#### **DIANE BABINSKI AGUD**

Senior Instructor of Mathematics Virginia Tech, 421 McBryde Hall, 225 Stanger Street, Blacksburg, VA 24061 540-231-8208 dagud@vt.edu

#### **EDUCATION**

**Graduate classes, Virginia Tech** 

M.A. Mathematics, St. John's University, Jamaica, NY

Undergraduate minor: Education

B.A. Mathematics B.S. Biology, Molloy College, Rockville Centre, NY

Minor: Chemistry

## **ACADEMIC EXPERIENCE**

Virginia Polytechnic Institute and State University--Blacksburg, VA

Senior Instructor of Mathematics Instructor of Mathematics

2008 - Present 1993 - 2008

#### Areas of instruction:

- Calculus I differential calculus course for math, computer science, engineering, and science majors
- Calculus II integral calculus course for math, engineering and science majors
- Calculus with Matrices I first semester calculus course taken primarily by business majors
- Calculus with Matrices II second semester calculus course taken primarily by business majors
- Calculus with Trigonometry I first semester calculus course taken by students in non-technical majors
- Calculus with Trigonometry II second semester calculus course taken by students in non-technical majors
- Elementary Calculus differential calculus course for non-math/engineering majors
- Linear Algebra a math course taken by math, computer science, engineering and science majors as part of their calculus sequence
- Multivariable Calculus third semester calculus course for math, engineering and science majors
- Precalculus with Transcendental Functions precalculus including college algebra and trigonometry
- Vector Geometry a math course taken by math, computer science, engineering and science majors as part of their calculus sequence
- Emerging Scholars Program for Calculus I and II a math course taken as a companion course to Calculus I and II for students in danger of failing calculus.

**University of Houston**--Houston, TX Adjunct Instructor of Mathematics and Computer Science <u>Areas of instruction</u>: College Algebra. 1992-1993

# San Jacinto Community College--Houston, TX

1992-1993

Adjunct Instructor of Mathematics and Computer Science

Areas of instruction: College Algebra.

# Molloy College--Rockville Centre, NY

1991-1992

Adjunct Instructor of Mathematics and Computer Science

Areas of instruction:

- Calculus
- Statistics

# Dowling College--Oakdale, NY

1991-1992

Adjunct Instructor of Mathematics and Computer Science Areas of instruction:

- Algebra
- Probability & Statistics

## St. John's University--Jamaica, NY

1990

Instructor of Mathematics and Computer Science

Areas of instruction:

- College Algebra
- Calculus
- Linear Programming

## St. John's University--Jamaica, NY

1988-1989

Graduate Assistant -- Tutored undergraduates and proctored exams in addition to teaching selected mathematics classes as requested by mathematics department.

### OTHER EXPERIENCE

## Conroe High School--Conroe, TX

1992-1993

Mathematics Teacher -- Taught secondary mathematics.

<u>Areas of instruction</u>:

- Algebra
- Mathematics of Money consumer math course

## **Curriculum Development:**

Involved in the development of an integrated curriculum involving Algebra II, Chemistry and Health Science. Students in this program could receive community college credit for some courses.

# **Huntington Learning Center**--Baldwin, NY

1991-1992

Tutor -- Taught SAT preparatory courses. Taught average and above average students to excel in Mathematics and Reading.

## **Syosset Home Tutoring, Inc.**

1991

Home Teacher -- Taught Mathematics and Science to home bound students.

Areas of instruction:

- Mathematics: Sequential I (9<sup>th</sup> grade), Sequential II (10<sup>th</sup> grade)
- Sciences: Biology, Earth Science.

## Wantagh School District--Wantagh, NY

1990-1991

Substitute Teacher -- Taught students (7-12) in all areas of curriculum.

## Rabbi Dov Revel Yeshiva--Forest Hills, NY

Substitute Teacher -- Taught 7th & 8th grade Mathematics.

1988

**Lynbrook Diagnostic laboratory**, EKG Department--Lynbrook, NY 1981-1988 Laboratory Technician -- Assisted the supervisor and officiated in the supervisor's absence. Made work schedules for technicians. Took EKGs and blood work on office patients. Clerical -- Typed EKG reports to be sent to Doctors and Nursing Homes. Computerized billing to be sent to Medicare and Medicaid. Updated patient files.

