

Teshome Mogessie Balkew
311 Apartment Heights Dr.
Blacksburg, VA 24060

Cell Phone: (813)5700704

Email: teshomeb@vt.edu

EDUCATION

Ph.D. Mathematics **North Carolina State University**, Raleigh NC, July, 2015.

M.S.C. Mathematics **East Tennessee State University**, Johnson City TN, Dec, 2010.

WORK EXPERIENCE

- Lecturer 14 years
- Chair of Department 2 years
- Graduate Teaching Assistant 7 years
- Data Analyst 1 year.

Instructor Virginia Polytechnic Institute and State University (**Virginia Tech**)
Since August 2017.

Courses Taught

- **Ma 1225** **Calculus I**
- **Ma 1226** **Calculus II**
- **Ma 2114** **Linear Algebra**

Teaching Assistant **North Carolina State University**, Raleigh (August 2010 – June 2015).

Courses Taught and Recitation Leader

1. **Ma 121** Elements of Calculus,
2. **Ma 103** Intermediate Algebra, **Ma 104** College Algebra.
3. **Ma 141** Calculus I.
4. **Ma 107** Pre-Calculus.
5. **Ma 341** Applied Differential Equations I.
6. **Ma 131** Calculus for Life and Management Sciences.
7. **OR 506** Algorithmic Methods in Nonlinear Programming.

Lecturer **Addis Ababa University**, Addis Ababa, Ethiopia; **2002 – 2008.**

Courses Taught

1. Calculus I, II and III (**Math 261**, **Math 262** and **Math 361**).
2. Linear Algebra (**Math 224**).
3. Introduction to Abstract Algebra (**Math 223** and **Math 323**).
4. Mathematics for Engineers I, II and III (**Math 231**, **Math 232** and **Math 331**).
5. Euclidean and Non-Euclidean Geometry (**Math 214**).

6. Solid Geometry (**Math 212**).
7. Analytic Geometry and Calculus (**Math 153**).
8. Number Theory (**Math 491**).
9. Set Theory (**Math**).

Lecturer **Haramaya University**, Haramaya , Ethiopia, 1998-2002.

Courses Taught

1. Linear Algebra (**Math 224**).
2. Introduction to Abstract Algebra (**Math 223**).
3. Mathematics for Engineers I, II, III and IV (**Math 231, Math 232, Math 331, and Math 332**).
4. Introduction to Statistics (**Math 173**).
5. Pre –Calculus (**Math 100**).

Teaching Assistant **East Tennessee State University**, Johnson City (August 2008 – July 2010).

Courses Tutored

1. Intermediate Algebra, College Algebra, Pre-calculus.
2. Calculus I, II and III.
3. Advanced Calculus.
4. Linear Algebra.
5. Algebra.

Adjunct Instructor Hillsborough Community College

Courses Taught

1. **MAT 1033** Intermediate Algebra.
2. **MAC 1155** College Algebra.

SKILLS

Class room technology: Blackboard, D2L, Campus Cruiser, MathXL, MyMathlab, Webassign, Moodle.

COMPUTER SKILLS

MATLAB, PYTHON, R, SQL, SAS, MAPLE, TABLEAU, INFORMATICA, MINITAB, ARENA, CPLEX, LINDO, LINGO, EXCEL.

Administration

Chair of Department, Haramaya University, Department of Mathematics, 2000-2002.

Data Analyst **Infospan Inc.**, 7631 Leesburg Pike, Falls Church, VA 22043
September, 2015.

TRAINING

- Operations Research Analyst.
- Data Analyst.
- Data Scientist
- Business Intelligence Analyst.

PUBLICATIONS

1. **Teshome Balkew and Negash Medhin**, Stability and Control Analysis of an HIV Treatment Model, NPSC 23 (2015) pp. 447-458.
2. **Teshome M.Balkew, Negash G.Medhin**, Dynamic programming method for impulsive control problems Applied to two HIV models, Communications in Applied Analysis 20 (2016), 489-521.
3. **Teshome M.Balkew**, SIR Model when $S(t)$ is a Multi-Exponential Function. Book (An out-growth of my Masers thesis), **February 2014**.
4. **Teshome M.Balkew**, Model Four of Basic Mathematics, Educational Book for Ethiopian first year college students who study by distance mode.

RESEARCH EXPERIENCE

1. **North Carolina State University**, Dynamic Programming Method for Impulsive Control Problems (both deterministic and stochastic) (**Ph.D. dissertation**)
2. Teshome Balkew and Negash Medhin, Stability and Control Analysis of an HIV Treatment Model, NPSC 23 (2015) pp. 447-458.
3. Dynamic Programming Method for Impulsive Control Problems Applied to Two HIV models, Communications in Applied Analysis 20 (2016), 489-521.
4. **East Tennessee State University**, Epidemiology, SIR Model when $S(t)$ is a Multi-Exponential function.
5. **North Carolina State University**, Integer Programming: Manhattan Newspaper Delivery Problem.
6. **North Carolina State University**, Simulation: Simulation Modeling Of Change To Breast Cancer Detection Of Women Age 40-49 Between 2006-2011 In Ontario, Canada.
7. **Addis Ababa University**, Vector Optimization: Mathematical Methods in the Study of Economic Models.

CONFERENCE AND WORKSHOPS

1. Seventh International Conference on Dynamic Systems and Applications & Fifth International Conference on Neural, Parallel, and Scientific Computations, May 27-30, 2015 Morehouse College, Atlanta, Georgia
2. INFORM ANNUAL MEETING, Charlotte, November 13-16, 2011
3. AMS Fall Southeastern Section meeting, Wake Forest University, September 24-35
4. North Carolina State University, Mathematics department, Teaching Assistance training workshop, August 2011.
5. Addis Ababa University, Mathematics department, Modeling International Conference.
6. Addis Ababa University, Mathematics department, many teachers development Workshops.

PROFESSIONAL AFFILIATION

1. American Mathematical Society (**AMS**).
2. Institute for Operations Research and Management Science (**INFORMS**).
3. Society for Industrial and Applied Mathematics (SIAMS).
4. **INFORMS** Students Chapter, North Carolina State University.

REFERENCES

1. Dr. Medhin Negash, Department of Mathematics, North Carolina State University, Raleigh.

Email: ngmedhin@ncsu.edu, Phone: 919-513-3585.
2. Dr. Tadesse Zerihun, Department of Mathematics, University of North Florida, Jacksonville FL

Email: zerihuntadesse@yahoo.com, Phone, 8137667902.
3. Dr. Abraham Abebe, Department of Mathematics, Temple University, 1801 N Broad St, Philadelphia, PA 19122.

Email: abebe@temple.edu, Phone: 336-987-9039.