CURRICULUM VITAE OF BELLE S. WOODWARD

I. PROFESSIONAL AFFILIATION AND CONTACT INFORMATION

A. Present University Department or Unit:

School of Information Systems and Applied Technologies

B. Office Address:

College of Applied Sciences and Arts
Mail Code 6614
1365 Douglas Drive, Room 104
Southern Illinois University
Carbondale, IL 62901
E-Mail: bellew@siu.edu

II. EDUCATION

A. Formal Education:

M.A. Computer Resources and Information Management Webster University, St. Louis, MO	1997
B.S. Business Administration and Accounting Wayland Baptist University, Wayland, TX	1995
B.S. Computer Science and Business Economics University of Bamberg, Germany	1989

B. Continuing Education:

Cisco Certified Academy Instructor (CCAI) Certification, authorizing me to certify instructors to teach Cisco Networking Academy student classes.

Cisco Certified Networking Associate (CCNA) Certification, specializing in Networking Basics, Routers and Routing Basics, Switching Basics, Intermediate Routing, and WAN Technologies.

Cisco Certified Networking Professional (CCNP) Certification, specializing in Advanced Routing, Remote Access, Multi-layer Switching, Internetwork Troubleshooting.

III. PROFESSIONAL EXPERIENCE

Southern Illinois University Carbondale (Carbondale, Illinois)   2004-Present
School of Information Systems and Applied Technologies
College of Applied Sciences and Arts
Associate Professor

- Teach undergraduate courses: Ethics and Security in Information Systems, Network Management, Advanced Enterprise Network Management, Special Projects in Security, Networking Security, and WAN Installation and Administration.
- Conduct research on ethics and security education, innovative e-learning & model curriculum design, and classroom discourse as it relates to women in technology.
- Develop and teach distance-learning online courses: Ethics and Security in Information Systems, Network Security, and LAN Installation and Administration via Blackboard.
- Developed the curriculum in networking and security courses to meet the requirements of the NSTISSI 4011 and 4013 national standards used by the National Security Agency to verify curriculum.
- Established the lab environment for teaching networking and security courses (funded by a State Farm Grant, $23,000.

University of Mary Hardin-Baylor (Belton, Texas)   2003- 2004
Department of Computer Sciences
College of Business
Assistant Professor

- Taught undergraduate courses: Telecommunications Development, and Telecommunications and Networks.

Temple Community College (Temple, Texas)   2000- 2003
Department of Computer Information Systems
Instructor

- Taught courses: Networking Hardware, Operating Systems, and Cisco curriculum at CCNA and CCNP levels.

Elizabethtown Community College (Elizabethtown, KY)   1998- 2000
Department of Computer Information Systems
College of Science
Assistant Professor

- Taught courses: Systems Analysis and Design, Networking, and Operating Systems.

Briggs & Stratton Corporation (Rolla, MO)   1995- 1997
Information Systems/Network Administrator

- Provided networking solutions to include highly secure and dynamic networks on an enterprise basis.
- Analyzed business needs and designed solutions on one or multiple platforms in a LAN/WAN and Web Architecture.

IV. RESEARCH AND CREATIVE ACTIVITY

A. Interests and Specialties:

Ethics Education and Assessment in IT
Designing a student-centered learning environment using collaborative learning strategies and integrating Distance-Learning
Curriculum design for information systems technologies and information security
Network Security and Privacy
Ethics and Technology
Women in Computing

B. Current Projects:

1. Journal Article Writing:

Going Global: The Value of Study Abroad

Group Work: Undergraduate Students Perceptions

Integrating Soft Skill Competencies Through Project-based Learning Across the Information Systems Curriculum

2. Grant Proposal Preparation:

Growth and Training Impact in IT: A Measure of Ethical Reasoning (to be submitted to the National Science Foundation).

C. Grants Applied for:

Woodward, B. (2009). Growth and Training Impact in IT: A Measure of Ethical Reasoning, Creative Research Grant. Funded by ORDA, Southern Illinois University Carbondale, Carbondale, Illinois.

Woodward, B., Colyar, J., Kallo, J., Sarvela, P., & Yanyan, S. (2007, October). Growth and Training Impact in IT: A Measure of Ethical Reasoning. Funded by the

National Science Foundation (SES - Ethics and Values in Science, Engineering, and Technology Program).

Hebel, M., Tate, R., & Woodward, B. (2007, January). CPATH CB: Revitalizing the Heartland through Network Technology. Funded by the National Science Foundation (CNS - CPATH Program).