#### **Nassau County Coroner's Office--NY**

1984

Field Experience in Toxicology -- Performed various tests on tissue samples to help the coroner determine the cause of death.

#### VIRGINIA TECH SERVICE

#### **VT MATHEMATICS DEPARTMENT SERVICE:**

**Curriculum Development for Math 1014, Math 1025, and Math 1026** Summer 2023 Worked with 4 other instructors to transition the online Math Emporium courses of Math 1014, Math 1025, and Math 1026 into classroom versions.

Contacted colleges and departments to determine 1) which majors required Math 1014,1025 and/or 1026, 2) why these math courses were required by their majors, 3) which in-major courses these math courses were a prerequisite for, 4) what mathematical content/key concepts were essential to these prerequisite courses as well as the major itself.

Contacted publishers for textbooks to review along with the associated software. Met with several publishing representatives to determine which text/software best applied to our curriculum.

Wrote/edited syllabi and assignments (homework, quizzes, exams) for each course.

Attended Master Class in Teaching Math Modeling for Life Sciences hosted by Harvard University to see how VT might implement some of the changes initially implemented by Alan Garfinkel at UCLA.

## **Course Coordinator for Math 1226**

2023-Present

Held initial semester course meeting. Reviewed instructors' course policy sheets.

Organized the 1226 Common Time Final Exam Committee, editor of the CTF exam.

Answered questions from instructors concerning course material, SSD accommodations, etc.

#### **Instructor Salary Proposal**

2022-2023

Proposal is an attempt to increase the base salaries for each Instructor rank within the Mathematics Department. Comparisons were made to salaries in other VT departments as well as VCCS system and Montgomery school system. Discussed the proposal with Mathematics Chairs and the College of Science.

#### Course Coordinator for Math 1014 and Math 1025

2022-Present

Revised the online textbook for Math 1014 (Summer 2023).

Revised sections of the online textbook for Math 1025 (Spring 2023).

Wrote multiple versions of each exam for the classroom version of Math 1025 (Summer2022).

Created annual Pathways reports for Math 1014 and Math 1025.

# **Common Time Final Exam Writing Committee Approval Committee**Chair

2022-Present 2023-Present

Collected the names of committee members proposed by each course's coordinators. After the CTF Approval Committee members approve a specific CTF writing committee, emailed the approval to the respective course coordinators.

# **Undergraduate Honor System Liaison**

2022-Present

Gave presentation to new faculty about the Undergraduate Honor System. Assisted mathematics faculty with questions about possible academic integrity violations and the procedural options.

## **Undergraduate Program Committee**

2019-2022

Revised different degree option course checklists, reviewed course proposals and participated in Senior exit interviews.

## **Lower Division Advising Team**

2017 - 2022

Advisor to Incoming Freshman Mathematics majors. Advised mathematics majors for the first two years at VT until they have chosen one of the three mathematics options. Coordinated information with the option advisor. Discussions with students included appropriate course selections, course requests, midterm evaluations, progress toward degree, mathematics degree options, etc. Attended Advisor workshops and conferences.

#### **Instructor Executive Committee**: Vice chair

2016, 2018, 2020-2021

Reviewed Faculty Activity Report (FAR) documents and vita of instructors annually. Reviewed FAR documents and dossiers for instructor promotions.

Wrote letters of support for instructor promotion.

Representative to the Department Executive Committee regarding instructor promotions.

## K-12 Outreach Committee: Chair

2017-Present

The K-12 Outreach committee serves as a liaison between the VT Math Department and local K-12 schools.

<u>Career Day</u>: an event for middle school students in hopes of inspiring their interest in mathematics as a career choice. The students interact with distinguished alumnae of the Virginia Tech math department, as well as other professionals who are pursuing mathematically oriented careers. The students also participate in a variety of computer activities involving mathematical visualization software and participate in problem solving using group work and presentations.

<u>VT Math Xperience</u>: the high school event encourages young mathematicians to not only consider a career in mathematics but to also consider attending VT to pursue their mathematics degree while simultaneously offering the students' teachers a professional development opportunity through which they might earn teaching re-certification points. This event provides the Math Department with an opportunity to showcase talent and research opportunities as well as to recruit future math majors.

#### **High School Outreach Committee**

2016-2017

This committee became part of the K-12 Outreach committee as VT Math Xperience subcommittee.

