5-Year Report for Master of Cybersecurity & Leadership
University of Washington Tacoma
Institute of Technology
Milgard School of Business

Prepared for the UW Graduate School
Office of Academic Affairs & Planning

January 25, 2018

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1. Overview

The Master of Cybersecurity & Leadership Program (MCL) at UW Tacoma's goal is to develop leaders who can effectively identify and promote solutions that protect an organization's cyber systems. It is designed for professionals and military personnel with technical backgrounds and work experience. The MCL program leverages the resources of the Institute of Technology and the Milgard School of Business to provide students with strong technical backgrounds and leadership skills for career advancement in the field of cybersecurity.

The MCL is a non-thesis, 40 credit-hour cohort based program that balances a technically-oriented curriculum focused on understanding the basic operations and functionality of cybersecurity systems and information assurance with a more behaviorally-oriented curriculum focused on the management of technical professionals and organizational leadership. Eight 5-credit courses are offered over four quarters commencing in Autumn 2014. They are Business Essentials, Networking and Internet Security, Principles of Cybersecurity, Leadership and Team Dynamics, Information Assurance, Risk Management and Security Strategies, Strategic Organization Change, Cybersecurity Management, and Project Management. Each quarter, students take two 5-credit courses. One course is taught by the Milgard School of Business faculty and the other course is taught through the Institute of Technology. These courses set the foundation for students to complete a team-based capstone challenge project with a local organization in the final quarter of the program.

MCL graduates leave with a practical understanding of operational cybersecurity, including the principles of data protection, network security, and information assurance, as well as the skills to manage technical professionals and lead strategic change in their organization.

2. Faculty

MCL faculty mainly consists of full-time faculty from the Institute of Technology and the Milgard School of Business who are specialized in Internet, computer and network security, information assurance, risk management, organization behavior, information systems and operations management, business communication, and marketing:

Bai, Yan, Ph.D.	Associate Professor, Institute of Technology
Barsness, Zoe, Ph.D.	Associate Professor, Milgard School of Business
Costarella, Charles, M.S.	Lecturer, Institute of Technology
Demirkan, Haluk, Ph.D.	Professor, Milgard School of Business
Grant, DC, M.S.	Lecturer, Institute of Technology
Goda, Bryan, Ph.D.	Professor, Institute of Technology
Nelson, Kent, Ph.D.	Senior Lecturer, Milgard School of Business
Sivadas, Eugene, Ph.D.	Professor, Milgard School of Business
Thompson, Tracy, Ph.D.	Associate Professor, Milgard School of Business

3. Students

Applications, Offers, Admissions

Table I shows the number of applicants, offers, students admitted, and graduates of MCL by academic year.

Table I. MCL Student Enrollment Date

MCL	Applicants	Offers	Enrolled	Graduates
AY 2013-14	45	33	30 SUM	-
			28 AUT	-
			27 WIN	-
			27 SPR	26
AY 2014-15	39	25	23 AUT	01
			22 WIN	-
			22 SPR	-
			22 SUM	20
AY 2015-16	53	52	38 AUT	-
			40 WIN	02
			35 SPR	-
			34 SUM	32
AY 2016-17	54	35	25 AUT	-
			26 WIN	01
			26 SPR	-
			26 SUM	26
AY 2017-18	54	45	33 AUT	-
			32 WIN	-

Graduates

Up to now, we have granted 108 MCL degrees.

Number and Progress of Students

This year we have 33 students enrolled in the MCL program. 32 students earned 10 credits in Autumn 2017. One student was put on academic probation for Winter 2018 due to incomplete course work because of a family issue.

Student Placements

Table II shows our MCL graduates' current work positions based on informal surveys and Linkedin pages. Some of our MCL graduates are working as cybersecurity technical managers and leaders in top companies, such as Boeing, Amazon, T-Mobile, Intel, City and State Government Agencies, and our Military.

Table II. MCL Student Placement

Company	Title
7 Cedars Resort	System Security Administrator
ACI Edge	Systems Engineer
Aetna	IAM Security Analyst
Air Force Reserves	Maintenance Officer/Flight Commander
Air National Guard	Mission Training Officer for Cyberspace Operations Squadron
Amazon	Technical Program Manager
Amazon Web Services	Technical Account Manager
Avanade	Business Analyst Lead
AVID Center	Technology Infrastructure Architect
Boeing	Computer Security & Information Protection Specialist
	Cyber Security Architect
	Configuration Management Analyst
	Information Security Architect
	Business Systems Manager
Catalysis	Database Administrator
Child Care AWare of Washington	IT Systems and Database Administrator
City of Redmond	Network Analyst
City of Tacoma	Senior IT Analyst
	Chief Information Security Officer
Continuant	Corporate Systems Manager
Consolidated Technology Services	Security Infrastructure Engineer

Department of Transportation	CyberSecurity and Information Technology
Department of Labor and Industries	IT Project Manager
DXC Technology	Info Systems Security Manager
ERNwest	IT Manager
Fidelity Technology	Network Engineer and Security Consultant
GRC at Optive INC	Security Consultant
Hope Academy	Principal
IBM	Security Consultant
Infoblox	Associate Software Developer
	Fraud Analyst
Integrated Auction Solutions	Quality Assurance Engineer
Intel	Network Support Specialist
	Enterprise Information Security, Senior Software Engineer/Architect
King County	Information Assurance Consultant
Madigan Army Medical Center	Correspondence Technician
Microsoft	Digital Advisor
MultiCare Health System	IT Associate - Intern
PCC Aerostructures	System Manager
Pierce Transit	Assistant Manager Network & Security
Pittman Consulting, LLC	Business Owner
REI	Cyber Threat Engineer
Reserve bank of Atlanta	Information Security Specialist
S&K Global Solutions, LLC	IT Specialist
Smartsheet	Security Solutions Engineer
Special Operations Joint Task Force	ISR Collection Manager
Staples	Technician
Subsentio LLC	Chief Engineering and Chief Information Security Officer
Succeed to Lead, LLC	Cybersecurity Instructor/Writer/Developer
Tacoma Public Utilities	Critical Infrastructure Protection Lead
	Communication Security Technician
T-Mobile	Associate Engineer, SystDesign & Strategy
	Principal Engineer: Cyber Security and Compliance
	Senior IT System Analyst
Travelers	Business Systems Specialist
US Customs and Border Protection	Management and Program Analyst

US Air Force	Network Intelligence Analyst
US Navy	IT Specialist
	Project Manager
University of Washington	Extension Lecturer
US Army	IT Manager and Network Administrator
	Battalion Communications Officer
	Project Manager
	Captain
US Department of Housing and Urban Development	Director of Information Technology
VA Office of Strategic Integration/Center for Applied Systems Engineering PMO Office	Deputy Associate Director
Washington State Department of Health	Information Security Risk Manager

Student Surveys

Responses from surveys we conducted in Academic Years 2015-16 and 2016-17 from MCL capstone challenge project partners, such as Tacoma Power Utilities, Microsoft, Boeing, City of Tacoma, and F5 Networks, was favorable, indicating that our students have achieved very good cybersecurity, communication, and leadership skills.

Differences from expectations in the proposal

In the original proposal, we projected the enrollment numbers listed below.

Table IV. Enrollment Target

Year	1 2013	2 2014	3 2015	4 2016	5 2017
Headcount	24	30	40	50	50
FTE	24	30	40	50	50
Program Graduates	21	27	36	45	45

On average we have about 30 enrolled per year, but there are some fluctuations from one year to another.

4. Changes to the Program since its Inception, including

Administration

The MCL degree is housed within the Institute of Technology, which is transitioning to a School at UW Tacoma in 2017. The MCL organization's structure was changed from one Program Director in the Institute of Technology overseeing the academic program to Co-Program Directors from both schools for the duration of the Academic Year 2016-17.

Curriculum

When the MCL program was created in Academic Year 2013-14, it was set up as five 8-week modules, but due to scheduling problems the format has changed to eight 5-credit courses which have run on the quarter system since Academic Year 2014-15. One major difference includes the addition of a business essentials course; this is a brand new course which is a lift from the business program's week-long seminar for business executives. Another change is the tailoring of the program toward the final capstone project courses including: Cybersecurity Management (TCL 570) and Project Management (TCL 580). Other than these two changes, 80 percent of the program remains the same.

Faculty

Since MCL degree program was launched in Academic Year 2013, courses in leadership are mainly taught by full-time faculty members from the Milgard Business School. While courses in IT and Cybersecurity were first taught by the Institute full-time faculty members in Year 1, the majority of courses were taught by part-time instructors in Years 2 and 3, and partly so in Year 4. Finally, in Year 5 teaching was conducted by full-time faculty members in the Institute again.

Staff

Staff for the MCL program includes Curtis Black (Graduate Program Advisor and Recruiter). Other degree support (administrative and fiscal) is mainly received from the Administrator and Director of Operations of the Institute of Technology.

Budget or Resources

Table III. MCL Budget by Year

Year	Revenue	Expenses
AY 2012-13	$145K	$9K
AY 2013-14	$397K	$298K
AY 2014-15	$439K	$300K
AY 2015-16	$668K	$560K
AY 2016-17	$509K	$314K

Table III shows overall revenue and expense from Years 0 to 4. Without increasing tuition over the past five years, MCL program's fiscal reserves indicate that we have sufficient net revenue for hiring more faculty and staff to offer more classes/sections, and provide increased academic and professional support to our students.

5. Progress of the Program

As outlined in the original proposal, the MCL program provides a thorough knowledge base for managers and technology leaders concerned with the design, development, implementation, operation, and management of systems, and with the protection of an organization's information asset. The MCL learning objective and outcome assessment for the 8 MCL courses overseen by MCL teaching faculty members over the past four years show that our MCL students have achieved the following learning goals outlined in the program proposal.

1. Are fluent in concepts and terminology appropriate to a leader in cybersecurity, and are able to communicate effectively orally and in writing in professional settings;
2. Are able to evaluate a range of cybersecurity events, including those of major scale, evaluate the business impact, determine risk posture and develop effective responses, and are able to use risk assessment concepts and methodologies to determine proactive measures in protecting organizations from critical data exposure.
3. Understand how to launch and assess organizational change initiatives, how to effectively lead and manage teams, and work effectively within an interdependent group to achieve common goals.

The MCL program has been actively recruiting and supporting traditionally underrepresented minority students. The number of MCL students who are African American has doubled. We have seen continuous increases in the number of Hispanic and female students since its inception in 2013. Since 2017, we have been a member of the Academic Alliance of the National Center for Women & Information Technology (NCWIT) and committed to collaborative efforts on increasing the focus on recruiting and retaining more talented women and underrepresented groups in the technology field. In 2018, we are supporting five Women students' attendance to WiCys 2018, a NSF/Industry/Academically-supported main conference in the nation to further the growth, networking and mentoring of women within the cyber field.

Generally, the MCL program has grown healthily. One indication is that the UW Tacoma Milgard School of Business program was extended accreditation for the undergraduate and master's degree programs in business, including MCL, for an additional five years by AACSB International - The Association to Advance Collegiate Schools of Business - in 2016. This year we have successfully partnered with University of Colorado in Colorado Springs and created an agreement allowing our MCL graduates to directly transfer into their Ph.D. in Engineering Concentration in Security program.

6. Challenges

Challenges Addressed/Being Addressed

1) Admission and Enrollment

    a. We changed admission criteria based on our applicant demographic information over the past 5 years. Specifically, we now require preferred candidates to have a minimum of four years of work experience, instead of having a minimum of three years of supervisory and/or leadership work experience.

2) Student effectiveness and support

    a. For admitted students with little or no technical background but many years of leadership/management experience in a cyber-related field, we offer Tech Bootcamp to boost up their technical background to help them smoothly transit into the MCL program. We have successfully organized two summer camps for the 2016-17 and 2017-18 MCL cohorts.
    b. We developed two new courses: TCSL 601 Internship and 600 Independent Study. These courses allow students to submit a petition to substitute one of the 8 courses through these two courses. It is suitable for students who qualify for a waiver due to academic background and/or industry experience in the subject matter of one of the 8 MCL courses, but wish to build their knowledge by taking a different class in a related area. Moreover, given that the MCL is a lock-step, cohort based program, each class in the existing curriculum is only offered one time per year. Consequently, students who fail a class must wait an entire year to retake it. Adding these two new courses has positive impacts under very specific and infrequent circumstances.

3) Faculty composition

To meet the requirements for the Milgard School of Business AACSB accreditation and more importantly, from the MCL student feedback on demanding more interactions and guidance from the instructors, and more hands-on laboratory experience to strengthen their technical skills in cyber, all Cyber courses offered this year by the Institute of Technology are taught by full-time faculty members.

Challenges Anticipated in the Next Five Years

1) Refine the focus of program and appropriate governance structure

   - The MCL program's leadership has changed three times over a 5-year period, including transitioning from one Program Director in the Institute of Technology overseeing the academic program to Co-Program Directors from the Institute of Technology and Milgard School of Business. It affects program involvement directly and indirectly, such as discrepancy in admission and enrollments, instability in the instructional resources of the Institute of Technology within the young MCL program, and continuous curriculum refinement.
   - Job placement data in Table III shows that MCL alumni are mainly working as managers and technology leaders in specific aspects of software security, application security and operation security; Few focus on the strategic plan and management of an entire organization's security and cyber systems. This raised a question — does the current 4 + 4 course model that equally distributes course offerings between the two schools provide MCL students with sufficient skillsets that current cyber jobs' need?

2) Faculty resources

   - The MCL program was established five years ago. No request for a teaching faculty position has been submitted before. The MCL courses are taught by existing faculty members from other academic programs. Those faculty members have been overloaded over the past couple of years. With an increase in the demand for a large

cyber security workforce in the region and nation, faculty and staff support specifically for this program has become an urgent need.

7. Goals

1) We will work on recruiting high-quality full time faculty members to instruct MCL courses. As the MCL program continues to grow, we will recruit more staff to support students' career development.
2) We plan to work on establishing articulation agreements with local universities and colleges which provide their graduates with a seamless transfer experience into our MCL program so as to steadily increase our enrollment.
3) We will more actively recruit and retain women and underrepresented students in the cybersecurity field.
4) A different model for course delivery (hybrid or online) is being considered due to large percentage of commuter students and ever-increasing I-5 traffic.

8. Appendices

1) Original MCL degree program proposal

2) Milgard AACSB accreditation in 2016

3) MCL Course Master Syllabi

FORM 2

COVER SHEET
NEW DEGREE PROGRAM PROPOSAL

Program Information

Program Name: Master of Cybersecurity and Leadership

Institution Name: University of Washington Tacoma

Degree Granting Unit: Institute of Technology and Milgard School of Business
(e.g. College of Arts & Sciences)

Degree: Master of Cybersecurity and Leadership *(e.g. B.S. Chemistry)* Level: Master *(e.g. Bachelor)* Type: N/A *(e.g. Science)*

Major: N/A *(e.g. Chemistry)* CIP Code: 11.1003

Minor: *(if required for major)*

Concentration(s): N/A *(if applicable)*

Proposed Start Date: *Winter 2013*

Projected Enrollment (FTE) in Year One: *24* *(#FTE)* At Full Enrollment by Year: *5* ; *50* *(# FTE)*

Proposed New Funding: *Year 1: $451,200*

Funding Source: ☐ State FTE ☒ Self Support ☐ Other

Mode of Delivery / Locations

☒ Campus Delivery Tacoma *(enter locations)*

☐ Off-site *(enter location(s))*

☐ Distance Learning *(enter formats)*

☐ Other

Note: If the program is the first to be offered at a given site or location, the submission must also include the information required for the establishment of a new teaching site as outlined in section B.1 of the Program and Facility Approval Policy and Procedures.