Colyar, J., Kelly, A., & Woodward, B. (2006, May). Female Students and Classroom Discourse in University IT Programs. Funded by the National Science Foundation (DRL - Research & Evaluation on Education in Science Engineering Program).

Woodward, B., Chevalier, L., Colyar, J., Kallo, J., & Yanyan, S. (2006, March). Growth and Training Impact in IT: A Measure of Ethical Reasoning. Funded by the National Science Foundation (SES - Ethics and Values in Science, Engineering, and Technology Program).

Woodward, B., Colyar, J., & Kelly, A. (2005, April). Female Students and Classroom Discourse in University IT Programs. Funded by the National Science Foundation (HRD - RES ON GENDER IN SCI & ENGINE Program).

D. Grants Received:

Tom Imboden, Assistant Professor of Information Systems Technologies, and Belle Woodward, Associate Professor of Information Systems Technologies, submitted an Information Assurance Scholarship Program (IASP) proposal as Principal Investigator (PI) and Co-PI, respectively, in February this year and recently received $29,722 funding from National Security Agency as scholarship awarded to a CASA student.
Imboden, T & Woodward, B. S. (2011). Undergraduate Student Tuition Surcharge for Technology Committee ($55,000.00)

Woodward, B. S. (2007-2009). Core Impact Grant, ($80,000.00).

Woodward, B. S. (2009). Growth and Training Impact in IT: A Measure of Ethical Reasoning. Funded by SIUC Creative Research and Faculty Research Seed Project, Southern Illinois University Carbondale, Carbondale, Illinois, ($9,717) and one month stipend.

Woodward, B. S. (2007). State Farm Foundation Grant, ($23,000.00).

Woodward, B. S. (2006). College of Applied Sciences and Arts Summer Research Fellowship, Southern Illinois University Carbondale, Carbondale, Illinois, ($6,500).

Woodward, B. S. (2004). Faculty Start-Up Grant, Southern Illinois University Carbondale, Carbondale, Illinois ($10,000) and one month stipend.

E. Honors and Awards:

Legier, J, Woodward, B S., & Martin, N. (2012).*Reassessing the Skills Required of Graduates of an Information Systems Program: An Updated Analysis*. Proceedings of Information Systems Education Conference, New Orleans, Louisiana. Received the Meritorious Paper Award at the conference.

Woodward, B S., Sendall, P., & Ceccucci, W. (2009). *Integrating soft skill competencies through project-based learning across the information systems curriculum*. Proceedings of the Information Systems Education Conference, Washington, DC. **Received the Distinguished Paper Award at the conference**.

ISAT *Teacher-of-the-Year Award*, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2007-2008.

Outstanding Mentor, McNair Scholars Program, Southern Illinois University Carbondale, Carbondale, Illinois, 2006.

CASA Research Paper-of-the-Year Award, 2008. Paper title: "The relationship between ethical decision making and ethical reasoning in information systems and technologies' students." Published in the *Journal of Information Systems Education,* 18 (2).

CASA Summer Research Fellowship, Southern Illinois University Carbondale, Carbondale, Illinois, 2005-2006.

F. Papers and Presentations at Professional Meetings:

Imboden T., Woodward, B. & Martin, N.L (2014) "*Evaluating Information Security Practice, Knowledge, and Attitudes of Information Technology Student Workers*", Information Systems Education Conference

Legier, J., Woodward, B. & Martin, N. (2012). *Reassessing the Skills Required of Graduates of an Information Systems Program: An Updated Analysis*, Information Systems Education Conference

Martin, N.L. & Woodward, B. (2012). *Building a Cybersecurity Workforce with Remote Labs*, Information Systems Education Conference

Martin, N. Martin, N., Woodward, B.S. (2011). *Will They or Won't They? Exploring Ethical Judgment, Gender, Age, Geographic Region, and Behavioral Intent.* Information Systems Education Conference, Wilmington, NC.

Woodward, B. S. (2011). *Information Assurance Awareness*. Deggendorf University, Deggendorf, Germany.

Martin, N., Woodward, B.S. (2011). *Computer Ethics of American and European Students: A Cross-Cultural Comparison*. International Association for Computer Information Systems International Conference, Mobile, Alabama.

Woodward, B. S. (2011). Database Security. Deggendorf University, Deggendorf, Germany.

