Curriculum Vitae Mustafa Avci, PhD

Athabasca University

Applied Mathematics

Faculty of Science & Technology

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Degrees

- PhD Mathematics, Dicle University 2011
- MSc Mathematics, Dicle University 2007
- BSc Mathematics, Dicle University 2001

Professional Experience

- Lecturer (Term), Department of Finance and Management Science, Edwards School of Business, University of Saskatchewan (2021/7 2022/6).
- Tutor, Faculty of Science and Technology, Athabasca University (2021-2022/7)
- Academic Expert, Faculty of Business, Athabasca University (2020-2022/7)
- Mathematics Facilitator (Online), Durham College (2020-2022)
- Assistant Professor (Limited Term), Department of Mathematics, Trent University (2020/8 2021/7).
- Instructor (Limited Term), Department of Science and Technology, Northwestern Polytechnic (2019/8 2020/4)
- Instructor (Sessional), Department of Finance and Management Science, Edwards School of Business, University of Saskatchewan (2019/5 2019/8).
- Postdoctoral Fellow, Department of Mathematics, Morgan State University (2014/9 2015/10).
- Associate Professor, Department of Economics and Administrative Sciences, Batman University (2013/3 2018/10).
- Instructor, Economics and Administrative Sciences Programs, Dicle University (2009/1 2013/3).

Research

Research Interests

- Analysis of variable exponent PDEs (Deterministic & Stochastic)
- Variable Lebesgue spaces
- Stochastic processes

Research Specialization Keywords

Variable Exponent Lebesgue Spaces, Variational Methods, Nonlinear Analysis, Measure Theory, Operator Theory, PDEs, Stochastic PDEs, Stochastic Processes and Applications.

Research In Progress

- Generalized volatility models with state-dependent variable exponent drift and diffusion
- PDEs in variable Lebesgue and Sobolev spaces

Research Funding (Awards & Grants)

- External Funding Proposal: Applied for NSERC-Discovery Grants (Individual) Program 2025 Website
- Athabasca University Academic Research Fund-Publication Award (2025)
- Athabasca University Research Incentive Account (Grant No: 140111RIA, 2023-2026)
- International Postdoctoral Research Fellowship Program. Scientific and Technological Research Council of Turkey (TUBITAK) (Grant No: 1059B191400450, 12 months, 2014-2015). Website
- Dicle University Scientific Project Research Management (DUPAB) Grant (2007 - 2009) for the Research Project: The Solutions of Parabolic and Elliptic
 - Equations with Standard and Nonstandard Growth Conditions in the Variable Exponent Lebesgue-Sobolev Spaces.

Refereed Book & Book Chapters

- Nontrivial weak solutions of a quasilinear equation involving p-Laplace operator (as Author), in Advances in Mathematics and Computer Science Vol.2, 2019. ISBN 978-93-89562-00-2 (Print) ISBN 978-93-89562-01-9 (eBook). DOI: 10.9734/bpi/amacs/v2. Website
- A Closer Look at Boundary Value Problems (as Editor), 2020. Nova Science Publishers, Inc. ISBN: 978-1-53617-857-9. Website

Refereed Conference Proceedings

• A new solution of some weighted problems for Riemann-Liouville and Weyl operators (with S. Ograş, R. Mashiyev) (2009), Proceedings of the 6th International ISAAC Congress, Ankara, Turkey, 13 - 18 August 2007. Website

