

Kenneth S. Sands II, Ph.D.

Office

Construction Management Department
Florida Gulf Coast University
10501 FGCU Blvd. S.
Fort Myers, FL33965
kesands@fgcu.edu

EDUCATION

Ph.D., Environmental Design & Planning (Building Construction)

Virginia Tech, Blacksburg, VA
Graduate Certificate: Future Professoriate

M.S., Construction Management

Florida International University, Miami, FL

B.S., Construction Management

Florida International University, Miami, FL
Summa Cum Laude

A.A., Civil Engineering Technology

College of the Bahamas, Nassau, Bahamas
Honors

HONORS AND AWARDS

- 2019 **ASC Regional Teaching Award**, ASC Region 1
 - 2018 **Teaching and Learning Conference Travel Award**, Drexel University
 - 2016 **Outstanding Faculty Service** for the Department of CM, Drexel University
 - 2015 **Outstanding Doctoral Student** of the College of Architecture and Urban Studies, Virginia Tech
 - 2015 **Participant** for the competitive Future Faculty Development Workshop as nominated by the Myers-Lawson School of Construction, Virginia Tech
 - 2014 **Exemplary BC Graduate Student** from the Department of Building Construction, Virginia Tech
 - 2014 **ASEE Conference Grant** from the Myers-Lawson School of Construction, Virginia Tech
 - 2014 **ASCE (CRC) Conference Grant** from the Department of Building Construction, Virginia Tech
 - 2014 **Doctoral Research Grant** from the Myers-Lawson School of Construction, Virginia Tech
 - 2013 **Engineering Sustainability Student Conference Grant** from the Mascaro Center for Sustainable Innovation, University of Pittsburgh
 - 2013 **Global Perspectives Program (GPP) Scholarship** from the Graduate School, Virginia Tech
 - 2012 **Pignon, Haiti Service Learning Scholarship** from the Department of Building Construction, Virginia Tech
 - 2008 **The Outstanding Graduate in Construction Management** from the Department of Construction Management, Florida International University
-

PROFESSIONAL CERTIFICATES & AFFILIATIONS

Certificates UAS Pilot's Certification (Part 107 – Pertinent to Drones in Construction)
Future Professoriate Graduate Certificate
30 Hour OSHA Trained Professional in Construction Safety and Health
First Aid/CPR/AED Certified

Affiliations Sigma Lambda Chi Construction Management Honor Society
Sustainable Facilities and Infrastructure Lab (SFI Lab)
American Society of Civil Engineers (ASCE)
American Society for Engineering Education (ASEE)
Construction Management Association of America (CMAA)
Golden Key International Honor Society

RESEARCH INTERESTS

- Construction risk (safety, economic impact)
- Construction education (pedagogy, service-learning)
- Construction & society (ethics, sustainability, resilience)

PROFESSIONAL ENGAGEMENTS & ACTIVITIES

ACADEMIC

Assistant Professor

Florida Gulf Coast University, Construction Management Department, Ft. Myers, FL, 2019-Present

Educator for multiple course offerings in the Construction Management Department.

Adjunct Professor

Drexel University, Construction Management Program, Philadelphia, PA, Jan. 2019-Present

Online courseware developer and instructor for the Construction Management program.

Assistant Teaching Professor

Drexel University, Construction Management Program, Philadelphia, PA, Jan. 2016-2019

Educator for multiple course offerings in the Construction Management program at Drexel University.

Courseware Developer

Florida Gulf Coast University, U.A. Whitaker College of Engineering, Ft. Myers, FL., 2018

Development of an online/hybrid *Estimating I* course

University of the District of Columbia, Washington, D.C., 2017

Development of *Construction Tools* courseware

University of the District of Columbia, Washington, D.C., 2017

Development of *Construction Terminology* courseware

Postdoctoral Research Associate

Development of a Transformative Safety Leadership Program for Construction Educators “SafeSWAG”, 2015 (concurrent with UDC coordinator position below)

Co-investigator on industry partner funded research aimed at encouraging the education of IIF® safety principles for construction students.

