

CURRICULUM VITAE
CARMINE C. BALASCIO, Ph.D., P.E.

EDUCATION:

Ph.D.	Co-Majors: Agricultural Engineering & Engineering Mechanics, Mathematics Minor – Iowa State University, Ames
M.S.	Agricultural Engineering - Iowa State University, Ames
B.S.	With High Honors, Agricultural Engineering Technology - University of Delaware, Newark
B.A.	With Honors, Mathematics - University of Delaware, Newark

PROFESSIONAL ACADEMIC EXPERIENCE:

2/13 – present	Associate Professor, Dept. of Plant and Soil Science with Joint Appointment , Dept. of Civil and Environmental Engineering, Univ. of DE, Newark, DE.
7/11 – 1/13	Associate Professor, Dept. of Bioresources Engineering and Dept. of Plant and Soil Science with Joint Appointment , Dept. of Civil and Environmental Engineering, Univ. of DE, Newark, DE.
6/00 – 6/11	Associate Professor, Dept. of Bioresources Engineering with Joint Appointment, Dept. of Civil and Environmental Engineering, University of Delaware, Newark, DE.
7/92 – 6/00	Associate Professor, Dept. of Bioresources Engineering, University of Delaware, Newark, DE.
4/85 - 6/92	Assistant Professor, Dept. of Bioresources Engineering, University of Delaware, Newark, DE.
5/80 - 4/85	Research Assistant, Department of Agricultural Engineering, Iowa State University, Ames, IA.
9/79 - 5/80	Instructor, Department of Agricultural Engineering, Iowa State University, Ames, IA.
7/79 - 9/79	Research Assistant, Department of Agricultural Engineering, Iowa State University, Ames, IA.

PROFESSIONAL ENGINEERING EXPERIENCE:

9/2013 through 7/2014	Co-investigator for project with Hagarty Environmental, LLC, to make recommendations about and write a report on best practices for handling stormwater impacts of aviation fuel sampling in general aviation settings.
6/2005 through 8/2005 (Part time)	Project Engineer – Engineering hydrology and statistical analysis of peak flows for flood plain delineation. Duffield Associates, 5400 Limestone Rd., Wilmington, DE 19808-1232
6/2003 through 8/2003 (Part time)	Project Engineer – Storm-Water Management. Duffield Associates, 5400 Limestone Rd., Wilmington, DE 19808-1232
8/2001 through 12/2001 (Full-time sabbatical)	Project Engineer – Storm-Water Management and site engineering, surveying field work. KCI Technologies, Inc., 153 E. Chestnut Hill Rd., Newark, DE 19711

PROFESSIONAL REGISTRATION:

Licensed Professional Engineer (Civil Engineering), State of Delaware, 1993 to present, registration number: 9352

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

ABET, since 2014; ASABE, since 1985; ASCE, since 1990; ASEE, since 1998; NSPE, since 2008, Delaware Academy of Science, since 1993; Delaware Association of Professional Engineers (DAPE) since 1993; National Council of Examiners for Engineering and Surveying (NCEES), since 2000.

HONORS AND AWARDS

- A. January 12, 2018, Recognized for 10 years of service on NCEES Fundamentals of Engineering Exam Development Committee.
- B. January 6, 2011, Recognized for Fall 2010 Departmental Leadership in the University’s ePortfolio Initiative, Winter Faculty Institute, University of Delaware.
- C. January 6, 2009, Recognition of Contributions as an Exemplary Assessment Faculty Fellow, Winter Faculty Institute, University of Delaware.
- D. June 7, 2002, Recognition as an Outstanding Technical Reviewer for Transactions of ASAE and Applied Engineering in Agriculture

SCHOLARSHIP:

- A. Research Interests: Dr. Balascio’s research interests currently include 1.) Urban hydrology and best practices for stormwater management, particularly green technology and low impact development, 2.) Outcomes assessment of engineering, engineering technology, and landscape architecture programs, 3.) Teaching with technology and active learning methods, 4.) Use of hydrologic computer models for engineering analysis and design--particularly for stormwater management, 5.) Use of advanced techniques for sensitivity analysis, calibration, and verification of hydrologic models.

