# SHEILA K. BRINTNALL, PH. D.

Professor of Mathematics Northwestern Oklahoma State University (580)327-8582 skbrintnall@nwosu.edu

#### Education:

Ph. D. in Instructional Leadership and Academic Curriculum, May 2002 University of Oklahoma; Norman, Oklahoma Emphasis: Mathematics Education Major Advisor: Dr. M. Jayne Fleener Dissertation: E-mentoring: A Case Study of the Viability and Benefits of Electronic Mentoring with Beginning Teachers in Rural Schools

Master of Science in Mathematics, December 1992
Oklahoma State University; Stillwater, Oklahoma
Component: "Calculators in the Mathematics Classroom"
Major: Pure Mathematics

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Bachelor of Science (Educ.), May 1988 Summa Cum Laude Northwestern Oklahoma State University; Alva, Oklahoma

Major: Mathematics Minor: Computer Science

Bachelor of Arts (Educ.), May 1988 Summa Cum Laude Northwestern Oklahoma State University; Alva, Oklahoma

Major: English

#### **Teaching**

Northwestern Oklahoma State University (1/93 - present)
Mathematics Teacher Education Coordinator Fall 2003 – present
Full-time Fall 1995 – present
Adjunct January 1993 - May 1995
Alva Independent School District #1 (8/93 - 5/95)
Full-time Mathematics Teacher / Student Council Sponsor
Oklahoma State University (8/89 - 5/92)
Graduate Teaching Assistant

#### Certification:

Mathematics, Computer Studies, and English; grades 7-12; Oklahoma (7/1/88-6/30/09)

Received the AAUW Educational Development Award in 2006

#### **Duties and Responsibilities**

Teach 24 hours per year

Advise students & supervise student teachers and resident teachers

Maintain Oklahoma Teacher Certification

Teach arranged courses as needed by graduating seniors

Review teacher education student portfolios

Participate in entrance interviews for admission to teacher education program

Participate in exit interviews at conclusion of teacher education program

Participate in department meetings and activities

Participate in committee meetings and activities

Prepare Mathematics Program Review

Prepare for NCATE Accreditation Visit

Complete 15 hours of professional development per year

Complete 10 hours of public school service per year

## Courses Taught at NWOSU

MATH 0013	Pre-Intermediate Algebra
MATH 0123	Intermediate Algebra
MATH 1313	Statistics (Non-majors)
MATH 1513	College Algebra
MATH 1523	Finite Math
MATH 1613	College Trigonometry
MATH 2215	Calculus I
MATH 2315	Calculus II
MATH 2533	Calculus for Business
MATH 3023	Theory of Numbers
MATH 3053	Discrete Math
MATH 3323	Multivariable Calculus
MATH 3353	Intro. to Modern Algebra
MATH 3513	College Geometry
MATH 4333	History of Mathematics
MATH 4442	<b>Teaching Secondary Math</b>
MATH 4203	Differential Equations
CMSC 1003	Introduction to Computing

#### Sample Student Comments

Very patient with students asking questions. And took the time to answer them. (Trigonometry, 2004)

Mrs. Brintnall is very helpful during class and even when you are out of class. You can ask for help at any time and she's interested in you getting the problems found. (College Algebra, 2004)

Dr. Brintnall is an awesome instructor. She explains the content well and is very willing to help the students. She wants the students to succeed. She is great! (History of Math, 2006)

She is fun and enthusiastic. She is easy to talk to and likes for you to ask questions. Dr. Brintnall doesn't make you feel stupid. She is awesome. (Calculus I, 2007)

She is fair in how she grades and also how she treats her students. (Calc I, 2007)

Dr. Brintnall did a great job teaching this course. She is concerned about her students not just getting through the syllabus, but more importantly she cares that we all understand the material. (Multivariable Calculus, 2008)

Grants: ConocoPhillips sponsored Math and Science Academy (2010)

"NWOSU Rendezvous"

Collaboration with Tim Maharry, Dena Walker, Steve Maier

"Math Camp" for elementary students

ConocoPhillips sponsored Summer Academy (2004 - 2009)

"Mathematics Technology: An Applications Paradigm" Collaboration with Billy Stewart and Tim Maharry

Week long residential "Math Camp" for high school students

Board of Regents sponsored Summer Academy (1999 – 2003)

"Mathematics Technology: An Applications Paradigm"

Collaboration with Billy Stewart and Tim Maharry

Week long residential "Math Camp" for high school students

Professional Development Grant Spring 2008

AAUW sponsored Workshops by Rhonda Mikels

"Rekindling that Passion & Enlarging Your Vision" &

"Multicultural Diversity"

Professional Development Grant Spring 2010

Co-sponsored by Math Dept and Educ Dept

SMART Board Training, provided workshop for area teachers

Organizational Memberships:

National Council of Teachers of Mathematics (NCTM)

Oklahoma Council of Teachers of Mathematics (OCTM)

Mathematics Association of America (MAA)

American Association of University Women (AAUW)

Kiwanis International – Board Member

Delta Kappa Gamma – CoPresident (2008-2010)

Presentations:

