

Dan Wolczuk

CONTACT INFORMATION	Dan Wolczuk Math Undergraduate Office Faculty of Mathematics University of Waterloo 200 University Ave W Waterloo, ON, Canada N2L 3G1	Phone: 1-519-888-4567 ext. 36247 E-mail: dstwolcz@uwaterloo.ca Website: www.wolczuk.com YouTube: LearnMoreWithDanWolczuk
BRIEF TEACHING PHILOSOPHY	I believe that education goes beyond simply imparting knowledge - it is about empowering students with the skills, mindset, and enthusiasm needed for lifelong learning. While understanding course content is important, I aim to instill a growth mindset, mathematical reasoning, and metacognitive abilities that will serve students well beyond the classroom. I achieve this by engaging students in active learning, making connections between concepts, and helping them develop independent learning strategies. I also believe that everyone can learn mathematics, and fostering a genuine interest in the subject is key to overcoming challenges. By demonstrating my own passion for mathematics and ensuring that students understand not only what they are doing but why, I help them build confidence and curiosity. Ultimately, I strive to teach students not just what to learn, but how to learn - giving them the tools to succeed in both academics and life.	
RESEARCH INTERESTS	Scholarship of teaching and learning, mathematics education, educational psychology	
ACADEMIC POSITIONS:	Associate Professor, Teaching Stream Faculty of Mathematics, University of Waterloo	May 2004 - present
AWARDS AND DISTINCTIONS	2022 Excellence in Teaching Award, Canadian Mathematical Society 2021 Distinguished Teacher Award, University of Waterloo 2013 Distinction in Teaching Award, Faculty of Mathematics, University of Waterloo 2013 Instructor of the Year, Mathematics Student Society, University of Waterloo 2001 NSERC Canada Graduate Scholarship	
PUBLICATIONS	Books and Course Notes Wolczuk, D. (2024) <i>Calculus for the Sciences</i> . openlibrary-repo.ecampusontario.ca Norman, D., Wolczuk, D. (2019) <i>Introduction to Linear Algebra for Science and Engineering (3rd edition)</i> . Pearson Publishing. ISBN # 978-0-13-468263-1 Wolczuk, D. (2016) <i>Linear Algebra 1 and 2 Course Notes</i> . Pearson Publishing. ISBN # 978-1-323-56954-2 Wainwright, J., West, J., Wolczuk, D. (2016) <i>Multivariable Calculus Course Notes</i> . Pearson Publishing. ISBN # 978-1-323-48163-9 Norman, D., Wolczuk, D. (2012) <i>Student Solution Manual for Introduction to Linear Algebra for Science and Engineering (2nd edition)</i> . Pearson Publishing. ISBN # 978-0-321-80762-5	

Refereed Journal Articles

Korst, B., Wolczuk, D., Smilek, D. (2022, August). *Is performance on tests affected by the difficulty of the first question and an informational message about the benefits of the testing effect?*. In 2022 ASEE Annual Conference & Exposition.

Pinner, C., Wolczuk, D. (2001) *On the inhomogeneous Hall's ray of period one quadratics*. *Experimental Math.* 10, 487 - 495.

PRESENTATIONS

Invited Talks

- Dec 2024 The Future of Mathematics Education, Fields Institute Conference (keynote speaker)
- Dec 2024 Cognitive Load Theory for Mathematics Education, Cornell University
- May 2024 Introducing the Science of Learning, ResearchEd (panel)
- Dec 2022 Fact, Fiction, or Fad, CMS
- June 2022 Moving Forward with OER, CMS
- June 2022 Enhancing Student Engagement, CMS
- Dec 2020 Virtual Escape Rooms, CMS
- July 2020 Promoting Student Engagement in Online Courses, CCREM
- Jun 2019 Presentation Skills, BIRS
- May 2018 Don't Give Them a Fish, Teach Them How to Fish, TESLWW May Conference, Conestoga College
- May 2017 Presentation Skills, TESLWW May Conference, Conestoga College

Colloquia, Seminars, Talks

- June 2024 Cognitive Load Theory in Mathematics, ResearchEd
- May 2024 Is the Aim of Mathematics Education Off, FYMSiC
- May 2024 Effective Mathematics Instructions, ResearchEd
- Jan 2023 Promoting Student Learning with Test Retakes, Lilly Conference
- June 2022 Increasing Student Learning with Weekly Proctored Quizzes, STLHE
- Feb 2020 Comics as Pedagogical Tools (poster)

Workshops

- Oct 2024 The Science of Learning, Edvance Annual Gathering
- Oct 2024 Active Learning, University of Waterloo Centre for Teaching Excellence
- June 2024 Cognitive Load Theory for Instructional Design, University of Waterloo Centre for Teaching Excellence
- Jan 2024 Presentation Skills, University of Waterloo.