Refereed Journal Articles

Published/Accepted

- 1. Existence and multiplicity of solutions for a discrete fourth-order boundary value problem (with M. Boroun, S. Heidarkhani), *Journal of Nonlinear Evolution Equations and Applications*. Accepted **(2025)**.
- 2. Three Solutions for a double-phase variable-exponent Kirchhoff problem, *Mathematics* 13(15) **(2025)**, 2462. Website
- 3. Singular p(x)-Laplacian equation with application to boundary layer theory, *Applicable Analysis* 104(13) **(2025)**, 2546–2566. Website
- 4. Existence results for a class of singular p(x)-Kirchhoff equations, *Complex Variables and Elliptic Equations* 70(7) **(2025)**, 1222–1253. Website
- 5. On a p(x)-Kirchhoff problem with variable singular and sublinear exponents, *Taiwanese Journal of Mathematics* 29(2) **(2025)**, 379–402. Website
- 6. On a p(x)-Kirchhoff-type equation with singular and superlinear nonlinearities, *Differential Equations and Dynamical Systems*, **(2024)**. Website
- 7. On an anisotropic $p(\cdot)$ -Laplace equation with variable singular and sublinear nonlinearities, *Communications in Analysis and Mechanics* 16(3) **(2024)**, 554–577. Website
- 8. Multiple solutions for a class of p(x)-Kirchhoff-type equations (with S. Heidarkhani, A. Ghobadi), *Applied Mathematics E-Notes* 22 **(2022)**, 160–168. Website
- 9. Solutions of Ginzburg-Landau-type equations involving variable exponent, *Thai Journal of Mathematics* 20(1) **(2022)**, 369–384. Website
- 10. Critical points approaches to a nonlocal elliptic problem driven by p(x)-biharmonic operator (with S. Heidarkhani, S. Moradi), *Georgian Mathematical Journal* 29(1) **(2021)**, 55–69. Website
- 11. A Class of nonlocal elliptic equations in Orlicz-Sobolev spaces (with B. Suer, V. Turut), *Journal of Abstract and Computational Mathematics* 6(2) **(2021)**, 16–29. Website
- 12. On a nonlocal problem with indefinite weights in Orlicz-Sobolev space (with N. T. Chung), Communications of the Korean Mathematical Society 35(2) (2020), 517-532. Website
- 13. A variational approach to the existence of infinitely many solutions for difference equations (with M. K. Moghadam, S. Tersian), *Journal of New Research in Mathematics* 5(22) **(2020)**, 99–110.
- 14. A topological result for a class of anisotropic difference equations, Annals of the University of Craiova Mathematics and Computer Science Series 46(2) (2019), 328-343. Website

- 15. On some classes of nonlocal problems in Musielak–Sobolev spaces, *Southeast Asian Bulletin of Mathematics* 43 **(2019)**, 791–814.
- 16. Positive ground state solutions to a nonlocal singular elliptic problem, *Canadian Journal of Applied Mathematics* 1(1) **(2019)**, 1–14. Website
- 17. On a nonlocal problem involving a nonstandard nonhomogeneous differential operator (with B. Suer), *Journal of Elliptic and Parabolic Equations* 5(1) **(2019)**, 47–67. Website
- 18. On a Robin problem in Orlicz-Sobolev spaces (with K. Suslu), *TWMS Journal of Applied and Engineering Mathematics* 9(2) **(2019)**, 246–256. Website
- 19. Solutions to p(x)-Laplace type equations via nonvariational techniques, *Opuscula Mathematica* 38(3) **(2018)**, 291–305. Website
- 20. Multivalued elliptic operators with nonstandard growth (with A. Pankov), *Advances in Nonlinear Analysis* 7(1) **(2018)**, 35–48. Website
- 21. Existence results to a nonlinear p(k)-Laplacian difference equation (with M. K. Moghadam), *Journal of Difference Equations and Applications* 23(10) **(2017)**, 1652–1669. Website
- 22. On a nonlocal Neumann problem in Orlicz-Sobolev spaces, *Journal of Nonlinear Functional Analysis* 2017 **(2017)**, Article ID 42, 1-11. Website
- 23. Existence results for anisotropic discrete boundary value problems, *Electronic Journal of Differential Equations* 148 **(2016)**, 1-11. Website
- 24. On a nonlocal problem involving the generalized anisotropic $p(\cdot)$ Laplace operator, *Annals of the University of Craiova Mathematics*and Computer Science Series 43(2) **(2016)**, 259–272. Website
- 25. Solutions to a system of p(x)-Kirchhoff discrete boundary value problems, *Nonlinear Studies* 23(4) **(2016)**, 665-674. Website
- 26. Existence of solutions for nonlocal problems in Sobolev-Orlicz spaces via Monotone method (with R. Mashiyev, N. T. Chung), *Electronic Journal of Mathematical Analysis and Applications* 4(1) **(2016)**, 63–73. Website
- 27. Positive periodic solutions of nonlinear differential equations system with nonstandard growth (with R. Ayazoglu), *Applied Mathematics Letters* 43 **(2015)**, 5–9. Website
- 28. Nontrivial solutions of discrete nonlinear equations with variable exponent (with A. Pankov), *Journal of Mathematical Analysis and Applications* 431 **(2015)**, 22–33. Website
- 29. Nontrivial weak solutions of a quasilinear equation involving p-Laplace operator, *British Journal of Mathematics & Computer Science* 6(2) **(2015)**, 112–118. Website
- 30. Existence of solutions for fourth-order elliptic equations of Kirchhoff type (with F. Wang, Y. An), *Journal of Mathematical Analysis and Applications* 409(1) **(2014)**, 140–146. Website
- 31. Existence of three solutions for a quasilinear elliptic equation involving the p(x)-Laplacian (with R. Mashiyev), *Sarajevo Journal of Mathematics* 10(23) **(2014)**, 1-13. Website
- 32. Existence and uniqueness of solutions of a nonlocal problem involving the -Laplacian (with R. Mashiyev), *Annals of the University of Craiova Mathematics and Computer Science Series* 41(1) **(2014)**, 30–37.
- 33. Existence results for a nonlocal problem involving the p(x)-Laplacian, Universal Journal of Applied Mathematics 2(3) (2014), 153–159. Website