## **Instructor Evaluation Committee**

2014-2015

Reviewed dossiers for submission for instructor advancement. This committee became the Instructor Executive Committee.

## **Instructors Affairs Committee**

1999-2002, 1995-1997, 2013-2014

Chair 2001-2002

This committee maintains a current update of Instructor and related departmental concerns and fosters liaison between the instructors and the rest of the Department in such a way that all faculty members may be well informed on matters appropriately involving the interests of the instructors.

#### **Course Coordinator for Math 1224**

2012-2015

The course coordinator organized weekly meetings with graduate assistants teaching the recitation portion of each section.

## **Registration Committee**

1997-2017

Chair 2010-2017

This committee dealt with force adding students into mathematics classes during the add period of each semester.

## **Graduate Teaching Certification**

2007-2023

Cowrote teaching certification activities that involved microteaching, writing assignments and case studies to help build classroom confidence.

Phase I teaching committee member: This phase is the first step in the Mathematics Department's graduate student teaching certification process. Students have to teach a 15-20 minute lecture in front of 3 members of the Phase I committee. If students pass this phase, they proceed onto the phase II certification.

Phase II teaching certification Mentor: This certification process helps prepare the graduate student for teaching his/her own class. The student begins by observing the instructor and then prepares and teaches 2 to 3 lessons. The instructor then makes a recommendation on the preparedness of the grad student to teach his/her own course.

#### Math 1206c tutorial help

2009-2013

Taught the lecture portion of this Calculus II course and tutored students as they prepared to take Math Emporium tests.

## **Course Coordinator for Math 1205 (Calculus I)**

2009-2010

Course Coordinator wrote weekly Mathematica labs and the common final exam for all sections taught each semester. Held weekly meetings with graduate student teachers.

**Teaching Committee** (became Instructor Evaluation Committee)

2002-2006

# Wrote on-line quizzes for Math Emporium Course, Math 1525

Fall 2002

Wrote multiple choice questions for Calculus with Matrices I, a math course for business majors, that was being transitioned to online instruction.

## Supervisor of undergraduate teaching assistants for the ESP program

1998-2002

#### Math Emporium tutor

1998-Spring 2007

As part of my teaching assignment, I answered students' questions from several different Math Emporium courses.

# **Women's Career Day Committee**

1997-2010

The Career Day Committee annually organizes "Women in Mathematics: Career Day at Virginia Tech" for young women of all mathematical abilities. The day provides these girls the opportunity to interact with distinguished alumnae of the Virginia Tech math

department, as well as other women who are pursuing mathematically oriented careers. The girls also participate in a variety of computer activities involving mathematical visualization software and participate in problem solving using group work and presentations. This committee became part of the K-12 Outreach committee Career Day

#### **Math Awareness Week Committee**

1996-2017

Co-Chair:

1998-2017

As co-chair of this committee, I am responsible for overseeing / organizing the subcommittees that work on the poster contest, the workshop for elementary and middle school teachers from Montgomery and Giles Counties, and the speaker for the University community.

Coordinator of the poster contest subcommittee:

1997-2017

As head of this subcommittee, I am responsible for organizing the poster contest for the primary (K-8) schools in Montgomery and Giles Counties

#### **Mentor Committee** 1994-2007

Phase I and Phase II certification process committee member Mentor graduate students teaching their own class This committee became part of the Graduate Teaching Certification committee.

#### **Common Time Final Committee**

1998 - 2001; 2005 - Present

Co-writer, editor, proofreader and/or data analyst of the common portion of the finals for Math 1214, Math 1205/1225, Math 1206/1226, Math 1224 and Math 2224/2204.

## **Member of the Teaching Committee**

1994-1995

**Lower Division Committee** 

1994-1996

#### Supervisor at the Math Emporium

1998-1999

Supervised undergraduate and graduate workers

## **VT UNIVERSITY SERVICE:**

#### **College of Science Faculty Association**

2023-Present

Mathematics Department representative on the Steering Committee

COSFA exists to serve the College, specifically to represent the faculty to the administration and promote productive communication. COSFA also identifies faculty representatives to serve on 12 different university committees.

#### **Search Committees:**

2020, 2021, 2022

Served on several search committees for hiring Director, Associate Directors, and Coordinators of The Office of Undergraduate Academic Integrity.

#### **Undergraduate Honor System (UHS):**

2002-Present

Faculty representatives serve as either a faculty counselor to an accused student or as the faculty representative on a hearing panel.

