Natalie B. Welcome

Gilbert, AZ 85295 | nwelcom@asu.edu | 480.727.1238

Education

Ph.D. in Curriculum & Instruction & M.A. in Mathematics Texas Tech University, Lubbock, TX | *January 2013 – August 2016*

Dissertation**:** *Matriculate and remediate: An alternative approach to math remediation at a 2-year college* | Ch air: Dr. Heather Greenhalgh-Spencer

M.A. in Teaching Liberty University, Lynchburg, VA | *October 2008 – May 2010*

B.S. in Industrial Engineering North Carolina A&T State University, Greensboro, NC | *August 1995 – May 2000*

Academic Appointments & Teaching Experience

Arizona State University (Mesa, AZ)

Instructor of Mathematics | *August 2017 – Present*

- Instructed a diverse range of undergraduate mathematics courses—including College Algebra, Precalculus, Calculus, Business Mathematics, and Introductory Statistics—within the College of Integrative Sciences and Arts.
- Delivered high-quality content across multiple instructional formats, optimizing student engagement across face-to-face, fully online, and hybrid modalities.
- Designed and produced original asynchronous curriculum materials, including self-produced instructional videos seamlessly hosted and managed on Canvas.
- Partnered closely with the Office of Disability Resources to implement optimal student accommodation, ensuring regulatory compliance and supporting successful course completion for all learners
- Maintained a dedicated schedule of regular office hours and individualized mentorship appointments to foster student persistence and academic achievement.

Iḷisaġvik College (Barrow, AK)

Assistant Professor of Mathematics | *May 2014 – May 2017*

- **Designed and executed** rigorous foundational mathematics curricula tailored to support the unique academic goals of a diverse student population.
- **Facilitated** student retention and achievement through deliberate pedagogical adjustments, targeted academic advising, and individualized student intervention strategies.

- **Served** on institutional and departmental committees to advance academic standards and support college-wide accreditation initiatives.

Instructor of Mathematics | August *2013 – May 2014*

- **Delivered** undergraduate mathematics instruction to students in small classroom settings.
- **Managed** comprehensive course assessments across core developmental math.

Distance Education Coordinator & MOODLE Administrator | *May 2011 – August 2013*

- **Spearheaded** the institutional administration of the MOODLE Learning Management System (LMS), ensuring optimal system uptime and digital course accessibility.
- **Trained and supported** instructional faculty in online course design, asynchronous teaching methodologies, and digital accessibility compliance.
- **Managed** distance education logistics and technical troubleshooting protocols to streamline the remote learning experience for students and staff.

University of Phoenix (Phoenix, AZ)

Adjunct Math Faculty (Online) | *December 2010 – October 2016*

- **Facilitated** fully online College Algebra courses, adhering strictly to established institutional curricula while providing personalized academic support.
- **Cultivated** active digital learning environments by moderating asynchronous discussion boards and delivering detailed, formative feedback on assessments.
- **Participated** regularly in professional development workshops to integrate emerging online pedagogy and instructional technologies.

Guilford Technical Community College (Jamestown, NC)

Math Adjunct | *August 2010 – August 2011*

- **Instructed** face-to-face developmental mathematics courses, supporting non-traditional and first-generation student populations in foundational skill acquisition.
- **Integrated** external digital learning modules—including MyMathLab and MOODLE—to supplement in-class instruction and streamline assignment tracking.

WSFC Schools / Lexington City Schools (WS, NC)

Math Teacher | *August 2006 – June 2010*

- **Delivered** comprehensive middle and high school mathematics instruction, managing daily lesson design for multiple tiers of Algebra, Precalculus, and Integrated Mathematics.
- **Designed and implemented** an original curriculum framework for Technical Mathematics I and II to bridge practical application with core mathematical theory.

- **Prepared** a diverse student demographic for rigorous state examinations, developing targeted scaffolding strategies for second-language learners and students with specialized accommodation needs.

Publications & Presentations

Peer-Reviewed Journal Articles & Proceedings

Serhan, D., & **Welcome, N. B.** (2026). Students' perceptions of using the AI tutoring tool "Tutorbot" in the mathematics classroom. *International Journal of Studies in Education and Science*, *7*(3), 329–341. https://ijses.net/index.php/ijses/article/view/6972

Serhan, D., & **Welcome, N. B.** (2025). The integration of the Inscribe Virtual Community in the Online Mathematics Classroom. *Proceedings of IHSES 2025– International Conference on Humanities, Social and Education Sciences*, 59-67.

Serhan, D., & **Welcome, N. B.** (2024). Integrating ChatGPT in the Calculus Classroom: Student Perceptions. *International Journal of Technology in Education and Science*. *8*(2), 325–335. doi.org

Serhan, D., & **Welcome, N. B.** (2023). Online Exam Proctoring Services: Students' Perceptions of Privacy and Equity. *Proceedings of International Conference on Social and Education Sciences (IConSES)* (Las Vegas, NV), 1, 146-155.

