mail: <u>glawi@mmust.ac.ke</u>

Dr. George Opande

Dean, School of Science Senior Lecturer, Department of Biological and Agricultural Sciences - KAFUCO P.O. Box 385-50309, Kaimosi Mobile Phone: +254-728-317 456, e-mail: <u>gopande@kafuco.ac.ke</u>