John W. Snow

116 East Hillcrest Drive
Seward, Nebraska 68434
John.Snow@cune.edu

Education

VANDERBILT UNIVERSITY, Nashville, Tennessee
> Ph.D., Mathematics, August 1998
> M.A., Mathematics, May 1996
> Advisor: Ralph McKenzie, Distinguished Professor

CONCORDIA UNIVERSITY, Seward, Nebraska
> B.A., Mathematics, May 1994

Work Experience

CONCORDIA UNIVERSITY, Seward, Nebraska
> **Associate Professor of Mathematics**
> Teach 24+ hours per year, advising, committee work
> August 2008 - Present
> **Assistant Professor of Mathematics**
> Teach 24+ hours per year, advising, committee work
> June 2000 - June 2004

SAM HOUSTON STATE UNIVERSITY, Huntsville, Texas
> **Associate Professor of Mathematics**
> **Undergraduate Curriculum Coordinator**
> Teach, research, committee work
> August 2007 - May 2008
> **Assistant Professor of Mathematics**
> Teach, research, committee work
> August 2004 - August 2007

SCHREINER UNIVERSITY, Kerrville, Texas
> **Assistant Professor of Mathematics**
> Teach 24+ hours per year, advising, committee work
> August 1998 - May 2000

VANDERBILT UNIVERSITY, Nashville, Tennessee
> **Research Assistant**
> Independent research in Universal Algebra
> Summer 1997, Summer 1998
> **Graduate Teaching Assistant**
> Teach one to two courses per semester, research
> August 1995 - May 1998
> **Instructor** (Differential Equations)
> Summer 1996
> **BJARNI JONSSON PRIZE FOR RESEARCH** 1998
> **B.F. BRYANT PRIZE FOR EXCELLENCE IN TEACHING** 1998

Courses Taught

CONCORDIA UNIVERSITY

- Elementary Calculus (Liberal Arts Calculus)
- Calculus and Analytic Geometry I, II, and III
- Introduction to Statistics and Probability
- History of Mathematics
- Mathematical Structures
- Linear Algebra
- Abstract Algebra
- Analysis
- Survey of Contemporary Mathematics
- Cryptography
- Logic
- First Year Seminar

SAM HOUSTON STATE UNIVERSITY

- College Mathematics
- Calculus Survey
- Calculus I, II and III
- Introduction to Mathematical Thought
- Algebraic Structures
- Rings and Fields
- Analysis I and II
- Graph Theory
- Abstract Algebra I and II (Graduate)
- Discrete Mathematics (Graduate)

SCHREINER UNIVERSITY

- College Algebra
- Analysis (Business Calculus)
- Calculus and Analytic Geometry II
- Finite Mathematics with Applications
- Probability I and II
- Abstract Algebra
- Critical Thinking (Interdisciplinary)

VANDERBILT UNIVERSITY

- Calculus and Analytic Geometry I and II
- Differential Equations

Course Notes (Extensive notes suitable for use as textbooks.)

- **Logic**. 2009. (Propositional and predicate logic including computability and cardinality.)
- **Algebra**. 2004, 2009. (Pseudo-Moore Method Theorem Sequence.)
- **Calculus**. 2008. (A simple introduction beginning with polynomials.)
- **Basic Cryptography for Liberal Arts Students**. 2003. (A survey course.)
- **An Introduction to Mathematics**. 2001. (Collaborative learning transition course.)
- **Mind Your P's and Q's**. 1999. (Mathematical logic survey course.)

Committees

CONCORDIA UNIVERSITY

- Assessment Committee, 2001-2002, 2002-2003 (Secretary), 2003-2004
- Honorary Awards Committee, 2002-2003
- Intellectual Property ad hoc Committee Fall 2008
- Graduate Council Fall 2009-Present

SAM HOUSTON STATE UNIVERSITY

- Calculus Textbook Committee 2004-2005
- Mathematics Search Committee 2005-2006
- Mathematics Faculty Evaluation Advisory Committee 2007
- Mathematics MS Revision Committee 2007
- Scholar in Residence Search Committee 2007-2008
- Mathematics Undergraduate Curriculum Coordinator 2005-2008

SCHREINER UNIVERSITY

- Faculty Affairs, 1999-2000
- Faculty Advisory Committee to the President, 1999-2000
- Technology Advisory Committee, 1999-2000
- Honors Committee, 1998-1999 and 1999-2000
- Financial Aid Committee, 1999-2000
- Faculty Affairs Subcommittee on Faculty Evaluation, 1998-1999 and 1999-2000 (Co-chair)
- Faculty Affairs Subcommittee on Technology Policy, 1999-2000

Research Publications

- **Reflexive relations on algebras with Boolean lattice reducts**. *Algebra Universalis*. 61:195-199 (2009).

- **Primitive Positive Clones of Groupoids**. *Algebra Universalis*. 60:231-237 (2009).

- **Interpolation in small lattices**. (With E. Martin).

- **Composition series for Maltsev algebras**. (With J.L.M. Wood).

- **OPC Lattices and Congruence Heredity**. *Algebra Universalis*. 58:59-71, 2008.

- **Almost distributive sublattices and Congruence Heredity**. *Algebra Universalis*. 57:3-14, 2007.

- **A genetic algorithm for drawing ordered sets**. (With B. Loft). *Texas College Mathematics Journal*. 3:10-26, 2006.

- **Subdirect Products of Hereditary Congruence Lattices**. *Algebra Universalis*. 54:65-71, 2005.

- **Relations Compatible with Near Unanimity Operations**. *Algebra Universalis*. 52:279-288, 2004.

- **Congruence modular varieties: commutator theory and its uses**. (With R. McKenzie). *Structural Theory of Automata, Semigroups and Universal Algebra*. Proceedings of the NATO ASI, Montreal, 2003.