- 34. Ni-Serrin type equations arising from capillarity phenomena with non-standard growth, *Boundary Value Problems* **(2013)**, Article 55, 1–18. Website
- 35. Existence and multiplicity of solutions for Dirichlet problems involving the p(x)-Laplacian, *Electronic Journal of Differential Equations* 14 **(2013)**, 1-9. Website
- 36. Existence of solutions for an elliptic equation with nonstandard growth (with R. Mashiyev, B. Cekic), *International Journal of Pure and Applied Mathematics* 86(1) **(2013)**, 131–139. Website
- 37. Solutions of a nonlocal elliptic problem involving -Kirchhoff-type equation, *Applied Mathematics* 3(2) **(2013)**, 56–60.
- 38. Existence and uniqueness of solutions for a quasilinear elliptic equation involving p-Laplacian (with R. Mashiyev), *International Journal of Differential Equations and Applications* 12(2) **(2013)**, 95–102.
- 39. Existence results for a nonlocal problem involving the p(x)-Laplacian, *Pure and Applied Mathematics Journal* 2(1) **(2013)**, 20–27.

Solutions of nonlocal ($p_1(x)$, $p_2(x)$)-Laplacian equations
(with R. Mashiyev), International Journal of Partial
Differential Equations, Vol. 2013, Article ID 364251, 7
pages.

Existence of weak solutions for a nonlocal problem
involving the -Laplace operator, Universal Journal of
Applied Mathematics 1(3) (2013), 192197.

Solutions of an anisotropic nonlocal problem involving
variable exponent (with R. Mashiyev, B. Cekic), Advances
in Nonlinear Analysis 2(3) (2013), 325—
338.

On an elliptic system of p(x)-Kirchhoff-type under
Neumann boundary condition (with Z. Yucedag, R. Mashiyev),
Mathematical Modelling and Analysis 17(2)
(2012), 161-170.

p-estimates of vector fields and applications to
magnetostatics problems (with B. Cekic, A. V. Kalinin, R.
Mashiyev), Journal of Mathematical Analysis and
Applications 389(2) (2012), 838-851.

Existence and multiplicity of weak solutions for nonuniformly elliptic equations with nonstandard growth (with R. Mashiyev, B. Cekic, Z. Yucedag), Complex Variables and Elliptic Equations 57(5) (2012), 579— 595.

Existence and multiplicity of solutions of the p(x)Kirchhoff type equation via genus theory (with B. Cekic, R.
Mashiyev), Mathematical Methods in the Applied Sciences</
em> 34(14) (2011), 1751-1759.
The Nehari manifold approach for a Dirichlet problem
involving the p(x)-Laplacian (with R. Mashiyev, S. Ogras, Z.
Yucedag), Journal of the Korean Mathematical Society 47(4) (2010), 845-860.