Scheduling

☐ Day Classes ☒ Evening Classes ☐ Weekend Classes
☐ Other *(describe)*

Attendance Options

☒ Full-time
☐ Part-time
Total Credits 40 ☒ Modified Quarter ☐ Semester

Contact Information (Academic Department Representative)

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Vice Provost and Dean of the Graduate School _____

Endorsement by Chief Academic Officer Date

One page summary

The University of Washington Tacoma's Institute of Technology and Milgard School of Business propose a new professional, self-funded Master of Cyber Security and Leadership (MCL), designed to address the post-baccalaureate needs of the military and veteran population of the South Sound – specifically those with a bachelor's degree who are seeking a competitive advantage for advancement, either within the military or in government agencies and the private sector, for positions of responsibility in the growth areas of cyber-security operations and personnel leadership. The MCL is proposed as a fee-based professional master's degree program, given its highly specialized content, targeted constituency, and atypical calendar of instruction. It will help UWT become a more comprehensive university that responds to the needs of the region. This program will provide an essential service to our students and the local cybersecurity cluster and related information assurance communities. It will also enhance the visibility of UWT, the Institute and the Milgard School in the South Sound, providing educational pathways for spouses and children of veterans in all of our degree offerings. Moreover, MCL also provides an alternative route for current Institute and Milgard students who seek a professional graduate degree in a growth industry.

The MCL program will provide a thorough knowledge base for managers and technology leaders concerned with the design, development, implementation, operation, and management of cyber security systems, and with the protection of an organization's information assets. It is a non-thesis, 40 credit-hour program, with a curriculum balanced between cybersecurity and information assurance, and strategic and team leadership. 4-credit hour courses will be offered over 8-week periods, beginning in early January and ending in late December, so that veterans and reservists using their Post-9/11 education benefits will not experience disruption of those benefits. Student learning outcomes include a practical understanding of the principles of data protection, network security, and counter cyber-terrorism techniques, all grounded in the ethical issues and communication strategies associated with cybersecurity and information assurance. Graduates of the MCL program will be well versed in advanced information assurance and leadership knowledge, while also increasing their analytical and communication skills. There are ten four-credit courses planned, as shown in this preliminary list:

Principles of Cyber Security
Information Assurance / Cybersecurity and Risk Management in Context
Designing and Executing Information Assurance and Cybersecurity Strategies
Network and Internet Security
Building an Information Risk Management Toolkit
TMGMT 516 Business Communication
TMGMT 512 Business Ethics and Social Responsibility
TBUS 506 Strategic Management
TBUS 507 Individual and Group Dynamics
TBUS 570 Organization Change

Section 1: Program Need

Relationship to Institutional Roles and Mission

Fit to University Role and Mission

The Master of Cybersecurity and Leadership program (MCL) responds directly to the three guiding principles of UW Tacoma's vision:

- Access to an exceptional university education;
- An interdisciplinary approach to knowledge and discovery in the 21st century;
- A strong and mutually supportive relationship between the campus and its surrounding communities.

The MCL program leverages the resources of the University of Washington's mission Center for Information Assurance and Cybersecurity by extending the reach of the Center's related certification courses to new military populations in the South Sound. By identifying, addressing, and promoting solutions for issues of information assurance and cybersecurity, MCL will serve as an educational foundation for invention, innovation, and entrepreneurship in the state of Washington, thereby sustaining the vitality of existing and prospective IA and cybersecurity industries. The Program will emphasize participation and collaboration with Joint Base Lewis/McChord and Camp Murray in building professional depth and breadth related to information assurance and cybersecurity at all professional levels. The cooperation of two professional degree units at UW Tacoma will further enhance the reputation and effectiveness of the campus's hallmark characteristic, its interdisciplinary approach to education.

Fit to Priorities in the 2008 Master Plan for HEC Board

MCL will directly meet several of the steps to successful higher education outcomes for Washington State identified in the 2012 HECB Update:

- It will increase the capacity of higher education to serve more students by providing an educational pathway to thousands of veterans cycling through Joint Base Lewis/McChord and the hundreds of reservist officers working at Camp Murray.
- It maintains the UW's commitment to access for low-income students by providing an educational use of the New GI Bill, reducing the economic stress while also increasing the employment prospects of South Sound veterans.
- It promotes accelerated learning programs for adult learners through an agile modular curriculum.

Currently, more than 6,000 soldiers per year transition through JBLM to veteran and reservist status. UW Tacoma has advising and benefits staff on campus to assist veterans and their families in pursuing UW degrees. MCL will provide a graduate-level bookend to one of the campus' fastest growing undergraduate programs, its Bachelor of Science in

Information Technology and Systems, with its niche area of expertise in IA and Cybersecurity, and its established programs in the Milgard School of Business, for both active service members and reservists/National Guard officers who live in Pierce, Thurston and King Counties. The modular curriculum was designed to maximize for students both their time and resources, with minimal interruption between courses and a reasonable price point relative to the New GI Bill educational benefits.

Documentation of Need for the Program

MCL also contributes to the goals of the 2008 HECB Master Plan by advancing degree production, particularly in a high-demand field where the needs are currently unmet and by promoting student enrollment in STEM fields. In terms of contributing to the innovation economy of the I-5 Corridor, there are numerous opportunities for employment in cyber-security positions. According to AGORA, cyber-security is an industry that maintains "0% Unemployment". Graduates of the MCL program will be competitive in Seattle/Bellevue/Redmond businesses such as Microsoft, Starbucks, Liberty Mutual, Swedish Medical Center, Group Health, Pacific Medical Centers, Nordstrom, Expedia, Amazon, Boeing, KPMG, Puget Sound Energy and T-Mobile seek cyber security specialists with leadership skills, as do regional companies such as Costco, IT Zones, PDS Technical Services, Verizon Business, MorphoTrak and REI. In Pierce County, there is a cyber-security cluster developing, with recently rapid increases in hiring. Companies include Northrop Grumman in Lakewood, Intel in Dupont, and ManTech at Fort Lewis. Here in Tacoma, companies include Avue Technologies, Topia Technologies, Internet Identity, Seasonal View, Prepared Response, Vadium and Pierce County IT.

Student demand

As letters of support indicate, there is a strong, unmet need for leadership in cyber security and information assurance positions. There is also a significant potential pool of applicants. According to Major Andrew Miller of the Air Force National Guard at Camp Murray:

Between JBLM and the Navy presence at Bremerton and Bangor there are at least 3,000 junior-to-mid grade officers that this program would be attractive to. If there was a straight online option that blows the doors off the potential. AMU has roughly 10,000 students in their Intelligence and National Security MA program, and that is a much "softer" focus area than Cyber.

Undergraduate students in Institute programs who are interested in information assurance and cyber security have few local options for graduate degrees. The new B.S. in Information Technology and Systems program, which has its curriculum focus and research expertise in IACS, produces 30 graduates a year. Many of the 50+ Computer Science and Computer Engineering students who graduate each year have also expressed interest in graduate work in this area.

A recent survey of active military and reservists at JBLM and Camp Murray about interest in this program received 48 responses.

Over 80% are not currently involved in graduate education today, but 90% are considering it in the near future. Nearly 85% of respondents were very likely or likely to pursue a master's degree in cybersecurity and leadership if offered by UW Tacoma.

When asked for comments and suggestions, responses included the following:

A Masters from the Army War College matters only to military members and perhaps people who retire and transition into government contract work. It doesn't do much for a future with a company like Amazon.com or Microsoft. Before I'd apply to such a program, I would want to know what this degree does for me once I completed it. I'm already a field grade officer and completing this course most likely would have very little impact on my future military career. So then what does it do for me in the private sector? Answer that and you'd have a guy like me applying. That is to say if I'm the type of candidate you'd want anyway.

Very interested, prior UWT graduate would love to see this offered.

I prefer programs that offer an accelerated option where classes five or six weeks long with a week in between each class so the student like myself who work full-time can still maintain a full-time class schedule, complete their degree requirements in a shorter amount of time, and not experience burnout.

I have completed a Master's degree in Organizational Leadership. None of my studies are in the cyber field, but if they were, I would be greatly interested in your proposed Cyber-Security and Leadership course.

I would be excited to have an option of a graduate degree in this area. It would fit well with the cyber capabilities being developed in the air national guard here in Washington.

Extremely interested! I'm in the process of retiring now with the hopes of attending UWT, BS/MS CECS as a primary choice (didn't know about Cyber Security and Leadership).

Employer Demand

Linda Rix, Co-Chief Executive Officer of Tacoma's Avue Technologies, 's "*excited about a program that supports the development of managers and technology leaders concerned with the design, development, implementation, operation and management of cyber security systems*." Her 30-year old company designs technology management solutions for the public sector.

Lars Harvey, CEO of Internet Identity, also located in Tacoma, is "*particularly interested in this proposal's capacity to increase not only the supply of qualified professionals in our regional workforce, but the program's focus on growth areas of cyber security operations and personnel leadership*." IID's focus is on providing technology and services that secure the Internet presence for an organization and its extended enterprise.

Topia Technology CEO Janine Terrano leads a woman-owned business that provides solutions to help overcome the challenges inherent to complex distributed systems such as the Internet. Topia welcomes this proposal in the interest of adding to its ranks of "*world-class engineers [who] specialize in mobile object technology, systems engineering, and distributed architectures, including SOA and cloud computing*." Topia has been a long-standing partner with both the Milgard School of Business and the Institute of Technology.

Community demand

On April 27, 2009, in a speech to the National Academy of Sciences, President Obama called for major investments in attracting students to science and engineering, because science is now "more essential for our prosperity, our security, our health, our environment, and our quality of life than it has ever been before." The post-9/11 veterans educational benefit creates an opportunity for the United States to expand its technical workforce while serving those who served. It also presents a solution to another problem: a critical shortage of skilled information assurance and cyber security specialists. James Gosler, a veteran cyber security specialist who has worked at the CIA, the National Security Agency and the Energy Department, says we do not have enough talented cyber workers coming into the field to support national security objectives. According to a recent article from National Public Radio, Gosler and SANS Research Director Alan Paller estimate that there are only 1,000 highly skilled cyber defense specialists in the U.S., but that the nation needs 20,000 to 30,000 of these skilled workers to meet national computer security needs.[1]

Just weeks before the president's speech to the NAS, NSF's Division of Engineering Education and Centers sponsored a workshop to help generate ideas on how to encourage post-9/11 veterans to use their new GI Bill benefits toward educational opportunities that lead to careers in science and technology. The first recommendation reached was for customized education for veterans, including graduate level degree pathways for veterans in engineering and science. The workshop members emphasized the opportunities for specialized study at the masters and PhD levels because of the educational attainment and leadership characteristics that many new veterans will bring from their time in military service.

Nearly 93 percent of the active-duty officer corps in 2007 had at least a four-year college degree. More than 36 percent had education beyond the bachelor's level.[2] Veteran officers can be ideal candidates for graduate school. Many of the new veterans will have an interest in and talent for technical fields. Substantial numbers of young people join the military in part because they want to acquire skills that will be useful in the civilian world.[3] Thirty-five

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[1] Gjelten, T. (2010, July 19). Cyberwarrior Shortage Threatens U.S. Security. Retrieved October 6, 2010, from National Public Radio: http://www.npr.org/templates/story/story.php?storyId=128574055s

[2] "Population Representation in the Military Services, FiscalYear 2007," Table B-26

[2] "Population Representation in the Military Services, FiscalYear 2007," Table B-26 (www.defenselink.mil/prhome/PopRep2007).

[3] Beth Asch, Can Du, and Matthias Schonlau, "Policy Options for Military Recruiting in the College

percent of enlisted members serve in electronics, communications, medical, or other technical fields.[4]

A recent report from the Center for Strategic & International Studies called A Human Capital Crisis in Cyber security says, "The cyber threat to the United States affects all aspects of society, business and government, but there is neither a broad cadre of cyber experts nor an established cyber career field to build upon, particularly within the Federal government." The CSIS report says that a critical element of a national cyber security strategy is to have skilled people at every level of cyber defense. According to the report, "We not only have a shortage of the highly technically-skilled people required to operate and support systems already deployed, but also an even more desperate shortage of people who can design secure systems, write safe computer code, and create the ever more sophisticated tools needed to prevent, detect, mitigate and reconstitute from damage due to system failures and malicious acts."[5]

Relationship to other Institutions/uniqueness of program

The proposed MCL program does not duplicate any degree program in Washington State, and most related programs are on the east coast of the US. The Information School at UW Seattle offers an MS in Information Management and the Department of Urban Design and Planning offers a Master of Infrastructure Planning and Management program, which includes related coursework. Other universities offer online master degrees in cyber security, such as University of Maryland and Virginia College. Western Governors University Washington offers an Information Security and Assurance online degree. Utica College offers an online MS in Cybersecurity, Intelligence and Forensics, and New Jersey Institute of Technology has just launched an MS in Cyber Security and Privacy. NYU e-Poly offers a management track in its online Cybersecurity program, while the National Defense University offers an eight-course certificate program in Cyber Leadership as part of a multi-disciplinary master's degree in Government Information Leadership. American Military University offers an online MA in Intelligence Studies.

MCL is distinctive in its curriculum, given parallel technical and leadership course offerings; in its scheduling, given the eight-week modular design; in its target audience, given its proven "service to country" orientation; and in its relationship to the increasingly sizable and influential information and identity security cluster of small businesses in Tacoma and throughout Pierce and King Counties.

Market: Results from a National Survey" (Santa Monica, CA: Rand, 2004), p. 34.

[4] "Population Representation in the Military Services, Fiscal Year 2007" (www.defenselink.mil/prhome/PopRep2007).

[5] Evans, K., & Reeder, F. (2010, July). http://csis.org/files/publication/100720_Lewis_HumanCapital_WEB_BlkWhteVersion.pdf. Retrieved February 12, 2012, from CSIS: http://csis.org/files/publication/100720_Lewis_HumanCapital_WEB_BlkWhteVersion.pdf

Section 2: Program Description

Program Goals for the UWT Master's Degree in Cyber-Security and Leadership

a. Combine coursework in both cyber-security (technical) and leadership (organizational/strategic)

b. Accommodate students with a wide variety of technical depth and real-world experience (Active Duty Army, Reservists, National Guard, people leaving the military, and our graduates)

c. Support continued certification of UW as a Center of Excellence in IA

d. Expose students to the Common Body of Knowledge in preparation for the Certified Information Systems Security Professional (CISSP) examination

Upon completion of this program, students should be able to:

1. Be able to identify and critically assess issues and concepts related to the protection of information and information systems. Develop and articulate an organization's strategic direction.

2. Assess an organization's security attributes: confidentiality, integrity, and availability. Understand an organization as complex, interdependent systems operating in an ever-changing and uncertain environment.

3. Analyze and evaluate proposed or extant information security policies, practices and procedures in order to assess potential advantages and disadvantages that might flow from implementing them. Provide leadership so that confidentiality, integrity and availability can be protected. Insure an environment of threat reduction is maintained in an organization.

4. Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems. Perform a risk analysis for an environment. Create a management plan for security in an environment. Analyze and diagnose complex organizational problems, design effective solutions, and implement change.

5. Create policies, strategies and standard operating procedures for securing information and communication systems. Manage people, information, and processes to accomplish organizational goals and objectives.

6. Identify and critically assess the social political, economic, and ethical dimensions of IA and CS in an organizational context.

Curriculum

Program pre-requisites

Student Population: The majority of students interested in this program will be National Guard, Reserves, and Soldiers and Airmen transitioning out of the military. Some active duty service personnel and our current undergraduate Information Technology and Systems students are interested in this degree program. Therefore, the student population will likely have a wide variety of skills and educational backgrounds not necessarily in a STEM discipline. Our admission requirements are based on those of the graduate programs in the Milgard School of Business, plus a grounding in information technologies.

Proposed Admission Requirements:

1. All applicants must possess a Bachelor's degree from a regionally accredited US institution or the equivalent from a foreign institution.

2. The minimum grade point average (GPA) considered for admission is a 3.0 on a 4.0 scale for all previous undergraduate work. In cases where the undergraduate GPA is below 3.0, applicants can meet individually with an advisor to determine alternate qualifications.

3. Competitive scores from the *Graduate Record Exam (GRE)*.

4. Fluency with Information Technology. For applicants with little or no technical background, it is highly suggested they complete the online Benefit course:

http://courses.washington.edu/benefit/FIT100/index.html

This course will provide an applicant with concepts and capabilities to apply today's information technology effectively. This course was developed by the University of Washington Education Outreach program under a National Science Foundation grant. The cost for this course is free.

Up to 12 transfer credits are permitted, if those credits are from either a UW certificate program or a combination of a UW certificate program and another university. We will be seeking a waiver to allow 12 transfer credits from the National Defense University's Government Information Leadership degree program, as is the case with UW Seattle's Master of Infrastructure Planning degree.

