

Personal Information

Name	Fayha Muhammed Al-Shibli
Marital Status	Married, Five Kids
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Qualifications

Qualification	Specialization	University of donor rank	Date
PhD	Applied Ecology / Water Theme	The Institute for Applied Ecology- University of Canberra-Australia	2018
Master's degree	Environmental Science and Management	University of Jordan- Jordan	2008
Bachelor's degree	Agricultural Resources and Environment	University of Jordan- Jordan	2003
Fulbright Junior Faculty Development Program Award	Sustainable Environment	University of Florida USA	2021

Specialization and domain of interest

Specialization	Applied Ecology
Domain of interest	Negative Emission, Climate Change Modelling – Flood Modelling, Environmental Modelling-Water Systems – Meteorology- Applied Hydrology –Irrigation Systems- GIS mapping -Environmental Impact Management

Links:

Google Scholar	https://scholar.google.com/citations?user=aYQbtUMAAAAJ&hl=en
ResearchGate	https://www.researchgate.net/profile/Fayha-Alshibli
Faculty Member Website	http://eacademic.ju.edu.jo/f.shibli/default.aspx
National Database for Researchers	http://resn.hcst.gov.jo/GeneralInfo.aspx No: 89554

Career Experience

Job Title	Place of work	Date
Head of the Department	Land, Water and Environment Department School of Agriculture Jordan	2021 to present
Assistant Professor	University of Jordan-Faculty of Agriculture/Land, Water and Environment Department	January 2019 to present
Affiliate	University of Canberra and University of Jordan	2016-2018
Academic Advisor	Saudi Arabia Cultural Mission /Saudi Arabia Embassy– Australia	2010-2015
Researcher	Ministry of Agriculture – Jordan	2005-2009
Project Coordinator – Instructor	Ministry of Water and Irrigation – and Jordanian Aqua Conservation Association UNEP/GEF Project	2003-2005

Courses taught:

Course	Semesters
Meteorology	2019/2020 -2022
Fundamentals of Irrigation	2019 to present
Seminar in Water, Land and Environment	2019, 2022
Farm Irrigation Management	2019 + 2021 +2022
Environment Impact Assessment	2020/2021
Hydrology	2020-2021 Summer, 2023
Research Methodology – PhD Course	2022

Recent Project and Graduates Supervision:

Project	Sponsor	Position
Simulate Flash Flood in the Dead Sea Basin under the GCMS/RCMS Projections: Building Resiliency for Flood Vulnerable Communities	Australian Embassy- Direct Aid Program (DAP)-Department of Foreign Affairs and Trade/Australia	Project Manager
Simulating Flood Sheets under Climate Change Scenarios in the Aqaba Region: Insight Future Projections to Hydro-Climatic Modelling	Deanship of Scientific Research Fund /Scientific Research Council -University of Jordan	Project Manager
Research Study in " Drought Assessment and Simulation in accordance with Climate Oscillation and Land Cover Changes, Methods and Applications- Amman Zarqa Basin- Jordan	Beihang University -China	Co-Supervisor

Ambient Air Pollution in Jordan- Examine Emissions of Air Pollutants and Compare with Different CMIP5 Models under Concentration-Driven Projections and Changing Land-Use Patterns	University of Jordan	Chair-Supervisor
Climate Change-Driven Crop Production in Jordan: Insights on Wheat and Olive Sensitivity to Climate Extremes - CMIP5 Multi-Model Ensemble under two climate scenarios RCP4.5 and RCP8.5	Hashemite University -Jordan	Co-Supervisor
Assessment of the impact of climate changes on the productivity of rainfed wheat in Irbid, Jordan	University of Jordan	Co-Supervisor

Administrative works and committees

Administrative work and committee	Date
Head of the Department - Land, Water and Environment Department -School of Agriculture- University of Jordan	2021-to present
Assistant Professor- Land, Water and Environment Department -School of Agriculture- University of Jordan	2019 to present
Affiliation Scholar –University of Jordan	2016-2018
Academic Advisor- Australian-Saudi Cultural Mission- Canberra/Australia	2010-2015
Trade Agreements Member – International Policies Department –Ministry of Agriculture of Jordan	2008-2009
Agricultural Production Committee Member – Ministry of Agriculture of Jordan	2006-2007
Financial and administrative Coordinator - Jordanian Aqua Conservation Association –UNEP/GEF Project	2003-2004

