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CURRICULUM VITAE TEMPLATE

Position/Designation: Assisstant Professor of Mathematics
Department: Department of Mathematical and Physical sciences
College: College of Arts and sciences
University of Nizwa, Sultanate of Oman

Personal Information

Name: Khalid Bouhjar
Marital Status: Married
Email Address: k.bouhjar@unizwa@edu.om
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Academic Qualifications

Ph.D. in Mathematics 1998 - 2002
Vrije Universiteit, Amsterdam (Division of Mathematics and Computer Science)
Thesis - "On the Structure of n-point Sets" (Advisor Jan van Mill and Co-advisor J.J. Dijkstra)

Master's degree in mathematics 1995 – 1998
Vrije Universiteit, Amsterdam, (Division of Mathematics and Computer Science)

Propadeuze (First Year) in Mathematics 1994 – 1995
Vrije Universiteit, Amsterdam, (Division of Mathematics and Computer Science)

Teaching Activities, Current/Previous Experience

My principle objective in my teaching is to encourage and motivate students to reach their greatest possible potential in mathematics and to enhance in their university studies in general. In each class and course, I assess the various students' level of ability and knowledge, and I adjust my teaching method to what I consider most appropriate for that group of students. Regardless of individual and cultural differences, the basis of my teaching objective is to encourage and to motivate. In my opinion, the most successful students will always be those who plan to succeed.

Assistant Professor
The American International University in Kuwait 2022 – 2023
Teach Mathematics Courses (Calculus and Differential Equations)

Assistant Professor
The American University of Malta 2018 – 2021
Teach Mathematics and Statistics units.
Research in Mathematics education.
Chair of Teaching and Learning Committee.

Member of Curriculum Committee.
Mentor and adviser of a number of students.
Member of the accreditation committee.
Postdoctoral Researcher 2015 – 2017
School of Education, Florida State University Tallahassee Florida, USA
Research in Mathematics Education (Full Time)
Teaching Position (Adjunct Faculty) 2015 - 2017
Department of Mathematics, Florida State University Tallahassee Florida, USA
Teach Math courses (Part Time)

Assistant Professor, Engineering Degree 2011 - 2014
The Australian College of Kuwait
Teach Math and Statistics courses. Mentor supervise and guide students.
Participate in Department committees; Faculty Affairs, Curriculum Committee,
Exam Committee. Research: Math Education and Topology.
Honorary Associate in the School of Engineering 2011 - 2012
University of Tasmania
Teach Multivariable Calculus & Differential Calculus.

Assistant Professor of Mathematics 2008 – 2010
Yasar University, Izmir, Turkey
Teaching and working on a topological research project. Participating in
Department and University committees. Mentoring and supervising graduate and
undergraduate students.

Assistant Professor of Mathematics 2006 – 2008
Qatar University, Doha, Qatar
Teach Mathematics for Foundation Program. Mentor, supervise and other
professional responsibilities including exam committee.

Assistant Professor of Mathematics 2004 – 2006
Al Akhawayn University in Ifrane (American University in Ifrane), Morocco
Teach Math Courses and Faculty Affairs,
Researcher and Co-teacher 1998 – 2002

Vrije Universiteit, Amsterdam, the Netherlands
Teach Math courses and Research on n-point sets; a Topological topic: see my
Research Statement. Member foreign student committee and Graduate Committee

Visiting Teaching Position 1999 – 2002
Technische Universiteit: Delft, the Netherlands
(Mentored by Prof. Dr. Jan M. Aarts)

Research Activities
(includes but not limited to research interests, conference attendance, conference presentations and publications: refereed journal, articles, books, etc.)

After receiving my master's degree in mathematics in 1998, I started doing research in Topology under the supervision of Prof. Jan van Mill and Prof. Jan J. Dijkstra. The project I was working on and which was under the title "n-point sets" produced 4 publications in renowned journals. This work was published jointly with my supervisors and the renowned professor of mathematics R. Daniel Mauldin. My task focused on finding the characteristics of n-point sets?". I found that this period of doing

research in pure mathematics was very helpful to switch to doing research in mathematics education. It helped me a lot in paying attention to small details, looking at students answers from a broad mathematical perspective, seeing the differences between the teacher and learner, knowing if the ideas given to convince the reader are consistent, complete and make sense or not and being able to see the difference between how a mathematician and a mathematics education researcher see mathematics and its application.

