

Josh Daniel Brooks

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Education

Master of Science in Mathematics (M.S.); East Tennessee State University, Johnson City, TN; Advisor: Dr. Debra Knisley (2012); Thesis Title: $(2,r)$ -regular graphs and their network properties

Bachelors of Science in Mathematics (B.S.); King College, Bristol, TN; Advisor: Dr. Andrew Simoson; Magna Cum Laude (2010)

Teaching Experience

- 2018 – Present Instructor of Mathematics, Mathematics Department; Virginia Tech
- Courses Taught: MATH 1225 Calculus of a Single Variable and MATH 1226 Calculus of a Single Variable.
- Prepared and performed lectures. Duties included handling all administrative responsibilities, such as upload of grades, and preparation of graded materials (homework, quizzes, and tests).
- 2017 – 2018 Adjunct Faculty – MATH 3300 History of Mathematics, MATH 2120 Differential Equations, MATH 2510 Discrete Mathematics, MATH 2910/3910 Cryptology
Hiwassee College
- Prepared and performed lectures. Duties included handling all administrative responsibilities, such as upload of grades, and preparation of graded materials (homework, projects, quizzes, and tests). Advise math and business students.
- 2013 – 2017 Assistant Professor of Mathematics, Math/Science Division
Hiwassee College
- Courses Taught: DSM 0970 Prealgebra, MATH 1130 College Algebra, MATH 1530 Statistical Reasoning, MATH 1630 Finite Mathematics, MATH 1730 Precalculus, MATH 1830 Basic Calculus, MATH 1910 Calculus I, MATH 1920 Calculus II, MATH 2110 Calculus III, MATH 2120 Differential Equations, MATH 2910/3910 Cryptology, and MATH 3300 History of Mathematics
- Prepared and performed lectures. Duties included handling all administrative responsibilities, such as upload of grades, and preparation of graded materials (homework, projects, quizzes, and tests). Advise math and science students.
- 2014 – 2017 Tutor – Teen Center Unit
Boys and Girls Club of the Monroe Area
- Individual/group tutoring for middle and high school students in the areas of mathematics, English, science and history.

- 2013 – 2014 Adjunct Faculty – MATH 1030 Introduction to College Mathematics
Pellissippi State Community College
- Prepared and performed lectures. Duties included handling all administrative responsibilities, such as upload of grades, and preparation of graded materials (homework, quizzes, and tests).
- 2012 – 2013 Instructor of Mathematics
Hiwassee College
- Courses Taught: DSM 0970 Prealgebra, MATH 1130 College Algebra, MATH 1530 Statistical Reasoning, MATH 1630 Finite Mathematics, MATH 1730 Precalculus, MATH 1830 Basic Calculus, MATH 1910 Calculus I, MATH 1920 Calculus II, MATH 2110 Calculus III, MATH 2120 Differential Equations, MATH 2910/3910 Cryptology, and MATH 3300 History of Mathematics
- Prepared and performed lectures. Duties included handling all administrative responsibilities, such as upload of grades, and preparation of graded materials (homework, projects, quizzes, and tests). Advise math and science students.
- 2011 – 2012 Graduate Teaching Assistant – MATH 1530 Introduction to Probability and Statistics, DSPM 0850 Intermediate Algebra
East Tennessee State University
- Prepared and performed lectures. Developed curricular resources including: problem sets, quizzes, and exams. Administered and graded quizzes. Assisted in writing and administering exams.
- 2010 – 2011 Tutor – Center for Academic Achievement
East Tennessee State University
- Individual/group tutoring for mathematics courses. Collaboration with instructors for development of supplemental instructional materials.
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Administrative Experience

- 2019 – Present Course Coordinator for MATH 1226; Virginia Tech
- Scheduling meetings with MATH 1226 instructors, selecting the CTE committee and approve the questions for the finalize exam, compiling the Pathways data and submitting a report to the Provost's office.
- 2017 – 2018 Director of Institutional Effectiveness
Hiwassee College
- Data collection and analysis for accreditation assessment and internal usage, compiling and filing federal reports such as National Student Clearinghouse and the Integrated Postsecondary Education System. Collaborate with faculty, staff and administration in assessment.

2014 – 2017 Assistant Unit Director – Teen Center Unit
Boys and Girls Club of the Monroe Area

Mentored middle and high school students. Helped plan trips, games, activities, and meals at the Teen Center. Handled any issues, along with Unit Director, of any misbehaviors from students.

Publications

Brooks, J. D., Knisley, D., Knisley, J. (January 2014) Nested $(2,r)$ -regular graphs and their network properties. *The Journal of Combinatorial Mathematics and Combinatorial Computing*, Vol. 88, 27-38.