Program Courses (sequence then brief descriptions)

The program will consist of ten 4-credit courses with eight-week durations. Each course will be offered once per week for four hours and ten minutes. One cybersecurity course will complement one leadership course each module. Content provided by Institute faculty includes principles, strategies and concepts of cybersecurity and information assurance,

risk management contextualized in a cyber-environment, and core concepts in network and Internet security. The Milgard faculty will be offering courses in business communication and ethics, social responsibility, organizational change, group dynamics and strategic management.

Course List: (Proposed Course in Italics; Existing Courses Underlined)

Module 1
1. *Principles of Cybersecurity*
2. Business Communication

Module 2
3. *Information Assurance / Cybersecurity and Risk Management in Context*
4. Business Ethics and Social Responsibility

Module 3
5. *Designing and Executing Information Assurance and Cybersecurity Strategies*
6. Strategic Management

Module 4
7. *Network and Internet Security*
8. Individual and Group Dynamics

Module 5
9. *Building an Information Risk Management Toolkit*
10. Organization Change

See Appendix C for curriculum vitae

1. Principles of Cybersecurity

Examines concepts, elements, strategies, skills related to the life cycle of information assurance - involving policies, practices, mechanisms, dissemination, and validation - that ensure the confidentiality, integrity, and availability of information and information systems. Analysis of the information assurance planning process, including determination and analysis of information assurance organization goals, the threat spectrum, risk, and legal and ethical issues.

Upon successful completion of this course, the student should be able to:

a. Identify and critically assess issues and concepts related to the protection of information and information systems.

b. Analyze and evaluate proposed or extant information security policies, practices and procedures in order to assess potential advantages and disadvantages that might flow from implementing them.

c. Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems.

d. Create policies, strategies and standard operating procedures for securing information and communication systems.

2. Information Assurance / Cybersecurity and Risk Management in Context

Examines the concepts, processes, and skills related to risk management in information assurance involving risk assessment, risk analysis, and mitigation planning. Analysis of the risk management process through several structured approaches that facilitate information assurance decision-making.

Upon successful completion of this course, the student should be able to:

a. Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems.

b. Analyze and evaluate proposed or extant risk management policies, practices, procedures and technologies in order to assess potential advantages and disadvantages that might flow from implementing them.

c. Be able to discuss the historical, philosophical and emerging trends in risk assessment methodology and the parallel contributions to security and the control of information environments.

3. Designing and Executing Information Assurance and Cybersecurity Strategies

Applies and combines information assurance concepts, processes, and skills to solve IA and CS case studies.

Upon successful completion of this course, the student should be able to:

a. Use basic ethical theories to evaluate the fairness of a proposed or extant collection of policies, laws, regulations, guidelines and practices designed to mitigate the risk and punish the misuse of on-line systems.

b. Analyze and evaluate proposed and extant information security policies, practices and procedures in order to assess, in concert with their organization's legal representatives and advisors, potential legal liabilities that might flow from implementing them.

c. Create policies and standard operating procedures for an organization that are ethically, morally and legally sound.

4. Network and Internet Security

Studies the technologies and techniques of information security policies, standards, and procedures. Topics include: Trust models; security policy design and incident response; and tools and techniques to defend against, react to, and recover from a cyber attack. Covers cryptographic methods including public and private key algorithms. Examines protocols that utilize secure email, digital signatures, authorization, and the fundamentals of computer network security.

Upon successful completion of this course, the student should be able to:

a. Illustrate and explain fundamental architectures of networks and the Internet as well as their underlying protocols.

b. Identify and define security issues, problems and vulnerabilities in voice, data, and wireless networks.

c. Define, evaluate, and compare prevalent information assurance solutions for voice, data, and wireless networks.

d. Describe and analyze Internet security issues and available countermeasures.

e. Apply industry standard security concepts and techniques to specific network environments.

f. Evaluate trends in network security policies and technology as well as their impact on the future of network development.

g. Conduct a vulnerability analysis.

5. Building an Information Risk Management Toolkit

Studies how an organization approaches technology decisions, including consideration of specific security requirements and goals that technology investments must address in support of the organization's mission. Explores how technology investments reduce the cost and complexity of managing and operation an information infrastructure while maintaining appropriate levels of cyber security. Covers systems security considerations in functional analysis, decomposition, requirements processes, and practical approaches to developing security architectures.

Upon successful completion of this course, the student should be able to:

a. Understand the concepts inherent in information security architectures.

b. Be able to perform functional analysis and decomposition in support of requirements development.

c. Understand the importance of various tradeoffs within the security architecture.

6. TMGMT 516 Business Communication (4)

Explores the functions, elements and types of communication that are important in business settings. Promotes understanding of important communication dynamics, and enhances the ability to communicate strategically and professionally in organizations.

Upon successful completion of this course, the student should be able to:

a. Understand the key functions and challenges of organizational communication, including the factors that can hinder and facilitate effective communication in business settings.

b. Be familiar with various theoretic frameworks in the study of organizational communication, and be able to apply these concepts to improve communication in business settings.

c. Understand how relational dynamics develop based on communication patterns in significant relationships with others.

d. Understand your own communication preferences and tendencies, and how they drive important outcomes you experience with others.

e. Be able to communicate strategically and professionally in business situations, including managing interpersonal dynamics, and organizing and presenting information in a professional and strategic manner in both written and oral formats.

7. TMGMT 512 Business Ethics and Social Responsibility (4)

Focuses on the ethical and moral challenges that are an everyday part of organizational life for managers. Addresses the societal consequences of managerial decisions and organizational actions. Considers global variance in ethical standards and impact of ethical behavior on organizational performance.

Upon successful completion of this course, the student should be able to:

a. Define ethical issues and problems given a situation in an organizational context.

b. Recognize ethical dilemmas and social responsibilities.

c. Analyze causes underlying an ethical problem or issue.

d. Identify alternative courses of action to address an ethical issue.

e. Justify courses of action selected to address an ethical issue.

8. TBUS 506 Strategic Management (4)

Strategic management deals with decisions that fundamentally influence the direction of the organization and effective implementation of the direction chosen. Strategic management addresses the *organizational structure*, *resources & capabilities*, and the *strategic positioning* of the organization to create, capture and sustain competitive advantage. In addition to economic *value creation*, management also must make decisions concerning the *distribution* of this economic value.

Upon successful completion of this course, the student should be able to:

a. Understand how firms gain and sustain competitive advantage.

b. Analyze strategic business situations and formulating strategy.

c. Implement strategy and organize a firm for strategic success.

9. TBUS 507 Individual and Group Dynamics (4)

This course prepares successful leaders to assemble the skills, talents, and resources of individuals and groups into those combinations that best solve the problem at hand. Scenarios are presented in which students manage people, information, and processes to accomplish organizational goals.

Upon successful completion of this course, the student should be able to:

a. Work under conditions and time frames that are not of one's own choosing.

b. Apply one's own skills and abilities to manage teams and organizations.

c. Diagnose problems, make effective decisions, influence and motivate others.

d. Optimize cross-functional teams and drive organizational change.

10. TBUS 570 Organization Change (4)

The course uses directed readings, case analyses, discussions, experiential exercises and reflective and analytical writing assignments to provide a foundation for understanding several different theoretical lenses related to organizational change. Students will apply these materials and experiences to real industries and

organizations in order to examine and assess their own managerial skills as they relate to creating and reacting to change.

Upon successful completion of this course, the student should be able to:

a. Analyze and diagnose complex organizational problems, design effective solutions, and implement change.
b. Increase one's effectiveness in dealing with multiple aspects of organizational change.
c. Identify conditions that may require it.
d. Present common approaches for analyzing, planning and implementing change from both an organizational development and a change management perspective.
e. Recognize the various roles individuals can play in the change process.
f. Develop a more situated and experience-informed theory of creating change in front-line settings.

Faculty

A committee of faculty from the Institute of Technology and the Milgard School of Business will have oversight of the program. We anticipate that for IA and CS courses, the faculty will be drawn from the Information Technology and Systems program, as well as faculty affiliated with the Center for Information Assurance and Cybersecurity. Faculty from the Milgard MBA program will be responsible for the leadership offerings.

Institute of Technology
Bryan Goda, PhD – Professor and Military Liaison
Sam Chung, PhD – Associate Professor
Yan Bai, PhD – Assistant Professor
Barbara Endicott-Pokovsky, PhD – Research Associate Professor, UW Seattle
Milgard School of Business
Zoe Barsness, PhD – Associate Professor
Kent Nelson, PhD – Senior Lecturer
Tracy Thompson, PhD – Associate Professor
Jonathan Wilson, PhD – Lecturer
Subject Matter Experts serving as Part-Time Lecturers

Student Enrollment

We expect the MCL program to increase its student body outreach by attracting the following sources of students:

Existing Information Technology and Systems undergraduate students of the Institute of Technology who have followed the Information Assurance and Cybersecurity option. UWT and non-UWT college graduates with relevant academic profile who wish to obtain a foothold in the increasingly relevant and employable fields of IA and CS. These students would need to satisfy information literacy pre-requisites in order to apply for the MCL program. Working professionals in the public, private or non-profit sectors who are interested in expanding career choices in IA and CS. These individuals wish to learn more advanced cybersecurity concepts, strategies and methods in order to improve their performance in their current job, progress faster in their careers, or transition to the information assurance and cybersecurity professions.

Based on potential interest, we expect to admit the following numbers of students to the program over the first five years of the program:

Year	1 2013	2 2014	3 2015	4 2016	5 2017
USAF National Guard	10	10	18	20	20
BS Information Tech & Systems Alumni	5	10	10	15	15
BA Healthcare Leadership Alumni	2	2	2	3	3
JBLM Enlisted Ranks	7	8	10	12	12

Enrollment and Graduation Targets

Based on the information above, we project enrollment and graduation targets as follows:

Form 5: ENROLLMENT AND GRADUATION TARGETS
Part 1

Year	1 2013	2 2014	3 2015	4 2016	5 2017
Headcount	24	30	40	50	50
FTE	24	30	40	50	50
Program Graduates	21	27	36	45	45

We anticipate that the quality of the curriculum and of our faculty will create a positive reputation for the MCL program, resulting in organic growth over the life of the program. Additionally, despite recent budget constraints and tuition increases, UWT's enrollments continue to increase. This fee-based program will be charging tuition that can be accommodated by GI Bill benefits. This is a relatively unexplored source of enrollment, but the number of potential students and the enthusiasm expressed by JBLM and Camp Murray

officers suggests that there could significantly positive potential in student enrollments and our revenue base. There is a certain advantage in being a first mover in this direction. In addition, although the proposed MCL program is designed initially for military personnel, it could potentially also attract career-changing college graduates, as indicated by interest from the Healthcare Leadership program.

Program Diversity Plan for Graduate Admission

The program will support UWT's tradition of promoting a diverse and dynamic student body by the following strategies and efforts. We will align with UWT's diversity plan and will use resources such as the Office of the Equity and Diversity to attract students from underrepresented segments of the South Sound community into the program. The admission process of the MCL program will make effective use of the UWT diversity policy. We will assure the accessibility of program advertising materials by utilizing alternative channels such as regional and local newspaper/magazine, academic/education websites and word of mouth. Working with the UWT's Assistant Chancellor for Equity and Diversity, we will identify a number of media outlets to help us reach out to and recruit underrepresented minorities. While maintaining consistency of admission criteria in screening student applications, we will look for variety among the admitted students to ensure a robust and exciting learning environment. As part of our recruiting efforts, we will be holding information sessions for the US Army and the Air Force Reserves at JBLM and Camp Murray, and working with the JBLM Education Centers as well as the J9 Unit at Camp Murray, which provides wrap-around services for National Guard officers and reservists. We will look for students with different life experiences, socio-economic backgrounds, professional experiences, and professional goals and ensure equitable access for minority and underrepresented students. Given the diversity of the military population transitioning through JBLM and Camp Murray, we anticipate significant participation from traditionally underrepresented populations.

The Army provides a very diverse body of potential students, as demonstrated by the statistics available at:

http://www.armyg1.army.mil/hr/demographics.asp

	Officer	Warrant	Enlisted	Total
White	72%	62%	60%	62%
Black	13%	19%	21%	20%
Hispanic	6%	8%	13%	11%
Asian	5%	2%	4%	4%
Other	4%	9%	2%	3%
TOTAL	**81,698**	**15,853**	**463,886**	**561,437**
TOTAL ACTIVE	**15%**	**3%**	**83%**	**100%**

Active component Army by race and ethnicity, FY11

The MCL faculty and administration will be actively involved in recruitment and nurturing

of minority and underrepresented students. The MCL faculty members are racially diverse and understand the importance of diversity and equity. They will have an opportunity to participate in the recruitment process and express their diversity perspective. They have also committed to embracing such concepts through lecturers, in-class discussions, assignments and student advising activities. In addition, they will provide on-going mentoring to the minority and underrepresented students whenever necessary.

We will continue to utilize the strong relations the UWT has had with the local community colleges to attract minority students to our undergraduate programs. They have long provided sustainable student sources for the Milgard School's undergraduate program and the computing programs of the Institute, which could in turn serve as a great source of enrollment for the MCL program. We will stress the diversity perspective in the advertising materials of the MCL program, through the recruiting events at these colleges and at the Education Centers on the joint base, and through on-going communications with their academic advisors. We will continue to support their recruiting efforts tailored towards minority and underrepresented students by providing materials in various forms (e.g., print, audio and video). The MCL program will develop and maintain an assessment process that helps to support and engage minority and underrepresented students. An exit survey will be conducted to collect students' feedback on the program's effectiveness in fostering diversity. Throughout the calendar year, students will also be encouraged to communicate to MCL faculty and advisors about concerns and suggestions related to diversity issues. The MCL program will promote and support group activities and social-networking opportunities that foster diversity. We will encourage student involvement with UWT student organizations that focus on cultivating a commitment to social and cultural diversity. Such student organizations include, but are not limited to, the Black Student Union, the Korean American International Student Team, the Latino Student Organization, the Native American Student Organization, among others. We will also promote diversity through the activities hosted by the Accounting Student Association, one of the most active and successful student organizations on campus, the ACM student chapter, the Women in Computer Science group and the Grey Hat Group in the Institute of Technology.

Administration

The MCL will require incremental resources in the administration of the program and student advising. This includes (1) co-program directors to oversee the academic program; and (2) one half-time staff person in Years 1-4, moving to full time in Year 5, whose responsibilities will be related to admissions, tracking, maintaining program guidelines, course scheduling, coordinating with the Graduate School and the administration, students counseling, verifying student requirement fulfillment for graduation and similar tasks. The admission process will be handled by a faculty committee, similar to those in our current MBA and MS CSS programs. The program directors will be selected from the faculty of the Milgard School and the ITS faculty in the Institute, and may be compensated in the form of course release or stipend for the additional administrative responsibilities assumed, if necessary. The staffing of the program will be fully supported by the revenue generated by the MCL program and will not require any state funding.

Section 3: Program Assessment

Assessment Plan

Student Assessment

The objective of the graduate program is to build technical, organizational and professional skills, attitudes, and values needed for the information assurance and cybersecurity industry. This program focuses on providing students with additional technical content and the ability to research, analyze, communicate, and apply new methods in a changing security environment. This knowledge is necessary for the student to succeed in an increasingly dynamic and complex environment.

The students will be graded in every course using the standard numeric grading. The grading will be competitive allowing prospective employers to use a student's GPA in their screening process. The students' success will be measured on how well they perform on the key learning objectives. The learning objectives include:

- Identify and critically assess issues and concepts related to the protection of information and information systems.
- Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems.
- Create policies and standard operating procedures for an organization that are ethically, morally and legally sound.
- Illustrate and explain fundamental architectures of networks and the Internet as well as their underlying protocols.
- Understand the concepts inherent in information security architectures.
- Understand the key functions and challenges of organizational communication, including the factors that can hinder and facilitate effective communication in business settings.
- Recognize ethical dilemmas and social responsibilities.
- Implement strategy and organize a firm for strategic success.

Course and Program Assessment

We will have an annual online course and program evaluation survey to assess the program. We will also have a group discussion with students to get feedback on the courses and program. Additionally we will look at student course evaluations and classroom

assessments (peer evaluations). Faculty will consider this information and recommend improvements to the program.

