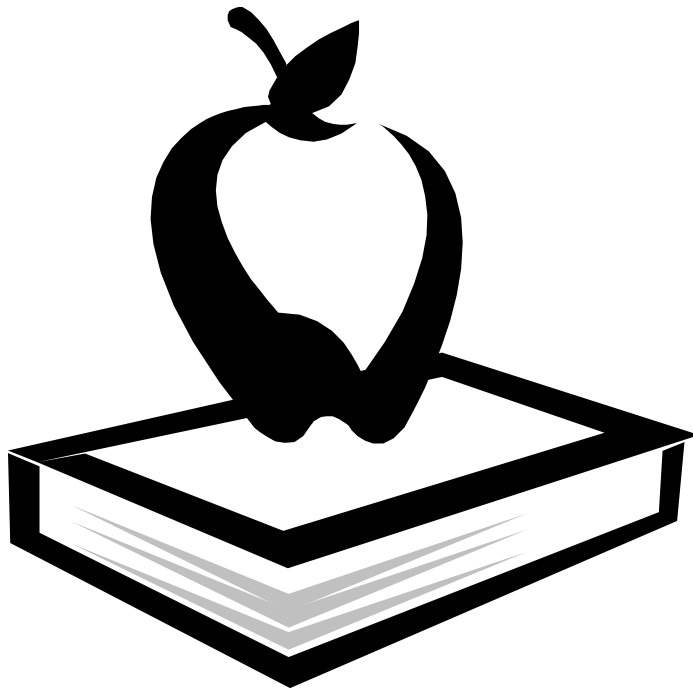




*North Texas  
Teachers as Scholars*

*2004 - 2005 Seminars*



*Seminar Locations:*

UNT Denton Campus      UNTHSC @ Ft. Worth

[www.coe.unt.edu/tas](http://www.coe.unt.edu/tas)

*North Texas  
Teachers as Scholars*

*Carrollton-Farmers Branch ISD*

*Denton ISD*

*DeSoto ISD*

*Eagle Mountain-Saginaw ISD*

*Fort Worth ISD*

*Grand Prairie ISD*

*Lake Dallas ISD*

*Little Elm ISD*

*with*

*Woodrow Wilson National*

*Fellowship Foundation*

*UNT College of Arts and Sciences*

*UNT College of Education*

*UNT Health Science Center at Fort Worth*

*UNT College of Music*



## *Teachers as Scholars Ground Rules*

1. Each ISD is affiliated with and helped to select the seminars to be offered at one of the UNT campuses. Teachers will enroll in seminars at the campus with which their ISD is affiliated. The campus affiliations are as follows.

**Denton Campus:** Carrollton-Farmers Branch ISD  
Denton ISD  
Eagle Mountain-Saginaw ISD  
Lake Dallas ISD  
Little Elm ISD  
DeSoto ISD  
Grand Prairie ISD  
Fort Worth ISD

**Fort Worth Campus:** Fort Worth ISD

2. Each ISD has a set number of places for teachers in each TAS seminar. Nomination of teachers occurs through a coordinator at each ISD. Teachers, please submit your applications to the following individuals.

Carrollton-Farmers Branch ISD	Edward Chevallier
Denton ISD	Ray Braswell
DeSoto ISD	Larry Davis
Eagle Mountain-Saginaw ISD	Steve Williams
Fort Worth ISD	Dorothy Thomas*
Grand Prairie ISD	Lorraine Morazzano
Lake Dallas ISD	Dawn Angove
Little Elm ISD	Robert Keener

\*For Science-related seminars

3. Selection of teacher participants for each TAS seminar occurs at least three weeks before the beginning of each seminar. Teachers will receive a letter of welcome and acceptance that may include an advance assignment from the instructor ten days before the seminar. In cases of illness or emergency, the ISD coordinator may substitute another teacher for the originally selected one. The substitute will attend both of the seminar sessions.
4. A seminar will not be held if fewer than 9 are signed up.
5. Seminar selections are made with consideration of the interests and scholarship of the UNT faculty and the interests and priorities of the affiliated ISDs. If you see an offering on another campus that you would like to see offered on your campus in a future year, be sure to let your coordinator know. The ISD coordinators serve with UNT faculty and administrators as an advisory committee to North Texas TAS. Participating teachers complete program evaluations that influence decisions about format and future direction. We welcome your input!