Vrije Universiteit Amsterdam
After receiving my master's degree in mathematics in 1998, I started doing research in Topology under the supervision of Prof. Jan van Mill and Prof. Jan J. Dijkstra. The project I was working on and which was under the title "n-point sets" produced 4 publications in renowned journals. This work was published jointly with my supervisors and the renowned professor of mathematics R. Daniel Mauldin. My task focused on finding the characteristics of n-point sets?". I found that this period of doing research in pure mathematics was very helpful to switch to doing research in mathematics education. It helped me a lot in paying attention to small details, looking at students answers from a broad mathematical perspective, seeing the differences between the teacher and learner, knowing if the ideas given to convince the reader are consistent, complete and make sense or not and being able to see the difference between how a mathematician and a mathematics education researcher see mathematics and its application.

Research Assistant
I spent more than two years supported by the National Science Foundation under grant numbers DRL 0634099, 0634074; DUE 1245673, 1245796, 1246083, and 1431393 that was given to Dr Christine Andrew-Larson and NSF-funded grant number DRL-0918780 that was given to Dr Ian Whitacre. Both projects teams consisted of some experienced researchers in mathematics education, some doctoral students and some undergraduate students in mathematics education. During my post-doctoral fellowship period, I got the chance to learn how to be responsible for coordinating project team staff, conducting interviews, and developing research instruments including classroom tasks, surveys, formative and summative assessments and interview protocols. I also assisted in data collection and data management, which included tasks ranging from audio and video taping classroom activities and project team meetings, to taking field notes. Coding, and analysing the data quantitatively and qualitatively was the most contribution and task, I was involved in, finding trends and students ways of thinking when dealing with a mathematical problem. This work resulted to a book chapter and papers that were presented at conferences including the Conference on Research in Undergraduate Mathematics Education (RUME), Joint Meetings of the American Mathematical Society and the Mathematical Association of America and the meeting that is held every year of the RUME with a View Cultivating New Researchers on the Frontier of RUME

Research Interests: The Teaching and Learning of Mathematics, Linear Algebra Education, Topology Education, Mathematics Education, Dual Process Theory.

Conference Presentations:
March 2020: 3rd International Network for Didactic Research in University Mathematics. Bizerte (Tunisia) 27-29 Mar 2020. On students' reasoning about span in the context of Inquiry-Oriented Instruction.

February 2019: 22ed Conference on Research in Undergraduate Mathematics Education Oklahoma City, OK 28 February-02 March 2019. Presented: "Student reasoning about span and linear independence: A comparative analysis of outcomes of inquiry-oriented instruction"

February 2017: 20th Conference on Research in Undergraduate Mathematics Education San Diego, CA 23-25 February 2017. Presented: "Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction."

February 2017: Joint Mathematics Meeting 2017 in Atlanta GA, 4-7 January 2017. Presented: "Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction".

February 2016: 19th Conference on RUME, Pittsburgh, PA February 25-27, 2016. Presented: "Developing an open-ended Linear Algebra Assessment"
June 2007: Abant Izzet Baysal University, International Conference on Dynamical Systems, Turkey 2007.

June 2002: Shimane University, International Conference on Topology in Matsue. Japan, 2002 Presented "Some new results on n-point sets"

April 2002: National Conference in Amsterdam, the Netherlands 2002. Presented "Some properties of n-point set

Conference Attendance:

2015-2017: Attended and given numerous seminars and courses in the USA. 1998-2014: Attended and given numerous seminars and courses (on my Research Project, Education, Teaching and Learning Methods.) in the Netherlands, Saudi Arabia, Morocco, Qatar, Turkey and Kuwait.

2000-2002: Attended numerous seminars at De Technische Universiteit Delft, The Netherlands and the University of Alabama, Tuscaloosa, Alabama USA

Publications:
Bouhjar, K., Andrews-Larson, C., & Haider, M. Q. (2021). An analytical comparison of students' reasoning in the context of Inquiry-Oriented Instruction: the case of span and linear independence. The Journal of Mathematical Behavior, 64, 100908.

Bouhjar, K., Andrews-Larson, C., Haider, M. (2020). On students' reasoning about span in the context of Inquiry-Oriented Instruction. International Network for Didactic Research in University Mathematics. Bizerte (Tunisia) 27-29 Mar 2020.
https://indrum2020.sciencesconf.org/data/pages/indrum2020_preproceedings.pdf

Bouhjar, K., Andrews-Larson, C., Haider, M., (2019). Student reasoning about span and linear independence: A comparative analysis of outcomes of inquiry-oriented instruction. In Aaron Weinberg, Deborah Moore-Russo, Hortensia Soto, & Megan Wawro (Eds.), Conference on Research in Undergraduate Mathematics Education (pp. 60-67). Oklahoma City, OK 28 February-02 March 2019.
http://sigmaa.maa.org/rume/RUME22_Proceedings.pdf