B. Peer-Reviewed Journal Articles and Conference Proceedings:

1. Balascio, C.C. 2017. Pedagogical Considerations in Use of Online Problem Sets in Technical Courses. Proceedings of the 2017 ASEE Annual Conference and Exposition, Columbus, OH.
2. Balascio, C.C. 2015. A Dozen Years of Asynchronous Learning: Using LON-CAPA for Online Problem Sets. Proceedings of the 2015 ASEE Annual Conference and Exposition, Seattle, WA.
3. Balascio, C.C. 2014. Engineering Technology Workplace Competencies Provide Framework for Evaluation of Student Internships and Assessment of ETAC of ABET Program Outcomes. Proceedings of the 2014 ASEE Annual Conference and Exposition, Indianapolis, IN.
4. Balascio, C.C. 2013. Use of an Electronic Dossier for Promotion. Proceedings of the 2013 ASEE Annual Conference and Exposition, Atlanta, GA.
5. Balascio, C.C. and B.K. Kinney. 2012. Development and Implementation of a Web-Based Peer Evaluation Tool for Team Projects. Proceedings of the 2012 ASEE Annual Conference and Exposition, San Antonio, TX.
6. Balascio, C.C. 2011. Implementation of an ePortfolio Requirement and Professional Development Seminar Series for an ET Program. Proceedings of the 2011 ASEE Annual Conference and Exposition, Vancouver, BC.
7. Balascio, C.C., T.J. Brumm, and S. Mickelson. 2010. Competency-Based Assessment of Engineering Technology Program Outcomes. Proceedings of the 2010 ASEE Annual Conference and Exposition, Louisville, KY.
8. Balascio, C.C., E.R. Benson, W.D. Balascio, and L. Hotchkiss. 2009. A study of student-reported out-of-class time devoted to engineering technology courses. *Journal of Engineering Technology*. Fall 2009 26(2):8-14.
9. Balascio, C. C. 2009. Offering a Successful Engineering Technology Program at a Large Research University: Challenges and Unusual Circumstances. Proceedings of the 2009 ASEE Annual Conference and Exposition, Austin, TX.
10. Balascio, C.C. and W.C. Lucas. 2009. A survey of storm-water management water quality regulations in four Mid-Atlantic States. *Journal of Environmental Management* 90:1-7.
11. Balascio, C. C., L. Wehrle, R. Henry, and C. Hollis. 2008. Nationally Normed Exams for Outcomes Assessment of Engineering Technology Programs and Certification of Engineering Technology Graduates. Proceedings of the 2008 ASEE Annual Meeting, Pittsburgh, PA.
12. Balascio, C.C. 2004. Use of Web-Based Testing Software for Problem-Based Learning in Hydraulics and Hydrology. Proceedings of the 2004 ASEE Annual Conference and Exposition, Salt Lake City, Utah.
13. Balascio, C.C. 2001. Multiquadric equations and optimal areal rainfall estimation. *Journal of Hydrologic Engineering*, 6(6):498-505.
14. Balascio, C.C., D.J. Palmeri, and H. Gao. 1998. Use of a genetic algorithm and multi-objective programming for calibration of a hydrologic model. *TRANSACTIONS of the ASAE*, 41(3): 615-619.
15. Balascio, C.C. 1996. Comments on "Influence of sample size on chemical and physical soil measurements". *Soil Sci. Soc. Am. J.* 60(2):630-631.
16. Balascio, C.C. 1992. Calibration of peat moss moisture contents from microwave oven drying vs. air-oven values. *APPLIED ENGINEERING IN AGRICULTURE* 8(2):197-200.
17. Balascio, C.C. 1991. Specifying sample masses for gravimetric testing procedures. *TRANSACTIONS of the ASAE* 34(4):930-936 CORRECTED.
18. Balascio, C.C. 1990a. Estimation of mean and variance from gravimetric samples of variable magnitude. *TRANSACTIONS of the ASAE* 33(1):31-35.
19. Balascio, C.C. 1990b. Precision of peat moss water contents measured by microwave oven drying. *APPLIED ENGINEERING in AGRICULTURE* 6(5):592-596.
20. Balascio, C.C., C.J. Bern, and C.R. Hurburgh Jr. 1989. Effect of humidity ratio on corn moisture content as determined by the air-oven method. *TRANSACTIONS of the ASAE* 32(5):1715-1719.
21. Balascio, C.C. and K.M. Lomax. 1989. A comparative study of moisture sensors for use in mushroom beds. *TRANSACTIONS of the ASAE* 32(3):928-933.
22. Balascio, C.C., M.K. Misra, and H.P. Johnson. 1987a. Particle movement and separation phenomena for a gravity separator: I. Development of a Markov probability model and estimation of model parameters. *TRANSACTIONS of the ASAE* 30(6):1834-1839.