Existence of solutions for a class of elliptic systems in \mathbb{R} ^N involving the (p, q)-Laplacian (with S. Ogras, R. Mashiyev, Z. Yucedag), Journal of Inequalities and Applications, Article 612938 (2008).

Submitted

- 1. Existence results for the Cox-Ingersoll-Ross model with variable exponent diffusion. Under review.
- 2. On the geometric Brownian motion with state-dependent variable exponent diffusion term. Under review.
- 3. Monotone operator methods for a class of nonlocal multi-phase variable exponent problems. Under review.
- 4. Existence and uniqueness results for a singular elliptic problem governed by an anisotropic $(p(\cdot), q(\cdot))$ -Kirchhoff-type operator. Under review.
- 5. Anisotropic Singular Equation with $(p(\cdot), q(\cdot))$ -Laplacian Operator and Hardy-type Potential. Under review.
- 6. A topological result for a singular double phase variable exponent problem. Under review.
- 7. Variational and nonvariational solutions for double phase variable exponent problems. Under review.
- 8. Nehari manifold approach for a singular multi-phase variable exponent problem. Under review.
- 9. Anisotropic Variable exponent Kirchhoff-type equation with double singularity (with B. Cekic, Z. Yucedag). Under review.
- 10. Singular Kirchhoff-Ginzburg-Landau-type equation with variable Exponent(with B. Cekic, Z. Yucedag). Under review.
- 11. On a p(x)-Kirchhoff Equation with double singularity exponent (with B. Cekic, Z. Yucedag). Under review.
- 12. Existence results for a class of double phase singular Kirchhoff-type equations with nonstandard growth (with A. Razani). Under review.

Work in progress

1. —

Presentations (Invited Talks & Contributed Talks)

List

- 1. **A generalized stochastic volatility model**, Alberta Mathematics Dialogue, University of Calgary, May 1-2, 2025, Calgary, Canada.
- 2. Enhancing mathematical learning with interactive content and adaptive online assessments (with A. Beltaos, J. Greenwood-Lee), Alberta Mathematics Dialogue, University of Calgary, May 1-2, 2025, Calgary, Canada.

- 3. The regularization method for multivalued elliptic PDEs with variable exponent, International Conference on Applied Mathematics, University of Craiova, Craiova, Romania, 29–31 October 2020.
- 4. **Variational approach for analysis of PDEs**, Mathematics Colloquium, Grande Prairie Regional College, Science Department, February 2020, Grande Prairie, Canada.
- 5. Existence and uniqueness results for a Dirichlet problem in Orlicz-Sobolev spaces, International Conference on Mathematics and Mathematics Education (ICMME-2017), 11–13 May 2017, Şanlıurfa, Turkey.
- 6. Nontrivial solutions for a Dirichlet problem in Orlicz-Sobolev spaces, ICMME-2017, 11-13 May 2017, Şanlıurfa, Turkey.
- 7. Solutions of an anisotropic Kirchhoff problem involving variable exponent, ICMME-2017, 11–13 May 2017, Şanlıurfa, Turkey.
- 8. Solutions of Kirchhoff problem in anisotropic variable exponent spaces, ICMME-2017, 11–13 May 2017, Şanlıurfa, Turkey.
- 9. **On some elliptic problems in Orlicz-Sobolev spaces**, International Health and Natural Sciences Conference (INHSC 2017), 19–21 October 2017, Antalya, Turkey.
- 10. Solutions to a nonlocal elliptic problem in Orlicz-Sobolev spaces, INHSC 2017, 19–21 October 2017, Antalya, Turkey.
- 11. Solutions of generalized anisotropic problems in variable exponent spaces, INHSC 2017, 19–21 October 2017, Antalya, Turkey.
- 12. A system of anisotropic discrete boundary value problems, International Engineering, Science and Education Conference, 1–3 December 2016, Diyarbakır, Turkey.
- 13. Existence of three solutions to a nonlinear difference equation involving p(k)-Laplace operator, International Engineering, Science and Education Conference, 1–3 December 2016, Diyarbakır, Turkey.
- 14. Variable Lebesgue spaces and variational approach, Morgan State University, Department of Mathematics, Mathematics Colloquium, November 2014, Baltimore, U.S.A.
- 15. Existence and uniqueness of an elliptic equation with p(x)-Laplace operator, XXVI. National Mathematics Symposium, 4-7 Sept, 2013, Dicle University, Diyarbakır, Turkey.
- 16. Power-type weighted Hardy and Hankel operators in variable exponent Morrey space, "Operators in General Morrey-Type Spaces and Applications" (Dedicated to the 70th Birthday of Prof. Victor I. Burenkov), Ahi Evran University, Kırşehir, Turkey, 20–27 May 2011.
- 17. **Maximal and Riesz operators in weighted variable exponent Morrey space**, same event, Ahi Evran University, Kırşehir, Turkey, 20–27 May 2011.
- 18. Existence of solutions for nonuniformly elliptic equations of **p(x)-Laplacian type**, 3rd International Conference on Differential Equations and Applications, Lviv, Ukraine, 3-6 November 2010.
- 19. Existence of solutions for a p(x)-Laplacian in ±(N), Workshop on Differential Equations and Applications, Pamukkale University, Denizli, Turkey, 18–20 April 2008.
- 20. A new solution of some weighted problems for the Riemann-Liouville and Weyl operators, 6th International ISAAC Congress, 13-