Faculty teaching MCL courses with an embedded measure of key learning objectives will also discuss results from the prior year, their plans for modifying course assignments based on those data and any changes to evaluation criteria used. Additionally, the faculty will discuss what they cover in their MCL courses and how they can better integrate their efforts.

We will also hold focus groups with managers at organizations that employ MCL graduates aimed at garnering feedback towards continuous improvement of the program. Similarly we will also hold focus groups with MCL alumni to gather feedback based on their work experience and how well the program prepared them for careers in cybersecurity and information assurance.

Finances

The program will operate on a fee-based funding model. UWT will enroll students and collect revenue in the form of course fees in this 40-credit graduate program to recover the costs of program operation and delivery. Expenses and overheads in Year 1 are projected to be $255K for an initial cohort of 24 students. The expenses are based on offering the ten courses in the curriculum during the first year. Please refer to Form 7.

External Evaluation of Proposal

The following scholars were contacted by the University of Washington Graduate School and provided an external evaluation of the proposal.

Professor Melissa Dark
Associate Dean of Planning and Research, College of Technology
Professor Computer and Information Technology
College of Science
Purdue University
305 N. University Street, West Lafayette, IN 47907
dark@cs.purdue.edu

Professor Julie Ryan
Associate Professor Engineering Management and Systems Engineering
The George Washington University
1776 G Street, NW - Suite 101 - Washington, DC 20052
jjchryan@gwu.edu

Appendices

A. Letters of support
B. Profile of other similar degrees
C. CVs
D. Form 4: Required Coursework
E. Form 5: Enrollment & Graduation Targets Part 1
F. Form 6: Program Personnel
G. Form 7: Summary of Program Costs and Revenue Part 2

STATE OF WASHINGTON
MILITARY DEPARTMENT
Camp Murray • Tacoma, Washington 98430-5000

May 9, 2012

Dr. Robert Friedman
Institute of Technology
University of Washington Tacoma
1900 Commerce St.
Tacoma, WA 19402

Dear Dr. Friedman:

As the Department's Chief Information Officer, I am pleased to offer this letter of support for the proposed Masters of Cybersecurity and Leadership degree at the University of Washington Tacoma. We appreciate the potential impact this program can have on active military, National Guard and reservists, as well as their families, given the employment possibilities that will come with graduation. Cybersecurity is a critical component of our nation's defense and crucial to the well being of the global economy. Moreover, here in the Pacific Northwest, where technology start-ups and multinationals are keeping tech sector employment rates quite high, soldiers and airmen transitioning to civilian life will benefit greatly from an educational opportunity that will build on their service experience and leadership skills.

We are particularly appreciative of the program's design: its combination of technology and organizational management; its modular design yielding a graduate degree within a calendar year; and its curriculum, one that contains the Common Body of Knowledge needed to prepare for the Certified Information Systems Security Professional (CISSP) examination.

Many of our soldiers and officers have sufficient experience and skills to warrant successful completion of a program that critically assesses issues and concepts related to the protection of information and information systems; protects an organization's security attributes, such as confidentiality and data integrity; and ensures a deep understanding of an organization as a complex, interdependent system operating in an ever-changing and uncertain environment.

We look forward to working with your staff to ensure that all interested and qualified personnel have access to the academic quality that the University of Washington Tacoma provides through its new offering.

Sincerely,

Lt Col Gent Welsh
Chief Information Officer

Appendix A: Letters of Support

TOPIA TECHNOLOGY

1119 Pacific Ave, Suite 200, Tacoma, WA 98402

www.TopiaTechnology.com ■ info@TopiaTechnology.com

May 1st, 2012

Robert Friedman, Ph.D.
Professor
University of Washington
1900 Commerce St.
Tacoma, WA 98402

RE: Master of Cyber Security and Leadership (MCL) post baccalaureate degree.

Dear Dr. Friedman,

We are excited at the prospect of deeper partnerships between Topia Technology and the University of Washington made possible by the proposed Master of Cyber Security and Leadership (MCL) program.

As you know, Topia Technology is a growing, woman-owned business whose products, services, and solutions help overcome the challenges inherent to complex distributed systems.

Our mission is to own the space between powerful technologies and simple solutions by hearing what customers need and keeping people passionate about making it happen. Topia's world-class engineers specialize in mobile object technology, systems engineering, and distributed architectures, including SOA and cloud computing.

We would be particularly interested in this proposal's capacity to increase not only the supply of qualified professionals in our regional workforce, but the program's focus on growth areas of cyber security operations and personnel leadership.

We are excited about a program that supports the development of managers and technology leaders concerned with the design, development, implementation, operation, and management of cyber security systems, and with the protection of an organization's information assets.

Sincerely,

Janine Terrano
CEO, Topia Technology

Columbia Bank
COLUMBIA STATE BANK

MARK W. NELSON
Executive Vice President
Chief Operating Officer

May 8, 2012

Dr. Shahrokh M. Saudagaran
Milgard School of Business University of Washington
1900 Commerce St.
Tacoma, WA 98402-3100

RE: Master of Cyber Security and Leadership (MCL) post baccalaureate degree.

Dear Dr. Saudagaran,

Columbia Bank is very interested in the prospect of greater partnership with the University of Washington – Tacoma through the proposed Master of Cyber Security and Leadership (MCL) program.

Columbia Bank is a fast-growing, regional community bank with 102 offices located throughout Washington and Oregon and is headquartered in Tacoma. To service this network of offices, Columbia Bank has invested heavily in an Operations Center locally to house its technology and security functions.

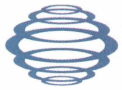
In addition, the increasing cyber security threats to our clients' financial data and our efforts to protect that data are a prime focus for the bank.

The MCL program's ability to provide managers and trained professionals for these areas would be of immense importance to finding qualified personnel and with the protection of Columbia Bank's information assets.

Sincerely,

Mark W. Nelson
Executive Vice President
Chief Operating Officer

1301 A Street, Suite 800 • Tacoma, Washington 98402-4205 Tel: (253) 396-6985 • Fax: (253) 272-2601
P.O. Box 2156 • Tacoma, Washington 98401-2156 e-mail: mwnelson@columbiabank.com



ACTIVELY SECURING THE EXTENDED ENTERPRISE

1142 Broadway - Suite 400
Tacoma, Washington 98402
888.239.6932
internetidentity.com

May 3, 2012

Robert Friedman, Ph.D.
Professor
University of Washington
1900 Commerce St.
Tacoma, WA 98402

RE: Master of Cyber Security and Leadership (MCL) post baccalaureate degree.

Dear Dr. Friedman,

We are excited at the prospect of deeper partnerships between IID (Internet Identity) and the University of Washington made possible by the proposed Master of Cyber Security and Leadership (MCL) program.

As you know, IID provides technology and services that secure the Internet presence for an organization and its extended enterprise. We recently introduced a number of unique approaches to secure organizations' use of Internet infrastructure with ActiveTrust® BGP, ActiveTrust DNS, and ActiveTrust Resolver and TrapTrace. IID also provides anti-phishing, anti-malware and brand security solutions for many of today's leading financial services firms, and e-commerce, social networking and ISP companies, and more. The company is working hard to deliver solutions that help keep the Internet safe and trusted for businesses.

We would be particularly interested in this proposal's capacity to increase not only the supply of qualified professionals in our regional workforce, but the program's focus on growth areas of cyber security operations and personnel leadership.

We are excited about a program that supports the development of managers and technology leaders concerned with the design, development, implementation, operation, and management of cyber security systems, and with the protection of an organization's information assets.

Sincerely,

Lars Harvey
CEO

WASHINGTON ARMY NATIONAL GUARD
156TH INFORMATION OPERATIONS BATTALION
CAMP MURRAY, TACOMA, WA 98430-5000

NGWA-IOG-BN

9 MAY 2012

Dr. Robert Friedman
Institute of Technology
University of Washington Tacoma
1900 Commerce Street
Tacoma, WA 91402

Dear Dr. Friedman:

I want to express my whole-hearted support for the Master's of Cybersecurity and Leadership degree at the University of Washington Tacoma. The confluence of active duty forces, military reservists and one of the most prolific veterans' communities in the nation make UW-Tacoma an ideal setting for this proposed graduate degree program. The "Silicon Forest" of Washington State has become a global leader in the advancement of information technology and the prolific vulnerabilities that follow. Washington is the second major technology hub within the United States, and the attendant military presence within the Puget Sound region lend further credence to the need for a cybersecurity program that amplifies the inherent leadership traits found in the military. This program fulfills a critical need in the recruitment, training and retention of our "Citizen Cyber Warriors".

Serendipity has created the unique opportunity for the University of Washington Tacoma to capitalize on the synergy of academic excellence, business acumen and military expertise as we enter a dynamic and dangerous cybersecurity environment. As the Commander of the first Information Operations Battalion in the Army National Guard, I have had the distinct pleasure to witness the educational benefits that the University of Washington has bestowed upon our Guardsmen. This program will be an outstanding element of a growing consortium of federal, state, local, tribal and private sector stakeholders that are essential to meeting the cybersecurity challenges of today and tomorrow.

I look forward to continuing the long-standing partnership that we have enjoyed with the University of Washington and fostering a regional community of excellence in the emerging field of cybersecurity.

Very Respectfully,

PHILIP P. OSTERLI
LTC, IN, WAARNG
Commanding

Avue™
TECHNOLOGIES CORPORATION

May 1, 2012

Robert Friedman, Ph.D.
Professor
University of Washington
1900 Commerce St.
Tacoma, WA 98402

RE: Master of Cyber Security and Leadership (MCL) Post Baccalaureate Degree

Dear Dr. Friedman,

We are excited at the prospect of deeper partnerships between Avue Technologies and the University of Washington made possible by the proposed Master of Cyber Security and Leadership (MCL) program.

Founded in 1983, Avue Technologies has pioneered the idea of smart technology for better management. The company provides the public sector with integrated technology and service solutions that dramatically increase enterprise-wide visibility and management effectiveness, workforce productivity, and manager and worker satisfaction. In the fight against "business as usual" in Washington, Avue helps power "business as unusual". Avue is a privately held company headquartered in Tacoma, Washington, and with offices in Washington, D.C.
We would be particularly interested in this proposal's capacity to increase not only the supply of qualified professionals in our regional workforce, but the program's focus on growth areas of cyber security operations and personnel leadership.

We are excited about a program that supports the development of managers and technology leaders concerned with the design, development, implementation, operation, and management of cyber security systems, and with the protection of an organization's information assets.

Sincerely,

Avue Technologies Corporation

Linda E. Brooks Rix & James D. Miller
Co-Chief Executive Officers

Avue Technologies Corporation
1145 Broadway Plaza, Suite 800, Tacoma, WA 98402
Phone: 253.573.1877
Fax: 253.573.1876

SOUND
CREDIT•UNION

May 8, 2012

Shahrokh M. Saudagaran
Gary E. and James A. Milgard Endowed Dean
Milgard School of Business
University of Washington, Tacoma
1900 Commerce Street
Tacoma, WA 98402-3100

Dear Dean Saudagaran,

We are looking forward to an even stronger partnership between Sound Credit Union and the University of Washington, Tacoma Milgard School of Business made possible by the proposed Master of Cyber Security and Leadership (MCL) program.

Sound Credit Union is a member-owned financial institution open to anyone who lives or works in Washington State. Founded in 1940, Sound serves the personal financial needs of more than 100,000 owner/members with assets exceeding $1 billion. Sound Credit Union is headquartered in downtown Tacoma with 21 branch locations throughout the Puget Sound from Lynnwood to Olympia. Our mission is to provide high-quality financial products and services.

We would be particularly interested in this proposal's capacity to increase not only the supply of qualified professionals in our regional workforce, but the program's focus on growth areas of cyber security operations and personnel leadership.

We are excited about a program that supports the development of managers and technology leaders concerned with the design, development, implementation, operation and management of cyber security systems, and with the protection of an organization's information assets. High standards of financial and personal information security are paramount to our organization.

If you have any questions, I can be reached at 253.597.7600 or toll free at 800.562.8130, ext. 7600. My email address is: rbrandsma@soundcu.com.

Sincerely,

Richard C. Brandsma

Richard C. Brandsma
President & CEO

ManTech
International Corporation

May 8th, 2012
Robert Friedman, Ph.D.
Professor
University of Washington
1900 Commerce St.
Tacoma, WA 98402

RE: Master of Cyber Security and Leadership (MCL) post baccalaureate degree.

Dear Dr. Friedman,
We're excited at the prospect of continuing relationships between ManTech and the University of Washington, and view the proposed Master of Cyber Security and Leadership (MCL) program as an important step in meeting a significant new set of challenges.

As you know, ManTech provides a full spectrum of Information Technology/Information Systems (IT/IS) services and facilities in a process-driven environment. Our experts design, develop, install, implement, test, and evaluate large, sophisticated, secure systems for government and commercial customers.

We develop solutions to enhance web-enabled software applications and network infrastructures to improve operational processes. We utilize both commercial off-the-shelf and custom software products to ensure program success.

ManTech has one of the longest running relationships with the Institute of Technology in the South Puget Sound, having interned and hired a large number of your students and graduates.

We're particularly interested in this proposal's capacity to increase not only the supply of qualified professionals in our regional workforce, but the program's focus on growth areas of cyber security operations and personnel leadership.

Sincerely,

Robert L. Aylor
Group Manager, Strategic Development

Appendix B: Profile of Programs with Similarities to the Professional Masters in Cybersecurity and Leadership

George Washington University
http://www.cs.gwu.edu/academics/graduate_programs/master/cybersecurity

The Master of Science in Cybersecurity in Computer Science is a new degree program in the Department of Computer Science at the George Washington University. This program was created to respond to the large and fast-growing need for technical Cybersecurity experts nationally and internationally. It will be the first such degree in the Nation's capital, and one of a few graduate degrees in Cybersecurity in the US and the world. 30 credit-hours, all related to computer science.

MS in Information Management, University of Washington
http://ischool.uw.edu/msim/prospective/advance

The University of Washington Information School's Master of Science in Information Management (MSIM) program develops leaders that know how to manage information and build information systems to meet organizational needs. Graduates can be found at industry leaders in the Puget Sound and around the globe turning today's information and technology resources into tomorrow's sources of change, growth, and innovation.

The MSIM curriculum integrates the areas of:

- Strategic planning
- Systems design
- Organizational leadership
- Information management
- Information technology

Master of Infrastructure Planning and Management, University of Washington
http://www.infrastructure-management.uw.edu/mipm/

The infrastructure systems that underpin our society and ensure our quality of life are constantly at risk. Further, these systems are expanding with growth and technology advances requiring a new level of professional management. The Master of Infrastructure Planning & Management (MIPM) teaches professionals to master the methods and core skills required to sustain and ensure resiliency of major infrastructures against both man-made and natural disasters.

Students learn a blend of skills in analysis and strategic planning as you explore how threats that range from climate change to mass urbanization, smart networks, the consequences of aging infrastructure, and extreme weather events impact interconnected and complex infrastructure systems. Graduates gain the understanding necessary to develop plans that reduce vulnerabilities and increase infrastructure resilience through

this online program.

University of Maryland

http://cyber.umd.edu/education/index.html

The Maryland Cybersecurity Center (MC2) was created as an interdisciplinary research center, bringing together experts from engineering and computer science with colleagues from across campus in fields such as information sciences, business, public policy, social sciences and economics to address our nation's growing needs in cybersecurity. Maryland researchers will apply their expertise in wireless and network security, cryptography, secure software, cyber supply chain security, cybersecurity policy, multimedia forensics, and the economics of cybersecurity, offering an innovative, holistic approach to the cybersecurity threat. The certification program is offered through the Department of Computer and Electrical Engineering.

Virginia College

http://www.vconline.edu/graduate-degrees-online/cyber-security-degree.cfm

The online master's degree in Cybersecurity at Virginia College provides an in-depth study in information technology infrastructure security including cyber-law, cyber-terrorism, forensics, system hardening, viral activity, and compliancy issues. This online cybersecurity degree program is designed to prepare graduates for security management of LAN, WLAN, and WAN environments, including national informational infrastructure. The degree program includes simulations and live lab projects to examine overall security administration and computer forensics of network security. Students in the online cybersecurity program receive a strong foundation in cryptography, forensics, intrusion detection and firewall devices.