Project Coordinator

University of the District of Columbia, Washington, D.C., 2015 (concurrent with above)

TAAACCT Grant coordinator for the construction academy. Responsible for curriculum management, employer outreach, industry advisory council, and internship program development and management for the Workforce Development and Lifelong Learning Program.

INDUSTRY

Project Coordinator/Estimator

Louminel General Contractor, Miramar, FL, 2011

Estimating and contract administration

Assistant Project Manager/Project Coordinator

Grace & Naeem Uddin, Inc., Miami, FL, 2007-2010

Estimating and bidding, planning and scheduling, pre-qualification preparation, purchasing, buyout, contract management, contract administration, subcontract management, and site supervision of projects for various public and private commercial construction projects.

RESEARCH PROJECTS

Faculty Research

Benchmarking the Usage and consumption of water during construction: A Case Study of AB9 on the Florida Gulf Coast University Campus, Funded at \$37,000, In Progress

Co-investigator researching the consumption of water during the process of construction.

Use of Drones on Construction Project Sites: A Case Study of AB9 on the Florida Gulf Coast University Campus, In Progress

Co-investigator researching the use of drones on construction sites.

Heat Stress Condition of Construction Workers: A Case Study of AB9 on the Florida Gulf Coast University Campus, In Progress

Co-investigator researching the conditions under which construction workers are exposed to.

Doctoral Research

Ethics education and its relationship to undergraduate construction students’ professional ethical sensitivity, Completed, 2014

Graduate Research Assistant

Development of a Transformative Safety Leadership Program for Construction Educators
 “SafeSWAG,” Completed with intention to continue, 2014

*See Postdoctoral Research

Introduction to Construction Engineering and Management Course Development (Ethics Perception), Completed, 2014

Co-investigator tasked with development and administrations of survey instrument for use in a pre-test, post-design experimental design study investigating the change in perception of the construction industry by construction engineering students.

Building Information Modeling (BIM), Completed, 2013

Co-investigator to disseminate and outline components of BIM management and BIM management plans. In addition, this assignment required the basic development of a virtual model of a helicopter hangar for industry collaboration with MB Contractors for analysis of relevant functionality.

Virginia Center for Housing Research, Completed, 2012

Geocoder for housing research study.

TEACHING

Course (# of credits)	No. of Sections	Delivery Method
Assistant Professor – Florida Gulf Coast University		
<i>BCN1210C: Construction Materials (4)</i>	2	Face-to-Face
<i>BCN2405C: Construction Mechanics (3)</i>	2	Face-to-Face
<i>BCN 3611C: Construction Estimating (3)</i>	1	BFLX
Assistant Teaching Professor – Drexel University		
<i>CMGT101: Introduction to Construction Management (3)</i>	1	Face-to-Face
<i>CMGT240: Economic Planning for Construction (3)</i>	4	Face-to-Face
<i>CMGT265: IT for Construction (3) - redeveloped</i>	7	Face-to-Face
<i>CMGT461: Construction Management (3) - redeveloped</i>	4	Face-to-Face & Hybrid
<i>CMGT469: Construction Seminar: Contemporary Issues (3) - redeveloped</i>	3	Online
<i>CMGT499: Independent Study in CMGT (3)</i>	3	Face-to-Face
Graduate Courses		
<i>CMGT 525: Applied Construction Project Management - redeveloped</i>	2	Online
<i>CMGT532: International Construction Practice (3 quarter credits) - redeveloped</i>	2	Online
Graduate Teaching Assistant – Virginia Tech		
<i>CNST2104: Introduction to the Construction Engineering and Management Profession</i>	1	Face-to-Face
<i>BC2044: Construction Buildings and Materials</i>	2	Face-to-Face
<i>BC3004: Construction & Society</i>	1	Face-to-Face
<i>BC4434: Construction Practice I (Pre-Capstone Course)</i>	2	Face-to-Face
<i>BC4444: Construction Practice II (Capstone course)</i>	2	Face-to-Face

SERVICE

College & Departmental Service

*Florida Gulf Coast University, CM Program, Faculty Advisor, 2020-
Construction Management Student Organization*