Assessment Day Presentation with Dena Walker

"Get Your Game On" - Smartboard Usage - Spring 2010

Women and Mathematics – Delphi (Kiowa, KS,2005) – AAUW 2003

BEST Award Presentation for BEST Pre-season Workshop

& Kickoff - Fall 2008

Delta Kappa Gamma – NWOSU Outreach Presentation - Fall 2008

Invited speaker, "Technology in Education Research";

Education Technology Class; University of Oklahoma; Fall 2000 Joint presentation with Dr. M. Jayne Fleener, "Time Series Analysis

of Classroom Dialogues"; Research Council on Mathematics Learning;

College Park, MD; February 1998

#### Departmental Activities:

Pilot Supplemental Instruction in 0013 Pre-Int Algebra Fall 2010 Piloted/developed Online College Algebra Spring 2005 Director of Academic Systems implementation Spring 2002-2003 Wrote NCATE Program Review of Mathematics Education Program Participated in revision of four year cycle of mathematics courses Participated in development of Contemporary Math Class Participated in development of Math Department exit examination Participated in revision of course syllabi for NCATE visit Provide individualized instruction for at risk students

#### University Wide Activities:

Faculty Senate Member (2008-2010)
NCATE Site Visit Interview Committees
Project HOPE
E-portfolio seminars
Heartland BEST Robotics Competition Committee Member
Curriculum Contest Test Administrator (1994-present)
New Faculty Member Mentor (2004-2006)
Freshman Connection Academic Advisor
Speech Tournament Judge Invitational & Regional (2003-present)
Science Fair Judge (1996, 2003-present)
Judged FFA Speech Contest Spring 2010

#### Committee Memberships:

Member Teacher Education Faculty (2003 – present)
Member Teacher Education Council (2004 –2010)
Honors Committee (2002-present) – Chair (2004 – present)
Assessment Committee (2004 – 2010)
Marketing Committee (2004)
General Education Committee (2004 –2008)
Academic Affairs Appeals Committee (2000-2004)
Library Committee (1997-2000)
Division Scholarship Committee (1996-98)

### Math Club Sponsor (1998 - present):

Arranged for Speakers to Celebrate Mathematics Awareness Month Activities

Homecoming Sheet Contest – First Place Fall 2005, 2006, 2010
Pixar Animation Lecture at UCO Fall 2009
Homecoming Booth on Square
Tour of Vance Air Force Base
Beginning and End of Year Picnics
Ranger Perk Table Painting Contest
Annual Bowling Competition with Chemistry Club

#### Class Sponsor (1997-present):

Current Senior Class Co-Sponsor (2010-2011) Coordinator of Senior Class Picture Project (2002) Coordinator of Senior Class Centennial Project (1998)

Tiling of the fountain in front of the library in collaboration with NWOSU Foundation

# Community Service:

Taught Trigonometry at AHS while Brit Gregory recuperated from surgery

Supervise Student Teachers and Resident Teachers in Public Schools

Member American Association of University Women

Past President (2003-05, 2007-09)

Donate books to underprivileged children

Award \$400 scholarship to NWOSU female student

Women's Recognition Dinner & Ceremony

Political Forum - Fall 2004 & 2008

Sponsor family for Christmas

Participate in Alva Christmas Craft Show

Host Soup for Scholarships

Member First United Methodist Church Alva, Oklahoma

Mission Trip to Mexico Spring Break 2010

Teach College Sunday School Class

Choir member

UMW member

Christmas musicals / Spring Melodramas

Peanut brittle fund raiser

VBS - Circle G Ranch, Lift off with Jesus, Beach-attitudes

President, Wesley Foundation Board

Member Kiwanis International – joined July 2005

**Board Member** 

Help with Little Olympics

Snow Cones for Bill Johnson Correctional Facility

Keep Gate at Football Game

Trash Pick-up

## Teaching Style/Philosophy

The driving premises of my philosophy of teaching are "Every student can learn" and "Any subject can be mastered if enough energy is exerted." I believe that the student must be committed to the experience for learning to take place. I do not believe that a teacher can force a student to learn material in which s/he has no investment so another important role of the teacher is that of motivator.

My teaching style is predominately lecture; however, I try to incorporate group learning activities and discovery approaches when possible. I feel that students can learn a great deal from each other. Sometimes a student needs to hear an explanation in his/her language. I like to have the students work in groups when we are covering difficult material. In my upper level classes, I have students work problems/proofs on the board. Incorporating the student into the teaching process has benefits for him/her, as well as, the students listening to the presentation. To be able to explain an idea to someone else one must fully grasp the concept him/herself. My teaching philosophy and style require the teacher and the student to be partners in the learning process.

Technology in its many forms influences my teaching style and helps to keep it fresh and growing. New last year to the Mathematics' Department was a SMART Board. I was privileged to be able to use it for my Calculus I course. I found that I was challenged to present the material in a slightly different manner and that the students were able to delve deeper into the meat of the course. I also incorporate graphing calculators and mathematics software programs into the classroom. I encourage the students to see the power of the technology, learn the limitations of it, and understand the necessity of learning the mathematical processes for themselves.