18 August 2007, Middle East Technical University (METU), Ankara, Turkey.

Teaching

AU Teaching and Course Coordination

- MATH 260 Calculus for Social Sciences and Economics (2022 present) (Supervising 1 tutor, 1 marker)
- MATH 366 Complex Variables I (2022 present) (Supervising 1 tutor)
- MATH 370 Applied Real Analysis (2022 present) (Supervising 1 tutor)
- MATH 376 Ordinary Differential Equations (2025 present) (Supervising 2 tutors)
- MATH 492 Special Study I (2022 present)
- MATH 493 Special Study II (2022 present)
- MATH 495 Mathematics Projects I (2022 present)
- MATH 496 Mathematics Projects II (2022 present)
- MATH 216 Computer-Oriented Approach to Statistics (2022 2025) (Supervised 3 tutors)

AU Tutoring

- MATH 376 Ordinary Differential Equations (2025 present)
- MATH 216 Computer-Oriented Approach to Statistics (2022—2025)
- MATH 365 Multivariable Calculus (2021—2022)
- MGSC 301 Statistics for Business and Economics I (2020 2022)
- MGSC 312 Statistics for Business and Economics II (2020 202)

AU Course Development and Revisions

- MATH 415 Introduction to Measure and Integration (In Development, 2025 — present)
- MATH 426 Introduction to Stochastic Processes (In Development, 2025

 present)
- MATH 437 Introduction to Stochastic Calculus (In Development, 2025

 present)
- MATH 325 Linear Programming Development (In Production) (2024)
- MATH 216 Computer-Oriented Approach to Statistics Revision (2024)
- MATH 260 Calculus for Social Sciences and Economics Revision (2024)

University of Saskatchewan Courses

- COMM 121 Business Mathematics (2021/6 2022/7)
- COMM 207 Business Statistics II (2019/Summer)
- COMM 104 Business Statistics I (2019/Sipring)

Trent University Courses

- MATH 1005H Applied Calculus (Lecture + Seminar) (2020-21/Fall & Winter & Spring)
- MATH 1110H Calculus I (Lecture + Seminar) (2020/Fall)
- MATH 2120H Calculus IV (Lecture + Seminar) (2021/Winter)
- MATH 4120H Mathematical Modelling I (Lecture + Lab) (2021/Winter)
- AMOD 5220H Mathematical Aspects of Modeling (Lecture + Lab) (2021/Spring)

Durham College Courses

- MATH 1185 Mathematics for Technology I (2021 2022)
- MATH 2150 Mathematics for Technology II (2020 2021)

