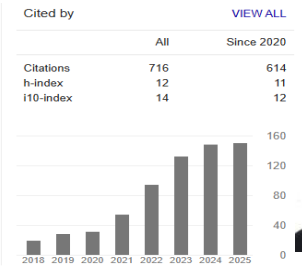
Dr. Salman Al-Kofahi
Department of Lands Management & Environment
Prince El-Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, P.O. Box 150459, Zarqa 13115, Jordan
Cell: 00962796744321
Email: salman@hu.edu.jo
ORCID ID: 0000-0002-2141-6350



EDUCATION

Jan. 2008-May, 2011 — Ph.D., Plant and Environmental Sciences,
College of Agricultural, consumer and environmental sciences, New Mexico State University (NMSU), Las Cruces, New Mexico State (NM), USA.

- Major: Plant and Environmental Sciences.
- Specialization: Mapping landcover, plant diversity and plants water budgets.
- Dissertation: Mapping Land Cover in Urban Residential Landscape: Implications for Water Budget Calculations.
- GPA: 4.0 / 4.0.

Minor: Applied Statistics,
Department of Applied Experimental Statistics, NMSU, Las Cruces, NM, USA.

- GPA: 4.0 / 4.0.

Sep. 2001-Jan. 2003 — M.S., Plant Production,
College of Agriculture, Jordan University of Science and Technology (JUST), Irbid, Jordan.

- Specialization: Agronomy (Field Crops Production).
- Thesis: Relationship between Seed Vigor Tests and Field Performance of artificially aged Barley seeds.
- Grade: 90%.

Feb. 1998-Jun. 2001 — B.S., Plant Production,
College of Agriculture, Jordan University of Science and Technology (JUST), Irbid, Jordan.

- Grade: 82%.

ACADEMIC POSITIONS & WORK EXPERIENCES

Oct. 2024- now	**Faculty Dean**, Prince El-Hassan Bin Talal Faculty for Natural Resources and Management, The Hashemite University, Zarqa, Jordan.
Aug. 2021- now	**Associate professor**, Department of Land Management and Environment, Prince El-Hassan Bin Talal Faculty for Natural resources and Environment (formerly "Faculty of Natural Resources and Environment), The Hashemite University, Zarqa, Jordan.
Oct. 2023-Oct. 2024	**Assistant Dean for Students' Affairs,** Prince El-Hassan Bin Talal Faculty for Natural Resources and Management, The Hashemite University, Zarqa, Jordan.
Sep. 2019- Sep. 2021	**Department Head,** Department of Land Management and Environment Department, Prince El-Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, Zarqa, Jordan.
Jun. 2016- Dec. 2021	**Assistant professor,** Department of Land Management and Environment, Faculty of Natural Resources and Environment, The Hashemite University, Zarqa, Jordan.
Sep. 2014- Jun. 2016	**Full-time lecturer,** Department of Land Management and Environment, Faculty of Natural Resources and Environment, The Hashemite University, Zarqa, Jordan.
Nov. 2017-2021	**Partner,** Geodesy and geoinformatics for sustainable development in Jordan (GEO4D). Erasmus+ Programme of the European Union.
Sep. 9, 2017	**Expert in Plant Production / University Academic Sector**, Certified by Jordanian Agriculture Engineering Association, Amman, Jordan.