*Florida Gulf Coast University, CM Program, Member, 2020-
Faculty Search Committee*

*Florida Gulf Coast University, COE, Member, 2020-
Undergraduate Curriculum Committee*

*Florida Gulf Coast University, Member, 2020-
Concrete Exposure Day Planning Committee*

*Drexel University, CM Program, PAR Self-study Team, Member, 2018
Member of the Program and Alignment Review (PAR) Team for the CM program with the
office of the Provost.*

*Drexel University, CM Program, Faculty Search Committee, Chair, 2017
Chaired committee and organized activities related to a new CM program faculty hire.*

*Drexel University, CM Program, Faculty Advisor, 2017
Provide mentorship and advisement for the Real Estate Investment Club at Drexel
University.*

*Drexel University, CM Program, ASC Competition Team, Coach, 2016-Present
Coach/mentor for the annual ASC Region 1 commercial construction team.*

*Drexel University, CM Program, Education & Curriculum Committee, 2016-Present
Updated entire undergraduate curriculum and continuously develop*

*Drexel University, CM Program, Faculty Advisor, 2016-Present
Provide mentorship and advisement for the Drexel University Construction Association
(DUCA) student club at Drexel University.*

*Drexel University, CM Program, Open House/Accepted Student Days, Host, 2016 - Present
Present and respond to potential students visiting open houses/accepted students days to
help them understand the CM program and career.*

*Myers-Lawson School of Construction, Peer Mentorship Program, 2013- 2014
Provided mentorship for incoming graduate students at both master's degree and doctoral
degree levels, providing assistance with cultural adjustment, program advisement, and
professional development.*

Building Construction, Graduate Program Advisory Panel, 2013- 2014

Member of the advisory panel as a liaison between graduate students and faculty to provide regular program improvement feedback and incoming graduate student assistance.

Associated Schools of Construction Annual Conference, 2014

Provided technical support for the development and execution of the 50th International Conference of the Associated Schools of Construction hosted by Virginia Tech.

Building Construction, Annual Golf Tournament, 2013

Provided organizational assistance for the execution of the Department of Building Construction at Virginia Tech's annual golf tournament and networking event.

University Service

Florida Gulf Coast University, Faculty Fellow, 2020-

Sigma Phi Epsilon

Florida Gulf Coast University, Volunteer, 2020-

Eagle Expo

Florida Gulf Coast University, New Faculty Academy, Participant, Fall 2019

Drexel University, College of Engineering, IT Academic & Research Advisory Group, 2018-Present

CM program representative providing support for the decision-making and direction setting of information technology (IT) for the College of Engineering.

Drexel University, College of Engineering, Undergraduate Curriculum Committee, 2017-Present

CM program representative (voting member) for the College of Engineering's curriculum committee.

Drexel University, Liberty Scholars Program, Faculty Mentor, 2016-Present

Provide student mentorship as a faculty mentor for Liberty scholarship recipients throughout a student's time at the University.

VT Board of Visitors' Graduate Student Representative Search Committee, College of Architecture and Urban Studies Graduate Student Representative, 2014

Acted as representative of the College of Architecture and Urban Studies on the search committee for the graduate student representative to the Virginia Tech Board of Visitors.

Virginia Tech Graduate School, Global Perspectives Program, 2013

Hosted students from the University of Basel (Basel, Switzerland), for Virginia Tech's Graduate School's Global Perspective Program to visit universities in the U.S.

Community Service

ACE Mentor Program of Eastern PA, Philadelphia, PA, 2018 - Present

Faculty mentor as part of a team hosting weekly workshops for a group of high school students wishing to learn more about careers in architecture, engineering, and construction.

Rebuilding Together Philadelphia (RTP), Philadelphia, PA, 2016 - Present

Organize Drexel students and participate in block build events for the rehabilitation of housing facilities.

Sustainable Facilities and Infrastructure Lab, Relay for Life, Blacksburg, VA, 2014

Raised funds for and participated in the American Cancer Society's relay for life fund-raiser held on Virginia Tech's campus as part of the SFI Lab's team.