Northwestern Polytechnic Courses

- ST 1510 Introduction to Applied Statistics I (Lecture + Lab) (2019/Fall & Winter)
- ST 2520 Introduction to Applied Statistics II (Lecture + Lab) (2020/ Winter)
- MA 1130 Elementary Calculus I (Lecture + Seminar) (2019/Fall)
- MA 1600 Higher Arithmetic (Lecture + Seminar) (2020/Winter)

Morgan State University Courses (USA)

• MATH 241 Calculus I (2015/Spring)

Batman University Courses (Turkiye) (2013 — 2018)

- 05010303 Business Mathematics
- 05050407 Statistics
- 05010105 Calculus I
- 05010205 Calculus II
- 05010601 Research Methods and Techniques
- 02030306 Differential Equations
- 02030405 Engineering Mathematics
- 02010405 Applied Mathematics for Engineers
- 02040401 Applied Mathematics for Engineers: Numerical Methods
- 02010407 Numerical Analysis
- 01030301 Advanced Analysis I
- 01030401 Advanced Analysis II
- 01030302 Introduction to Topology
- 01030606 Vector Analysis
- 01030701 Functional Analysis I
- 01030809 Functional Analysis II
- 60070101 Functional Analysis and Applications I

- 60070111 Functional Analysis and Applications II
- 60070102 Advanced Real Analysis I
- 60070112 Advanced Real Analysis II
- 60070128 Variational Analysis I
- 60070135 Variational Analysis II
- 600701100 Specialization Course
- 600701101 Seminar
- 61090119 Numerical Methods
- 61090128 Business Statistics
- 61090201 Research Methods

Dicle University (Turkiye) (2009 - 2013)

- Business Mathematics
- Business Statistics
- Engineering Mathematics

Supervision

AU Undergraduate Student Supervision

- Rizwan Hamidi MATH 492 Special Study I. (2025/3 present) Project Title: Advanced Engineering Mathematics.
- Pascale Boudreau MATH 495 Mathematics Projects I. (2025/1 present)
 - Project Title: Application of the Fixed-point Theorems to the Solutions of Differential Equations.
- Amina Anna Mahamane Ousmane MATH 495 Mathematics Projects I. (2025/5 - 2025/6)
 - Project Title: Investigating the Effectiveness of Optimization Methods: Full-Batch Gradient Descent vs. Stochastic Gradient Descent for Training Regression Models on Housing Market Data.
- John Didiodato MATH 493 Special Study II. (2024/1 2024/5) Project Title: Mathematical Finance.
- Andre Leke Umambo MATH 495 Mathematics Projects I. (2023/7 2023/11)
 - Project Title: The Queuing System.
- Alexander van Dijk MATH 493 Special Study II. (2022/9 2022/12) Project Title: Introduction to Mathematical Finance.
- Mahin Khan MATH 492 Special Study I. (2024/7 2024/12) Project Title: Measure Theory and Lebesgue Integration.

Theses Supervised

- Berat Süer On Solutions of the Ginzburg-Landau-type Equation in Orlicz-Sobolev Spaces, M.Sc. Mathematics (Co-supervisor), Batman University, 2020.
- Kenan Süslü On Solutions of Nonlocal Equations in Orlicz-Sobolev Spaces, M.Sc. Mathematics, Batman University, 2017.

- İdris Teymur Coefficient Bounds for Subclasses of M-Fold Symmetric Bi-Univalent Functions, M.Sc. Mathematics (Co-supervisor), Batman University, 2017.
- Diyadin Keskin Approximation by Simple Functions in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.
- İbrahim Eren Atalay Convex Functions and Inequalities in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.
- Mehmet Nuri Tüzün, Bounded Linear Operators and Riesz Representation Theorem in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.
- Mustafa Yılmaz, Approximation by Continuous Functions in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.

