Teaching and Supervision

Courses taught at the University of Winnipeg:

Basic Calculus

Introduction to Calculus I and II (and the former Introduction to Calculus)

Discrete Mathematics

Linear Optimization

Introduction to Operations Research

Graph Theory

Group Theory

Rings and Fields

Advanced Graph Theory and Combinatorial Optimization

Networks and Their Applications

Complex Analysis

Student, Research Assistant and Postdoctoral Fellowship Supervision

- 1. Samuel Yusim, The metric and strong metric dimension for certain graph classes. (Undergraduate Summer Research Project, 2015)
- 2. Gaia Moravcik, The metric and strong metric dimension for certain graph classes. (NSERC USRA, 2015)
- 3. Skylar Nicol, Global cycle structure in graphs with minimum clustering coefficient. (NSERC USRA, 2014)
- 4. Adam Borchert, Global cycle structure in locally isometric graphs. (NSERC USRA, 2014)
- 5. Philip Lafrance, On digital convexity of a graph. (NSERC USRA, 2014)
- 6. Timothy Pressey, On digital convexity of a graph. (Undergraduate Summer Research Project, 2013)
- 7. Rachel Anderson, Elimination orderings in graphs, (MSc student University of Victoria, co-supervised with Gary MacGillivray, 2010-2013)
- 8. Yizhe Zeng, Heuristics for approximating the metric dimension of a graph. (Undergraduate Summer Research Project, 2012)
- 9. Randy Yee, Heuristics for approximating the metric dimension of a graph. (Undergraduate Summer Research Project, 2012)
- 10. Dr. Morten Nielsen (i) Convexity and Helly numbers; (ii) Graph classes characterized by local convexities. (Postdoctoral Fellow, February 2010 June 2010)
- 11. Terri May, Strong metric dimension of distance hereditary graphs (Undergraduate Summer Research Project, 2008 and 2009)
- 12. Iain Crump, (i) Elimination orderings of graphs and (ii) rainbow colouring numbers of graphs (NSERC USRA, 2008)

- 13. Dr. Morten Nielsen, (i) k-Traceability in graphs and digraphs and the path partition conjecture and (ii) Steiner convexity in graphs (Postdoctoral Fellow, November 2006 August 2007)
- 14. Stephanie Phillips, Steiner intervals and the Steiner geodetic number of a graph. (Undergraduate Summer Research Project, 2005)
- 15. Joel Peters-Fransen, (i) The metric dimension of products of cycles and (ii) The strong metric dimension of a graph. (NSERC USRA, 2004)
- 16. Charlene Pawluck, The metric dimension of Cayley digraphs. (Research Assistant, 2003/04)
- 17. Shonda Gosselin, The partition dimension of Cayley digraphs. (Undergraduate Summer Research Project, 2003)
- 18. Melodie Fehr, The partition dimension of Cayley digraphs. (Undergraduate Summer Research Project, 2003)
- 19. Shonda Gosselin, The metric dimension of Cayley digraphs. (NSERC USRA, 2002)
- 20. Melodie Fehr, The metric dimension of Cayley digraphs. (Undergraduate Summer Research Project, 2002)
- 21. Jennifer Prokop, The probabilistic method and the average connectivity of an oriented graph. (NSERC USRA, 2000)
- 22. William Pensaert, Maximum average connectivity in oriented graphs. (Undergraduate Summer Research Project, 1999)
- 23. Nadia Howlader, Broadcasting in graphs. (NSERC USRA, 1998)
- 24. William Pensaert, Broadcasting in graphs. (Undergraduate Summer Research Project, 1998)
- 25. William Pensaert, (i) Steiner centres and Steiner medians of graphs and (ii) The average connectivity of a graph. (Undergraduate Summer Research Project, 1997)
- 26. Dave I. Carson, Aspects of domination in graphs. (Ph.D., University of Natal, Durban, South Africa, 1994)
- 27. Stewart W. Melville, A practical investigation of meteor burst communication. (Ph.D., University of Natal, Durban, South Africa, 1992, Served as co-supervisor with Dr. A. Satori-Angus as supervisor)
- 28. Dave I. Carson, Planarity testing and embedding algorithms. (M.Sc., University of Natal, Durban, South Africa, 1991)