Western Governors University Washington

http://washington.wgu.edu/online_it_degrees/information_security_assurance_degree

This online information security master's program in Information Security and Assurance prepares students with the necessary skills for the protection of networks, communication, and data, as well as the knowledge base for planning, implementing, and managing enterprise level security and system integrity. This program has been certified by the National Security Agency's Information Assurance Courseware Evaluation (IACE) Program. This certification verifies that WGU's courseware meets the requirements established by the Committee on National Security Systems National Training Standards No. 4011 (Information Systems Security Professionals) and 4012 (Senior Systems Managers).

Utica College

http://www.onlineuticacollege.com/programs/masters-cybersecurity.asp

Utica's online MS in Cybersecurity - Intelligence and Forensics trains students to proactively address ever-changing attack and infiltration techniques. A leader in

economic crime programs for over 20 years, Utica designed the program in response to calls from cybersecurity professionals for a graduate-level program that combines state-of-the-art practices in intelligence and forensics. The program offers two specializations targeted to students with different interests in this field:
Intelligence: Designed for professionals interested in cyber intelligence and counterintelligence, cyber counterterrorism, and cyber counter-sabotage, the curriculum covers analysis of global and national cybersecurity policies, the study and protection of critical infrastructures, as well as operations involving cyber threats and defense.
Computer Forensics: Designed for students interested in collecting and preparing evidence of computer crimes such as fraud, child pornography, and cyber espionage. The curriculum emphasizes a comprehensive understanding of the forensic tools and techniques used to investigate and analyze network-related incidents and preserve digital evidence.

New Jersey Institute of Technology

http://cs.njit.edu/academics/graduate/mscsp.php

The MS in Cyber Security and Privacy, offered through the Computer Science Department, produces experts who analyze new and existing security threats and devise solutions against them. Graduates of the program use in-depth knowledge of network-based and system-level attacks and appropriate countermeasures to ensure that the software and the infrastructure is designed and implemented with the best security practices in mind. Students acquire the ability to design, develop, and maintain new tools and technologies to enhance the security of applications and infrastructure. Moreover, graduates of the program will be able to conduct research on existing and emerging security threats and on the interplay between security and other computing disciplines.

NYU e-Poly

http://www.poly.edu/academics/online/masters/cybersecurity

Poly's Master in Cybersecurity is designed to produce sophisticated practitioners in cyber security, the science of protecting vital computer networks and electronic infrastructures from attack. Students acquire a solid foundation in key technologies — computer and network security, digital forensics, cryptography, and biometrics. They study with internationally recognized faculty from Information Systems and Internet Security (ISIS) Laboratory in order to prepare for careers in developing security products, as security-application programmers, security analysts, penetration testers, vulnerability analysts and security architects.

National Defense University – Information Resources Management College

http://www.ndu.edu/icollege/pcs/pcs_cyberS.html

NDU's Cyber Security (Cyber-S) fully online program, available only to military-affiliated students, provides graduate-level information security education for those serving as the Chief Information Security Officer (CISO), Senior Agency Information Security Officers

(SAISO), their staffs, and cyber security managers. This program provides advanced education to respond to the requirements set forth in the Federal Information Security Management Act (FISMA) and requirements for secure use of national security information systems set by the Committee for National Security Systems (CNSS).

American Military University – Online MA in Intelligence Studies

http://www.amu.apus.edu/academic/programs/degree/1311/master-of-arts-in-intelligence-studies-capstone-option

The Master of Arts in Intelligence Studies provides professional, graduate-level academic education in the interdisciplinary field of intelligence studies. The program's core courses impart substantive knowledge and analytic skills required by all professionals in the intelligence community. Students may also pursue concentrated study in functional areas or intelligence sub-fields. Student learning is greatly enhanced by the diversity of program professors with strong professional and academic backgrounds in intelligence studies, many who currently work in the U.S. Intelligence Community.

Appendix C: Curriculum Vitae

Yan Bai
Assistant Professor
Institute of Technology
University of Washington Tacoma
Phone: (253) 692-5863
Email: yanb@uw.edu
URL: http://faculty.washington.edu/yanb

RESEARCH INTERESTS

- Cyber Security
- Computer networking
- eHealth and Health IT
- Cloud Computing
- Multimedia communications

EDUCATION

University of British Columbia, Vancouver, Canada
Ph.D. in Electrical and Computer Engineering (*Computer Engineering specialization*), November 2003

Sam Houston State University, Huntsville, Texas, USA
M.S. in Physics, May 1997

Guangxi Normal University, Guilin, China
B.S.in Physics, June 1989

RESEARCH EXPERIENCE

Postdoctoral Research Fellow – ***University of British Columbia, Department of Electrical and Computer Engineering*** (December 2003 – July 2006)

- Performed research on Voice over IP (VoIP) security, Quality of Service (QoS), multimedia communications, Internet routing, and web-caching.
- Led voice over IP security projects funded by Industry Canada. Designed a Mobile Agent-based intrusion detection system for VoIP applications and vulnerability testing methodology for the VoIP protocol implementations.
- Developed a new framework for dynamic priority packet transmission in multi-hop IP networks that ensures adequate quality of service both for video over IP and for voice over IP applications.

TEACHING EXPERIENCE

Assistant Professor (Tenure-Track)
Institute of Technology, University of Washington Tacoma, Tacoma, WA

i. AY 2011-2012 Courses
   a. TINFO 330: Foundations of Information Networking
   b. TINFO 340: Foundations of Information Assurance
   c. TINFO 350: Foundations of Web Design and Programming
   d. TINFO 441: Network Security
   e. TINFO 445: Digital Forensics

f. TINFO 451: Routing and Switching

ii. AY 2010-2011 Courses
   a. TINFO 330: Foundations of Web Design and Programming
   b. TINFO 340: Foundations of Information Assurance
   c. TINFO 441: Network Security
   d. TINFO 445: Digital Forensics
   e. TCSS 430: Networking and Distributed Systems

iii. AY 2009-2010 Courses
   a. TINFO 320: Foundations of Hardware and Software Systems
   b. TINFO 330: Foundations of Web Design and Programming
   c. TINFO 340: Foundations of Information Assurance
   d. TINFO 350: Foundations of Information Networking
   e. TCSS 431: Network Security
   f. TCSS 590: Network Security and Privacy

iv. AY 2008-2009 Courses
   a. TCSS 371: Machine Organization
   b. TCSS 430: Networking and Distributed Systems
   c. TCSS 431: Network Security
   d. TCSS 590: Information and Communication Security
   e. TCSS590/490: Computer Forensics

Assistant Professor (Tenure-Track)
Department of Computer Science, Columbus State University, Columbus, GA

i. AY 2007-2008 Courses
   a. CPSC 1105: Technological Solutions
   b. CPSC 5127: Introduction to Computer and Network Security
   c. CPSC 6126: Information Systems Assurance
   d. CPSC 6157: Network Management
   e. CPSC 6167: Network Risk Assessment
   f: CPSC 6555: Multimedia Security

ii. AY 2006-2007 Courses
   a. CPSC 5157: Computer Networks
   b. CPSC 6126: Information Systems Assurance
   c. CPSC 6157: Network Management
   d. CPSC 6159: Computer Forensics
   e. CPSC 6167: Network Risk Assessment

UNIVERSITY SERVICES

(at University of Washington Tacoma)

- Program Development
  - Worked with other faculty and founded the B.S. in Information Technology and Systems degree program at the University of Washington Tacoma, offered since Fall 2009.

    - Led curriculum development for the B.S. in Information Technology and Systems degree program. Developed and revised 20 course master syllabi.
    - Developed a total of 6 undergraduate courses in Information Technology and Systems degree program.
    - Modified and edited new sections about the Information Technology and Systems degree program in the Catalog Description Handbook.
    - Developed a total of 3 graduate courses in Computing and Software Systems degree program.
- Lecturer Mentor, Institute of Technology
    - 2 lecturers (Fall 2010, Winter 2010, Spring 11)
- Recruitment Activity
    - Invited as a Panel Speaker at IGNITE's Seattle Chapter Event at Spanaway High School to motivate female high school students interest in computer science.
- Student Advisement
    - M.S Thesis and Project
        - Primary Advisor, 5 graduate students
        - Committee Member, 1 graduate student
    - B.S Project and Internship
        - Faculty Advisor, 43 undergraduate students
    - Advisor, GreyHat group (Fall 08 – Present)
    - Faculty Advisor, Women in Computing Science (Winter 09, Spring 09)
- Faculty Host, visiting scholar Prof. Whanki Yong (Handong University, Korea), July 2010 to February 2011.
- Member, Graduate Committee, Institute of Technology (Fall 2008 – Spring 2010)
- Member, Undergraduate Committee, Institute of Technology (Fall 2010)
- Member, Undergraduate Committee in Information Technology and Systems degree program (Winter 2011 – Present)
- Member, Facilities Committee, Institute of Technology (Fall 2008 – Present)
- Member, ITS Lecturer Search Committee, Institute of Technology (2012)
- Member, ITS Faculty Search Committee, Institute of Technology (2010)
- Member, CSS Lecturer Search Committee, Institute of Technology (2010)
- Member, UWT Scholarship Committee (Spring 2010 – Present)
- Member, UWT International Student Services Advisory Board (Autumn 2011 – Present)

(at Columbus State University)

- Program Development
    - Worked with other faculty to prepare an application for Columbus State University to be certified as a National Center of Academic Excellence (CAE) in Information Assurance Education (IAE).
- Recruitment Activity
    - Participated in various recruitment activities to recruit students into the computer science program such as the Cougar Computer Science Camp, and the Columbus Regional Mathematics Collaborative PRIME Summer Camp for Girls
    - Participated in planning and training high-school students and teachers on emerging computer technologies such as the Georgia Computer Science Teacher Association Academy.
- Student Advisement
    - M.S Thesis and Project
        - Primary Advisor, 4 graduate students

    - B.S Project
        - 1 undergraduate student
    - Faculty Advisor for graduate students in the Department of Computer Science
- Member, Computer Science ABET Accreditation Committee
- Member, Computer Science Graduate Program Committee
- Member, Computer Science Program Outcome Assessment Committee
- Member, Computer Science Student Scholarship Committee
- Coordinator Chair, Computer Science Colloquium Series
- Library Liaison, Computer Science Department
- Member, Columbus State University's 50th Anniversary Faculty Committee

PUBLICATIONS

Book Chapter

1. S. Chung, *C. Crompton*, **Y. Bai**, B. Endicott-Popovsky, S-H. Baeg, and S. Park, "Analyses of Evolving Legacy Software into Secure Service-Oriented Software Using Scrum and a Visual Model", book chapter in Agile and Lean Service Oriented Development: Foundations, Theory and Practice, IGI Global, in press.
2. **Y. Bai**, Y. Chu and M.R. Ito, "On Achieving Efficiency and Fairness in Video Transportation", Springer-Verlag Lecture Notes in Computer Science (LNCS), Vol. 3420/2005, pp.654-661 (ISBN 3-540-25339-4), April 2005.

Journal Articles

3. L. Dai and **Y. Bai**, "A Nonfunctional Requirement Tradeoff Analysis Approach for Software Product Line Architecture Design", Journal of Computational Methods in Science and Engineering (JCMSE), IOS Press, Volume 11, Supplement 1/ 2011, pp. 65-76, August 2011.
4. Y. Chu, J. H. Park, **Y. Bai**, J. S. Son, and S. Kumar, "An Efficient Simulation Model for Network Terminal Packet Buffer", SIMULATION: Transactions of the Society for Modeling and Simulation International, Sage Publications, in press.
5. **Y. Bai**, Y. Chu and M.R. Ito, "Dynamic end-to-end QoS support for video over the Internet", Elsevier International Journal of Electronics and Communications, 65 (2011), pp. 385-391, March 2011.
6. X. Su, **Y. Bai**, S. K. Dhaliwal, "Optimal File Distribution in Practical Mesh-Based Overlay Network", Journal of Communications, Academy Publisher, Volume 5, no. 9, pp. 703-714, October 2010.
7. **Y. Bai** and M.R. Ito, "A New Technique for Minimizing Network Loss from Users' Perspective", Elsevier Journal of Network and Computer Applications, volume 30, Issue 2, pp.637-649, April 2007.
8. **Y. Bai** and M.R. Ito, "Managing QoS Requirements for Video Streaming: from Intra-Node to Inter-Node", Wiley International Journal Communication Systems, Volume 19, Issue 5, pp.545-565, June 2006.
9. **Y. Bai** and M.R. Ito, "Supporting User Needs in a Network: A New Queue Management Technique", IEICE Transactions on Communications, Volume E88-B, No.8, pp.3458-3461, August 2005.
10. **Y. Bai** and M.R. Ito, "Class-based Packet Scheduling to Improve QoS for IP Video", Springer Telecommunication Systems, Volume 29, Number 1/May 2005, pp.47-60, May 2005.
11. **Y. Bai** and M.R. Ito, "Application-Aware Buffer Management: New Metrics and Techniques", IEEE Transactions on Broadcasting, Volume 51, Issue 1, pp.114-121, March 2005.

12. **Y. Bai** and M.R. Ito, "QoS Control for Video and Audio Communication in Conventional and Active Networks: Approaches and Comparison", IEEE Communications Surveys & Tutorials, Volume 6, No.1, pp.43-49, First Quarter 2004.

Conference Papers

13. *R. Wooten, R. Klink, F. Sinek* and **Y. Bai**, "Design and Implementation of a Healthcare Social Cloud System", Accepted by C4BIE in conjunction with the 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2012), May 2012, Ottawa, Canada.
14. *K. Levy , B. Sargent*, and **Y. Bai** , "A Trust-Aware Tag-Based Privacy Control for eHealth 2.0", The 12th Annual Conference on Information Technology Education (SIGITE 2011), West Point, New York, October 2011.
15. **Y. Bai,** *R. Kesterson*, K. Gwinnup, and C. Taylor, "Cyber Defense Competition: A Tale of Two Teams", the 13th Annual CCSC Northwestern Regional Conference, Richland, Washington, October 2011.
16. L. Dai and **Y. Bai**, "An Organization-Driven Approach for Enterprise Security Management", the Fifth International Conference on Secure Software Integration and Reliability Improvement (SSIRI 2011), Jeju Island, Korea, June 2011 *(Acceptance rate: 32%)*.
17. **Y. Bai**, X. Su and *D. Su*, "A Study of Privacy Control in eHealth 2.0", 2011 4th IEEE International Conference on Computer Science and Information Technology (ICCSIT 2011), Chengdu, China, June 2011 *(Acceptance rate: 28%)*.
18. *A. Boonyarattaphan*, **Y. Bai**, S. Chung and R. Poovendran, "Spatial-Temporal Access Control for e-Health Services", The 5th IEEE International Conference on Networking, Architecture, and Storage (NAS 2010), Macau, China, July 2010.
19. **Y. Bai**, A. Kongmunvattana and *S.Kantubukta*, "Quality of Security Service in a Virtual Private Network", ISCA 22nd International Conference on Computer Applications in Industry and Engineering (CAINE-2009), San Francisco, USA, November 2009.
20. *A. Boonyarattaphan*, **Y. Bai**, and S. Chung, "A Security Framework for e-Health Service Authentication and e-Health Data Transmission", The 9th International Symposium on Communication and Information Technologies (ISCIT 2009), Incheon, Korea, September 2009.
21. Y. Chu, **Y. Bai**, A. Uppal and J.S. Son, "A Case for a Packet Management in a Network Terminal", The 2009 IEEE International Conference on Networking, Architecture, and Storage (NAS 2009), Zhang Jia Jie, Hunan, China, July 2009.
22. **Y. Bai**, X. Su and B. Bhargava, "Adaptive Voice Spam Control with User Behavior Analysis", the 11th IEEE International Conference on High Performance Computing and Communications (HPCC-09), Seoul, Korea, June 2009 (*Acceptance rate: 23%)*.
23. **Y. Bai**, X. Su and B. Bhargava," Detection and Filtering Spam over Internet Telephony: A User-behavior-aware Intermediate-network-based Approach", the 2009 IEEE International Conference on Multimedia and Expo (ICME), New York City, June/July 2009 (*Acceptance rate: 23%)*.
24. **Y. Bai**, W. Summers and E. Bosworth, "Teaching Network Risk Assessment to Online Graduate Students", Information Security Curriculum Development (InfoSecCD) Conference 07, September 2007, Kennesaw, USA.
25. S. Batra, Y. Chu, and **Y. Bai**, "Packet Buffer Management for a High-Speed Network Interface Card", the 16th International Conference on Computer Communications and Networks (ICCCN), Honolulu, USA, August 2007 (*Acceptance rate: 29%)*.
26. **Y. Bai** and X. Su, "A User-Driven Transmission Scheme for Voice Over IP Applications", the 2007 IEEE International Conference on Multimedia and Expo (ICME), Beijing, China, July 2007.
27. X. Su, S. Singh and **Y. Bai**, "Local Reference with Early Termination in H.264 Motion Estimation", the 2007 IEEE International Conference on Multimedia and Expo (ICME), Beijing, China, July 2007.