Jun. 2015-Dec. 2015	**Researcher**, LocalSat project, funded by the European Union through Jordan University of Science and Technology.
Sep. 2015	**GIS Trainer,** In "Local Sat" project, funded by the European Union, delivered at the GIS laboratories of Jordan University of Science and Technology.
Jan. 2015- 2020; Feb. 2012- Sep. 2012	**Lecturer,** Departments of Urban Planning, City Planning, and Design, College of Architecture and Design, Jordan University of Science and Technology (JUST), Irbid, Jordan. **Taught courses:** • Master's level: Environmental Planning and Management; Special Topics in Urban Planning. • Bachelor's level: Geographic Information Systems (GIS); Sustainable Development; Urban Ecology.
Sep. 2012- Sep. 2014	**International Baccalaureate (IB) Diploma Instructor,** Environmental Systems and Societies (ESS)- Naseem Internationals, Bahrain.
Jan. 2008-May, 2011	**Researcher,** Projects: • Using Vegetation Extraction Software to Classify Urban Residential Landscapes in Albuquerque. • New Approaches in Residential Landscape Water Budget Calculations.
Jan. 2009-May, 2011	**Laboratory Safety Officer**, Periodic environmental, health, and safety audits and ensure safe handling and dealing with laboratory chemicals /College of Agriculture, New Mexico State University.
Aug. 2010-Jan. 2011	**Teaching Assistant,** Environmental Physiology of Plants, Plant and Environmental Sciences, College of Agriculture, New Mexico State University.
Apr. 2004- Jan. 2007	**Agricultural Administrator and Translator**, Qatar International Trading Company, Doha, Qatar.

Additional part-time work as **Agricultural Engineer**, Al-Salwly Qatar Landscapes Company, Doha, Qatar.

Oct. 2003- Feb. 2004 **Research Assistant and Teaching Assistant,**
Department of Plant Production, Jordan University of Science and Technology (JUST), Irbid, Jordan.
Teaching responsibilities of courses included:

- Introduction to Plant Science,
- Seed Production Technology,
- Field Crop Science, and
- Plant Physiology.

PUBLISHED ARTICLES

Al-Kofahi, S., Al-Khlaief, A., El Afandi, G. (2025). Enhancing the Allocation of Urban Green Spaces in Arid Environments: A Multi-Criteria Assessment Incorporating an Integrated Urban Green Space Exposure Index. Earth Systems and Environment. https://doi.org/10.1007/s41748-025-00790-0

Al-Kofahi, S., Almrahleh, R., Sawalhah, M., Othman, Y. (2025). Yield and physiological responses of wheat (Triticum aestivum L.) in relation to different levels of nutrient. South African Journal of Botany, 184: 1051-1061. https://doi.org/10.1016/j.sajb.2025.07.020.

Al-Kofahi, S., Khudairat, W., Al-Shibli, F., El Afandi, G. (2025). Assessing the Influence of Climate Extremes on the Cultivation of Rainfed Wheat (*Triticum Aestivum*) and Olive Trees (*Olea Europaea*) in Arid Regions. Earth Systems and Environment, https://doi.org/10.1007/s41748-025-00647-6.

Al-Kofahi, S. and Al-Khlaief, A. (2025). Assessment of spatial disparity of neighborhoods greenspace availability using integrated greenspace exposure indicators in an arid city. Urban Forestry & Urban Greening, Volume 103, 128589.

Al-Gharaibeh, M., **Al-Kofahi, S.,** Bakhit, H., Flory, S., Rosche, C. (2025). Toward eco-sustainable afforestation in arid lands: key lessons from a 23-year-old arboretum of native and non-native trees in Jordan. Restoration Ecology. http://doi.org/10.1111/rec.70178 10.1111/rec.70178

Abusmier, S., **Al-Kofahi, S.** (2025). Examining Land Use/Land Cover Dynamics in Zarqa Governorate Major Districts: Implications for Urban and Environmental Sustainability. Jordan Journal of Earth and Environmental Sciences, 16(1):1-10.

Jaradat, S., Bsoul, E., **Al-Kofahi, S.,** and Alkhatib, R. (2024). Growth, water relation and physiological responses of eggplant (*Solanum melongena* L.) under different olive mill waste water levels. Jordan Journal of Biological Sciences, 17(4).

Al-Kofahi, S., Sawalhah, M., & Abu Dkhineh, A. (2024). Vegetation Diversity and Composition in Relation to Different Grazing Intensity Levels in an Arid Environment in Jordan. African Journal of Range and Forage Science, 41, 1-12. Https://doi.org/10.2989/10220119.2024.2321606.