Recent Publications

Name of researcher	Research title, Publisher, Date
Fayha Al-Shibli*, William Maher, Mohammad Ashraf Ottom, Jawad AlBakri	Estimating Soil Heat Flux in Jordan Based on ERA5 Parameters and NCEP/NCAR Energy Outputs: Definite Radiative Forcing of Climate Change Using PCA. Earth Systems and Environment, Springer Nature. 2024 . doi.org/10.1007/s41748-024-00374-4

Mohammad Ashraf Ottom, Fayha Al-Shibli, Mohammed S. Atoum	The Future of Data Storytelling for Precipitation Prediction in the Dead- Sea-Jordan Using SARIMA Model. DOI: https://doi.org/10.15379/ijmst.v10i1.2794 . ijmst, vol. 10, no. 1, pp. 1159-1169, Oct. 2023 .
Nivin Abdelrahim Hasan Yang Dongkai and Fayha Al-Shibli*.	SPI and SPEI Drought Assessment and Prediction Using TBATS and ARIMA Models, Jordan. Water 2023 , 15, 3598. https://doi.org/10.3390/w15203598
Nivin Abdelrahim Hasan Yang Dongkai and Fayha Al-Shibli.	A Historical–Projected Analysis of Land Use/Land Cover in Developing Arid Region Using Spatial Differences and Its Relation to the Climate Sustainability 2023 , 15, https://doi.org/10.3390/
Fayha M. Al-Shibli, Mohammad A. Ottom, Hani Saoub, Radwan Al-Weshah	Comparative Analysis of Potential Evapotranspiration Calculation Methods with ERA-Reanalysis Climate Models’ Projections in Western Asia, Jordan. Applied Ecology and Environmental Research. 2021 . 19(6):4849-4879
Khalid M.O. Nahar, Fayha Alshibli, Mohammad Ashraf Ottom, and Mohammed M. Abu Shquier	Air Quality Index Using Machine Learning – Jordan Case Study. COMPUSOFT, An international journal of advanced computer technology. 2020 . 9(9), 3831-3840.
Al-Shibli, F. M., Maher, W. A., & Thompson, R. M.	The Need for a Quantitative Analysis of Risk and Reliability for Formulation of Water Budget in Jordan. Jordan Journal of Earth and Environmental Sciences, 8(2):77-89. 2017
Fayha Al-Shibli, PhD Thesis	Modelling a Future Water Budget in the Amman-Zarqa Basin, Jordan: Evaluation of the Major Stressors Affecting Water Availability. University of Canberra 2018
Fayha Al-Shibli, Master Thesis	Assessment of National Capacity Constraints for Implementing the International Environmental Conventions. University of Jordan 2008
Fayha Al-Shibli	Water Use in Agriculture Guide. Jordanian Aqua Conservation Association 2005.
Fayha Al-Shibli and others	Student Water Manual. Ministry of Water and Irrigation 2004.

Scientific conferences and symposia

Conference Title	Place and date of conference	Type of participation
	School of International Studies 18/05/2022	PANELIST Talk title:

The University of Jordan Erasmus+ International Staff Week 2022 - Renewable Energy and Climate Change		“Climate Change and Negative Emissions “
Climate Change Impacts and Policies for Adaptation and Resilience – UCN's joint cooperative project "PULSE" and presented by UJ, the University of Florida and the University of Wisconsin-Madison	VIRTUAL WEBINAR 30 May 2022	PANELIST Talk title: “Enhancing natural processes on land and sea: options for climate change mitigation and negative emission action”
International Conference on Space 2022	(29 March 2022) Islamabad, Pakistan	Co-Authorship Assessment on Main Indices to Decreasing of Dead Sea Surface Water Using Satellite Images and Timeseries Datasets Analysis. Nivin Hasan*, Dr. Fayha Al-Shibli, Prof. Yang Dangkai*, Prof. Tan Yumin
ECMWF “Connecting global to local hydrological modelling and forecasting: scientific advances and challenges”	Virtual 29 June 2021 to 1 July 2021	Participant
Copernicus-Climate Change Service- ECMWF C3S (Climate Change Service) Conference & General Assembly	18-20 May 2021- Virtual using Swapcard.	Attendee
IAE HDR Conference, February 2018	Canberra –Australia 2018	Standard Presentation entitled: Direct Coupling of Global Climate Models to Hydrological Models: Simulation the Effect of Climate Change on Streamflow –Amman Zarqa Basin Case Study
WTO Agricultural Agreements Delegations	Cairo-Egypt 2008	Delegate
Domestic Conferences in Water and Environment	Amman 2004-2008	Participant
eWater Software Conference, November 2017	Canberra –Australia 2017	peer-reviewed poster presentation entitled: Quantifying Hydrological changes and surface runoff in a changing climate. Case study from Jordan