## *Seminars*

### **UNT Denton Campus**

#### *Contemporary French Society*

**Date:** Wednesdays, Sept. 22 & Oct. 6, 2004  
9:00-3:00 p.m.

**Room:** TBA

**Leader:** Marie-Christine Koop, Department of Foreign Languages and Literature

This seminar will present an overview of contemporary France, emphasizing social issues. Topics will include trends in demographics, family, the status of women, the challenges facing the educational system, eating habits and health concerns, religion, social stratification, cultural practices, and France within the European Union. Discussions will center on a comparative analysis of the value system and behavior patterns in France and the United States today. Lectures will be illustrated with video sequences, and readings will cover the topics of the seminar.

Marie-Christine Koop (Ph.D., Michigan State University) is Professor of French, Chair of the Department of Foreign Languages and Literatures at UNT, and Director of the French Summer Institute. She teaches courses on contemporary France, the history of French civilization, and Quebec. She has published on social issues in France (education, women) and Quebec, and her books include *France at the Dawn of the Twenty-First Century: Trends and Transformations*. A former Vice President of the American Association of Teachers of French, she has received several national teaching awards and is a Knight in the Order of the French Academic Palms.



## UNT Denton Campus (continued)

### *Thinking about Infinity*

**Date:** Wednesdays, Oct. 13 & 27, 2004  
9:00-3:00 p.m.

**Room:** TBA

**Leader:** Kirk Weller, Department of Mathematics

Infinity is a concept that has perplexed philosophers, mathematicians, and students for centuries. Despite difficulties in understanding the concept, infinity cannot be ignored, as it plays an important, and sometimes central, role in nearly every branch of mathematics. In this seminar, which assumes no prior background, we will explore several of the paradoxes and dichotomies of the infinite which have confounded thinkers throughout history. We will try to answer questions such as: Can we compare infinite quantities and talk about notions such as larger and smaller? Is there more than one "level" of infinity? Can an infinite collection be thought of in toto? In what way, if ever, can an infinite process be thought of as "completed"? Is infinity akin to large finite quantities, or is there a fundamental difference between the two notions? These and other questions will be explored through a series of activities and discussion, with the goal of expanding our understanding of infinity from a mathematical perspective.

Kirk Weller (Ph.D., University of Norte Dame) is Associate Professor in the Department of Mathematics. He does research in collegiate mathematics education. His current interests, in addition to students' conceptions of infinity, include preparing future elementary, middle school, and secondary mathematics teachers, and studying ways to incorporate algebraic thinking into the elementary and middle school mathematics curriculum.



## UNT Denton Campus (continued)

### *Finding Music: A Seminar in Making Music with Things*

**Date:** Thursdays, Oct. 7 & 21, 2004  
9:00-3:00 p.m.

**Room:** TBA

**Leader:** David Schwarz, College of Music

This seminar is designed for K-12 teachers who are interested in teaching music-making to students both with objects found lying around the spaces in which we live and with the digital manipulation of such sounds in computers. The goal of the seminar is to understand sounds physically and emotionally both in their "found" and "digitally-altered" states, and to help teachers generate excitement in students as they feel the pleasure of music-making. The seminar will be supported with research from the psychology of sound processing in early childhood as a model for strong emotional growth and intellectual development.

At the end of the first session, each participant will have and perform a *Just-Found Symphony*. At the end of Day II each participant will have a *Digital Found Sound* CD. These can be used as models for projects in the participants' classrooms. Note: Conventional music training can't hurt but it is NOT required.

David Schwarz (Ph.D., University of Texas at Austin) is Assistant Professor in the College of Music. He has played the violin for many years. Dr. Schwarz has written two books and is working on a new one: *Hearing Things: Music, Modernism, Germany*. In both his teaching and research he brings psychology and the immediacy of music making and music perception into an ongoing conversation.