Sustainable Facilities and Infrastructure Lab, Apartment Complex Deconstruction, Blacksburg, VA, 2014

Worked with a crew of faculty and students deconstructing windows and frames of a Blacksburg apartment complex for re-use as part of a Habitat for Humanity fundraising event.

Habitat for Humanity Restore®, Christiansburg, VA, 2013

Worked with faculty and students of the SFI Lab to design and construct a greenhouse kit using reclaimed windows, and built demonstration model for display in local ReStore.

Habitat for Humanity®, Roanoke, VA, 2012

Worked as project coordinator from January-February 2012. Supervised volunteer staff and worked as a laborer for painting, framing, landscaping, and miscellaneous work.

Professional Service

Program Reviewer, American Society for Engineering Education (ASEE), 2014 - Present

Program Reviewer, Associated Schools of Construction (ASC), 2015 – Present

Program Reviewer, Construction Research Congress (CRC), 2016 – Present

International Service

Foundation Preparation of New Elementary School Building, Pignon, Haiti, 2012

Prepared the foundation for a new elementary school building, including the demolition of existing conditions, hand excavation, and stone foundation preparation.

PROFESSIONAL DEVELOPMENT & TRAINING

Florida Gulf Coast University, 2019-

KEEN FIRE Workshop – Dayton, Ohio – Summer 2019

UAS/Drone Pilot Re-certification – Particular to Drone Use in Construction

New Faculty Academy – Fall 2019

ACCE Certification – Initial Visiting Team Member Training – 2020

ACCE Certification – Advanced Visiting Team Training – 2020

ACCE Certification – 12 Hour CM Teaching Workshop – 2020

Drexel University, 2016-2019

UAS/Drone Pilot Training Program – Particular to Drone Use in Construction
University Professional Development - Understanding Title IX, Active Shooter, The Clery Act at Drexel, US Data Privacy and Security, Protection of Minors & Reporting Child Abuse

University of the District of Columbia, 2015

FERPA Compliance Training: Minimizing Your Risks
FERPA for Higher Education
Prevention of Discrimination and Sexual Violence: Title IX and the SaVE Act
Lawful Hiring
Unlawful Harassment Prevention for Higher Education Staff
LGBT Cultural Competency

Associated Schools of Construction 50th Annual Conference, 2014

Soft Skills Workshop
Incident and Injury-Free® (IIF®) Safety Workshop

Virginia Tech Faculty Development Institute, 2012-2014

Graduate Teaching Assistantship Training Workshop
Ethics in Teaching Workshop
Case Studies in Class Management and University Policies Workshop
Classroom Threat Assessment, Managing Threatening or Disruptive Behavior Workshop
Title IX Training

PUBLICATIONS & PRESENTATIONS

REFEREED

Journal

- Sands II, K.S.**, Pearce, A.R., Suh, M.J., Simmons, D.R., Fiori, C.M., and Mouras, V.A. (2020). *“Toward a Technique of Evaluating Student Ethical Sensitivity to Professional Issues of the Construction Industry”* Journal of Construction Engineering and Project Management, 10(2), 1-20. doi:10.6106/JCEPM.2020.10.2.001
- Suh, M.J., Pearce, A.R., Zhang, Y., **Sands II, K.S.**, Ahn, Y.H., and Kim, K. (2020). *“Spillover effect of LEED-Energy Star certified office buildings on market values in New York city”* International Journal of Sustainable Building Technology and Urban Development, 11(3), 114-141. doi:10.22712/susb.20200010

Conference

- Sands II, K.**, Suh, M.J., Capano, C. (2020). *“Toward a framework for digitally connected construction technology risk management (dCT-RM).”* (Accepted – cancelled due to COVID-19)
- Sands, K.S.**, Pearce, A.R., Simmons, D.R., Suh, M.J., Fiori, C.M. (2020) *“Ethics in Undergraduate Construction Curricula: A Two-Stage Exploratory Sequential Approach*
-

to Developing and Piloting the HETC Survey.” *Proc., American Society of Engineering Education*. Virtual. – ***Nominated for Best Paper**

Suh, M. J., **Sands II, K.S.**, Kim, K., Ahn, Y.H., Ma, J. and Karan, E. (2019). “Cyber Security Awareness in BIM/VDC-Related Courses at Higher Education Institutions.” *Proc., International Conference on Sustainable Built Environment, December 12-13, Seoul, Korea*.