Serhan, D., & **Welcome, N. B.** (2023). Adaptive Learning: Students' Perceptions of Equity and Inclusion. In E. Langran, P. Christensen & J. Sanson (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference*.

Conference Presentations

Welcome, N. B. (2025). The integration of the Virtual Community InScribe in the online mathematics classroom. Paper presentation at the *International Conference on Humanities, Social and Education Sciences*.

Serhan, D., & **Welcome, N. B.** (2024). Integrating ChatGPT in the Calculus Classroom: Student Perceptions. Paper presentation at *The Arizona Women's Symposium in Mathematics (AWsiM)*.

Serhan, D., & **Welcome, N. B.** (2024). Integrating ChatGPT in the Calculus Classroom: Student Perceptions. *International Journal of Technology in Education and Science*, 8(2), 325–335. doi.org *(AWsiM)*.

Serhan, D., & **Welcome, N. B.** (2022). Diversity and Inclusion: Incorporating History into the Mathematics Classroom. Research paper presented at the *International Conference on Research in Education and Science (ICRES)*.

Welcome, N. B. et al. (2019, October). The Alaskan Arctic: Integrating Iñupiat knowledge and culture with Western science education and research practices. Paper presentation at the *Society for the Advancement of Native Americans and Chicanos in Science Conference*, Honolulu, HI.

Welcome, N. B. (2016, February). An alternative approach to remediation at a tribal college. Paper presentation at the *Southwest Educational Research Association Conference*, New Orleans, LA.

Welcome, N. B. (2013, March). Providing asynchronous solutions for math remediation needs. Project presentation at the *Department of Education Project Directors Meeting*, Washington, D.C.

Welcome, N. B. (2011, February). Developing an online math course. Project presentation at the *Alaska Society of Technology in Education (ASTE)*, Anchorage, AK.

Institutional Service

Arizona State University

- **Secretary**, Faculty Association (2017 – Present) | *Recorded and maintained formal meeting minutes and attendance records.*
- **Committee Member**, Inclusion Committee (2021 – Present) | *Organized and facilitated events promoting faculty-to-faculty and faculty-to-student engagement, including socials and targeted networking meetings.*

Iḷisaġvik College

- **Division Chair**, Liberal Arts Division (2014 – 2017) | *Facilitated division meetings, maintained advisory committees, oversaw degree maintenance, and managed program assessment reporting.*
- **Committee Chair**, Academic Council (2014 – 2016) | *Provided oversight for all college-wide curricula and academic policies. Facilitated the successful review and approval process for the dental hygiene therapist program.*
- **Committee Member**, Accreditation Committee (2015 – 2017) | *Monitored accreditation policy updates and coordinated institutional actions required to maintain college accreditation.*
- **Committee Member**, Student Orientation Committee (2012 – 2017) | *Spearheaded the grass-roots design, launch, and seasonal execution of a sustainable, comprehensive student orientation program.*

Professional Skills & Certifications

Technical & Pedagogical Skills

- **Course Management Systems:** Canvas, Moodle, Blackboard
- **Mathematical Software & Learning Platforms:** MyMathLab, MyOpenMath, WebAssign, Edfinity
- **Distance Education Technologies:** Video Teleconferencing, Blackboard Collaborate, Video Production, AI Instructional Technology
- **Productivity:** Microsoft Office Suite (Word, Excel, PowerPoint, Outlook)

Certifications Formerly Obtained

- Copyright Training Certificate – University of Phoenix (2014)
- Online Instructor Certification – University of Phoenix (2012)
- Faculty Trainer Certification – Iḷisaġvik College (2012)
- Foster Parent Certification – State of North Carolina (2011)
- Waste Management Certification – North Carolina A&T State University (2000)

Community & Volunteer Service

- **Volunteer**, Young Lives, AZ (2023 – Present) | *Collaborate with a local team to organize biweekly development and wellness activities supporting teenage parents.*
- **Secretary**, Lions Club of Barrow, AK (2015 – 2017) | *Maintained club records, coordinated scholarship funding distributions for local high school students, and supported community health events.*
- **Secretary**, Imagination Library of Barrow, AK (2015 – 2017) | *Managed administrative operations for the local chapter, promoting early childhood literacy (ages 0–5) by facilitating free book distributions and educational parental workshops.*

References

- **Derar Serhan** Professor of Mathematics, Arizona State University
  Phone: 480-577-5286
- **Durgesh Sharma** Professor of Information Technology, Arizona State University
  Phone: 480-351-9425
- **Linda Nicholas-Figueroa** Assistant Professor of Science, Iḷisaġvik College
  Phone: 410-812-0534