Dr. Osama Khader Alkam (Associate Professor)

e-mail: oalkam@ju.edu.jo
Mobile: 00 962 -795636213
Work: 00 962-6-5355000, **extension**: 22101.

Address: The University of Jordan. Department of Mathematics. Amman, Jordan.

Personal Information:
Date of birth: August 20, 1962.
Nationality: Jordanian.
Gender: Male.
Marital status: Married (Three children).

Education:
B.S., Mathematics, 1984, The University of Jordan, Amman, Jordan.
M.S., Mathematics, 1987, The University of Jordan, Amman, Jordan.
Ph.D., Mathematics, 1993, Middle East Technical University, Ankara, Turkey.

Work Experience:
A. Teaching:
Teaching Assistant, The University of Jordan, Dept. of Mathematics, Amman, Jordan , 1985 – 1986.
 Lecturer, Arab Community College, Dept. of Computer Science, Amman, Jordan, 1986 – 1987.
Research Assistant, Middle East Technical University, Dept. of Mathematics, Ankara, Turkey , 1990 – Jan. 1994.
 Assistant Professor, Applied Science University, Dept. of Mathematics, Amman, Jordan, Feb. 1994 – August 1994.
 Assistant Professor, University of Petra (formerly Jordan University for Women). Dept. of Mathematics, Amman, Jordan, Sept. 1994 – Sept. 2004.
 Lecturer, The University of Jordan. Dept. of Mathematics, Amman, Jordan, Sept. 2004 – Sept. 2005.
Assistant Professor(B), The University of Jordan. Dept. of Mathematics, Amman, Jordan, Sept. 2005 – April 2008.
Assistant Professor(A), The University of Jordan. Dept. of Mathematics, Amman, Jordan, April 2008 – July 2010.
Associate Professor (B), The University of Jordan. Dept. of Mathematics, Amman, Jordan, July 2010 – August 2017.
Associate Professor (A), The University of Jordan. Dept. of Mathematics, Amman, Jordan, August 2017 – up-to-date.
Temporary Positions (sabbatical leave)
Associate Professor, The German Jordanian University. September 2011 – September 2012.

B. Administrative (at Petra University):
Director of the Computer Center, 1998 – 1999.
Assistant Dean of Students' Affairs, 2001.

Member of the editorial board of the scientific refereed journal Al-Basaer, issued and published by the University of Petra, 2000 – 2004.
Member of the College of Science board for many years.
Member of the University —Curriculum Committee (2003/2004).
Coordinator of the Mathematics and Physics groups in the College of Science (2003/2004).

C. Administrative (at The University of Jordan):
Coordinator of the Quality Assurance Committee of the Dept. of Mathematics.
Member of the Math. Major B.S. qualifying exam committee.
Member of the college board (2006/2007 and 2012/2013).

Personal Accomplishments:
Capable of teaching all undergraduate courses in Mathematics.
Capable of teaching graduate courses in Algebra, Algebraic Number Theory, Algebraic Functions, Class Field Theory and Biostatistics.

Teaching Record: I taught the following courses

 At Petra University (formerly Jordan University for Women):

1. Abstract Algebra.

2. Number Theory.

3. Calculus(1 and 2).

4. Statistical Methods.

5. Biostatistics.

6. Discrete Mathematics.

7. Foundation of Mathematics.

8. Real Analysis (1 and 2).

9. Complex Analysis.

10. Numerical Analysis (1 and 2).

11. Topology.

12. Ordinary Differential Equations (1 and 2).

13. Partial Differential Equations.

14. Special Functions.

15. Applied Mathematics.

16. Supervised two-credit hour seminars for senior Math. Students (in Jordan University for Women) on Topology (graduate standards), Algebra (Ring Theory, Galois Theory, Field Extensions, Modules and Commutative Algebra) and Number Theory .

At the University of Jordan:

1. Abstract Algebra I and II (Master's level and undergraduate).

2. Number Theory (Ph.D. level and undergraduate).

3. Mathematical packages (Mathematica).

4. Calculus(1 and 2).

5. Principles of Statistics.

6. Biostatistics (Master's level and undergraduate).

7. Numerical Analysis.

8. Mathematics for Business and Social Sciences.

9. Ordinary Differential Equations.

10. Mathlab (*Mathematica* laboratory)

11. Principles of Mathematics.

At the German Jordanian University:

1. Calculus I

2. Probability and Statistics (for Engineers)

3. Engineering Mathematics I

Other institutions:
Taught pure Mathematics courses in the international foundation year program in Amman, organized and supervised by the Northern Consortium of the British Universities, 1995 – 1997, 2001 – 2003.