Sawalhah, M., Alshdaifat, M., **Al-Kofahi, S.,** Almasaeid, O. (2024). Enhancing Semi-Arid Ecosystem Resilience in Jordan Using Controlled Grazing – A Short and Long-Term Assessment. Journal of Ecological Engineering, 25(5):29-42. 5(5), 29–42. https://doi.org/10.12911/22998993/185354.

Ibbini, J., **Al-Kofahi, S.,** Davis, L.C., Alrousan, D., Elshebi, M. (2023). Investigating the Potential of Fusarium solani and Phanerochaete chrysosporium in the Removal of 2,4,6-TNT. Applied Biochemistry and Biotechnology. https://doi.org/10.1007/s12010-023-04735-z.

Othman, Y., Ayasrah, B., **Al-Kofahi, S.** (2023). Habitat Selection to Reintroduce Iris bismarckiana in Semi-Arid Environments. Diversity, 15, 957. https://doi.org/10.3390/d15090957.

Al-Kofahi, S., Al-Kafawin, A., Al-Gharaibeh, M. (2023). Investigating domestic gardens landscape plant diversity, implications for valuable plant species conservation. Environment, Development and Sustainability. DOI: 10.1007/s10668-023-03528-y.

Sawalhah, M., Othman, Y., Abu Yahya, A., **Al-Kofahi, S.**, Al-Lataifeh, F., Cibils, A. (2021) Evaluating the influence of COVID-19 pandemic lockdown on Jordan Badia rangelands, Arid Land Research and Management. 35:4, 483-495, DOI: 10.1080/15324982.2021.1921071

Gharaibeh, A., Shaamala, A., Obeidat, R., **Al-Kofahi, S.** (2020). Improving land-use change modeling by integrating ANN with Cellular Automata-Markov Chain model. Heliyon 6: E05092; https://doi.org/10.1016/j.heliyon.2020.e05092

Hatamleh, R., Jamhawi, M., **Al-Kofahi, S.** (2020). The Use of a GIS System as a Decision Support Tool for Municipal Solid Waste Management Planning: The Case Study of Al Nuzha District, Irbid, Jordan. Procedia Manufacturing 44 (2020) 189–196

Al-Kofahi, S., Gharaibeh, A., Bsoul, E., Othman, Y., St. Hilaire, R. (2019). Investigating domestic gardens' densities, spatial distribution and types among city districts. Urban Ecosystems, 22(3), 567-581. https://doi.org/10.1007/s11252-019-0833-7.

Sawalhaha, M., **Al-Kofahi, S.,** Othman, Y., Cibils, A. (2018). Assessing rangeland cover conversion in Jordan after the Arab spring using a remote sensing approach. Journal of Arid Environment, 157: 97-102.

Al-Hammouri, A., **Al-Kofahi, S.,** Ibbini, J., Abusmier, S., Sanogo, S. (2018). Effect of biofumigation by *Calligonum polygonoides*, dry olive leaves, and ash of olive leaves on chilli pepper growth and recovery of *Rhizoctonia solani*. Acta agriculturae Slovenica, 111(1):41-49.

Al-Kofahi, S., Hammouri, N., Sawalhah, M., Al-Hammouri, A. and Aukour, F. (2018). Assessment of the urban sprawl on agriculture lands of two major municipalities in Jordan using supervised classification techniques. Arabian Journal of Geosciences, 11(3): 1-12.