28. **Y. Bai**, "Dynamic Class-based Control for Improving Perceived Voice Quality", the 9th International Workshop on Multimedia Network Systems and Applications (MNSA'07), in conjunction with the 27th International Conference on Distributed Computing Systems (ICDCS'07), Toronto, Canada, June 2007.
29. **Y. Bai** and M.R. Ito, "A Study for Providing Better Quality of Service to VoIP Users", the IEEE 20th International Conference on Advanced Information Networking and Applications (AINA), Vienna, Austria, April 2006.
30. **Y. Bai** and M.R. Ito, "Proactive Resource Allocation Schemes", the 2005 IEEE International Conference on Communications (ICC 2005), Seoul, Korea, May 2005.
31. **Y. Bai** and M.R. Ito, "Loss Control through the Combination of Buffer Management and Packet Scheduling", the 1st International Conference on E-Business and Telecommunication Networks (ICETE), Setúbal, Portugal, August 2004.
32. **Y. Bai** and M.R. Ito, "QoS Support for Video Traffic via Router-based Control Mechanisms", the 4th International Network Conference (INC), Plymouth, UK, July 2004.
33. **Y. Bai** and M.R. Ito, "mFDDT+: An Integrated Approach for Enhancing QoS for Networked Video", the 4th International Network Conference (INC), Plymouth, UK, July 2004.
34. **Y. Bai** and M.R. Ito, "FDDT+: Improving Fairness for Video Transmission over IP Networks", the 9th IEEE Symposium on Computers and Communications (ISCC), Alexandria, Egypt, June 2004.
35. **Y. Bai** and M.R. Ito, "A User-Centered Approach to Enhance QoS for Networked Video", the 2004 IEEE International Conference on Multimedia and Expo (ICME), Taipei, Taiwan, June 2004.
36. **Y. Bai** and M.R. Ito, "Network-level Loss Control Schemes for Streaming Video", the 2004 IEEE International Conference on Multimedia and Expo (ICME), Taipei, Taiwan, June 2004.
37. **Y. Bai** and M.R. Ito, "Coordinated Buffer Management Schemes for Streaming Video in a Multi-Hop IP Network", the IEEE/IEE 3rd International Conference on Networking (ICN), Pointe-à-Pitre, Guadeloupe, French Caribbean, February 2004.
38. **Y. Bai** and M.R. Ito, "QoS Control Techniques for Video and Audio Transport over Non-active and Active Networks", the IEEE/IEE 3rd International Conference on Networking (ICN), Pointe-à-Pitre, Guadeloupe, French Caribbean, February 2004.
39. S. Vuong and **Y. Bai**, "A Survey of VoIP Intrusions and Intrusion Detection Systems", the 6th International Conference on Advanced Communication Technology (ICACT), Phoenix Park, Republic of Korea, February 2004.
40. **Y. Bai** and M.R. Ito, "Active network-based Mechanisms and Node Architecture to Enhance Quality of Service for Video Transport over IP networks", The 5th Workshop on Media and Stream Processors (MSP-5), in conjunction with the 36th International Symposium on Microarchitecture (MICRO-36), San Diego, USA, December 2003.
41. **Y. Bai** and M.R. Ito, "On Loss-Aware Packet Scheduling for Video Transport over a Multi-Hop IP Network", the 5th International Workshop on Multimedia Network Systems and Applications (MNSA'03), in conjunction with the 23rd International Conference on Distributed Computing Systems (ICDCS '03), Providence, Rhode Island, USA, May 2003.
42. **Y. Bai** and M.R. Ito, "Towards End-to-End Loss Guarantees for Streaming Video in a Multi-Hop IP Network", the International Conference on Information Technology: Coding and Computing (ITCC'03), Las Vegas, USA, April 2003.
43. **Y. Bai** and M.R. Ito, "A Packet Scheduling Scheme for Satisfying Intra and Inter-Stream Loss Requirements in Video Communication", the 17th International Conference on Advanced Information Networking and Applications (AINA), Xi'an, China, March 2003.
44. **Y. Bai** and M.R. Ito, "Users-oriented Fair Buffer Management for MPEG Video Streams", the 17th International Conference on Advanced Information Networking and Applications (AINA), Xi'an, China, March 2003.
45. **Y. Bai** and M.R. Ito, "Packet Scheduling to Support Loss Guarantee for Video Traffic", the 10th IEEE/IEE International Conference on Telecommunications (ICT), Papeete, Tahiti, French Polynesia, February 2003.

46. M.R. Ito and **Y. Bai**, "Development in QoS Control for Video Communication", 4th International Conference on Communication Systems (ICCS), Singapore, November 2002.
47. M.R. Ito and **Y. Bai**, "A Packet Discard Scheme for Loss Control in IP Networks with MPEG Video Traffic", the 8th International Conference on Communication Systems (ICCS), Singapore, November 2002.

Talks

- A Study of Privacy Control in eHealth 2.0 - 2011 4th IEEE International Conference on Computer Science and Information Technology (ICCSIT 2011), Chengdu, China (June 2011)
- Adaptive voice spam control with user behavior analysis - the 11th IEEE International Conference on High Performance Computing and Communications (HPCC-09), Seoul, Korea (June 2009)
- Providing better quality of service to VoIP users, invited talk at Georgia Southwestern State University, Americus, Georgia (September 2007)
- Being a woman in other cultures, panel speaker at 2007 American Association of University Women of Georgia State Convention, Columbus, Georgia (April 2007)
- Teaching network risk assessment to online graduate students - Information Security Curriculum Development (InfoSecCD) Conference 07, Kennesaw, Georgia (September 2007)
- Dynamic class-based control for improving perceived voice quality - The 9th International Workshop on Multimedia Network Systems and Applications (MNSA'07), in conjunction with the 23rd International Conference on Distributed Computing Systems (ICDCS'07), Toronto, Canada (June 2007).
- Towards end-to-end loss guarantees for streaming video in a multi-hop IP network - International Conference on Information Technology: Coding and Computing (ITCC'03), Las Vegas, Nevada (April 2003).
- Development in QoS control for video communication - The 8th International Conference on Communication Systems (ICCS), Singapore (November 2002)
- A packet discard scheme for loss control in IP networks with MPEG video traffic - The 8th International Conference on Communication Systems (ICCS), Singapore (November 2002).

GRANTS FUNDED

1. Chancellor's Fund for Research and Scholarship Support, "Privacy Control in eHealth 2.0", University of Washington Tacoma, 2011.
2. Founders' Endowment Fund, "Real-time Cyber Defense Exercises", University of Washington Tacoma, 2011.
3. Chancellor's Fund Travel Grant, University of Washington Tacoma, 2011
4. Teaching Grant, "Enhancing Awareness of Green IT through Information Technology and Systems (ITS) Course Improvement Project", UWT Center for Leadership and Social Responsibility, 2010
5. Chancellor's Fund for Research and Scholarship Support (with Sam Chung and Apaporn Boonyarattaphan), "Authentication and Access Control for e-Healthcare Applications", University of Washington Tacoma, 2009.
6. Chancellor's Fund for Research and Scholarship Support (with Chiraag Aval), "Fighting Image-based Spammers With Honeypots", University of Washington Tacoma, 2009.
7. Travel Grant for NSF Cyberinfrastructure and Engineering Education Workshop, Summer 2008
8. Professional Development Grant, Columbus State University, Spring 2007
9. Professional Development Grant, Columbus State University, Summer 2007
10. ICICS Travel Grant, University of British Columbia, Canada, 2002, 2003

HONORS

- UWT Outstanding Women, University of Washington Tacoma, USA, 2012
- Outstanding Student Celebration for Awards and Recognition Award Nominees, University of Washington Tacoma, USA, 2010
- Distinguished Research Award Nominees, University of Washington Tacoma, USA, 2009
- Faculty Research and Scholarship Award Finalist, Columbus State University, USA, 2008
- Approved Candidate for Visiting Fellowship in Canadian Government Laboratories, Natural Sciences and Engineering Research Council of Canada, 2005 (success rate: 25%)
- Graduate Student Travel Award, University of British Columbia, Canada, 2001
- Tuition Award, Sam Houston State University, USA, 1995 – 1997
- Exemption from National College Entrance Examination, China, 1985

ACTIVITIES

- National Science Foundation Review Panel, 2011
- Evaluator for the NSF Grant on "Building Instructional Capacity for Instructors Unfamiliarity with Security Teaching Non-Traditional Students", NSF Scholarship for Service (SFS) Capacity Building, 2010
- Program Committee, 2012 ASE/IEEE International Conference on Cyber Security (2012)
- Program Committee, 2012 IEEE International Conference on Privacy, Security, Risk and Trust (PASSAT) (2012)
- Program Committee, the IEEE International Conference on Multimedia & Expo (ICME) (2012)
- Program Committee, the Second IEEE International Conference on Privacy, Security, Risk, Trust (PASSAT) (2011)
- Program Committee, The 4th IEEE International Workshop on Computer Forensics in Software Engineering (CFSE 2012), in conjunction with COMPSAC 2012 (2012)
- Program Committee, The 3rd IEEE International Workshop on Computer Forensics in Software Engineering (CFSE 2011), in conjunction with COMPSAC 2011 (2011)
- Program Committee, The 2nd IEEE International Workshop on Computer Forensics in Software Engineering (CFSE 2010), in conjunction with COMPSAC 2010 (2010)
- Steering Committee, The 4th annual APWG eCrime Researchers Summit, Tacoma, WA, USA (2009)
- Technical Program Committee Member of the 17th International Conference on Computer Communications And Networks (ICCCN), St. Thomas, Virgin Islands (USA) (2008)
- Workshop Co-chair of First International Workshop on Networking Technology for Robotics Applications (NeTRA), organized in conjunction with the 16th International Conference on Computer Communications and Networks (ICCCN), Honolulu, Hawaii, USA (2007)
- Co-Chair of Special Session on Security in VoIP Networks, organized in Conjunction with the 1st International Conference on E-Business and Telecommunication Networks (ICETE), Setúbal, Portugal (2004)
- Journal Technical Reviewer for IEEE Transactions on Circuits and Systems for Video Technology, Intelligent Service Robotics, Wiley Security and Communication Networks, Wiley International Journal of Communication Systems, IEEE Transactions on Broadcasting, IEEE Transactions on Multimedia, IEEE Communication Magazine, IEEE Communication Letters, Elsevier Journal of Computer Communications, Kluwer Multimedia Tools and Applications, Wiley Security and Communication Networks.
- Technical Reviewer for The 9th IEEE Symposium on Computers and Communications, The 20th ACM Symposium on Applied Computing, The 7th International Conference on Advanced Communication Technology, Networking 2005, IEEE 62nd Semiannual Vehicular Technology Conference, The 11th IEEE Symposium on Computers and Communications, Information Security Curriculum Development Conference 07, The 2007 IEEE Symposium on Computers and

Communications, The 2008 IEEE International Conference on Communications, International Wireless Communications and Mobile Computing Conference 2008, IEEE Symposium on Computers and Communications 2008, The 2009 IEEE International Conference on Information Privacy, Security, Risk and Trust, 2009 ACM Southeast Conference, The 4th annual APWG eCrime Researchers Summit, the 7th International Conference on Cybernetics and Information Technologies, Systems and Applications: CITSA 2010, The 2010 IEEE International Conference on Information Privacy, Security, Risk and Trust.

MEMBERSHIPS

- Voting Member, IEEE Multimedia Communications Technical Committee (MMTC)
- Invited Member of IEEE MMTC Media Processing and Communications Security Interest Group (SecIG)
- Invited Member of IEEE Communications and Information Security Technical Committee (CISTC).
- Member, ACM SIGITE

CURRICULUM VITAE

ZOE I. BARSNESS
Milgard School of Business
University of Washington, Tacoma
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Tacoma, WA 98402-3100
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EDUCATION

Kellogg School of Management, Northwestern University, Evanston, Illinois.
Ph.D., Organization Behavior (*December 1996*).
M.S., Organization Behavior (*December 1993*).

Harvard College, Harvard University, Cambridge, Massachusetts.
A.B., Comparative History, *cum laude* (*June 1987*).

PROFESSIONAL EMPLOYMENT

Milgard School of Business, University of Washington, Tacoma
Associate Professor of Business Administration (*September 2005 – present).*
Assistant Professor of Business Administration (*September 2000 – August 2005).*

Mays Business School, Texas A&M University
Assistant Professor of Management (*August 1996 – August 2000*).

Kellogg School of Management, Northwestern University
Lecturer, Department of Organization Behavior (*June 1994 – March 1996).*

Computer Associates International, Inc., Garden City, NY
Assistant Product Marketing Manager (*December 1990 – August 1991*)

Manageware, Inc., Stamford, CT
Applications Consultant (*June 1989 – December 1990*)

Andersen Consulting, New York, NY
Associate Consultant, Strategic Services Practice (*September 1987 – June 1989)*

GRANTS, FELLOWSHIPS AND AWARDS

Founders Endowment Grant, University of Washington, Tacoma. Awarded $3000 (*June 2001 – December 2002*).

United States Department of Agriculture. Michael, J. H. and Barsness, Z. I. (Senior Associate). Improving Work Team Performance in Wood-based Production Facilities (#98-351030-6627). Awarded $75,253 (*January 1999 – December 2000*).

Advanced Research/Advanced Technology Program, Texas Higher Education Coordinating Board. Michael, J. H. and Barsness, Z. I. (Co-Principal Investigator). A Social Networks Investigation of

Production Facility Work Teams (#999902-100). Awarded $76,120 (*January 1998 – December 1999*).

Bank of America, Texas. Barsness, Z. I. and Tenbrunsel, A. E. (Principal Investigator). Building Organizational Commitment through Employee Involvement and Social Activism. Awarded $5,000 (*September 1997 -- September, 1999*).

Second Place, Best Article Award, CPR Institute for Dispute Resolution, New York, NY (*1996*). Brett, J. M., Barsness, Z. I., and Goldberg, S. B. (1996). The Effectiveness of Mediation: An Independent Analysis of Cases Handled by Four Major Service Providers. The Negotiation Journal, July: 259-269.

Finalist, Dissertation Award, Group Psychology and Group Psychotherapy Division, American Psychological Association (*1996*)

GE Foundation Dissertation Year Fellowship, Northwestern University (*1995-1996*).

University Fellowship (*Northwestern University, 1991-1994*).

REFEREED PUBLICATIONS

Rosette, A. S., Brett, J. M., BARSNESS, Z. I., and Lytle, A. L. (2011). When cultures clash electronically: The impact of e-mail and social norms on negotiation behavior and outcomes. Journal of Cross-Cultural Psychology, 43 (4): 628-643

Balkundi, P., BARSNESS, Z. I., Michael, J. H. (2009). Unlocking the influence of leadership network structures on team conflict and viability. Small Group Research, 40 (3): 301-322.

Diekmann, K. A., Sondak, H, and BARSNESS, Z. I. (2007). Does fairness matter more to some than to others? The relationship between work-place status, procedural fairness perceptions, and job satisfaction. Social Justice Research, 20(2): 161-180.

Balkundi, P., Kilduff, M., BARSNESS, Z. I., and Michael, J. H. (2007). Demographic antecedents and performance consequences of structural holes in work teams. Journal of Organizational Behavior, 28(2): 241-260.

BARSNESS, Z. I., Diekmann, K. A. and Seidel, M. L. (2005). Motivation and opportunity: The role of physical, demographic, and social proximity in impression management. Academy of Management Journal, 48(3): 401-419.

Michael, J. H., BARSNESS, Z. I., Lawson, L., Balkundi, P. (2004). Focus please: Coordination and team performance at a wood manufacturer. Forest Products Journal, December: 250-255.