Service & Contributions

AU Standing Committee Memberships

- FST Faculty Council (2022 present)
- FST Undergraduate Program Council (2025 2028)
- Academic & Professional Development Fund Committee (APDF) (2025 2028)
- Academic Research Fund Committee (ARF) (2024 2027)
- GFC Academic Planning, Policy, and Standards Committee (APPSC) -(2024 - 2027)
- GFC Academic Research Committee (ARC)- (2024 2027)
- Academic & Professional Development Fund Committee Replacement term - (2023 - 2025)

AU Ad Hoc Committee/Group Memberships

- Research Information Management System (RIMS) Advisory Group (2023 2024)
- Tri-Agency Undergraduate Student Research Award Selection Committee (USRA) - (2025 - present)
- FGS Faculty Council Working Group: Research Software for Graduate Students and Faculty (2025 present)
- ARC CFI-JELF Expression of Interest Review Subcommittee (2025)
- Applied Math Program Advisory Committee (2025 present)
- Mobius Ladership Group (2024 present)
- Hiring Committee service-Assistant Professor Applied Math.
- Hiring Committee service-Tutor MATH 216
- Hiring Committee service-Tutor MATH 266
- Hiring Committee service-Tutor MATH 309
- Hiring Committee service-Tutor MATH 376
- Hiring Committee service-Tutor MATH 476
- Hiring Committee service-Tutor MATH 480
- Hiring Committee service-Tutor MATH 481

Professional Activities

Service to Discipline

• Canadian Mathematical Society, Member (2023/12 - present)

Editorial Activities

- Editorial Board Member Advances in Differential Equations and Control Processes (2025 present)
- Editorial Board Member Pure and Applied Mathematics Journal (2025 present)
- Topical Advisory Panel Member Axioms (2023 present)
- Editorial Board Member International Journal of Scientific and Innovative Mathematical Research (2018 present)
- Editorial Board Member American Journal of Applied Mathematics and Statistics (2015 present)
- Editorial Board Member Journal of Mathematical Sciences and Applications (2015 present)
- Editorial Board Member International Journal of Partial Differential Equations and Applications (2015 present)
- Editorial Board Member Universal Journal of Applied Mathematics (2015 present)
- Guest editor for the Special Issue: Advances in Stochastic Differential Equations: Theory, Computation and Applications in *Axioms* (2025/7 2026/12)
- Guest editor for the Special Issue: Differential Equations and Stochastic Processes: Trends and Challenges in *Mathematics* (2023/10 2024/11)
- Co-Guest editor for the Special Issue: Nonlinear and Variational Analysis and their Applications in *Journal of Function Spaces* (2020/1 -2020/12)

Event Administration

- Co-organizer Organized Session: Recent Developments in Stochastic Analysis, PDEs and Related Topics.
 Alberta Mathematics Dialogue (AMD), University of Calgary, May 1-2, 2025. Website
- Co-organizer Organized Session: Innovative Strategies in Online Learning Environments for Mathematics Education.
 Alberta Mathematics Dialogue (AMD), University of Calgary, May 1-2, 2025.

Conference Committee Activities

 Scientific Board Member, 4th International Engineering, Science and Education Conference (INESEC), November 6-8, 2019, Dicle University, Turkey.

- Scientific Board Member, 3rd International Engineering and Natural Sciences conference, Nov 14-17, 2018, Dicle University, Turkey.
- Scientific Board Member, 2nd International Natural and Health Science Conference (INHSC), October 19-21, 2017, Antalya, Turkey.
- Scientific Board Member, 1st International Engineering, Science and Education Conference (INESEC), December 1-3, 2016, Dicle University, Turkey.
- Session Chair, 1st International Engineering, Science and Education Conference (INESEC), December 1-3, 2016, Dicle University, Turkey.