Al-Kofahi, S., Jamhawi, M. and Hajahjah, Z. (2018). Investigating the current status of Geospatial Data and urban growth indicators in Jordan and Irbid Municipality: Implications for Urban and Environmental Planning, Environment, Development and Sustainability Journal, 20(3): 1067-1083 [Doi: 10.1007/s10668-017-9923-y]

Aukour, F., Bani Hani, N., **Al-Kofahi S.,** Abu Smeir, S. (2018). The Effects of Biosolid Application on Water-Use Efficiency and the Growth Behavior of Sesbania sesban (L.) Merr in Arid Mediterranean Environments. Jordan Journal of Earth and Environmental Sciences, 9(3), 134-138.

Bani-Melhem, K., Al-Shannag, M., Alrousan, D., **Al-Kofahi, S.,** Al-Qudah, Z., and Al-Kilani, M. (2017). Impact of Soluble COD on Grey water Treatment by Electrocoagulation Technique. Desalination and Water Treatment, 89:101-110.

Al-Ghzawi, A., Juma'a, K., Al-Rawashdeh, I., **Al-Kofahi, S.,** and Bsoul, E. (2016). Diversity of herbaceous plant communities and Artemisia herba-alba Asso. at different governorates' open-lands in Jordan. Bulgarian Journal of Agricultural Sciences, 22(6): 897–905.

Bsoul, E., Jaradat, S., **Al-Kofahi, S.,** Al-Hammouri, A. and Alkhatib, R. (2016). Growth, water relation and physiological responses of three eggplant cultivars under different salinity levels. Jordan Journal of Biological Sciences, 9(2): 123-130.

Al-Kofahi, S., Steel C., VanLeeuwen D., St. Hilaire R. (2012). Mapping land-cover in urban residential landscapes of a desert city using Fine Resolution Imagery. Urban Forestry and Urban Greening Journal, 11/3: 291-303.

Al-Kofahi, S., St. Hilaire, R., VanLeeuwen, D., Zohrab, S. (2012). A water budget calculator created for residential urban landscapes in Albuquerque, New Mexico. Irrigation and Drainage Engineering Journal, 138:525-533.

Al-Kofahi, S., St. Hilaire, R. (2011). A water budget calculator created for residential urban landscapes using novel approaches. Irrigation Association: Innovations in Irrigation, November 6-8, 2011, San Diego, CA, USA.

Samarah, N., **Al-Kofahi, S.** (2008). Relationship of seed quality tests to field emergence of artificially aged barley seeds in the semiarid Mediterranean region. Jordan Journal of Agricultural Sciences, 4 (3): 217-230.

Samarah, N., **Al-Kofahi, S.** (2006). Effect of aging on seedling emergence and establishment of barley under soil moisture stress. Seed Research, 34 (2): 128-133.

PUBLISHED ABSTRACTS

Sawalhah, M. N., Othman, Y.A., Abu Yahya, A., **Al-Kofahi, S.,** Al-Lataifeh, F.A. and Cibils, A.F. (2024). Effects of Pandemic Lockdown on Jordan Rangelands Vegetation. Abstract. 77th Annual Society for Range Management meeting, Reno, Nevada.

Al-Kofahi, S. (2017). Assessment of the spatial and temporal urban expansion on agricultural lands of major cities of Jordan using GIS and ENVI classification technique. National Research Center. International conference on "Advanced Technologies and their Applications in Agriculture". Cairo, Egypt. March, 27-29, 2017. P.75.

Al-Kofahi, S., Steele, C., VanLeeuwen, D., Samani, Z., Hilaire, R., (2011). Using the knowledge of residential landscape vegetation spatial variability to support water conservation. In: American Water Resources Association: Annual Water Resources conference. Albuquerque, New Mexico, USA, November 7-10, 2011, P.7.

Al-Kofahi, S., St. Hilaire, R., Samani, Z., Bean, M., and Santon, L. (2010). Creating a landscape water budget calculator for a desert city. In: American Society for Horticulture Science Conference. Palm Desert, California, USA, August 2-5, 2010. HortScience, 45(8): S262.
Invited poster to the 51st International Plant Propagation Society, September 8-11, 2010 Bellingham, WA, USA.