Diekmann, K. A., BARSNESS, Z. I., and Sondak, H. (2004). Uncertainty, procedural fairness perceptions, and work-related attitudes and behaviors: A Field Study. Social Justice Research, 17(3): 237-255.

BARSNESS, Z. I., Tenbrunsel, A. E., Michael, J. H. and Lawson, L. (2002). Why am I here? The influence of group and relational attributes on member-initiated team selection. In Margaret Neale, Beta Mannix and Harris Sondak (Eds.), Research on Managing Groups and Teams, 4: 141-171.

Uzzi, B., and BARSNESS, Z. I. (1998). Contingent Employment Arrangements in British Firms: Organizational Determinants of the use of Fixed-term Hires and Part-time workers. Social Forces, 76(3): 967-1007.

Brett, J. M., BARSNESS, Z. I., and Goldberg, S. B. (1996). The Effectiveness of Mediation: An Independent Analysis of Cases Handled by Four Major Service Providers. The Negotiation Journal, July: 259-269.

Reprinted in the following:

- Brett, J. M., BARSNESS, Z. I., and Goldberg, S. B. (1997). La eficacia de la mediacion: Un analisis independiente de casos getionados por cuatro importantes proveedores de servicio. La Ley: Suplemento de Resolucion De Conflictos, Noviembre 27: 1-9.

Lytle, A. L., Brett, J. M., BARSNESS, Z. I., Tinsley, C. H., Janssens, M. (1995) A paradigm for quantitative cross-cultural research in organizational behavior. In L. L. Cummings and B. M. Staw (Eds.), Research in Organizational Behavior, 17: 167-214.

INVITED BOOK CHAPTERS

BARSNESS, Z. I. (In Press). Communication Media: Implications for negotiation process and outcome. In Rachel Croson and Gary Bolton (Eds.), Oxford Handbook of Economic Conflict Resolution. London: Oxford University Press.

Bhappu, A. D. and BARSNESS, Z. I. (2006). Risks of E-mail. In Andrea Schneider and Christopher Honeyman (Eds.), The Negotiator's Fieldbook (pp. 395-400). Washington, DC: American Bar Association Books.

Reprinted in the following:

- Bhappu, A. D. and BARSNESS, Z. I. (2009). Risks of E-mail. In Lewicki, R., Barry, B. and Saunders, D. (Eds.), Negotiation Readings, Exercises and Cases. New York: McGraw-Hill Irwin.

BARSNESS, Z. I. and Bhappu, A. D. (2004). At the crossroads of technology and culture: How they impact attention, social influence, and information exchange processes during negotiation. In Michele J. Gelfand and Jeanne M. Brett (Eds.), The Handbook of Negotiation: Theoretical Advances and Cross-Cultural Perspectives (pp. 350 – 373). Palo Alto, CA: Stanford University Press.

Brett, J. M., Tinsley, C. H., Janssens, M. J., BARSNESS, Z. I., and Lytle, A. L. (1997). New approaches to the study of culture in I/O psychology. In P. C. Earley and M. Erez (Eds.), New Perspectives on International/Organizational Psychology (pp. 75-129). San Francisco, CA: Jossey-Bass Inc. USA.

Tenbrunsel, A. E., BARSNESS, Z. I., and Hirsch, P. M. (1997). Sara Lee Corporation and Corporate Citizenship: Unity in Diversity. In Noel Tichy, Andrew R. McGill, and Lynda St. Clair (Eds.) Corporate Global Citizenship: Doing business in the Public Eye (pp. 197-213), San Francisco, CA: New Lexington Press.

OTHER PUBLICATIONS

Shortell, S. M., Gillies, R. R., BARSNESS, Z. I., Hughes, E. F. X., O'Brien, J. L., Bohr, D., Izui, C., Kralovec, P. (1994) The quality march: Part three of a national survey of quality improvement activities. Hospitals & Health Networks, January 5.

Gillies, R. R., BARSNESS, Z. I., Shortell, S. M., Hughes, E. F. X., O'Brien, J. L., Bohr, D., Izui, C., Kralovec, P. (1993) The quality march: Part two of a national survey of quality improvement activities. Hospitals & Health Networks, December 20.

BARSNESS, Z. I., Shortell, S. M., Gillies, R. R., Hughes, E. F. X., O'Brien, J. L., Bohr, D., Izui, C., Kralovec, P. (1993) The quality march: National survey profiles quality improvement activities. Hospitals & Health Networks, December 5.

REFEREED CONFERENCE PROCEEDINGS

BARSNESS, Z. I., Seidel, MD. L., Diekmann, K. A., and Michael, J. H. (2008) Mirror, mirror on the wall: the implications of status for overestimation of network ties. Administrative Sciences Association of Canada Organizational Theory Division Conference Proceedings, Volume 29(1).

Seidel, M-D. L., BARSNESS, Z. I., Lo, E., and Wong, J. (2007). The Role of the Ethnic Network Portfolio in Discrimination for Canadian Immigrants and Minorities. Administrative Sciences Association of Canada Organizational Theory Division Conference Proceedings, Volume 28(1).

Michael, J. H., BARSNESS, Z. I., and Lawson, L. (2001) Tips for increasing performance and retention in production employees. Proceedings of the 29th Wood Technology Clinic and Show, Portland, Oregon.

Michael, J. H., BARSNESS, Z. I., and Lawson, L. (1999) Enhancing utilisation of human capital in wood processing facilities: A time for teamwork. Proceedings of the 4th International Conference on the Development of Wood Science, Wood Technology and Forestry. High Wycombe, England: Forest Products Research Centre, Buckinghamshire Chilterns University College.

Michael, J. H., Lawson, L, and BARSNESS, Z. I. (1999) Making teams work: New Strategies for Productivity and Performance. Proceedings of the 27th Wood Technology Clinic and Show, Portland, OR.

BARSNESS, Z. I., Michael, J. H., and Glew, D. (1998) Understanding networks: A key to productivity and performance. Proceedings 32nd Annual International Particleboard/Composite Materials Symposium. Pullman, WA: Washington State University.

TEACHING CASES

Kaiser, R. and BARSNESS, Z.I. (1998). Melons. Program for Conflict and Dispute Resolution, Center for Public Leadership Studies, Bush School of Government and Public Service, Texas A&M University.

Kaiser, R. and BARSNESS, Z. (1998). Fire Lake. Program for Conflict and Dispute Resolution, Center for Public Leadership Studies, Bush School of Government and Public Service, Texas A&M University.

BARSNESS, Z. I., Pasche, A. J., and Thompson, L. (1997). Teleswitch. The Dispute Resolution Center, Kellogg School of Management, Northwestern University.

WORKING PAPERS

BARSNESS, Z. I., Seidel, MD L., Diekmann, K. A., Ma, D., and Michael, J. H. Mirror, mirror on the wall: The effect of power on asymmetric trust.

BARSNESS, Z. I., Fong, C., and Eberly, M. Flexible staffing arrangements and group diversity: An examination of the multiple effects of diversity on group process and effectiveness.

Eiston, Lo, Seidel, Marc-David L., BARSNESS, Zoe I., and Ma, Dennis. Network portfolio path dependence and systemic discrimination: The impact of early-life network investments on later-life discrimination.

Rockman, K. W., BARSNESS, Z. I., and Diekmann, K. A. Should I go into the office? How remote (vs onsite) team members can uniquely build trust through face-to-face contact.

Yang, J., BARSNESS, Z. I., Seidel, M-D, and Balkundi, P. Pipes, Prisms and Promotions: Effect of Social Networks on the Performance-Promotion Relationship.

REFEREED CONFERENCE PRESENTATIONS

Yang, J., BARSNESS, Z. I., Seidel, M-D, and Balkundi, P. (2011). "Pipes, Prisms and Promotions: Effect of Social Networks on the Performance-Promotion Relationship" presented at the Academy of Management Meeting, San Antonio, TX, August 12-16.

Rockman, K. W., BARSNESS, Z. I., and Diekmann, K. A. (2011). "Interpersonal ties and remote work: Who benefits the most from face-to-face communication?" presented at the International Association for Conflict Management Conference, Istanbul, Turkey, July 3 -6.

BARSNESS, Z. I. (2009) "Flexible staffing arrangements and group diversity: An examination of the multiple effects of diversity on group process and effectiveness" presented at the INGroup Conference, Colorado Springs, Colorado, July 16-18.

Seidel, Marc-David L., Zoe I. BARSNESS, Eiston Lo, and Josephine Wong. (2008) "Discrimination and the ethnic network portfolio from childhood" presented at the Academy of Management Meeting, Anaheim, California, August 10-13.

Balkundi, P., BARSNESS, Z. I., and Michael, J. H. (2008) "Formal vs. informal team leadership: The influence of leadership network structures on team conflict and team member intent to quit," presented at the INGroup conference, Kansas City, MO, July 17-19.

BARSNESS, Z. I., Seidel, MD. L., Diekmann, K. A., and Michael, J. H. (2008) "Mirror, mirror on the wall: the implications of status for overestimation of network ties," presented at the Administrative Sciences Association of Canada Annual Meeting, Halifax, Canada, May 24-27.

Balkundi, P., Michael, J. H., and BARSNESS, Z. I. (2007) "How conflict mediates between leadership network structures and turnover intentions," presented at the Academy of Management Meeting, Philadelphia, PA, August 5 - 8.

Seidel, M-D. L., BARSNESS, Z. I., Lo, E., and Wong, J. (2007) The Role of the Ethnic Network Portfolio in Discrimination for Canadian Immigrants and Minorities," presented at the Administrative Sciences Association of Canada Annual Meeting, Ottawa, Canada, June 2-5.

Balkundi, P., Michael, J.H., and BARSNESS, Z. I. (2007). "The leadership paradox: how leadership network structures predict turnover intentions among team members". 27th International Sunbelt Social Networks Conference & 8th European Social Networks Conference. Corfu, Greece. May.

BARSNESS, Z. I., Seidel, MD. L., Diekmann, K. A., and Michael, J. H. (2006). "Mirror, mirror on the wall: The implications of status for overestimation of friendship ties," presented at the Academy of Management Meeting, Atlanta, GA, August 11-16.

BARSNESS, Z. I., Seidel, MD. L., and Michael, J. H. (2006). "Not all ties are created equal: The impact of differing Network portfolios on promotion," presented at the Academy of Management Meeting, Atlanta, GA, August 11-16.

Harrison, M. M., Mohammed, S., Michael, J. H., and BARSNESS, Z. I. (2005). "The influence of intragroup trust on team performance," presented at the Society for Industrial Organizational Psychology Meeting, Los Angeles, CA, April 15-17.

Diekmann, K. A., BARSNESS, Z. I., and Sondak, H. (2004). "The dark side of status: Status, procedural fairness, and work-related attitudes and behaviors," presented at the Academy of Management Meeting, New Orleans, LA, August 8-11.

BARSNESS, Z. I., Diekmann, K. A., and Seidel, MD. L. (2003). "Structural Location, Opportunity, and Influence," presented at the Academy of Management Meeting, Seattle, WA, August 3-6.

BARSNESS, Z. I., Diekmann, K. A., and Seidel, MD. L. (2002). "Managing Impressions in the Virtual Organization: The Impact of Three Forms of Distance," presented at the Academy of Management Meeting, Denver, CO, August 11-14.

BARSNESS, Z. I., Bhappu, A. D., Burgess, G. (Chair), and Katsh, E. (2002). "Technology in dispute resolution education and practice," symposium presented at the Annual International Association for Conflict Management Meeting, Park City, UT, June 9-12.

Balkundi, P., Lawson, L. Kilduff, M., Michael, J. H., and BARSNESS, Z. I. (2001) "Thinking alike, working better: Antecedents and consequences of shared team cognition," presented at the Academy of Management Meeting, Washington, DC, August 5-8.

Diekmann, K. A., BARSNESS, Z. I., and Sondak, H. (2001) "The effects of physical, psychological, and social distance on fairness perceptions and prosocial behaviors," presented at the International Association for Conflict Management Meeting, Paris, France, June 24-27.

Michael, J. H., BARSNESS, Z. I., and Lawson, L. (2001) "Enhancing employee performance and retention in wood panels facilities," presented at the Forest Products Society 55th Annual Meeting, Baltimore, MD, June 24-27.

Rosette, A. S., Brett, J. M., BARSNESS, Z. I., and Lytle, A. L. (2001) "The influence of e-mail on Hong Kong and U.S. intra-cultural negotiations," presented at the International Association for Conflict Management Meeting, Paris, France, June 24-27.

Michael, J. H., BARSNESS, Z. I., and Lawson, L. (2001) "Tips for increasing performance and retention in production employees," presented at the 29th Annual Wood Technology Clinic and Show, Portland, OR, March 14-16, 2001.

Michael, J. H., Lawson, L and BARSNESS, Z. I. (2000) "Making Teams Work," presented at the Wood Technology Clinic and Show, Charlotte, NC, September 15, 2000.

Diekmann, K. A. and BARSNESS, Z. I. (2000) "Creating a desired identity: The impact of physical and psychological distance on impression management behaviors," presented at the Academy of Management Meeting, Toronto, Canada, August 6-9.

Rosette, A. S., Brett, J. M., BARSNESS. Z. I., and Lytle, A. L. (2000) "Motivation to search: Communication, culture and electronic media," presented at the Academy of Management Meeting, Toronto, Canada, August 6-9.

Lawson, L., BARSNESS, Z. I. and Michael, J. H. (2000) "Diversity as an Antecedent of Role Stress," presented at the International Association of Conflict Management Meeting, St. Louis, MO, June 17-21.

BARSNESS, Z. I., Tenbrunsel, A. E., Michael, J. H. and Lawson, L. (2000) "Why am I here? The influence of group and relational attributes on member-initiated team selection," presented at the 4th Annual Conference on Research on Managing Groups and Teams, Stanford University, Palo Alto, CA, May 12-13.

BARSNESS, Z. I. and Diekmann, K. A. (1999) "Out of sight, out of mind? The impact of alternative work arrangements on selection and effectiveness of feedback seeking and impression management behaviors," presented at the Academy of Management Meeting, Chicago, IL, August 9-11.

Michael, J. H., BARSNESS, Z. I., and Lawson, L. (1999) "Enhancing utilisation of human capital in wood processing facilities: A time for teamwork," presented at the Fourth International Conference on the Development of Wood Science, Wood Technology and Forestry, Buckinghamshire Chilterns University College, High Wycombe, England, July 14-16.

Michael, J. H., BARSNESS, Z. I., and Lawson, L. (1999) "Work teams in panels facilities: Panacea, Poison, or Placebo?," presented at the Forest Products Society 53rd Annual Meeting, Boise, ID, June 27-30.

Rosette, A.S., Brett, J.M., BARSNESS. Z.I., and Lytle, A.L. (1999) "What e-mail can do in Chinese culture: The consideration of two communication media in integrative bargaining," presented at the International Association of Conflict Management Meeting, San Sebastian, Spain, June 20-23.

BARSNESS, Z. I. and Tenbrunsel, A. E. (1999) "Technology Mediated Communication and Negotiation: Do Relationships Matter?" presented at INFORMS, Institute for Operations Research and the Management Sciences, Cincinnati, OH, May 2-5.

BARSNESS, Z. I. (1998) "Developing Real World Skills: Managing Transnational and Virtual teams" presented at the Academy of International Business, Vienna, Austria, October 7-11.

BARSNESS, Z. I. (1998) "The Student as Customer: Market Savvy or Misguided Rhetoric?" presented at the Academy of Management, San Diego, CA, August 9-12.

BARSNESS, Z. I. and Tenbrunsel, A. E. (1998) "Technologically mediated communication and negotiation: Do relationships matter?" presented at the International Association of Conflict Management Meeting, Washington, DC, June 6-10.

BARSNESS, Z. I., Michael, J. H., and Glew, D. (1998) "Understanding Networks: A Key to Productivity and Performance," presented at the 32nd International Particleboard/Composite Materials Symposium, Pullman, WA, March 31 – April 2.

BARSNESS, Z. I. (1996) "Just-in-Time Workers and the Team-Based Organization: Employee Orientation, Internal Group Process and Work Group Effectiveness," presented at the Academy of Management Meeting, Cincinnati, OH, August 11-14.

