### **CURRICULUM VITAE**

#### David M. Kender

Department of Biomedical, Industrial, and Human Factors Engineering Wright State University Dayton, Ohio 45435

(937) 775-5044

Current Status: Senior Lecturer of Engineering, Emeritus

#### **Education:**

- M.S. (Human Factors Engineering), Wright State University, Dayton, Ohio, 1996
- M.S. in Education, (Educational Technology), Wright State University, Dayton, Ohio, 1989
- B.S. (Electrical Engineering), Air Force Institute of Technology, Dayton, Ohio, 1973
- B.S. Education (Mathematics), Miami University, Oxford, Ohio, 1964

#### **Years of Service**

2017 - Senior Lecturer, Emeritus	College of Engineering and Computer Science
2016 - Graduate Faculty Re-Appointment	College of Engineering and Computer Science
2011 - Graduate Faculty Re-Appointment	College of Engineering and Computer Science
2010 - Senior Lecturer of Engineering Appointment	College of Engineering and Computer Science
2009 - Lecturer Continuing Appointment	College of Engineering and Computer Science
2006 - Graduate Faculty Appointment	College of Engineering and Computer Science
2003 - Faculty Lecturer of Engineering Appointment	College of Engineering and Computer Science
1997 - Adjunct Instructor Appointment	College of Engineering and Computer Science
1997 - Graduate Faculty Re-Appointment	College of Education and Human Services
1994 - Graduate Faculty Appointment	College of Education and Human Services
1993 - Adjunct Instructor Appointment	College of Education and Human Services
1992 - Adjunct Instructor Appointment	College of Science and Mathematics

### **Teaching and Industrial Experience:**

2017-Present	Senior Lecturer, Emeritus, Department of Human Factors, Industrial Systems, and Biomedical Engineering, Wright State University, Dayton, OH
2010-2017	Senior Lecturer, Department of Human Factors, Industrial Systems, and Biomedical Engineering, Wright State University, Dayton, OH
2003-2010	Lecturer, Department of Human Factors, Industrial Systems, and Biomedical Engineering, Wright State University, Dayton, OH
1997-2003	Adjunct Instructor, Department of Human Factors, Industrial Systems, and Biomedical Engineering, Wright State University, Dayton, OH
1993-2000	Adjunct Instructor, Department of Teacher Education, Wright State University, Dayton, OH
1992-1994	Adjunct Instructor, Department of Mathematics and Statistics, Wright State University, Dayton, OH
1990-1998	Adjunct Instructor, Clark State Community College, Springfield, Ohio (Mathematics, Physical Science, Computer Programming)
1964-1988	Military Officer, United States Air Force (Staff Engineer and Program Manager)

### CURRICULUM VITAE David M. Kender Page Two

# **Courses Taught: Wright State University**

# **College of Engineering and Computer Science**

BME 1950 BME 1980 BME 3511 BME 3512 BME 6010 IHE 6010		Inges Due to Conversion from Quarters to Semesters  Undergraduate Research in Biomedical Engineering Special Topics in Biomedical Engineering Bioelectronics I Bioelectronics II Ethics in Engineering (Academic Integrity) Ethics in Engineering (Research and Practice)	
ISE 2	2211	Statistics for Engineers	
DME	105	To the Company of the	
BME	195	Introduction to Biomedical Engineering	
BME	422/622	Biophysics	
BME	460/660	Biomedical Electronics	
BME	461/661	Bioinstrumentation	
EGR	190	Fundamentals of Engineering and Computer Science	
EGR	199	Preparatory Math for Engineering and Computer Science	
EGR	482	Engineering Fundamentals	
HFE	301/699	Statistical Methods for Testing, Development, and Manufacturing I	
HFE	302/699	Statistical Methods for Testing, Development, and Manufacturing II	
HFE	306/606	Human Factors in Engineering and Design	
HFE	307/607	Industrial Ergonomics	
HFE	450/650	Human Factors Engineering Analysis Methods	
HFE	451/651	Human Factors Engineering in Computer Systems Design	
HFE	471/671	Systems Performance Modeling	
HFE	480/680	Engineering in Occupation Safety and Health	
HFE	482/682	Operations and Facilities Design	
HFE	603	Statistics for Engineers	
HFE	723	Human Factors Engineering in Aerospace Medicine	
HFE	734	Experimental Research and Evaluation in Human Factors Engineering	
HFE	742	Understanding and Aiding Human Decision Making	
IHE	677	Systems Process Analysis	
IHE	678	Computational Models for Industrial Systems Engineering	
ISE	210	Engineering Perspectives	
ISE	301	Statistical Methods for Testing, Development, and Manufacturing I	
ISE	302	Statistical Methods for Testing, Development, and Manufacturing II	
ISE	477	Systems Process Analysis	
ISE	478	Computational Models for Industrial Systems Engineering	
IDL	170	Companied Wiodels for industrial Systems Engineering	
College of Education and Humans Services			
ED	633	Teaching Skills and Strategies	
EDL	670	Spreadsheet Applications Across the Curriculum	
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ED	633	Teaching Skills and Strategies
EDL	670	Spreadsheet Applications Across the Curriculum
EDL	731	Statistics and Appraisal in Education
EDL	793	Computer Applications for Educational Leaders
EDT	280	Classroom Application of Computers
EDT	470	Integrating Software Applications
EDT	485	Computers for Educators
EDT	670	Staff Development Institute for Teachers
EDT	786	Application of Computers in Education