23. Balascio, C.C., M.K. Misra, and H.P. Johnson. 1987b. Particle movement and separation phenomena for a gravity separator: II. Experimental data and performance of distance-transition Markov models. TRANSACTIONS of the ASAE 30(6):1840-1847.

TEACHING: Have taught lectures and laboratory sections for lecture/lab courses at the University of Delaware in these subjects:

Land and Water Management	Soil and Water Conservation
Land Surveying	Soil Physics
Hydraulics	Landscape Construction Systems
Soil Mechanics	Site Engineering
Stormwater Management	Production of Ag Equipment and Products
Ind. Study advisor for 43 undergrad and grad students	Technical Practicum in Industry advisor for 18 students

SELECTED PROFESSIONAL SERVICE

- A. DAPE Council (The Council is the governing body for DAPE, the Delaware Association of Professional Engineers, the licensing board for engineers in Delaware): Elected to Education Seat, 9/00 to 8/08, 9/12 through 8/20.
- Vice President / President Elect, DAPE Council, 09/13/2017 through 09/12/2018.
 - Member, Examining Committee (processes applications for licensure by examination and comity; applications for reinstatements, temporary permits, and certificates of authorization), 10/00 to present
 - Chair of Examining Committee, 10/02 through 09/08, 10/2013 through 09/2016.
 - Secretary, DAPE Council, 10/03 through 09/05.
- B. NCEES (National Council of Examiners for Engineering and Surveying),
- Member, Exams for Professional Engineers Committee, 2017 through present.
 - Representative, North East Zone, Uniform Practices and Legislative Guidelines Committee (UPLG), Computer-Based Testing (CBT) Subcommittee, 2011 through 2014
 - Member, FE Exam Review Committee, Civil Engineering Subcommittee, 2007 to present.
 - Northeast Region Representative, Engineering Education Task Force, 2007 to 2010 (initially Ad-Hoc Committee on Bachelor's +30 education initiative).
- C. ABET – Engineering Accreditation Commission (EAC) Program Evaluator for Civil Engineering since 2014.
- D. ASEE (American Society for Engineering Education): Biological & Agricultural Engineering Division
- Awards Chair, 2014-15;
 - Division Chair, 2013-14;
 - Program Chair, 2012-13, 2014-15;
 - Secretary, 2011-12.
- E. Technical Reviewer:
- Journals: *Journal of Irrigation and Drainage*, *Journal of Hydrologic Engineering*, *Journal of Environmental Engineering*, *Journal of Hydraulic Engineering*, *TRANSACTIONS of ASABE*, *Applied Engineering in Agricultural*, *Journal of Environmental Management*, *Quarterly Journal of the Royal Meteorological Society*.
 - Proposal Review: Shota Rustaveli National Science Foundation, Cariplo Foundation, Maryland Industrial Partnerships.

RECENT SELECTED DEPARTMENT, COLLEGE, AND UNIVERSITY SERVICE

- Member, CANR Courses & Curriculum Committee. First term: Sep. 2014 through Aug 2017, second term: Sep. 2017 through Aug. 2020.
- Chair, CANR Courses & Curriculum Committee. Sep. 2014 through Aug 2016.
- PLSC Undergraduate Program Coordinator, January 2017 to present, and member PLSC Administrative Group, Fall 2015 through present.
- Undergraduate Co-coordinator, Fall 2015 through December 2016.
- Member, Landscape Architecture Faculty group, 2014 to present.
- Member, Plant & Soil Science Courses & Curriculum Committee, 2014 to present. Chair, Fall 2015 through Spring 2016, January 2017 through present.
- Member, Plant & Soil Science P&T committee, 2012-14.
- Member, Landscape Horticulture & Design, MLA faculty search committee, 2013-14