Woodward, B.S., Martin, N., & Imboden, T. (2010). *Expansion and Validation of the PAPA Framework*. Information Systems Education Conference, Nashville, TN

Woodward, B. S. (2010). *Project Management Security*. Deggendorf University, Deggendorf, Germany.

Woodward, B. S. (2009). *Database security*. Deggendorf University, Deggendorf, Germany.

Woodward, B., Imboden, T., & Woodward, J. (2009). *Effectiveness of remote access labs versus traditional labs*. International Association for Computer Information Systems International Conference, Pittsburgh, PA.

Woodward, B., Colyar, J., & Woodward, J. (2009). *IT group work: Undergraduate students perceptions*. International Association for Computer Information Systems International Conference, Pittsburgh, PA.

Woodward, B.S., Sendall, P., & Ceccucci, W. (2009). *Integrating soft skill competencies through project-based learning across the information systems curriculum*. Information Systems Education Conference, Washington, DC.

Woodward, B. S., Ceccucci, W., & Whitney, M. (2008). *IT students and computer ethics: Making the case for further training and ethical development*. Information Systems Education Conference, Phoenix, AZ.

Woodward, B. S. (2008). *Information assurance and international management*. Deggendorf University, Deggendorf, Germany.

Colyar, J. & Woodward, B. (2007). *Women students' confidence in information technology content areas*. Information Systems Education Conference, Pittsburgh, PA.

Woodward, B. S. (2007). *Information assurance and international management*. Deggendorf University, Deggendorf, Germany.

Woodward, B. S. (2007). *Information assurance and international management*. Helsinki Polytechnic Stadia's, Helsinki, Finland.

Woodward, B. S. (2007). *Information assurance and international management*. Cologne University of Applied Science, Cologne, Germany

Woodward, B. S., Ashby, S., Littiken, A., & Zamora, S. (2007). *Student perceptions of information technology preparedness and important job skills*. Proceedings of the Information Systems Education Conference, Pittsburgh, PA.

Woodward, B. S. (2007). *Growth and training impact in IT: A measure of ethical reasoning*. International Association for Computer Information Systems International Conference, Vancouver, B.C.

Woodward, B. S. & Young, T. (2006). *Redesigning an information system security curriculum through the application of traditional pedagogy and modern business trends*. Information Systems Education Conference, Dallas, TX.

Ashby, S., Colyar, J. E., Kelly, A., & Woodward, B. S. (2006). *Female student experiences in information technology majors: Exploring the intersections of classroom discourse and gender*. Association for the Study of Higher Education Annual Conference, Anaheim, CA.

Woodward, B. S. & Ashby, S. (2006). *Measuring growth and impact: Ethical reasoning in the information technology field*. International Association for Computer Information Systems International Conference, Reno, NV.

Woodward, B. S. (2006). *Growth and training impact in IT: A measure of ethical reasoning*. 8th Annual Meeting of the Society for Ethics Across the Curriculum at Dartmouth College, Dartmouth, NH.

Woodward, B. S. & Davis, D. (2005). *Impact of technology on teaching ethics*. Proceedings of the 8th Annual Ethics & Technology Conference, St. Louis, MO.

G. Peer-Reviewed Published Proceedings:

Legier, J., Woodward, B. & Martin, N. (2013). *Reassessing the Skills Required of Graduates of an Information Systems Program: An Updated Analysis*, Information Systems Education Journal, 11(3), 79-89. (A preliminary version appears in The Proceedings of ISECON 2012)

Martin N.L. & Woodward, B. (2013*). Building a Cybersecurity Workforce with Remote Labs*, Information Systems Education Journal, 11(2), 57-62. (A preliminary version appears in The Proceedings of ISECON 2012)

Woodward, B.S., Martin, N., & Imboden, T. (2010). *Expansion and Validation of the PAPA Framework*. Proceedings of the Information Systems Education Conference, Nashville, TN

Woodward, B S., Sendall, P., & Ceccucci, W. (2009). *Integrating soft skill competencies through project-based learning across the information systems curriculum*. Proceedings of the Information Systems Education Conference, Washington, DC. Received the Distinguished Paper Award at the conference.

Woodward, B S., Ceccucci, W., & Whitney, M. (2008). *IT students and computer ethics: Making the case for further training and ethical development*. Proceedings of the Information Systems Education Conference, Phoenix, AZ.

Woodward, B. S., Ashby, S., Litteken, A., & Zamora, S. (2007). *Student perceptions of information technology preparedness and important job skills*. Proceedings of the Information Systems Education Conference, Pittsburgh, PA.