Research:

A. Research Interests: Ring Theory, Number Theory, Mathematics of Computation.

B. Publications:

[1] Alkam, Osama; Bilhan, Mehpare. Class number of (ʋ,n,M)-extensions. Bull. Austral. Math. Soc. 63 (2001), no. 1, 21—34 (ISI).

[2] Abu Osba, Emad; Henriksen, Melvin; Alkam, Osama. Combining local and von Neumann regular rings. Comm. Algebra 32 (2004), no. 7, 2639—2653 (ISI).

[3] Abu Osba, Emad; Henriksen, Melvin; Alkam, Osama; Smith, F. A. The maximal regular ideal of some commutative rings. Comment. Math. Univ. Carolin. 47 (2006), no. 1, 1--10.

[4] Alkam, Osama; Abu Osba, Emad. On the regular elements in Zn. Turkish J. Math. 32 (2008), no. 1, 31—39 (ISI).

[5] Alkam, Osama . von Neumann Factorial. Int. Math. Forum 5 (2010), no. 8, 395 – 400.

[6] Helu,Amal; Abu-Salih, Muhammad; Alkam,Osama. Bayes Estimation of Weibull Distribution Parameters Using Ranked Set Sampling. Communications in Statistics - Theory and Methods, 39 (2010), no. 14, 2533 - 2551 (ISI).

[7] Alkam, Osama; Abu Osba Emad. On Eisenstein Integers Modulo n. International Mathematical Forum, 5 (2010), no. 22, 1075 – 1082.

[8] Hamideen, M.S.; Sharaf, J.M.; Alkam,Osama, Radioactive Point Source Localization in One, Two, and Three Dimensions within a Bulky Medium. Applied Radiation and Isotopes, 68 (2010), no. 6, 1160-1168 (ISI).

[9] Alkam, Osama; Abu Osba Emad. Zero Divisor Graph for the Ring of Eisenstein Integers Modulo n. Algebra. Volume 2014, Article ID 146873, 6 pages.

[10] Abu Osba, Emad; Alkam, Osama. When zero-divisor graphs are divisor graphs. Turkish J. Math. 41 (2017), no. 4, 797—807 (ISI).

[11] Yousef, Feras; Alkam, Osama; Saker; Ines. The dynamics of new motion styles in the time-dependent four-body problem: weaving periodic solutions. The European Physical Journal Plus. 135:722 (2020), 1—10 (ISI).

[12] Al-Hawary, T.; Aldawish, I.; Frasin, B.A.; Alkam, O.; Yousef, F. Necessary and Sufficient Conditions for Normalized Wright Functions to Be in Certain Classes of Analytic Functions. Mathematics 2022, 10, 4693. https://doi.org/10.3390/ math10244693 (ISI).

Arabization (Translation and Localization):

Scientific Editor for the Arabic version of River deep-Obeikan online Mathematics teaching project (2007), Obeikan, Saudi Arabia.

Committee coordinator and co-translator of Mathematics Student's book, Activity book and Teacher's book, grade 4, Math Connects Series (2009), McGraw Hill, Published by Obeikan, Saudi Arabia. These textbooks have been adopted by Ministries of Education in Saudi Arabia, Kuwait and Bahrain.

Conferences and Workshops:

1. IV National Math. Symposium, Antakya, Turkey, 1991.
2. V National Math. Symposium , Sakarya, Turkey, 1992.
3. International Workshop on Arithmetic Algebraic Geometry, I.C.T.P., Trieste, Italy, 1992.
4. VII National Math. Symposium, Ankara, Turkey, 1994.
5. International Workshop on Finite and Locally Finite Groups, Istanbul, Turkey, 1994.
6. International Workshop on Number Theory, Ankara, Turkey, 1997.

Foreign Languages: Fluent in English and Turkish.

Computer Literacy:

Good at using computers, especially Mathematical and word processing packages like MATHEMATICA, DERIVE and lyX (LaTex), in addition to most of Microsoft products including Windows and Office.

References:
1. Prof. Fuad Kittaneh. A Former Dean of the School of Science. The University of Jordan.
2. Prof. Mohammad Al-Raqab. A Former Chairman of the Department of Mathematics. The University of Jordan.