Conference Presentations and Professional Development

1. December 2017, Attendee: Assessment workshops and seminars at the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Annual Conference in Dallas, Texas
2. October 2017, Attendee: Assessment seminars at the Transnational Association of Christian Colleges and Schools (TRACS) Annual Conference in Orlando, Florida.
3. March 2015, Attendee: LiveText’s Regional Assessment Workshop in New Orleans, Louisiana designed to address and improve assessment practices and data collection for SACSCOC.
4. **Brooks, J. D.** (May 2012). “Nested $(2,r)$ -regular graphs and their network properties” Presented at the 25th Cumberland Conference, Johnson City, Tennessee.
5. March 2012, Attendee: Mathematical Biosciences Institute Workshop 4: Evolution and Spread of Disease (The Ohio State University) designed to educate and inform attendees of new practices, research and breakthroughs in the field of mathematical modeling.
6. May 2011, Attendee: 24th Cumberland Conference (University of Louisville) designed to educate and inform attendees of new practices, research, and breakthroughs in the field of Combinatorial Mathematics and Graph Theory.
7. **Brooks, J. D.** (March 2011). “Graphs and their Complements Having Equal Paired-Domination” Mathematical Association of America Southeastern Section, Tuscaloosa, Alabama.
8. November 2010, Attendee: Atlanta Lecture Series in Combinatorics and Graph Theory designed to develop young researchers and professionals in mathematics.

Awards

2019	Nominee for Favorite Faculty, Virginia Tech
2017	Distinguished Faculty of the Year, Hiwassee College
2014	Earned the Erdős Number of 3

- 2013 Distinguished Faculty of the Year Nominee, Hiwassee College
- 2011 Inducted into the Kappa Mu Epsilon: Mathematics Honors Society, ETSU
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Outreach and Leadership Activities

- 2019 Writer: (CTE MATH 1225 Committee, Virginia Tech) is the committee that submits problems for the MATH 1225 Final Exam.
- 2018 Chair: (Institutional Assessment, Research and Planning Committee, Hiwassee College) is the subcommittee of the TRACS Steering Committee responsible for the editing, research and review of the TRACS Self-Study Accreditation Standards.
- 2018 Member: (TRACS Steering Committee, Hiwassee College) is the executive committee of the TRACS Self-Study at Hiwassee College and responsible for data collection, review, editing, and delegation of the self-study efforts for the 5-year reaffirmation of accreditation.
- 2017 – 2018 Member: (SACSCOC Steering Committee, Hiwassee College) is the executive committee of the SACSCOC Application for Hiwassee College and responsible for data collection, review, editing, and delegation of the assessment efforts for SACSCOC Standards of Accreditation.
- 2016 – 2018 Coordinator: (Course of Study, Holston Conference) coordinates and facilitates the needs of the Course of Study courses held at Hiwassee College for the United Methodist Holston Conference.
- 2016 – 2017 Chair: (Faculty Assembly, Hiwassee College) represents the faculty, addresses any internal issues with the faculty, and brings any concerns before the Vice President for Academic Affairs and the President of the College.
- 2015 – 2018 Member: (SACSCOC – Institutional Effectiveness Committee, Hiwassee College) is the subcommittee of the SACSCOC Steering Committee responsible for the editing, research and review of the SACSCOC Standards of Accreditation.
- 2015 – 2018 Actor: (Hiwassee College Theatre Department) performed in numerous productions at the college such as *The Odd Couple*, *Antigone*, and *The Princess and the Pea*.
- 2014 – 2018 Faculty Representative: (Campus Judicial Board, Hiwassee College) reviews, considers student testimony, and votes on the outcome (probation, suspension, and expulsion) of each student's misconduct.
- 2013 – 2018 Member: (Curriculum Committee, Hiwassee College) helped review, design new courses, and vote on curriculum changes at the curricular and programmatic levels.

- 2013 – 2018 Member: (Instructional Improvement and Faculty Development Committee, Hiwassee College) helped review syllabi and papers to aid in the assessment of general education goals.
- 2013 – 2018 Volunteer/Technician: (Hiwassee College Theatre Department) helped in various roles of production including lighting and sound design.
- 2013 – 2017 Judge: (Tiger Games Quiz Bowl, Hiwassee College) helped judge the Quiz Bowl of the annual Tiger Games.
- 2013 – 2017 Volunteer: (Tiger Games, Hiwassee College) helped coordinate and create mathematics quizzes and games for the annual Tiger Games.
- 2013 – 2015 Member: (Student Life Committee, Hiwassee College) helped with generating ideas and plans for student life activities.
- 2012 Chair: (Session at 25th Cumberland Conference) responsible for introducing speakers and time management of one of the sessions of the 25th Cumberland Conference held at ETSU.
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Technical Skills

Experience with a wide range of technical programs and software
Mathematica, MyMathLab, Matlab, PC-TeX, and Excel

Experience with a wide range of Learning Management Software
Canvas, D2L, Populi, Blackboard, and Blackbaud

Experience with assessment/accreditation software
XitracS

Experienced in various statistical analysis software
R and Minitab

References

Dr. Jason Leonard
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Madisonville, TN
Email: jeleonard33@gmail.com Tel: 865-773-4182

Dr. Christina Hillesheim
Professor of Chemistry, Louisiana School of Mathematics, Science and Arts (LSMSA),
Natchitoches, LA
Tel: 985-687-6951

Dr. Robert “Bob” Gardner

Math and Stats Graduate Coordinator and Professor, Department of Mathematics and Statistics,
East Tennessee State University, 308F Gilbreath Hall, Johnson City, TN
Email: gardnerr@etsu.edu Tel: 423-439-6979

T. David Watts

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