Al-Kofahi, S., Steele, C., VanLeeuwen, D., and St. Hilaire, R. (2010). Mapping land cover in urban residential landscapes using fine resolution imagery and object-oriented classification.
Also In: American Society for Horticulture Science Conference. Palm Desert, California, USA, August 2-5, 2010. HortScience, 45(8): S93.

Al-Kofahi, S., Garfin, G., Fraisse, C., Bean, M., St. Hilaire, R. (2009). Establishing a decision making tool to reduce drought vulnerability in residential urban landscapes. In: American Society for Horticulture Science Conference. St. Louis, Missouri, USA, 25-28 July, 2009. HortScience, 44: 1162.

RECENT UNIVERSITY SERVICE & ADMINISTRATIVE COMMITTEES

Chair, Student Training Committee, Department of Land Management & Environment.
Chair, Faculty Appointments Review Committee, Prince El-Hassan Bin Talal Faculty for Natural Resources and Environment.
Chair, Laboratory Accreditation Committee for Water Analysis, Prince El-Hassan Bin Talal Faculty for Natural Resources and Environment.
Chair, Student Clubs Election Committee

Member, University Deans Council, The Hashemite University.
Member, Competency Exam Committee, Agricultural Sciences Program, Jordanian Universities Accreditation & Quality Assurance Commission, Amman, Jordan.
Member, University-Level Grading Committee
Member, University-Level Public Safety and Emergency Committee
Member, Sustainable Water Resources Management Committee in the Badia **/** Higher Council for Science and Technology, Amman, Jordan.
Participant, Educational Exchange Week, University of Jaén, Spain (Erasmus+ Program, EU-funded).
Participant, Workshop on Launching the "Master's in Climate Change and Food Security" Project, University of Jordan, in collaboration with Jordan University of Science and Technology, Mutah University, and Jerash University.
Participant, "Zero Hunger by 2030" Workshop, Amman, Jordan, under the patronage of H.R.H. Prince El-Hassan Bin Talal.
Member, Department Council, Department of Land Management & Environment.
Member, University & Community Engagement Committee.
Member, Graduate Studies Committee, Department of Land Management & Environment.
Member, Scientific Research Committee, Department of Land Management & Environment.
Member, Curriculum Planning Committee, Department of Land Management & Environment.
Member, University-Wide Community Engagement Committee.

SELECTED ATTENDED WORKSHOPS & PARTICIPATIONS:

Nov. 20, 2025	Participant, National Dialogue on Financing Biodiversity to Support Jordan's Biodiversity Conservation, Ministry of Environment & UNDP, Amman, Jordan.
Jul. 6-7, 2025	Participant, Climate Change and Health in the Arab Region (CCHAR & ICE-MENA) Conference, Amman, Jordan.
Jul. 2025	Member, Scientific and Organizing Committee, Climate Change and Health in the Arab Region (CCHAR & ICE-MENA) Conference, Amman, Jordan.
Oct. 2, 2024	Participant, Beyond Boundaries: AI Transforming the WEFE Nexus, October 14 – 15, 2024 Amman - Jordan
Mar. 8, 2023	Participant, Land Degradation Neutrality Goals, Royal Scientific Society, Amman, Jordan
Aug. 2021	Participant, HEINNOVATE Self-Assessment under "JUICEE project" Germany.
May 23, 2013	Invited speaker in the Seminar Event organized by the College of Biology /

University of Bahrain, Kingdom of Bahrain.

Oct. 8-9, 2018 Participant, Workshop on the Use and Application of the WANA System, West Asia and North Africa Institute (WANA) in partnership with the International Union for Conservation of Nature (IUCN-ROWA), under the patronage of H.R.H. Prince El-Hassan Bin Talal.

Apr. 14, 2017 Speaker at the Workshop on Remote Sensing and GIS Applications in Natural Resources Management, Faculty of Natural Resources and Environment, The Hashemite University, Zarqa, Jordan.