## UNT Denton Campus *(continued)*

### *Electromagnetism*

**Date:** Wednesdays, Nov. 3 & 17, 2004  
9:00-3:00 p.m.

**Room:** TBA

**Leader:** James Roberts, Department of Physics

We will explore the laws of electromagnetic induction, the compass and wire experiment, and how we can produce transformers and power supplies to make electric systems work. We'll look at some sample systems, looking at motors and radio transmitters and receivers. Then we'll move to the use of magnetism and electromagnetism with compasses to map fields. You will leave this seminar with the knowledge and skills you need to help students understand electromagnetism!

The participants will construct a "Poor Man's Spectroscope" to study some properties of light and the atom and will study the effects of current in wires to transmit signals across space and they will construct a d. c. electric motor, an electroscope and a generator based on what they have learned.

Jim Roberts (Ph.D., University of Oklahoma) is Professor of Physics and won the 2002 President's Council Teaching Award. Dr. Roberts studies the properties of liquids, especially water, using microwave irradiations. Dr. Roberts has established a unique learning environment on campus for middle school students to study physics and often interacts with K-12 students and their teachers. The emphasis of his program is "hands-on, minds on" involvement to provide a broad base of understanding of the topics.



## UNTHSC @ Fort Worth

### *Behind the Elements and their Interactions*

**Date:** Wednesdays, Oct. 13 & 27, 2004  
9:00-3:00 p.m.

**Room:** Research & Education Bldg (RES) #126 & 127

**Leader:** Diana Mason, Chemistry Department

Science is a human endeavor that represents our interpretations of the natural world based on observations. Observations help us develop unifying concepts, one of the key principles of the national science standards. This seminar will involve live and virtual chemistry demonstrations that cut across the science disciplines. The demonstrations will illustrate the transfer of energy, represent the physical and chemical properties of matter, and serve to correct misconceptions about science that arise from discrepant events.

Diana Mason (Ph.D., University of Texas at Austin) is Associate Professor of Chemistry, and a chemistry educator who studies how students learn to solve problems and how misconceptions interfere with their learning. Her recent research includes consideration of how the cultural backgrounds of students may affect their learning chemistry. Dr. Mason holds degrees in zoology and Science Education/Chemistry. She has a variety of teaching experience and is past president of the Associated Chemistry Teachers of Texas, active in the American Chemical Society, and editor of the *Journal of Chemical Education*.



## UNTHSC @ Fort Worth *(continued)*

### *Anatomy, Histology and Physiology of the Human Cardiopulmonary System*

**Date:** Tuesdays, Nov. 30 & Dec. 14, 2004  
9:00-3:00 p.m.

**Room:** TBA

**Leader:** Rusty Reeves, Pathology and Anatomy

Lecture, discussion, and three labs will be included in this seminar that will involve several faculty from the UNT Health Science Center who specialize in anatomy and physiology of the human cardiopulmonary system. Participants will learn about the anatomy, histology, and physiology of the anterior thoracic wall, lungs, and pleurae, and of the heart, pericardium and mediastinum. In labs, participants will work with prosected materials and organ specimens, including human specimens. The seminar will provide first-hand experience with the content as experienced in a health science environment.

Rusty Reeves (Ph.D., UNT-Health Science Center at Fort Worth) teaches histology, embryology and gross anatomy. He is an Assistant Professor in the Department of Cell Biology and Genetics. His research is focused on development of multimedia teaching aides for use in the graduate and medical school curriculum, and he is the director of the National Science Foundation's Project SCORE. This project enables graduate teaching Fellows to work alongside Fort Worth Independent School District's biology teachers as content resources and to improve the use of technology in science instruction in the classroom.



## UNTHSC @ Fort Worth *(continued)*

### *Bang! Toot! and Twang! The Physics of Music*

**Date:** Thursdays, Oct. 14 & 28, 2004  
9:00-3:00 p.m.

**Room:** Patient Care Center (PCC) #172

**Leader:** Sam Matteson, Department of Physics

The study of musical sound and how it is produced is an exciting way to learn the physics of wave motion. This seminar will explore through multimedia, hands-on experimentation and active learning the terra incognita of musical acoustics. The knowledge gained by the participants will immediately equip them to help their students master the wave motion objectives of the Texas Assessment of Knowledge and Skills, as well as provide the basis for making meaningful connections of physics to the performing arts.

