

Mario C. Cortes

Associate Professor – Tenured

2006-Present

Teaching Area

Foundations Program, Professional Program –

ARCH 4075/5775G, ARCH 4076/ 5776G – Building Structures I and II

ARCH 2015, ARCH 2016 Architecture II

ARCH 3015, ARCH 3016 Architecture III

ARCH 4515, ARCH 4516 – Architecture V

ARCH 4214 – TS: Europe Studio/Culture Studies

ARCH 3046 – Building Assemblies, ARCH 3054 Building Analysis

ARCH 4524 – Thesis Documentation

ARCH 3514 – TS: Watercolor

Education

Master of Architecture,

Virginia Tech

1995

Bachelor's of Arts in Architecture,
(Cum Laude)

Washington University

1979

Major: Architecture

Minor: Civil Engineering – Structures

Teaching and Administrative Experience

Chair, Professional Program of Architecture

2018-2020

Associate Professor – Tenured

2006 to present

Assistant Professor

2001-2006

Instructor, School of Architecture and Design, VPI&SU

1986-2001

Professional Experience

Consulting – Structural Consulting and Design:

1996-Present

William Galloway – Graduate Laboratory Concrete - Room

2009-2010

Kathryn Albright – Blacksburg Farmers Market

2006-2007

Pittman/Thompson – Rammed Earth Design-Build Studio

Leon Davis – Haybale Residence and Thesis

Susan LaBrie and Associates: Pheasant Run Unit 202

Hunter Pittman, Architect: King Building I, II

Donald Sunshine, Architect: multiple residences

Keith Hunter, Architect: Pearisburg Residence

Architectural Designer and Project Manager

1981-1984

Beery, Rio and Associates, Architects

Architectural Intern, Holle and Graff Architects

1980-1981

Creative Activity, Research and Scholarship

Procured \$4,000 for awards for 3rd Year IIBEC –

(International Institute of Building Enclosure Consultants) Competition.

Spring 2022

Gabriel Prize – National Winner --

Exhibit of Watercolor Architectural Analytiques , Miami, Florida

2006-2007

Western European Architecture Foundation Exhibit. Paris, France.

2006

Cite Internationale de Arts Exhibit of French Theaters watercolors. Paris, France

2006

Gabriel Prize – National Finalist (among top three candidates)

2005

Presentation of my architectural watercolors and sketches. Boston, MA.

Exhibit: Second Year 2004 Competition – Fall 2004
“A place to work and display for three artisans.”
Trade Street, Winston-Salem, NC.

Presented and published ***Bridge Between Structures and Design*** 2003
at the ACSA Central Conference 2003 - WEAVING –
Constructing and construing the material world and tapestry.

Exhibit: Student-Faculty Watercolor Tonal Montages. Fall 2004
Hollins University, Roanoke, VA.
Exhibit of watercolor montages

Organized an exhibit of watercolor montages of enlarged photographs of
Erwin Blumenfeld and Samuel Chamberlain. Fall 2004

Teaching Excellence Awards

Virginia Tech College of Architecture and Urban Studies
Excellence in Teaching Lecture & Seminar 2008
Virginia Tech College of Architecture and Urban Studies
For Studio Teaching Excellence Award 2007
Virginia Tech College of Architecture and Urban Studies
Creative Achievement Award 2006
Panhellenic Council of VA Tech 2003
Merit pay increases 1993-2015
CAUS Faculty Small Project Research Grant 1997
Nominee for Teaching Excellence Award 1993
Tau Sigma Delta National Honor Society 1992
Phi Kappa Phi Honor Society 1984
Graduate Fellowship 1986-1988
Cum Laude, Dean’s List 1975-1979
Washington University 1975-1979
Chancellor’s Honorary Scholarship 1975-1979

University Service

Honorary Committee Member – College Level 2011-2013
Honorary Committee Member – College Level 2003-2009
Honorary Committee Member – College Level 2003-2005
Honorary Committee Member – School Level 2004-2006
Undergraduate Honor System Representative 1999-Present
Search Committees:
Professional Program, Structures 1996-1997
Graduate Program, Building Technology 1996-1997
Serve in all Faculty Meetings in undergraduate program

Research and Scholarship

Presented and published ***Bridge Between Structures and Design***
at the ACSA Central Conference 2003 - WEAVING –
Constructing and construing the material world and tapestry. 2003

Structural Advisor of the Rammed Earth Design-Build Studio
(Pittman/Thompson).

Developed structural modules for:

- Roof rafter design and analysis.
- Micro Lam rafter design and analysis.
- Flitch Beam design and analysis.
- Roof truss design and analysis.
- Shear wall analysis due to wind forces.
- Frame analysis and design of interior columns.
- Pipe column design.
- Roof stability design.
- Perimeter Spread Footing.
- Square Spread Footing design.
- Verified design of hip rafter and compression ring connection.

2003-2015

Structural Designer of Sunshine Residence

Developed structural modules for:

- Roof rafter design and analysis.
- Ridge Beam.
- 2"x 4" Stud Wall Construction.
- Garage Hip Roof Rafter and Tension Cable.
- Floor Beams.
- Floor Joists.
- Micro Lams at Door Entrance.
- Micro Lam Spandrel.
- Perimeter Footing.
- Column Square Spread Footings.
- Rafter Tensile Cables.
- Ridge Beam.
- Transfer Girder.
- Interior Posts for Transfer Girder.
- Wind Uplift Force Analysis.

2004-2015

Structural Designer of Leon Davis' Haybale Residence and Thesis

- Spandrel Beam Size.
- Tensile Cable Design.
- Compression Panel Design.
- Beam Bearing Capacity.

2005

Virginia Tech Faculty Development Program

Enrolled in Visual Basic Programming Course

1997

Computer Applications and Tools

1994-Present

Web-Based Teaching Tools

1997-Present

Distance Learning Applications

1998-Present

International Travel

Co-Leader, CAUS Study Abroad, Italy, France, and Spain

2004, 2008-2018

Co-Leader, CAUS Study Abroad, Italy

1997

Public Service

SWVSA Youth Soccer: Coach

1995-1999

YMCA Open University Instructor

1995-1998

Blacksburg Parks and Recreation Youth Baseball

1997-1998