May 9, 2015 National Conference for the National Master Plan to Rehabilitate the Jordan River Valley. Organized by the Ministry of Water and Irrigation, Royal Haskoning DHV, EcoPeace Middle East, SIWI, GNF, and EU. Crown Plaza Hotel, Dead Sea, Jordan.

Oct. 20-21 2015 International Specialized Conference: The Use of Geospatial Technologies for City Sustainable Management. Organized by Jordan University of Science and Technology. Dead Sea Spa Hotel, Dead Sea, Jordan.

SELECTED FUNDED RESEARCH / PROJECTS

- Establishment of Jordan's National Seeds Bank – Granted: JD 750,000
- Investigating the Profitability and Limitations of Vegetable Production in the Vicinity of The Hashemite University – Granted: JD 144,000
- Investigating Biodiversity and Residential Landscape Biodiversity in Urban Areas – Granted: JD 26,000
- Advanced Sensing Technologies to Predict Nutritional Status of Selected Field Crops – Granted: JD 56,000
- Partner in Geodesy and Geoinformatics for Sustainable Development in Jordan (GEO4D) / Erasmus+ Project – Granted: JD 136,712
- Potential of AquaSource for Jordan: Alleviating Plant Stress from Water Shortage (with Ecotechnology LLC, Yerevan, Armenia) – Granted: JD 25,000.

RESEARCH IN PROGRESS

- Advanced sensing technologies to predict nutritional status of selected field crops.
- Investigating biodiversity and seasonal urban greenspace exposure in urban areas.
- Decoding Climate Extremes with Entropy: A Data-Driven Assessment of Circulation Pathways and Future Scenarios.

SUPERVISION OF POSTGRADUATE STUDENTS

- Assessing Implementation of Amman's Bus Rapid Transit through Transportation Sustainability Indicators
  Student: Maqbuleh Abu Hazeem

Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, January 2025

- Assessment of Urban Greenspace Availability to Identify Potential Sites for New Public Greenspaces Using MCA Method
  Student: Aida Al-Khlaief
  Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, November 2024

- Wheat and Olives Production Responses to Climate Extremes in an Arid Area Using CMIP5 Model
  Student: Walaa Khudairat
  Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, September 2024

- Physiological and Yield Responses of Wheat and Barley Crops in Relation to Different Levels of Nutrient Application
  Student: Roaa Almrahleh
  Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, December 2023

- Study and Determination of Regional Climate Models Compatible with the Environment of the Amman and Zarqa Basin
  Student: Asma'a Al-Zboon
  Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, August 2022

- Investigating Plant Cover Biodiversity in Protected and Non-Protected Semi-Arid Mediterranean Ecosystems
  Student: Ahmad Abu-Dkhinah

Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, April 2020

- Mapping Land Cover and Biodiversity in Residential Landscapes in Amman City
  Student: Amani Kafawin
  Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Land Management and Environment, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, September 2019

- Evaluation of the Seed Vigor of Jojoba Seeds of Different Ages and Seed Sizes and Feasibility of Jojoba Plantation in Jordan
  Student: Mod Noor
  Awarded Master's degree in Climate Change and Arid Land Sustainability, Deanship of Graduate Studies; Department of Land Management and Environment, Natural Resources and Environment College, February 2018

- Improving Municipal Solid Waste Management by Introducing Geographic Information System (A Case Study in Irbid, Jordan)
  Student: Heba Nsair
  Awarded Master's degree in Architectural Engineering, Faculty of Graduate Studies, Jordan University of Science and Technology, February 2017