Faculty Senate representative

2023- Present

Faculty representative of the Honor Council Honor Council meets bimonthly to review cases. Serve as faculty representative on appeal panels. 2015-Present

Faculty representative of the UHS Review Board Fall 2013–2015 UHS Review Board meets weekly to review the cases heard during the week. After restructuring of the UHS, this review board became the Honor Council.

Faculty Senate 2009-2014, 2016-Present

Attend bimonthly meetings, representing the Mathematics Department, to discuss matters that pertain to faculty and student issues.

# **Faculty Senate Cabinet**

2023-Present

Faculty Senator representing the College of Science

The Faculty Senate Cabinet meets bimonthly (on alternate weeks to Faculty Senate meetings) to discuss faculty issues, the topics to include in the agenda for upcoming Faculty Senate meetings.

# **Commission on Faculty Affairs**

2011-2013, 2022-Present

Faculty Senate representative

Attend bimonthly meetings to discussed issues that pertain to the faculty. Resolutions were created and brought to University Council for a vote.

# **Employee Benefits Committee**

2023-Present

Commission on Faculty Affairs representative

Attend monthly meetings to discussed issues that pertain to the benefits.

## **Transportation and Parking Committee**

2018-Present

Faculty Senate representative

Attend monthly meetings and bring parking concerns to the attention of the Director of Parking Services.

University Council 2018- 2022

Faculty Senate representative

Attended bimonthly meetings and vote on resolution pertaining to university policies.

Campus Scouts 2018-Present

Faculty Advisor

Service organization provides opportunities for college students to be involved in Scouting and leadership development by hosting events for the area Boy and Girl Scout communities. Weekly meetings are held to prepare for merit badge workshops, hikes, camping, etc.

## Secretary/Treasurer of Academy of Teaching Excellence

Fall 2005-2007

# **Faculty Advisor for the University Sporn Award**

2005-2006

Nominations are received from students, and recipients are selected by a committee comprised of student representatives from Omicron Delta Kappa and Golden Key honor societies and a faculty advisor who was the previous year's award winner.

#### Mentor for The Center for Academic Enrichment and Excellence

1997-1998

# **VT HONORS**

30 years of service 2023

Favorite Faculty (sponsored by VT Residence Life)

2010,2013,2017

"Thank a Teacher" (sponsored by Center for Instructional Development and Educational Research) 2010,2016, 2017, 2018, 2021, 2022

Promoted to Senior Instructor

2008

#### University Sporn Award

2005

Sponsored by the Center for Instructional Development and Educational Research and the Virginia Tech Academy for Teaching Excellence, the Sporn Award for Excellence in Teaching Introductory Subjects is presented annually to a Virginia Tech faculty member to recognize excellence in teaching introductory-level courses.

#### Academy of Teaching Excellence

2005-Present

The Academy is an organization of faculty committed to the enhancement of the educational environment, the highest standards of instruction, the vigilant pursuit of new forms and technologies of teaching, the continual evaluation of practices and standards of teaching effectiveness, and personal and organizational commitment to the importance of teaching in the research university.

"Comfort Zone" 2000

I was recognized by the Dean of Students for services for students with disabilities. One or more students with disabilities identified me as a faculty member who provides a welcoming environment in the classroom.

#### **TEACHING CERTIFICATIONS**

New York Secondary Education Teaching Certification (7-12) Texas Secondary Education Teaching Certification (7-12)

## **VOLUNTEER WORK**

Parish Council – St. Mary's Catholic Church	2017-2021
Committee member of Boy Scout Troop 152	2012-2018
Judge for the Giles County Academic fair	2009-2010
Math textbook committee for the elementary and middle schools in Giles Cou	inty 2006
Co-Leader and Business Manager – Girl Scout Troop 2286	2005-2016
Co-Leader - Brownie Troop 545	2004-2005
Sunday school teacher – St. Mary's Catholic Church	2004-2020
Eastern Elementary volunteer	2000-2013
Eucharistic Minister – St. Mary's Catholic Church	1998-Present
Newport Agricultural Fair	1997-2018
Lecture - St. Mary's Catholic Church	1995-Present
Mathematics Tutor	1995-Present
Share (a food cooperative)	1995-2005
Malverne Volunteer Ambulance Corps-Emergency Medical Technician	1981-1992
Mercy Hospital	