Bouhjar, K., Andrews-Larson, C., Haider, M., & Zandieh, M., (2018). Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction. In Sepideh Stewart, Christine Andrews- Larson, Avi Berman, & Michelle Zandieh (Eds.), Challenges and Strategies in Teaching Linear Algebra (18 pages). Springer.
https://link.springer.com/chapter/10.1007/978-3-319-66811-6_9

Bouhjar, K., Andrews-Larson, C., Haider, M., & Zandieh, M. (2017). Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction. In Aaron Weinberg, Chris Rasmussen, Jeffrey Rabin, Megan Wawro, & Stacy Brown (Eds.), Conference on Research in Undergraduate Mathematics Education (pp. 67-81). San Diego, CA 23-25 February 2017. http://sigmaa.maa.org/rume/RUME20.pdf.

Bouhjar K, Haider M., and Andrews-Larson C. "Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction". Joint Mathematics Meeting 2017 in Atlanta GA, 4-7 January 2017.

Bouhjar K., "Student Learning, Breakout Session 1, Facilitated by Michelle Zandieh" RUME With a View Cultivating New Researchers on the Frontier of RUME October 8-9, 2016 Norman, OK.

Whitacre I, Bouhjar K, Pierson Bishop J, Randolph A. Philipp, Bonnie P. Schappelle, & Lisa L. Lamb: Regular Numbers and Mathematical Worlds. For the Learning of Mathematics 36, 2 (July, 2016) FLM Publishing Association Fredericton, New Brunswick, Canada.

Haider, M., Bouhjar, K., Findley, K., Quea, R., Keegan, B., & Andrews-Larson, C. (2016). Using student reasoning to inform assessment development in linear algebra. In Tim Fukawa-Connelly, Nicole E. Infante, Megan Wawro, & Stacy Brown (Eds.), 19th Annual Conference on Research in Undergraduate Mathematics Education (pp. 163-177). Pittsburgh, PA. Retrieved from http://sigmaa.maa.org/rume/RUME19v3.pdf.

Bouhjar K, Haider M., Findley K., Ruby Q. and Larson C. "Developing an open-ended Linear Algebra Assessment, Initial Findings from Clinical Interviews". SIGMAA on RUME 2016 in PA, 25-27 February 2016.

Bouhjar K. June 2007. "n-point sets are not σ-compact". Abant Izzet Baysal University, International Conference on Dynamical Systems, Turkey 2007.

Bouhjar K, Dijkstra JJ. "On the structure of n-point sets". Israel Journal of Mathematics. 2003; 137: 321-354.

Bouhjar K. "On the structure of n-point sets". Ph.D. dissertation. Vrije Universiteit, Amsterdam 2002.

Bouhjar K, Dijkstra JJ. "No n-point set is σ-compact". Proceedings of the American Mathematical Society. 2001; 129: 621-622.

Bouhjar K, Dijkstra JJ, and van Mill J. "Three-point sets". Topology Applications. 2001; 112: 215-227.

Bouhjar K, Jan van Mill. "The set of all extendible partial two-point sets is not F ". U-Collection, Vrije Universiteit, Amsterdam. 1999.

Bouhjar K. "Two-point sets are not zero-dimensional, a Simple Proof". U-Collection, Vrije Universiteit, Amsterdam. 1998.

CHAPTERS IN EDITED BOOKS

Bouhjar K, Andrew-Larson C, Haider M and Zandieh M: Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction. ICME Book 20.

Faculty Administrative Experience
Course Coordinator **Exam Coordinator** **Workshops, Trainings Seminars and Presentations about Teaching and Learning** **Mamber of Curriclum Committee** **Mentor and adviser of a number of students.** **Member of the accreditation committee.** **Member of the Hiring Committee** **Formulated action plans for individual learners, reviewed their progress after a fixed time period.** **Participated in department and college committees** **Designed and developed curriculum** **Participated in professional development activities and administrative duties** **Excellent counselling methods were implemented in suggesting the best courses for individual students' requirements and interests.** **Monitored, organised and reviewed the progress of students through regular assessment.** **Chair of Teaching and Learning Committee.**
Community Services
Tutored and advised at some schools how to prepare for the exams, how to read and how to learn efficiently . Helped students on some international exams require; students learned how to find the material needed for each question and how to tackle that question.
Consultancy
Educational Consultant: Schools, Colleges, Universities and Non-profit Educational Institutions. Provide expertise and guidance related to curriculum development, knowledge of (e.g., American, British, Canadian …) curriculum and its associated assessment practices, examine students' readiness for entrance exams (e.g., Cambridge IGCSE mathematics). classroom management, administration, career advice, …