A COMMITTEE MEMBER IN POSTGRADUATE STUDENTS DEFENSE

- Effect of Essential Oils and Aqueous Leaf Extract from Three Eucalyptus Species on Seed Germination and Growth of the Invasive Horseweed (Erigeron canadensis L.)
  Student: Ghaidaa Almomani, M.Sc. in Plant Production / Horticulture, Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, August 28, 2025
- Contributions of Urban Agriculture Initiatives to Cities' Sustainability and Challenges: Case of Amman
  Student: Sondos Al-Momani, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, November 2024
- Managing Urban Growth in Amman: Evaluating Containment Strategies and Future Directions

Student: Ghufran Khalil, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, September 2024

- Exploring the Impact of Continuous Growth and Proposed Development on the Future Urban Sprawl Pattern Using AI Methods
  Student: Mohammad Al-Rabee', Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, May 2024
- The Effect of Drought-Tolerant Bacteria Isolated from Harsh Soils as Plant Growth-Promoting Rhizobacteria (PGPR) on Barley Growth, Yield, and Yield Components
  Student: Bushara Al-Mashaqbah, Master's in Biology, Faculty of Graduate Studies, The Hashemite University, Zarqa, Jordan, 2024
- Drought Monitoring and Risk Assessment Using Geomatics Techniques: Case Study of Al-Karak Governorate
  Student: Khawla Kloub, Master's in Geomatics Engineering, Faculty of Graduate Studies, Al-Balqa' Applied University, Salt, Jordan, January 2024
- Assessing the Impacts of Land Use Regulation on Access to Food Services in Rural Areas: The Case of Nu'ayyimah, Jordan
  Student: Areen Odat, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2024
- Vegetation Response to Controlled Grazing under Semi-Arid Climate Conditions: Short- and Long-Term Assessment
  Student: Mustafa Alshdaifat, Master's in Climate Change and Arid Land Sustainability, Land Management and Environment / Faculty of Graduate Studies, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, Zarqa, Jordan, 2023
- Land Use Detector Platform and Designing Interactive Map
  Student: Amal Ibrahem Al-Azizi, Master's in Geomatics Engineering, Faculty of Graduate Studies, Al-Balqa' Applied University, Salt, Jordan, 2022
- Sheep Performance and NDVI Relationship Under Arid Conditions
  Student: Oday Mohammad Ali Almasaeid, Master's in Climate Change and Arid Land Sustainability, Land Management and Environment / Faculty of Graduate Studies, Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, Zarqa, Jordan, 2022
- Evaluating the Use of Artificial Neural Networks for Temporal Climate Change Modeling at Amman-Zarqa Basin
  Student: Aseel Ahmad Abu Shawish, Master's in Climate Change and Arid Land Sustainability, Land Management and Environment / Faculty of Graduate Studies,

Prince El Hassan Bin Talal Faculty for Natural Resources and Environment, The Hashemite University, Zarqa, Jordan, 2022

- Development of an Agricultural Drought Monitoring Indicator for Semi-Arid Environments Using Multi-Source Remote Sensing Data and Machine Learning Techniques
  Student: Khaled Faisal Alkaraki, Master in Applied Geoinformatics, Department of Earth and Environmental Sciences / Faculty of Graduate Studies, Yarmouk University, Irbid, Jordan, 2022
- Understanding the Relationship Between Natural Habitat Loss and Urban Development in Irbid Governorate
  Student: Tariq Naser Al-Dela'a, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2022
- Improving the Capability of Integrated Cellular Automata-Markov Model to Simulate Future Urban Growth Using Artificial Neural Network
  Student: Abdulrazzaq Hasan Mohammed Shaamala, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2019
- GIS-Based Approach for Spatial Planning: Evaluating Site Suitability for Wind-Energy Potential in Jordan
  Student: Deema Al-Shboul, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2019
- The Use of Neural Networks and Suitability Analysis for Assessing Urban Growth for the City of Irbid
  Student: Lamees Mahmoud Kana'an, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2017
- Investigating Rehabilitated Streets in Amman: Measuring Urban Design Qualities and Walkability
  Student: Iqbal Jalal Batayneh, Master's in Urban Planning and Studies, Department of Urban Planning, College of Architecture and Design / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2017
- Land Use/Land Cover Change Detection in Northern Jordan Using Remote Sensing
  Student: Maha Mahmoud Ghuzlan, Master's in Natural Resources and Environment, Department of Natural Resources and Environment, College of Agriculture / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan, 2017
- Water Disinfection by Solar Energy