Sands, K.S., Fiori, C.M., and Suh, M.J. (2018). “Beyond BIM: The evolution of an IT for Construction Course.” *Proceedings of the 2018 Construction Research Congress*.

Johnson, N.J., **Sands, K.S.**, Fiori, C.M., and Pearce, A.R. (2014). “Building the right way: The need and importance of an ethicist in construction engineering.” *In proceedings of the 2014 Engineering Leaders Conference being held on November 9-11, Doha, Qatar*.

Sands, K.S. and Pearce, A. (2013). “Fostering green innovations in future practitioners.” *Proc., Mascaro Engineering Sustainability Conference, Pittsburgh, PA*.

Sands, K.S. and Pearce, A. (2014). “Toward a framework for construction ethics education; A meta-framework of construction ethics education.” *Proc., 2014 Construction Research Congress, Atlanta, GA, 379-388*.

Sands, K.S. and Simmons, D. (2014). “Utilizing think-aloud protocols to assess the usability of a test for ethical sensitivity in construction.” *Proc., American Society of Engineering Education*. Indianapolis, IN.

Zhao, D., **Sands, K.S.**, Wang, Z., and Ye, Y. (2013). "Building information modeling-enhanced team-based learning in construction education." *Proc., Information Technology Based Higher Education and Training (ITHET), 2013 International Conference, IEEE, Antalya, Turkey, 1-5*.

NON-REFEREED

Sands, K.S. (2018). “Is your organization ready for drones?”, *Construction Today*, (2), 23.

Sands, K.S. and Maser, D. (2016). “Perspectives on VDC in education and in action”, *Construction Today*, (3), 22-25.

Sands, K.S. (2014). “Switzerland’s response to ‘our common future’: Swiss sustainability and higher education” *Global Perspectives Program Manual*, 4(1), 84-89.

PRESENTATIONS & SPEAKING ENGAGEMENTS

Conference Presentations

Sands, K.S., Fiori, C.M., and Suh, M.J. (2018). “Beyond BIM: The evolution of an IT for Construction Course.” *Accepted – Proceedings of the 2018 Construction Research Congress*.

Sands, K.S., (2014). “Toward a framework for construction ethics education; A meta-framework of construction ethics education.” Presented at the 2014 Construction Research Congress, Atlanta, GA.

Sands, K.S., (2014). “Utilizing think-aloud protocols to assess the usability of a test for ethical sensitivity in construction.” Presented at the American Society of Engineering Education. Indianapolis, IN.

Invited Presentations

-
- Sands, K.S.**, (2016). "Technology in the Construction Industry." Presented to the General Builders & Contractors Association (GBCA - AGC), Atlantic City, N.J.
- Sands, K.S.**, (2015). "Tools for success: Soft skills for the construction trades." UDC-CC WDLL, Washington, D.C.
- Sands, K.S.**, (2014). "Answering the why of research: A journey to writing a dissertation on ethics education." Presented to a class on Engineering Ethics, Blacksburg, VA.
- Sands, K.S.**, (2014). "The doctoral process: The manuscript option 101." Presented at the Myers-Lawson School of Construction, Blacksburg, VA.
- Sands, K.S.**, (2014). "Tips, tools, and techniques for writing research." Presented at the Myers-Lawson School of Construction, Blacksburg, VA.
- Sands, K.S.**, et al. (2014). "University and society: Meeting expectation? Student perspective." Presented at the Embassy of Switzerland, Washington, D.C.

Panel Discussions

- Sands, K.S.**, et al. (2013) "An honest discussion on the graduate student process." Presented at the Myers-Lawson School of Construction, Blacksburg, VA.

Poster Presentations

- Sands, K.S.**, and Pearce, A. (2013). "Fostering green innovations in future practitioners." Presented at the Mascaro Engineering Sustainability Conference, Pittsburgh, PA.
-