

# CURRICULUM VITA

## Mohammed Majed Al-Dolat

Associate Professor

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### PERSONAL DATA

- Year of Birth: 1978.
- Nationality: Jordanian.
- Marital Status: Married with three children.
- Cellular Phone: +9620772048907.
- Living Address: Irbid

### ACADEMIC HISTORY

1. **Ph.D.** in Mathematics, Functional Analysis. **University of Jordan, Jordan**, July 2009. Thesis title "Inequalities for the numerical radii of Hilbert space operators".
2. **M.Sc.** in Mathematics. **Yarmouk University, Jordan**, June 2002. Thesis title "Rough singular integrals along surfaces of revolution".
3. **B.Sc.** in Mathematics **Yarmouk University, Irbid, JORDAN**, June 2000.

### EXPERINECE

1. Associate Professor: Department of Mathematics and Statistics, Jordan University of Science and Technology, JORDAN, September 2019 –present.
2. Assistant Professor: Department of Mathematics and Statistics, Jordan University of Science and Technology, JORDAN, September 2014 –2019.
3. Assistant Dean: Jordan University of Science and Technology, JORDAN, 2017-2019.
4. Instructor: Department of Mathematics and Statistics, Jordan University of Science and Technology, JORDAN, 2012-2014.
5. Teacher of Mathematics: Ministry of Education – JORDAN, 2000-2004.

### TEACHING ( T )

- ( T1 ) Courses Taught

**1. At Jordan University of Science and Technology (2012-present)****(i) General Courses:**

- |                           |                 |                          |
|---------------------------|-----------------|--------------------------|
| 1. Calculus I.            | 2. Calculus II. | 3. Calculus III.         |
| 4. Differential Equations |                 | 5. Discrete Mathematics. |

**(ii) Math. Major Courses:**

- |                            |                          |
|----------------------------|--------------------------|
| 6. Mathematical methods I. | 7. Logic and Set Theory. |
| 8. Advance Calculus.       | 9. Real Analysis I       |
| 10. Real Analysis II.      | 11. Linear Programming.  |

**(iii) Graduate Level Courses**

12. Measure Theory
13. Functional analysis

- **( T2 ) Courses I am able to Teach**

- |                         |                        |                 |
|-------------------------|------------------------|-----------------|
| 1. Graph Theory.        | 2. Topology I.         | 3. Topology II. |
| 4. Number Theory.       | 5. Abstract Algebra I. |                 |
| 6. Abstract Algebra II. |                        |                 |

- **( T3 ) Course Coordinator**

Since I joined JUST in 2012, and at every semester, I have been the coordinator of some general course. I have coordinated the following general courses: Calculus I, II and III, and Discrete Mathematics. The coordination duties include:

**1. Preparing detailed syllabus that includes:**

- (i) The topics of the course with a weekly time schedule.
- (ii) Course objectives that must be also entered into the online system of "Quality Assurance" (for the ABET accreditation purpose) and then connected and weighted with the Program Learning Outcomes.
- (iii) Suggested exercises, textbooks, references, and instructions to students and teachers.

2. Writing exams and supervising the grading process. This includes connecting and weighting every question in the exam with its course objective and enter this in the online system of "Quality Assurance" (for the ABET accreditation purpose).
3. Organizing regular meeting with instructors to follow up the teaching process and collecting feedbacks.
4. Analyzing the results and writing a detailed report to the department chairperson.
5. Contributes to the development, planning, and implementation of high quality curriculum through a continuous collecting of feedback from students and instructors.

## RESEARCH ( R )

I maintain to carry out research and produces publications. I always keep the potential to sustain a research program in a teaching-intensive environment.

### • ( R1 ) Submitted Papers

1. **M. Al-Dolat**, *Numerical radius inequalities for  $m \times m$  off-diagonal operator matrices*, submitted to **Analysis and Mathematical physics**.
2. **M. Al-Dolat and F. Bani-Ahamed**, *General power inequalities for generalized Euclidean operator radius*, submitted to **Journal of mathematical inequalities**.

### • ( R2 ) Accepted and Published Papers

1. **M. Al-Dolat, I. Jaradat and B. Al-Husban**, *A novel numerical radius upper bounds for  $2 \times 2$  operator matrices*, **Linear and Multilinear Algebra** (2020)  
<https://doi.org/10.1080/03081087.2020.1756199>
2. **M. Al-Dolat, I. Jaradat and D. Baleanu**, *An extension of several essential numerical radius inequalities of  $2 \times 2$  off-diagonal operator matrices*, **Advances in Difference Equations (1) (2020) 1-8**
3. **M. Al-Dolat and K. Al-Zoubi**, *Numerical radius inequalities for Hilbert space operators*, **Journal of Mathematical Inequalities 10(4) (2016) 1041-1049**
4. **M. Al-Dolat, K. Al-Zoubi, M. Ali, and F. Bani-Ahmad**, *General numerical radius inequalities for matrices of operators*, **Open Mathematics, (14)(2016): 109-117**
5. **M. Al-Dolat, M. Ali, I. Jaradat and K. Al-Zoubi** *On the Boundedness of a certain class of maximal functions on product spaces and extrapolation*, **Analysis and Mathematical physics 2018**.
6. **M. Ali and M. Al-Dolat**, *Parabolic Marcinkiewicz integrals on product spaces and extrapolation*, **Open mathematics. 14(1)(2016) 649-660**
7. **K. Al-Zoubi and M. Al-Dolat**, *On graded classical primary submodules*, **Advance in Pure and Applied Mathematics 7(2) (2016) 93-96**