Reviewer for Journals

List

- 1. AMS Mathematical/MathSciNet Reviews (Reviewer) Website
- 2. Acta et Commentationes Universitatis Tartuensis de Mathematica
- 3. Acta Mathematica Scienta
- 4. Advances in Nonlinear Analysis
- 5. Afrika Matematika
- 6. AIMS Mathematics
- 7. Annals of the Alexandru Ioan Cuza University Mathematics
- 8. An International Journal of Optimization and Control: Theories & Applications
- 9. Applicable Analysis
- 10. Applied Mathematics E-Notes
- 11. AppliedMath
- 12. Arabian Journal of Mathematics
- 13. Asian Journal of Mathematics and Computer Research
- 14. Axioms
- 15. Boletim da Sociedade Paranaense de Matemática
- 16. Boundary Value Problems
- 17. Boletín de la Sociedad Matemática Mexicana
- 18. Bulletin of the Malaysian Mathematical Sciences Society
- 19. British Journal of Applied Science and Technology
- 20. Complex Variables and Elliptic Equations
- 21. Computation
- 22. Contemporary Mathematics
- 23. Discrete Dynamics in Nature and Society
- 24. Discrete and Continuous Dynamical Systems, Series S
- 25. Differential Equations and Dynamical Systems
- 26. Electronic Research Archive
- 27. Entropy
- 28. FILOMAT
- 29. Foundations
- 30. Fractal and Fractional
- 31. Georgian Mathematical Journal
- 32. Journal of Mathematics
- 33. Journal of Mathematical Physics
- 34. Journal of Nonlinear Mathematical Physics
- 35. Journal of Advances in Mathematics

- 36. Journal of Advances in Mathematics and Computer Science
- 37. Journal of Inequalities and Applications
- 38. Journal of Nonlinear Functional Analysis
- 39. Journal of Elliptic and Parabolic Equations
- 40. Journal of Pseudo-Differential Operators and Applications
- 41. Kragujevac Journal of Mathematics
- 42. Mathematics
- 43. Mathematical Methods in the Applied Sciences
- 44. Nonlinear Analysis
- 45. Numerical Algorithms
- 46. Proceedings of the Edinburgh Mathematical Society
- 47. Rocky Mountain Journal of Mathematics
- 48. Qualitative Theory of Dynamical Systems
- 49. SIAM Journal on Imaging Sciences
- 50. Symmetry
- 51. TWMS Journal of Applied and Engineering Mathematics
- 52. Zeitschrift für angewandte Mathematik und Mechanik
- 53. Zeitschrift für Analysis und ihre Anwendungen

Professional Development

Continued Professional Development

- Higher Education Teaching Certificate-Online Course by Harvard University Derek Bok Center for Teaching and Learning, Oct-Dec 2020.
- Orientation for Distance Education-the Centre for Professional and Part-time Learning Durham College, 2020.
- Valuing Diversity and Supporting Inclusivity-Virtual Workshop by Trent University, 2020.
- How to Deliver Experiential Learning in a Remote Course, Centre for Teaching & Learning, Trent University, 2020.
- Learning How to Increase Learner Engagement- Online Course by LinkedIn Learning, 2020.
- Flipping the Classroom-Online Course by Lynda.com, 2020.
- Teaching Online: Synchronous Classes-Online Course by Lynda.com, 2020.
- How to Engage your Students in a Virtual Environment-webinar by McGraw-Hill. 2020.
- Developing Your Course Syllabus-Online Course by The Gwenna Moss Centre for Teaching and Learning, University of Saskatchewan, 2020.
- Remote Teaching Essentials: Constructive Alignment in a Remote Context-Online Course by the Gwenna Moss Centre for Teaching and Learning, University of Saskatchewan, 2020.
- Teach Adult Learners in Higher Education-Online Course by Lynda.com, 2020.
- Educational Technology for Student Success-Online Course by Lynda.com, 2020.
- Communication in the 21st Century Classroom-Online Course by Lynda.com, 2020.

- Learning Microsoft Teams for Education-Online Course by Lynda.com, 2020.
- Foundations of Learning Management Systems (LMS)-Online Course by Lynda.com, 2020.
- Pedagogical Courses (with credit, taken during PhD), Dicle University, Diyarbakir, Turkey, 2011.
- The Certificate of Pedagogy Formation for Teachers, Dicle University, Diyarbakir, Turkey, 2001.

Tech (Research & Education) Skills

- Teaching in a variety of formats, including face-to-face, online, and hybrid/blended classrooms.
- Instructing/Teaching/ Conducting seminars and labs remotely (synchronously and asynchronously).
- Working with educational technologies and Learning Management Systems (LMS): Mobius, Blackboard, Canvas, Moodle, Google Classroom, Brightspace.
- Competent at: Python, MATLAB, SPSS.

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