

Volume (10)

Issue (1)

May 2025

Dhul-Qidah 1446

J N B A

Journal of the North for Basic and Applied Sciences

Peer-Reviewed Scientific Journal

Northern Border University www.nbu.edu.sa

> p- ISSN: 1658 - 7022 e- ISSN: 1658 - 7014



IN THE NAME OF ALLAH
THE MOST GRACIOUS, THE MOST MERCIFUL



Journal of the North for Basic and Applied Sciences (JNBAS)

Peer-Reviewed Scientific Journal

Published by

Translation, Authorship, and Publishing Center

Northern Border University

Volume (10) - Issue (1)

May 2025 - Dhul-Qidah 1446

Website & Email

www.nbu.edu.sa
s.journal@nbu.edu.sa

p-ISSN: 1658 - 7022 e- ISSN: 1658 - 7014

Editor-in-Chief

Prof. Mohammed Abdulaziz Tashkandi

Professor, Mechanical Engineering

Editorial Board Members

Dr. Muflih Battah Alhazmi

Associate professor, Mathematics

Dr. Fahdah Ayed Alshammari

Associate professor, Biology

Dr. Munirah Mutlaq Aljuaid

Associate professor, Mathematics

Dr. Ali El-Said El- Rayyes

Associate professor, Chemistry

Dr. Tarek Ibrahim Alanazi

Assistant professor, Physics

Journal of the North for Basic and Applied Sciences (JNBAS)

About the Journal

The Journal of the North is concerned with the publication of original, genuine scholarly studies and researches in Basic and Applied Sciences in Arabic and English. It publishes original papers, review papers, book reviews and translations, abstracts of dissertations, reports of conferences and academic symposia. It is a biannual publication (May and November).

Vision

The journal seeks to achieve leadership in the publication of refereed scientific papers and rank among the world's most renowned scientific periodicals.

Mission

The mission of the journal is to publish refereed scientific researches in the field of Basic & Applied Sciences according to well-defined international standards.

Objectives

- 1. Serve as a scholarly academic reference for researchers in the field of Basic & Applied Sciences.
- 2. Meet the needs of researchers, publish their scientific contributions and highlight their efforts at the local, regional and international levels.
- 3. Participate in building a knowledge community through the publication of research that contributes to the development of society.
- 4. Cover the refereed works of scientific conferences.

Terms of Submission

- 1. Originality, innovation, and soundness of both research methodology and orientation.
- 2. Sticking to the established research approaches, tools and methodologies in the respective discipline.
- 3. Accurate documentation.
- Language accuracy.
- 5. The contribution must be unpublished or not submitted for publication elsewhere.
- 6. The research extracted from a thesis/dissertation must be unpublished or not submitted for publishing elsewhere and the researcher must indicate that the research submitted for publishing in the journal is extracted from a thesis/dissertation.

Correspondence

Editor-in-Chief

Journal of the North for Basic and Applied Sciences (JNBAS), Northern Border University, P.O.Box 1321, Arar 91431,

Kingdom of Saudi Arabia. Tel: +966(014)6615499 Fax: +966(014)6614439

email: s.journal@nbu.edu.sa Website: www.nbu.edu.sa

Subscription & Exchange

Translation, Authorship, and Publishing Center, Northern Border University, P.O.Box. 1321, Arar 91431, Kingdom of Saudi Arabia.





PUBLICATION INSTRUCTIONS FOR AUTHORS

Submission Guidelines

- 1. Manuscript must not exceed 35 pages of plain paper (A4).
- 2. Manuscript must have a title and an abstract in both Arabic and English on one page; the abstract should not be more than 250 words. The manuscript should include, in both languages, keywords that indicate the field of specialization. The keywords are written below each summary and should not be more than six.
- 3. The author(s) name(s), affiliation(s) and address(es) must be written immediately below the title of the article, in Arabic and English.
- The Arabic manuscript is typed in Simplified Arabic, in 14-font size for the main text, and 12-font size for notes.
 The English manuscript is typed in Times New Roman, in 12- font size for the main text, and 9-font size for notes.
- 6. The manuscript is typed only on one side of the sheet, and line spacing should be single. Margins should be 2.5 cm (or 1.00 inches) on all four sides of the page.
- 7. The manuscript must have the following organization:
 - **Introduction:** It should indicate the topic and aims of the research paper, and be consistent with its ideas, information and the established facts. The research problem(s) and importance of the literature review should also be introduced.
 - **Body:** The manuscript body includes all necessary and basic details of research approach, tools and methods. All stated information should be arranged according to priority.
 - **Findings and Discussion:** Research findings should be clear and brief, and the significance of these findings should be elucidated without repetition.
 - **Conclusion:** It is a brief summary of the research topic, findings, recommendations and suggestions.
- 8. Figures, diagrams and illustrations should be included in the main text and consecutively numbered and given titles, with explanatory notes beneath them.
- 9. Tables should also be included in the main text, consecutively numbered and given titles at the top, with explanatory notes below.
- 10. Footnotes should be added at the bottom of each page, when necessary. They are to be indicated by numbers or asterisks, in 12-font size for Arabic and 9-font size for English.
- 11. The Journal of the North does not publish research and measurement tools (instruments). However, they must be included in the submission(s).
- 12. Citations must follow the American Psychological Association (APA) reference style in which both the author's name and year of publishing are mentioned in the main text, i.e. (name, year). Numbering the references inside the main text and adding footnotes are not allowed.
 - Researchers' documentation must be as follows:
 - For single author, the author's family name, followed by a comma, and the publishing year, such as (Khayri, 1985).
 - Page numbers are indicated in the main text in case of quotations, such as (Khayri, 1985, p. 33).
 - If a manuscript has two authors, they must both be cited as shown previously, e.g. (AL-Qahtani & AL-Adnani, 1426 H).
 - If there are multiple (more than two) authors, their family names must be mentioned the first time only, e.g. (Zahran, Al-Shihri, & Al-Dusari, 1995); if the researcher is quoting the same work several times, the family name of the first author followed by "et al." [for papers in English] and by "وَ الْحَرُونَ" [for papers in Arabic] must be used, e.g. (Zahran et al., 1995) / (1995) /
- 13. The bibliography, list of all the sources used in the process of researching, must be added in alphabetical order using the author's last name according to the APA reference style (6th edition) in 12-font size for Arabic and 9-font size for English.