- **Every Finite lattice in $V(M_3)$ is representable**. *Algebra Universalis*. 50:75-81, 2003.

- **Generating Primitive Positive Clones**. *Algebra Universalis*. 44:169-185, 2000.

- **A Constructive Approach to the Finite Congruence Lattice Representation Problem**. *Algebra Universalis*. 43:279-293, 2000.

- **Maltsev Conditions and Relations on Algebras**. *Algebra Universalis*. 42:299-309, 1999.

- **Relations on Algebras and Varieties as Categories**. Ph.D. Dissertation. Vanderbilt University. August 1998.

- **Maltsev Conditions**. Ph.D. Qualifying Thesis. Vanderbilt University. September 1996.

Conferences and Talks

CONCORDIA UNIVERSITY

- Special Session on The Logic and Combinatorics of Algebraic Structures
  AMS Spring Central Sectional Meeting,
  University of Illinois at Urbana-Champaign, Urbana, IL
  March 27-29, 2009
  Session Organizer

SAM HOUSTON STATE UNIVERSITY

- Algebra and Computation Mini-Conference
  Sam Houston State University, Huntsville, TX
  April 18-19, 2008
  Organizer

- Workshop on Universal Algebra and the Constraint Satisfaction Problem
  Vanderbilt University, Nashville, TN
  June 17-20, 2007

- International Conference on Order, Algebra, and Logics
  Vanderbilt University, Nashville, TN
  June 12-16, 2007
  Talk Presented: Primitive positive clones of groupoids

- Department Colloquium
  Sam Houston State University, Huntsville, TX
  April 18, 2007
  Talk Presented: Interpolation in Universal Algebra

- Special Session on Universal Algebra and Order
  AMS/MAA Joint Meetings,
  New Orleans, LA
  January 5-8, 2007
  Talk Presented: Characterizing lattice terms
  Session Organizer

- Texas Undergraduate Mathematic Conference
  Sam Houston State University, Huntsville, TX
  October 21, 2006
  Talk Presented: Physics animations with constraints

- Colloquium
  SUNY New Paltz
  New Paltz, NY
  July 21, 2006
  Talk Presented: Interpolation and congruence lattices

- Seminar
  Bard College,
  Annondale on the Hudson, NY
  July 19, 2006
  Talk Presented: Constrained Dynamics

- Special Session on Universal Algebra and Order
  AMS/MAA Joint Meetings,
  San Antonio, TX
  January 12-15, 2006
  Talk Presented: M4 and congruence heredity
  Session Organizer

- Special Session on Universal Algebra and Order
  AMS section meeting,
  University of Nebraska, Lincoln
  October 21-23, 2005
  Talk Presented: Almost distributive sublattices and congruence heredity
  Session Organizer

- Texas Undergraduate Mathematic Conference
  Sam Houston State University, Huntsville, TX
  October 15, 2005
  Talk Presented: The Hough Transform

- 35th Biannual National KME Conference
  Schreiner University, Kerrville, TX
  April 15, 2005
  Keynote Address: A Genetic Algorithm for Drawing Ordered Sets

- Universal Algebra and Logic Seminar
  Vanderbilt University, Nashville, TN
  March 16, 2005
  Talk Presented: Hereditary Congruence Lattices

- Department Colloquium
  Sam Houston State University, Huntsville, TX
  March 9, 2005
  Talk Presented: Two Element Algebras

- Special Section on Universal Algebra and Lattice Theory
  AMS section meeting,
  Vanderbilt University, Nashville, TN
  October 16-17, 2004
  Talk Presented: Relations on Algebras

- Algebras, Lattices, Varieties, A Conference in Honor of Walter Taylor
  University of Colorado, Boulder, Colorado
  August 15-18, 2004

CONCORDIA UNIVERSITY

- Special Section on Algebras, Lattices, and Varieties
  AMS section meeting,
  University of Colorado, Boulder, Colorado
  October 2-4, 2003
  Talk Presented: Congruence Lattices of Finite Algebras

- NATO Advanced Studies Institute on Structural Theory of Automata
  Semigroups, and Universal Algebra
  University of Montreal, Quebec
  July 7-18, 2003

- Groups, Topology, and Semigroups Seminar
  University of Nebraska, Lincoln, Nebraska
  April 16, 2002
  Talk presented: Constructing Congruence Lattices of Finite Algebras

- Groups, Topology, and Semigroups Seminar
  University of Nebraska, Lincoln, Nebraska
  January 29, 2002
  Talk presented: Algebras, Relations, Compatibility, and Majority

- Third Annual Regional Workshop in the Mathematical Sciences
  University of Nebraska, Lincoln, Nebraska
  October, 2000
  Talk presented: Consequences of Algebraic Identities

SCHREINER UNIVERSITY

- First Annual Thomasina Coverly Memorial Workshop on Algebra and Order
  Vanderbilt University, Nashville, Tennessee
  May 24-27, 2000

- Workshop on Universal Algebra
  Vanderbilt University, Nashville, Tennessee
  July 12-16, 1999
  Talk presented: Congruence Lattices of Finite Algebras

- Twenty-Third Holiday Mathematics Symposium
  New Mexico State University, Las Cruces, New Mexico
  January 8-12, 1999

VANDERBILT UNIVERSITY

- Special Session on Semigroups, Algorithms, and Universal Algebra
  AMS section meeting
  University of Louisville, Kentucky
  March 20-21, 1998
  Talk presented: A New Look at Maltsev Conditions

- NATO Advanced Institute on Algebraic Model Theory
  The Fields Institute, Toronto, Canada
  August 19-30, 1996

- International Conference on Modern Algebra and its Applications
  Vanderbilt University, Nashville, Tennessee
  May 14-18, 1996