Colyar, J. & Woodward, B. S. (2007). *Women students' confidence in information technology content areas*. Proceedings of the Information Systems Education Conference, Pittsburgh, PA.

Woodward, B. S. & Young, T. (2006). *Redesigning an information system security curriculum through the application of traditional pedagogy and modern business trends*. Proceedings of the Information Systems Education Conference, v 23, pp. 1-11, Dallas, TX.

V. PUBLICATIONS AND CREATIVE WORKS

A. Articles in Professional Journals:

Woodward, BS., Imboden T., & Martin, N. (2013) *An Undergraduate Information Security Program: More than a Curriculum. Journal of Information Systems Education, 24 (1)*.

Legier, J, Woodward, BS, & Martin, N. (2013) Reassessing the Skills Required of Graduates of an Information Systems Program: An Updated Analysis. *Information Systems Education Journal,* 9 (3). (A preliminary version appears in The Proceedings of ISECON 2012)

Martin, N.L. & Woodward, B. (2013). Building a Cybersecurity

Workforce with Remote Labs, Information Systems Education Journal, 11(2), 57-62. (A preliminary version appears in The Proceedings of ISECON 2012)

Martin, N., Woodward, B.S. (2011). *Computer Ethics of American and European Students: A Cross-Cultural Comparison. Issues in Information Systems Journal, 12(1), 78-87.*

Woodward, B.S., Martin, N., & Imboden, T. (2011). *Expansion and Validation of the PAPA Framework. Information Systems Education Journal,* 9 (3).

Having, K., Davis, J., Lautar, C., & Woodward, B. (2010). *Assessment of Healthcare Faculty Interest in Internet-based International Education Collaboration and Exchange: A Pilot Study. International Electronic Journal of Health Education*, 13:111-124.

Woodward, B.S., Sendall, P., & Ceccucci, W. (2010). *Integrating soft skill competencies through project-based learning across the information systems curriculum. Information Systems Education Journal, 8* (8).

Woodward, B., Colyar, J., and Woodward, J. (2009). IT group work: Undergraduate students perceptions. Issues in *Information Systems Journal*, 9(2), 220-224.

Woodward, B. S., Ceccucci, W., and Whitney, M. (2009). IT students and computer ethics: Making the case for further training and ethical development. *Information Systems Education Journal,* 7 (77).

Woodward, B.S., Ashby, S., Litteken, A., and Zamora, S. (2008). Student perceptions of information technology preparedness and important job skills. *Information Systems Education Journal,* 6 (38).

Colyar, J. & Woodward, B. (2008). Women students' confidence in information technology content areas. *Information Systems Education Journal,* 7 (38).

Davis, D. C. & Woodward, B. (2007). An analysis of skills required of graduates of an information systems program. *Information Technology, Learning, and Performance Journal*, 2(24).

Woodward, B. (2007). Growth and training impact in IT: A measure of ethical reasoning. Issues in *Information Systems Journal*, 8(2), 220-224.

Woodward, B. & Young, T. (2007). Redesigning an information system security curriculum through the application of traditional pedagogy and modern business trends. *Information Systems Education Journal*, 5(11).

Woodward, B. & Davis, D. C. (2007). The relationship between ethical decision making and ethical reasoning in information systems and technologies' students. *Journal of Information Systems Education*, 18.

Woodward, B. & Ashby, S. (2006). Measuring growth and impact: Ethical reasoning in the information technology field. Issues in *Information Systems Journal*, 7(1), 3-7.

B. Chapters in Professional Books:

Woodward, B., Whitney, M., Riley, M., & Mei, K. (2010). Virtual security. Boston, MA: Thomson Course Technology.

Rufi, A., Oppenheimer, P., Woodward, B., & Brady, G. (2008). Network fundamentals. Indianapolis, IN: Cisco Press.

Woodward, B. (2006). Secure network architecture and management. In Rufi, A. (Ed.), *Network security 1 and 2 companion guide* (pp. 665-715). Indianapolis, IN: Cisco Press.

C. Book Reviews:

Spinello, R. A. (2005). *Case studies in information technology ethics*. [Review of the book, 2nd ed.] ISBN 0-13-099150-3 2005.

D. Technical Review of Professional Books:

Rufi, A. (Ed.). *Network security 1 & 2 companion guide*. Indianapolis, IN: Cisco Press.