The bibliography should be organized as follows:

Citation from books:

Citation from a one-authored book:

Shotton, M. A. (1989). Computer education? A study to computer dependency . London, England: Taylor & Francis.

Citation from a book of more than one author:

Timothy, N., Stepich, D., & James, R. (2014/1434 H) *Instructional technology for teaching and learning.* Riyadh, Kingdom of Suadi Arabia: University of King Saud Publications.

Citation from Periodicals

Al Nafaa, A. H. (1427 H). Effect of driving off—road on wild vegetation parks: A study in environmental protection, in the center of the Kingdom of Saudi Arabia. *Saudi Journal of Life Sciences*, 14(1), 35-72.

Citation from M.A. or Ph.D. Thesis:

AlQadi, I. A. (1429 H). *Natural Plants in a Coastal Environment between Rassi Tanoura and Elmalouh in the Eastern Region: A Study in Botanical Geography and the Protection of Environment.* Unpublished Ph.D. Dissertation, College of Arts for Girls, Dammam, Kingdom of Suadi Arabia: King Faisal University.

Citation from Internet References:

Citing an online book:

Almazroui, M. R. & Madani, M. F. (2010). *Evaluation of performance in Higher Education Institutions*. Digital Object Identifier (doi:10.xxxx/xxxx-xxxxxxx-x), or the Hypertext Transfer Protocol (http://www...), or the International Standard Book Number (ISBN: 000-0-00-000000-0) must be mentioned.

Citing an article in a periodical:

Almadani, M. F. (2014). The definition of debate in reaching consensus. *The British Journal of Educational Technology, 11*(6), 225-260. Digital Object Identifier (doi:10.xxxx/xxxx-xxxxxxxxxx) or the Hypertext Transfer Protocol (http://onlinelibrary.wiley.com/journal/10.1111), or the International Standard Serial Number of the journal (ISSN: 1467- 8535) must be mentioned.

14. It is the researcher's responsibility to translate into English the Arabic bibliography.

Example:

- Al-Gabr, S. (1991). The evaluation of geography instruction and the variety of its teaching concerning the experience, nationality, and the field of study in intermediate schools in Kingdom of Saudi Arabia (in Arabic). Journal of King Saud University- Educational Sciences, 3(1), 143-170.
- 15. Numerals should be the original Arabic numbers (0, 1, 2, 3 ...) in the manuscript.

Required Documents

Researchers are required to submit the following:

1. An electronic copy of their submissions in two formats: Microsoft Word Document (WORD) and Portable Document Format (PDF), to be sent to the following email:

s.journal.nbu@gmail.com

æ

s.journal@nbu.edu.sa

- The researcher's CV, including his/her full name in Arabic and English, current work address, email, and academic rank.
- 3. The researcher must fill out and submit the application for publishing in the Journal of the North, along with the Pledge Statement that his/her submission has not been published before or has not been submitted for publishing elsewhere.

NB

- 1. The submissions received by the Journal of the North will not be returned whether they are published or not.
- 2. The published papers reflect only the author's points of view.
- 3. All accepted manuscripts devolve their property to the Journal of the North for Basic and Applied Sciences (JNBAS).

Journal of the North for Basic and Applied Sciences (JNBAS)

p-ISSN: 1658- 7022 e-ISSN: 1658- 7014

Volume (10) - Issue (1)

May 2025 - Dhul-Qidah 1446

CONTENTS

•	chemic Encephalopathy: A Study at Atbara Teaching Hospital NICU, Sudan	LS-
	Ashraf Abdelrhman Elbashir Elmdni	1
•	A Bibliometric Analysis of Probability and Statistics Research in Saudi Arabia	
	Zakariya M. S. Mohammed	9
•	Mechanisms for Transition Towards Sustainable Developmental Housing in Saudi Arabia	
	Waleed S. Alzamil	18
•	Impact of Manufactured Waste Sand on the Compressive Strength of Concrete	
	Riyadh Alturki	29
•	Assessment of Nutrition Habits as Related to Osteoporosis in Al Baha Region. Kingdom Saudi Arabia.	
	Hala Mohamed Ali Wahba	41