Student: Esra'a Ahmed Al-Turk, Master in Climate Change and Arid Land Sustainability, Department of Land Management and Environment, College of Natural Resources and Environment / Faculty of Graduate Studies, The Hashemite University, Zarqa, Jordan, 2016

- A Theoretical Study of Municipal Solid Waste Characterization in Jordan and Its Economic Feasibility
  Student: Mahmoud Ibrahim Al-Shorman, Master in Environmental Science and Management, Department of Water Management and Environment, College of Natural Resources and Environment / Faculty of Graduate Studies, The Hashemite University, Zarqa, Jordan, 2015.

ATTENDED SPECIALIZED COURSES

Sep. 2-13, 2019	Engineering Applications of Geomatics, Politecnico di Milano, Italy – in the frame of the GEO4D Erasmus+ project
Jun. 18-29, 2018	GIS Training Course, Politecnico di Milano, Italy – in the frame of the GEO4D Erasmus+ project
July, 2012	Piloting Climate Change Adaptation to Protect Human Health in Jordan: Adaptation through Safe Use of Treated Wastewater, World Health Organization, July 9–11
December, 2011	Landscape Design Using AutoCAD, Agriculture Association – 10-hour course
February, 2011	Cartographic Design Using ArcGIS 9, ESRI Foundation – 21-hour course
July, 2010	Interdisciplinary Modeling of Water Issues and Changing Climate, University of Nevada, Reno – 3-credit regular summer class
March, 2010	Working with Rasters in ArcGIS Desktop, ESRI Foundation – 9-hour course
October, 2009	Exploring ENVI, ITT Visual Information Solutions – 4-day training class
February, 2009	Protecting Human Research Participants, National Institutes of Health Office of Extramural Research, NMSU
February, 2009	ArcGIS Desktop Course, ESRI Foundation – 24-hour course

AWARDS AND HONORS

2011	Honors Graduate Certificate from New Mexico State University Graduate School in recognition of outstanding academic success and maintaining the highest graduate grade point of

	4.0.
2010-Now	Research Member in the Climate Assessment of the Southwest / University of Arizona.
2010-2011	Merit-based Enhancement Award offered from the Graduate School for outstanding graduate assistant, NMSU.
2010-2011	Wilson Marvin Award offered from Plant and Environmental Sciences Dept., College of Agriculture, NMSU.
2009-2010	Melton D. Billy Award offered from Plant and Environmental Sciences Dept., College of Agriculture, NMSU.
2008-2009	Herrera E. A. Award offered from Plant and Environmental Sciences Dept., College of Agriculture, NMSU.
2008-2011	Internship and Research Assistantship on a PhD Project Funded from the National Oceanic and Atmospheric Administration (NOAA), Climate Assessment of Southwest (CLIMAS), and Southeast Climate Consortium.
2007-Now	A member in the Jordanian Agriculture Engineering Association.

REFERENCES

- Professor Rolston St. Hilaire
  Department of Plant and Environmental Sciences, New Mexico State University
  Email: rsthilai@nmsu.edu
- Professor Caiti Steele
  Jornada Experimental Range, USDA, New Mexico State University, Las Cruces
  Email: caiti@nmsu.edu
- Professor Dawn VanLeeuwen
  Agricultural Experiment Station Statistician, New Mexico State University
  Email: vanleeuw@nmsu.edu
- Professor Nezar Husein Samarah
  Department of Plant Production, Faculty of Agriculture, Jordan University of Science and Technology, Irbid, Jordan
  Email: nsamarah@just.edu.jo