University of Waterloo Teaching Seminars

- Oct 2024 Teach Them How to Learn, University of Waterloo Math Teaching Seminar
- July 2022 Assessing Assessments, University of Waterloo Math Teaching Seminar
- July 2022 Teach Them How to Fish, Teaching Student Association Seminar
- Feb 2020 Optional Test Retakes, University of Waterloo Teaching Research Commons

PUBLICATIONS

Books and Course Notes

Wolczuk, D. (2024) *Calculus for the Sciences*. openlibrary-repo.ecampusontario.ca

Norman, D., Wolczuk, D. (2019) *Introduction to Linear Algebra for Science and Engineering (3rd edition)*. Pearson Publishing. ISBN # 978-0-13-468263-1

Wolczuk, D. (2016) *Linear Algebra 1 and 2 Course Notes*. Pearson Publishing. ISBN # 978-1-323-56954-2

Wainwright, J., West, J., Wolczuk, D. (2016) *Multivariable Calculus Course Notes*. Pearson Publishing. ISBN # 978-1-323-48163-9

Norman, D., Wolczuk, D. (2012) *Student Solution Manual for Introduction to Linear Algebra for Science and Engineering (2nd edition)*. Pearson Publishing. ISBN # 978-0-321-80762-5

PROFESSIONAL SERVICE

University of Waterloo Service

2019 - Present	Transfer Credits
2018 - Present	Graduate Student Teacher Training Program Co-Instructor
2008 - 2025	Outreach and recruitment activities: Fall Open House, March Break Open House, You@UWaterloo Day, Ontario University Fair
2021 - 2023	Director of Mathematical Studies Program
2021 - 2023	Math Faculty Undergraduate Affairs Committee
2021 - 2022	Department Advisory Committee on Appointments
2020 - 2021	Covid-19 Teaching Team member
2016 - 2020	Senate Undergraduate Council
2016 - 2020	Undergraduate Student Learning How to Learn Seminars Instructor\Organizer
2011 - 2020	Mathematics Contest Committee
2010 - 2020	Math Faculty Undergraduate Affairs Committee
2016 - 2019	Senate
2008 - 2019	Plans for Students Outside the Math Faculty
2016 - 2018	Transfer Credits for core math courses
2014 - 2016	General Advising
2012 - 2014	Senate Undergraduate Council
2007 - 2011	Math Circles Instructor\Organizer

External Service

2021 - Present	CMS Education Committee
2024	Chalk & Talk with Anna Stokke Podcast
2021 - 2023	Fields Elementary Program

TEACHING EXPERIENCE	Course Development	
	2023 - 2024	Calculus 1 and 2 for Science Students Online
	2020	Revised Calculus 1 and 2 for Science Students
	2014	Linear Algebra for Mathematical Teaching Online
	2013	Linear Algebra 2 for Honours Mathematics Online
	2012	Linear Algebra 1 for Honours Mathematics Online
	2009	Revised Linear Algebra 1 and 2 for Honours Mathematics
	2008	Revised Calculus 3 for Honours Mathematics
	University of Waterloo Courses Taught	
		Course
	AMath/PMath 332 Applied Complex Analysis	4
	Math 116 Calculus 1 for Engineering	3
	Math 118 Calculus 2 for Engineering	6
	Math 125 Applied Linear Algebra 1	1
	Math 127 Calculus 1 for Science	10
	Math 128 Calculus 2 for Science	11
	Math 135 Algebra for Honours Math	1
	Math 136 Linear Algebra 1 for Honours Math	26
	Math 137 Calculus 1 for Honours Math	10
	Math 138 Calculus 2 for Honours Math	6
	Math 217 Calculus 3 for Chemical Eng	1
	Math 218 Differential Equations for Engineering	1
	Math 235 Linear Algebra 2 for Honours Math	30
	Math 237 Calculus 3 for Honours Math	17
	Math 636 Linear Algebra for MMT	4
	Math 900 University Mathematics Teaching Techniques	1
	PMath 340 Elementary Number Theory	2
EDUCATION	University of Waterloo, Waterloo, ON, Canada	
	MMath, Pure Mathematics, 2004	
	<ul style="list-style-type: none"> • Thesis Topic: Intervals with few prime numbers. • Advisor: Dr. Cameron Stewart 	
	University of Northern British Columbia, BC, Canada	
	BSC, Mathematics, 2001	
	<ul style="list-style-type: none"> • Research Topic: Inhomogeneous Diophantine approximations. • Advisor: Dr. Chris Pinner 	
VOLUNTEERING	2021 - 2023	Fields Institute Elementary Program
	2015 - 2018	MATU High School Enrichment Program
	Jan 2018	Sir John A MacDonald SS presentation
	2004 - 2018	Elizabeth Ziegler Elementary Volunteer
	2014 - 2018	Centennial Public School Volunteer
	2011 - 2015	Ukrainian Dance Instructor
	2007 - 2012	MATU High School Enrichment Program
	2002 - 2007	Ukrainian Dance Instructor