8. **K. Al-Zoubi, I. Jaradat and M. Al-Dolat** , *On graded P-compactly packed modules*, **Open mathematics. 13(2015) 487-492**
9. **I. Jaradat, M. Al-Dolat and M. Alquran**, *Theory and applications of more general form for fractional power series*, **Chaos, solutions and fractal 108, 107-110**
10. **I. Jaradat, M. Alquran and M. Al-Dolat**, *Analytic Solution of Homogeneous time-invariant Fractional IVP*, **Advances in Difference Equations 2018: 143**
11. **Al-Dolat and Ali**, *General Numerical Radius Inequalities*, **Studies in Math. Sci., 6(2013), No. 1, 1-7**
12. **K. Al-Zoubi, I. Al-Ayyoub and M. Al-Dolat**, *On graded 2-absorbing compactly packed modules*, **Advanced studies in Contemporary Math. 28(3) 2018:479-486**
13. **M. Al-Dolat and K. Al-Zoubi**, *General upper bounds for the numerical radius on complex Hilbert space*, **Journal of Interdisciplinary Mathematics, Accepted**
14. **M. Al-Dolat and I. Jaradat**, *A refinement of the Cauchy-Schwarz inequality accompanied by new numerical radius upper bounds*, **Filomat, Accepted**
15. **M. Alquran, A. Dagher and M. Aldolat**, *Exact Traveling Wave Solutions for the Celebrated Gardner Model and the Nonlinear Klein–Gordon System by Means of the Celebrated Unified Method*, **International Journal of Applied and Computational Mathematics 5 (3), 1-11**
16. **M. Al-Dolat, M. Alquran, I. Jaradat and M. Ali**, *Analytical simulation for the mutual influence of temporal and spatial Caputo-derivatives embedded in some physical models*, **Rom. Rep. Phys 74 (1)**

## COMMUNITY WORK (CW)

I always manage to contribute to departmental or University-wide working groups or committees as requested. In addition, I support and participate in student organization activities.

- **( CW1 ) Committees**

- (i) At the College of Science and Arts:**

1. ABET "Accreditation Board of Engineering and Technology" committee: responsible for tracking the required materials for ABET files of every course at the Dept. of Math.
2. Students legal issues committee: conducting investigations on the cases of allegations of misconduct or nonacademic behavior.

- (ii) At the department of mathematics and statistics:**

1. ABET committee: preparing portfolios for the Math. Courses to be accredited by the ABET.
2. Student Recruitment: Advising and enrolment for the freshmen of math major.

3. Graduate studies committee: Monitoring the progress of the graduate students and developing the curriculum of the master program at the department.
4. Scientific research committee: refereeing and evaluating the research proposal submitted by students and their advisors towards master theses.
5. Syllabus committee: developing curriculums for the master and bachelor programs.
6. Recruitment committee: collecting and organizing the data of all applicants for a position at the mathematics department.
7. Social committee: organizing invitations and occasion gatherings for the faculty and staff of the department.
8. Final exam grade reassessment committee: reassessment of students grades in the final exam upon a written request by the student.
9. Library Committee: pertaining the connection between the Math. Dept. and the main library of the university for enhancing the library with titles in mathematics.

## ACADEMIC SCHOLARSHIPS AND DEVELOPMENT ( ASD )

- ( ASD1) **Academic Development Workshops**
  1. **Modern Methods in University Teaching**, the Academic Development Center, Jordan University of Science and Technology, 2018.
  2. **Open Educational Resources**, the Academic Development Center, Jordan University of Science and Technology. 2017.
  3. **Modern Methods in University Teaching**, the Academic Development Center, Jordan University of Science and Technology. 2013.

## MASTER THESES

- **Advisor**
  1. **Hala Al-Mahdawi**, General numerical radius inequalities for bounded linear operators in Hilbert spaces, Jun 2016.
  2. **Rawan Ababneh**, Numerical Radius Inequalities for Matrices of Bounded Linear Operators in Hilbert Spaces , *December 2016*.
  3. **Ghadeer Theinat**, Numerical Radius Inequalities of Hilbert space operators and Bounds for the zeros of polynomials, *April 2017*.

## REFERENCES

1. Fuad Kittaneh, Professor, Dean of College of Sciences and Arts, University of Jordan,  
Email: [fkitt@ju.edu.jo](mailto:fkitt@ju.edu.jo)
2. Mahmoud Alrefaei, Professor Dean of Faculty of Scientific research, Jordan University of  
Science and Technology. [alrefaei@just.edu.jo](mailto:alrefaei@just.edu.jo)
3. Qutaibah Khatatbeh, Professor, Dean of College of Sciences and Arts, Jordan University  
of Science and Technology. [qutaibeh@just.edu.jo](mailto:qutaibeh@just.edu.jo)