Training courses

Name of course	Year
Climate Change Mitigation via Removal of Atmospheric GHGs <i>Australian National University-Institute for Climate, Energy, and Disaster Solutions -Australia</i>	2021
Climate and Weather – Copernicus and EUMETSAT Earth observation and visualization data	2023
EUMETSAT short course: SARA – A Climate Data Record on Surface Solar Radiation-Copernicus and EUMETSAT	2023
Climate Extremes: Heatwaves, Changes in Ice Drought and Flood - Copernicus and EUMETSAT Earth observation and visualization data	2023
Excellence in Peer Review: How to be an effective peer reviewer-Taylor & Francis Reviewer Training Network	2023

Total column water vapour- <i>implemented by the European Centre for Medium-Range Weather Forecasts on behalf of the European Commission</i>	2023
Near surface and upper air climate data- <i>implemented by the European Centre for Medium-Range Weather Forecasts on behalf of the European Commission</i>	2023
Atmospheric chemistry and physics: ozone- <i>implemented by the European Centre for Medium-Range Weather Forecasts on behalf of the European Commission</i>	2023
How to find the right collaborators and funding opportunities, ELSEVIER	2022
Choosing the right journal for Biology, Agriculture and Food Science research – Taylor & Francis Author Services Platform	2022
Management & Leadership Skills-University of Jordan	2022
Time Management-University of Jordan	2022
Predatory Academic Journals and Conferences: Raising Awareness and Understanding	2022
Open Educational Resources	2021
The Quantitative and Qualitative Gap between Educational Outcomes and Labour Market Requirements	2021
URKUND-Plagiarism Detection Made Simple-Jordanian Universities -	2021
How to build an exam on JU e-Exam platform (LMSystem)	2020
Techniques of Managing Online Educational Meetings	2020
Employ advanced features on using Microsoft Teams	2020
Arabic language efficiency Exam – Jordan Academy of Arabic	2019
Using MCQs to Test Higher Order Thinking Skills – University of Jordan	2019
Blended Learning - University of Jordan	2019
Design a Course - University of Jordan	2019
Project Based Learning in Undergraduate Engineering Education- University of Jordan	2019
Academic Quality Assurance - University of Jordan	2019
Creating Effective Surveys using Google Forms - University of Jordan	2019
Three-part series: All you need to know for the successful completion of the research thesis and beyond- University of Canberra/ Australia	2018
Training sessions in Coding, Surface Water and Groundwater Modelling. eWater – Canberra/ Australia	2017-2018
Academic Writing - University of Canberra/ Australia	2017
eWater Source Software –Brisbane/ Australia	2017
Seven Steps for Academic Writing - University of Canberra/ Australia	2016
Academic Integrity Module – University of Canberra/ Australia	2015
Time Management – CIT Solutions – Canberra/ Australia	2014
Smart Living and Working – Nurturing Nortons-Canberra/Australia	2013
Olive Pruning, Organoleptic Olive Oil	2008
Genetic Fingerprint for Olive Varieties in Jordan	2007
Wastewater Reuse for Agricultural Crops	2006

Electronic Sensors in Soil Moisture & Temperature	2004
Planning & Economical Study for Technical Project	2003

Community Service:

1. Final candidate Dutch Youth Innovation Award- June 2023- Finland Church Aid -Agricultural Waste Management -Biochar Production.
2. The Higher Council for Science and Technology-Remote Sensing in Climate Change National Committee
3. Committee member - Accreditation and Quality Assurance Commission for Higher Education Institutions-
4. Supervisor to LWED students – won second place in the Jordan Speak Green Competition at the National university level – sponsored by Green Generation Foundation and Friedrich Ebert Stiftung-2019.
5. Coordinator of Scientific Day and Graduates Assembly Day, Faculty of Agriculture, 2022.
6. Member of Faculty Strategy Review Committee-2020/2021.

Software:

- eWATER, Source.
- ArcMap GIS
- ArcGIS Pro
- R and RStudio
- JavaScript