VI. TEACHING EXPERIENCE

A. Teaching Interests and Specialties:

Enterprise Networks
Advanced Enterprise Networks
Network Design
Information Security and Ethics
Network Security
Cryptography

B. Teaching and Training Grants:

Woodward, B. S. (2005). *Excellence through Commitment Undergraduate Teaching Enhancement Award*, Southern Illinois University Carbondale, ($12,000).

Asoh, D., Sissom, J. D., and Woodward, B. S. (2006). *Distance Learning Program Enhancement Award*, Southern Illinois University Carbondale, ($20,258).

C. Teaching Awards and Honors:

Awarded *Departmental Teacher-of-the-Year,* School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2007 – 2008.

VII. UNIVERSITY EXPERIENCE

A. Department Committees:

Advisor, Collegiate Cyber Defense Competition Team, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2006 – present.

Chair, IST Curriculum Committee, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2008 – present.

Member, ISAT Curriculum Committee, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2007 – 2008.

Member, IST Curriculum Sub-committee on Networking and Security Track, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2004 – present.

Member, ISAT Scholarship Committee, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2004-2006.

Member, Tenure-Track Faculty Search Committee, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2007 – 2008.

Chair, Tenure-Track Faculty Search Sub-Committee Reference Networking, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2007 – 2008.

Member, ISAT Equipment Committee, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2004-2006.

Member, ISAT Recruitment and Retention Committee, School of Information Systems and Applied Technologies, Southern Illinois University Carbondale, 2006-present.

B. College and University Committees and Councils:

1. College Level:

Member, Teaching Best Practices Committee, Southern Illinois University Carbondale, 2008 – present.

Member, CASA Research Paper/Creative Activity-of-the-Year Committee, Southern Illinois University Carbondale, 2008 –2010.

Member, CASA Tenure and Promotion Committee, Southern Illinois University Carbondale, 2011.

Member, CASA Dean Search Committee, Southern Illinois University Carbondale, 2011.

2. University Level:

Member, Director of the University Assessment Search Committee, Southern Illinois University Carbondale, 2009.

Member, Faculty Senate Elections Committee, Southern Illinois University Carbondale, 2007 – 2008.

Member, McNair Scholars Program, Southern Illinois University Carbondale, 2006-2007.

Member, REACH Program, Southern Illinois University Carbondale, 2006-2007.

Workshop Leader, Annual *Expanding Your Horizons Conference*, Southern Illinois University Carbondale, 2005 – present.

C. Other:

1. University Visits for International Academic Partnership Exploration:

Traveled to Finland and Germany with SIUC's College of Applied Sciences and Arts delegation to develop partnerships in Information Assurance and related Information Systems fields. Met with representatives from Helsinki Polytechnic Stadia's

Information Systems Educators in Helsinki, Finland, and Educators from Cologne and Deggendorf, Germany, 2007.

VIII. PROFESSIONAL SERVICE

A. Membership in Professional Associations:

Association of Computing Machinery (ACM), 2001 – present.

Institute of Electrical and Electronics Engineers (IEEE), 2002 – present.

Association of Information Technology Professionals (AITP), 2004 – present.

B. Evaluation of Manuscripts for Journals and Book Publishers and of Grant Proposals for Agencies:

Editorial board member, International Journal of Management in Education (IJMIE), focused on Managing Online Teaching in Higher Education, spring 2009.

Editorial board member, Information Systems Educators Journal (ISEDJ), 2006 – present.

Proceedings paper reviewer, International Association of Computer Information Systems Conference (IACIS), 2006 – present.

Reviewer, Issues in Information Systems Journal (IIS), 2006 – present.

Proceedings paper reviewer, Information Systems Educators Conference (ISECON), 2006 – present.

C. Invited Presentation:

Topic: "Information *Security"*
- Deggendorf University of Applied Sciences, Deggendorf, Germany, 2011

Topic: *"Project Management Security"*
- Deggendorf University of Applied Sciences, Deggendorf, Germany, 2010

Topic: "Database Management and International Management"
- Deggendorf University of Applied Sciences, Deggendorf, Germany, 2009

Topic: "Information Assurance and International Management"
- Deggendorf University of Applied Sciences, Deggendorf, Germany, 2008

Topic: "Information Assurance and Network Security"

- Deggendorf University of Applied Sciences, Deggendorf, Germany, 2007
- Cologne University of Applied Sciences, Cologne, Germany, 2007
- Helsinki Polytechnic Stadia, Helsinki, Finland, 2007