# **College of Mathematics and Science**

MTH	105	Mathematics and the Modern world
STT	264	Elementary Statistics I

# CURRICULUM VITAE David M. Kender Page Three

#### **Scientific and Professional Societies:**

Member The Honor Society of Phi Kappa Phi

Member The Engineering Honor Society of Tau Beta Pi

#### **Honors and Awards:**

Excellence in Teaching - Most Effective Teacher, College of Engineering and Computer Science, Wright State University (2012)

Excellence in Teaching - Most Effective Teacher, College of Engineering and Computer Science, Wright State University (Top Five Nominee 2006, 2007, 2008, 2010, 2011, 2016)

Excellence in Teaching - Most Effective Adjunct Teacher, College of Engineering and Computer Science, Wright State University, 2001, 2002

Adjunct Faculty Award for Professional Excellence, Clark State Community College, 1993, 1997 Merit Award, Johns Hopkins National Search for Computing to Assist Persons with Disabilities, 1991

#### **Institutional and Professional Service:**

#### Institutional Service

Member	University Classrooms of the Future	2003-2005
Member	University Faculty Affairs Committee	2005-2006
Member	WSU Trebuchet Competition Group	2004-2013
Member	CECS College Teaching Awards Committee	2013-2015
Member	CECS College Academic Computing Committee	2010-2017
Member	CECS College ABET Committee	2009-2010
Member	CECS College Service Courses Committee	2009-2010
Member	CECS College Web-Page Development Committee	2005-2006
Chair	BIE Department ABET Committee	2009-2010
Chair	BIE Continuous Curriculum Improvement Committee	2004-2006
Member	BIE Industrial Systems Curriculum Committee	2003-2017
Member	BIE Biomedical Engineering Curriculum Committee	2003-2017
Member	BIE Alumni/Industrial Advisory Board	2003-2017

#### **Grants:**

- 1. Kender, David M. (Principal Investigator) and Hance Dennis (Co-Investigator):: <u>Transition of BME 3511</u> <u>Bioelectronics from a Traditional Delivery of Instruction to a Student Success Center SCALE-UP Classroom (Fall 2015)</u> Wright State University Teaching Innovation Grant Proposal Student Engagement and Alternative Delivery 2015 Funded: (\$6,000)
- 2. Kender, David M. (Principal Investigator): <u>Transition of ISE 2211 Statistics for Engineers from a Traditional Delivery of Instruction to a Student Success Center SCALE-UP Classroom (Fall 2015)</u> Wright State University Teaching Innovation Grant Proposal Student Engagement and Alternative Delivery 2015 Funded: (\$6,000)

# CURRICULUM VITAE David M. Kender Page Four

#### **Journal Publications:**

#### Journal Articles

Phillips, C., Repperger, D., Kinsler, R., Bharwani, G. and Kender, D.: Quantitative Model of the Human-Machine Interaction and Multi-Task Performance: A Strategy Function and the Unity Model Paradigm. Computers in Biology and Medicine, 37:1259-1271, 2007

Phillips, C. A., Kinsler, R. E., Repperger, D. W., Mandal, J., Neidhard-Doll, A. T., & Kender, D. M. (2013). A human–machine interaction strategy function: information throughput and weighting with application to Multiple-Attribute-Task-Battery. *Theoretical Issues in Ergonomics Science*, 14(4), 379-401.

Camden, A. N., Phillips, C.A., McKinley, R.A., Kender, D. M. and Nelson, J.: (2015) Strategy Shifting With Multisensorial Cueing: Theoretical Capability of Multitasking Throughput. <u>IEEE Transactions on Human-Machine Systems</u> 01/2015; DOI:10.1109/THMS. 2015.2470679

#### Journal Abstracts

Phillips, C.A., Repperger, D.W., Kinsler, R., Bharwani, G. and Kender, D.: Human-Machine-Interaction Parameter Applied to the Multi-Attribute Task Battery.

Aviation Space Environmental Medicine, 78:239, 2007

Phillips, C.A., Kinsler, R., Repperger, D.W., and Kender, D.: Human-Machine-Interaction Model: Definition and Application to Multiple Task Information Processing.

<u>Aviation Space Environmental Medicine</u>, 81:255, 2010

A N. Camden, C. A. Phillips, R. A. McKinley, D. M. Kender: (2015)

The Effect of a Constant MATB Information Input Rate on Human Performance with Increasing Number of Tasks and Task Combinations. <u>Aerospace Medicine and Human Performance</u>, 86(3):206-207, 2015

#### **Conference Papers:**

Space, Environmental Medicine

Phillips, C. A., Walters, C. M., Reynolds, D. B., & Kender, D. M. (2012). INFORMATION THROUGHPUT AS A MULTI-TASKING PERFORMANCE METRIC FOR MULTIPLE-ATTRIBUTE-TASK-BATTERY(MATB). Aviation, Space, and Environmental Medicine, 83(3). (2013)

Phillips, C., Walters, C., McKinley, A., Kinsler, R., Neidhard, A., & Kender, D. (2013). INFORMATION THROUGHPUT MODEL FOR THE RESOURCE MANAGEMENT COMPONENT OF THE MULTIPLE-ATTRIBUTE-TASK-BATTERY(MATB).

Aviation, Space, and Environmental Medicine, 84.4 (2013)

Camden, A. N., Walters, C., Phillips, C. A., McKinley, A., Neidhard, A., and Kender, D. Enhancement of Information Throughput Using the Resource Management Component of the Multiple-Attribute Task Battery.

39th AIAA Dayton-Cincinnati Aerospace Sciences Symposium, 5 March 2014, Dayton, OH.