Sam Matteson (Ph.D., Baylor University) is Professor of Physics, an award-winning instructor, and a scholar whose research interests are wide ranging, from the application of ion beams to materials characterization to the acoustics of percussion instruments. He is a former Chair of the Department of Physics at UNT and is active in both the American Physical Society and in the American Association of Physics Teachers. He has been a professor of physics for over eighteen years and is a principal instructor of the very popular course, The Science and Technology of Musical Sound. Married to a teacher, he often consults with middle and secondary science teachers and is a frequent in-service instructor.



UNTHSC @ Fort Worth (continued)

## Spring 2005

### *Anatomy, Histology and Physiology of the Human Renal System*

**Date:** TBA  
9:00-3:00 p.m.

**Room:** TBA

**Leader:** Rusty Reeves, Pathology and Anatomy

Abstract: TBA

Rusty Reeves (Ph.D., UNT-Health Science Center at Fort Worth) teaches histology, embryology and gross anatomy. He is an Assistant Professor in the Department of Cell Biology and Genetics. His research is focused on development of multimedia teaching aides for use in the graduate and medical school curriculum, and he is the director of the National Science Foundation's Project SCORE. This project enables graduate teaching Fellows to work alongside Fort Worth Independent School District's biology teachers as content resources and to improve the use of technology in science instruction in the classroom.



## *Teachers as Scholars Fall, 2004 Seminars*

I would like to sign up for the following *Teachers as Scholars* Seminar:

*Please complete the following and return to your ISD representative:*

Seminar Name: \_\_\_\_\_

Dates: \_\_\_\_\_

Location: \_\_\_\_\_

Your Name: \_\_\_\_\_

ISD: \_\_\_\_\_

Grade/Subject \_\_\_\_\_

Taught: \_\_\_\_\_

School Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Principal: \_\_\_\_\_

Questions? Contact: Meadows Chair for Excellence in Education  
University of North Texas  
P.O. Box 31740  
University of North Texas  
Denton, TX 76203  
940/369-8355 fax: 940/369-8358  
[lineville@unt.edu](mailto:lineville@unt.edu)



### *Other Opportunities*

Dr. Rusty Reeves, UNT Health Science Center at Fort Worth, invites all interested teachers to weekend and evening seminars sponsored by SCORE (Schools' Cooperative Opportunities for Resources and Education) Program. Funded by the National Science Foundation, this program supports the teaching of science in Fort Worth ISD. [www.hsc.unt.edu/score/speakerseries.cfm](http://www.hsc.unt.edu/score/speakerseries.cfm) for information.

Dr. Sandi Spenser, Director of Women's Studies, invites all interested teachers to join the Women's Studies Community Book Club, which meets the third Thursday of each month on the Denton campus. For [www.wmst.unt.edu](http://www.wmst.unt.edu) or 940 565-2098.

Dr. Pam Lane directs the SAM Science and Math Academy for 5<sup>th</sup> and 6<sup>th</sup> grade urban math and science teachers: [www.coe.unt.edu/outreach/samacademyfaq.htm](http://www.coe.unt.edu/outreach/samacademyfaq.htm).

Drs. Carol Wickstrom and Janelle Mathis, College of Education, coordinate the North Star of TX Writing Project (A site of the National Writing Project) for all teachers of writing. [www.coe.unt.edu/northstar](http://www.coe.unt.edu/northstar).

Dr. Marie-Christine Koop, Department of Foreign Languages and Literature, directs the French Summer Institute for teachers of French! <http://courses.unt.edu/koop/institute.htm>.

The Mean Green Physics Demonstration Team is for teachers of science, and includes Ask-a-Doc, your physics questions answered at: [www.phys.unt.edu/startrek.htm](http://www.phys.unt.edu/startrek.htm).

## *North Texas Teachers as Scholars*

### *Mission*

The TAS program goal is to offer North Texas public school teachers opportunities for intellectual renewal through exploring with UNT scholars topics of current interest in the arts, sciences, and humanities.

### *Staff*

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Meadows Chair for Excellence in Education

Linda Neaville  
Administrative Assistant

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