Uzzi, B., and BARSNESS, Z. I. (1995) "Möbius strip employment arrangements: The determinants of the use of externalized workers," presented at the American Sociological Association Meeting, Washington, D.C., August 19-23.

BARSNESS, Z. I. (1995) "Seeing and understanding: The importance of physical proximity and social context in the transmission of organizational culture," presented at the Academy of Management Meeting, Vancouver, British Columbia, Canada, August 6-9.

Uzzi, B., and BARSNESS, Z. I. (1995) "Inside-out employment arrangements: Structural contingencies and the use of just-in-time workers," presented at the Academy of Management Meeting, Vancouver, British Columbia, Canada, August 6-9.

BARSNESS, Z. I., Brett, J. M., and Goldberg, S. B. (1995) "ADR in the private sector: Client goals, case factors, procedure chosen, and effectiveness," presented at the International Association for Conflict Management Meeting, Elsinore, Denmark, June 11-14.

BARSNESS, Z. I. (1994) "Foundation for the application of causal modeling techniques to cross-cultural research," presented at the RMD Conference on Causal Modeling, Purdue University, March 3-5.

INVITED PRESENTATIONS

BARSNESS, Z. I., Seidel, MD L., and Michael, J. H. (2005). "Mirror, mirror on the wall: The implications of outbound and inbound friendship ties for promotion." UCLA Anderson School of Management Colloquium, Los Angeles, CA, March 11.

BARSNESS, Z. I. (2004). "What should be on your plate for next year?" Human Resources Network Meeting Round Table Discussant, Bellevue, WA, October 21.

BARSNESS, Z. I., Diekmann, K. A. and Seidel, M. L. (2004). "Motivation and opportunity: The role of physical, demographic, and social proximity in impression management." Western Washington University Colloquium, Bellingham, WA, January 14.

BARSNESS, Z. I. (2003). "Uncertainty, status, and fair process." Human Resources Network Meeting Presentation, Tacoma, WA, December 4.

BARSNESS, Z. I. and Bhappu, A. D. (2001) "At the crossroads of technology and culture: How they impact attention; social influence, and information exchange processes during negotiation," presented at the Kellogg Graduate School of Management, Northwestern University, Evanston, IL, October 26-27.

BARSNESS, Z. I., Diekmann, K. A. and Seidel, M. (2000) "Creating a desired identity: The impact of physical, psychological and social distance on impression management behaviors," presented at the Wharton Conference on Organizational Behavior, The Wharton School, University of Pennsylvania, Philadelphia, PA, November 17-18.

BARSNESS, Z. I. (1999). "What e-mail can do in Chinese culture: The consideration of two communication media in integrative bargaining." Program on Conflict and Dispute Resolution Colloquium, Texas A&M University, College Station, TX, February 24.

BARSNESS, Z. I. (1997). "The impact of Alternative Work Arrangements on Group Process and Effectiveness." Organizational Behavior Speaker Series, University of Illinois, Champagne-Urbana, IL, December 12.

BARSNESS, Z. I. (1997). "Just-in-Time Workers and the Team-Based Organization." Department of Psychology Colloquium, Texas A&M University, College Station, TX, April 4.

BARSNESS, Z. I. (1997). "Just-in-Time Workers and the Team-Based Organization." Department of Management Speaker Series, University of Texas, Austin, TX, February 28.

TEACHING EXPERIENCE

Undergraduate

Business Competencies Practicum, University of Washington, Tacoma (*Spring 2006*)
Managing and Motivating Teams, University of Washington, Tacoma (*Spring 2009 - present*)
Managing Organizations, University of Washington, Tacoma (*Fall 2000 – Spring 2006*).
Negotiation and Conflict Management, University of Washington, Tacoma (*Summer 2002 – present*).
Organizational Behavior, Texas A&M University (*Fall 1996 – Summer 2000*).
Strategic Human Resource Management, University of Washington, Tacoma (*Winter 2001 – Spring 2008*).
Strategy and Business Policy, University of Washington, Tacoma (*Spring 2000 – Spring 2004*).

MBA

Individual and Group Dynamics, University of Washington, Tacoma (*Spring 2005 – present)*
Negotiation, University of Washington, Tacoma (*Winter 2009 – present*)
Negotiation, Texas A&M University (*Fall 1997 – Summer 2000*)
Negotiation, Kellogg School of Management, Northwestern University (*Summer 1994 - Spring 1996*).
Strategic Human Resource Management, University of Washington, Tacoma (*Winter 2002 – Spring 2008*).

Strategic Human Resource Management, Melbourne Business School, Melbourne, Australia (*Summer 2005*)
Strategic Management, University of Washington, Seattle (*Winter 2006*).
Teamwork skills workshop, MBA residency week, Texas A&M University (*Fall, 1997 – Fall 2000)*

Executive MBA
Negotiation, Texas A&M University (*Spring 1998 – Summer 2000*)
Teamwork skills workshop, Executive MBA residency week, Texas A&M University (*Fall, 2000)*

Professional Development
Negotiation, Essentials of Management Program, University of Washington, Tacoma (*Fall 2010)*
Negotiation Concepts and Strategies for Effective Salary Negotiation, Institute of Managerial Accountants, Tacoma, WA (*April, 2007)*
Strategic Planning, Goodwill Tacoma, Tacoma, WA (*September 2006*)
Negotiation, Wizards of the Coast, Renton, WA (*November 2003*).
Information Sharing and Team Decision Making, Metroparks, Tacoma, WA (*August, 2003*).
Negotiation Skills and Analysis, Knowledge Is Power Program, Chicago, IL (*November, 2002*).
Negotiation, Green Mountain Energy, Austin, TX (*March, 2002, June 2003*).
Negotiation, Executive Construction Management Program, Center for Executive Development, Mays Business School, Texas A&M University (*Fall 1998 – Summer 2000*)
Negotiation and Alternative Dispute Resolution, Law Enforcement Institute, Center for Executive Development, Mays Business School, Texas A&M University (*Spring 1998 – Summer 2000)*
Negotiation, Garden.com, Austin, TX (*June, 1999*).
Water Issues Management: Identifying and Facilitating Water Disputes, Texas Agricultural Extension Service and the Program on Conflict and Dispute Resolution, Center for Public Leadership Studies, Bush School of Government and Public Service, Texas A&M University, College Station, TX (*April 1999*).
Organizational Impact of Corporate Volunteerism, San Antonio Mentorship Association Workshop, San Antonio, TX (*October 23, 1998*)
Alternative Work Arrangements and Staff Relationships, Illinois Organization of Nurse Leaders, Springfield, IL (*May, 1996*).
Community Leadership and Negotiation, Leadership Evanston, Evanston, IL (*Spring, 1995*).

TEACHING RECOGNITION

Commendation for Excellence in Teaching, Milgard School of Business, University of Washington, Tacoma (*2010, 2011, 2012*)
Distinguished Teaching Award Nomination, University of Washington, Tacoma (*2002*).
Recognized One of Top 25% Most Effective Teachers on Campus, Texas A&M University (*Spring 2000*).
Doctoral Teaching Award, Kellogg School of Management, Northwestern University (*1994-1995*).

STUDENTS

Doctoral
Glew, David. (December, 1999). Person-Team Fit: An Examination of Individual Congruence in Work Teams. Committee member.
Lawson, Lucinda. (August, 2001). Understanding the Influences of Demographic Diversity on Role Stress: A Tripartite Analysis. Committee member.

Masters

Graciela Tena de Lara (Summer 2011). Independent Study: Advisor.
Kim Tebrugge (Spring 2006). Independent Study: Advisor.
Bouldry, Jennifer (June, 1998). Masters of Psychology. Committee member.
Phung, Andrew. (December, 1998). Masters of Human Resource Management. Committee chair.

Undergraduate

Clark, Richard (Spring, 2001). Independent Study: Motivation and Reward Systems. Advisor.
Marshall, Laura (Summer, 2002). Independent Study: Influence of Social Networks on Skill Development. Advisor.

SERVICE

University

Council of Faculty Council Chairs, University of Washington, Ex Officio Member (*2011-2012*)

Faculty Senate, University of Washington. Ex Officio Member. (*2011 – 2012).*

Faculty Senate Executive Council, University of Washington. Ex Officio Member. (*2011 – 2012).*

Faculty Council on Tri-Campus Policy, University of Washington, Ex-officio Member. (*2010 – 2011*).

Faculty Senate Chair's Cabinet, University of Washington, Member. (*September 2009 – present*).

Faculty Senate, University of Washington, Representative for Milgard School of Business. (*2008 –2010*).

Faculty Council on Tri-Campus Policy, University of Washington, Member. (*2008 – 2009*).

Graduate Review Committee for Social Work Program at the University of Washington, Tacoma. Member. (*January 2006 – June 2006*)

Faculty Council on Tri-Campus Policy, University of Washington. Member. (*May 2004 – December 2006*).

Graduate Faculty, University of Washington. Member. (*September 2003 – present*).

Graduate Faculty, Texas A&M University. Member. (*March 1997 – June 2000*).

Steering Committee, Program on Conflict and Dispute Resolution, Center for Public Leadership Studies, Bush School of Government and Public Service, Texas A&M University. Member. (*September 1997 – June 2000).*

Campus

Chair, Faculty Assembly, University of Washington, Tacoma (*2011 – 2012*)

Executive Council, Faculty Assembly, University of Washington, Tacoma. Chair. (*2011 – 2012).*

Strategic Budget Committee, University of Washington, Tacoma. Ex Officio Member. (*2011 – 2012*).

Search Committee for Vice Chancellor for Administrative Services, University of Washington, Tacoma, Member. (*Fall 2011*).

Vice Chair, Faculty Assembly, University of Washington, Tacoma. (*2010 – 2011)*

Executive Council, Faculty Assembly, University of Washington, Tacoma. Ex Officio Member. (*2010 – 2011).*

Academic Leadership Council, University of Washington, Tacoma. Ex Officio Member (*2010 – 2012*)

Budget Committee, University of Washington, Tacoma. Ex Officio Member (*2010 – 2011*)

Executive Planning Council, University of Washington, Tacoma. Ex Officio Member. (*2010 – 2011)*

Undergraduate Program Advisory Taskforce, University of Washington, Tacoma. Member. (*2010 – 2011*).

Advising System Task force, University of Washington, Tacoma. Member. (*2010 –2011)*

Faculty Council on Tenure & Promotion, University of Washington, Tacoma. Chair. (*2009 – 2010*).

Faculty Council on Tenure & Promotion, University of Washington, Tacoma. Member. (*2008 – 2009*).

New Faculty Orientation, University of Washington, Tacoma. Panelist. (*2001, 2002, 2005, 2006, 2011*).

Steering Committee for Development of Lower Division, University of Washington, Tacoma. Member. (*June 2004 – December 2004).*

Executive Committee, Faculty Assembly, University of Washington, Tacoma. Member. (*2003 –2006).*

Teaching and Learning Roundtable, University of Washington, Tacoma. Member. (*2002 –2003*).

Faculty Council on Academic Affairs, University of Washington, Tacoma. Member. (*2001 –2003*).

RAPP, University of Washington, Tacoma. Member. (*2001 – 2003*).

Distinguished Teaching Award Committee, University of Washington, Tacoma. Member. (*2001).*

School

Management Search Committee, University of Washington, Tacoma. Member. (*Spring 2011)*

MBA Committee, University of Washington, Tacoma, Member (*2008 – 2010*).

Faculty Council, Milgard School of Business, University of Washington, Tacoma. Member (*Spring 2006*).

MBA Committee, University of Washington, Tacoma. Member (*January 2005 – September 2005*).

Accounting Search Committee, University of Washington, Tacoma. Member. (*2003 – 2004)*

Core Curriculum Task Force, Business Administration Program, University of Washington, Tacoma. Member. (*2003 –2004*)

Annual Review Task Force, Business Administration Program, University of Washington, Tacoma. Chair. (*2002 – 2003*)

MBA Curriculum Task Force, Business Administration Program, University of Washington, Tacoma. Member. (*2001 – 2002*)

Scholarship Committee, Business Administration Program, University of Washington, Tacoma. Member. (*2000 – 2010)*

Undergraduate Curriculum Task Force, Department of Management, Mays Business School, Texas A&M University. Member. (*1999 – 2000).*

Technology Task Force, Department of Management, Mays Business School, Texas A&M University. Member. (*Fall 1998)*

Management Society, Mays Business School, Texas A&M University. Faculty Advisor. (*1997 – 2000*).

Faculty Advisory Board, Center for Executive Development, Mays Business School, Texas A&M University. Member. (*1999 –2000).*

Assessment Committee, Fellows and Honors Program, Mays Business School, Texas A&M University. Member. (*1996 –1997*).

National Undergraduate Challenge and EDS Challenge Preliminary Case Study Competition, Mays Business School, Texas A&M University. Judge. (*Fall 1996*).

Professional

Editorial Boards: *Negotiation and Conflict Management Review* (*2005 – present*).
International Journal of Conflict Management (*2003 – 2004*).

Ad Hoc Referee: *Academy of Management Journal*
Group Decision and Negotiation
Industrial Relations
Journal of International Business
Journal of Management Inquiry
Journal of Organizational Behavior
Organizational Behavior and Human Decision Processes
Organization Science
Work and Occupations.

Member: Academy of Management
Beta Gamma Sigma, Member. (2011 – present).
International Association of Conflict Management
Interdisciplinary Network for Group Research

Elected Offices: Division Chair Elect, Conflict Management Division, Academy of Management (*September 2011 – August 2012)*

Program Chair, Conflict Management Division, Academy of Management (*September 2010 – August 2011)*

Program Chair Elect, Conflict Management Division, Academy of Management (*September 2009 – August 2010*)

Representative-at-large, Conflict Management Division, Academy of Management (*September 2001 – August 2002*)

Chair/Convener: Local Arrangements Co-Chair, International Association for Conflict Management 2013 Annual Meeting (*2011 – 2013*)
Program Chair, International Association for Conflict Management 2004 Annual Meeting (*2003 – 2004*)
Organizer, Professional Development Workshop, Human Resources Division, Academy of Management (*2003*)

Committees: Local Arrangements, Academy of Management (*2003*)
Book Award, International Association for Conflict Management (*2000*)
Program, Conflict Management Division, Academy of Management (*1996 - present)*
Program, International Association for Conflict Management (*1999 - present)*
Program, Organizational Behavior Division, Academy of Management (*1998 - 2010)*
Program, Academy of International Business (*2002)*

Community

Seattle Parks and Recreation, T-ball coach (*2011*).

Kellogg Alumni Club of Western Washington, Board Member (*2001 – 2005*)
Mountaineers, Seattle Washington, instructor for the Basic Climbing, Navigation, and Scrambling courses (*2002 – 2007*)
PEPS (Program for Early Parental Support), Seattle, WA, New Parents Group, Facilitator (*Fall 2009).*
PEPS (Program for Early Parental Support), Seattle, WA, 25th Anniversary Advisory Committee, Member (*September 2007 – May 2008).*

RESEARCH INTERESTS

Alternative work arrangements, cross cultural management, group process and effectiveness, social networks, negotiation and conflict management.

TEACHING INTERESTS

Negotiation and conflict management, organizational behavior, strategic human resources management, strategy, team dynamics.

CURRICULUM VITAE
SAM CHUNG

PERSONAL INFORMATION

Present Position: Associate Professor
ITS Curriculum Committee Chair & Program Coordinator
Endowed Chair of Information systems and Information Security
Information Technology and Systems (founding faculty)
Computing & Software Systems
Institute of Technology
University of Washington, Tacoma
BOX 358426
1900 Commerce Street
Tacoma, WA 98402-3100
(TEL) 253-692-5886
(FAX) 253-692-5862
(Email) chungsa@uw.edu
(Web) http://faculty.washington.edu/chungsa/

Associate Director of Cyber Physical Systems
Center for Information Assurance and Cybersecurity
University of Washington
Box 354985
4311-11th Avenue NE, Suite 400, Seattle, WA 98105
(Web) http://ciac.ischool.washington.edu/

Home Address: 1617 34th St. SE
Puyallup, WA 98372
(TEL) 253-678-2212 (Cellular)

EDUCATIONAL BACKGROUNDS

1) Ph.D. in Computer Science

Duration: Sept. 1991 - May. 1996
School: Department of Computer Science & Engineering
School of Engineering
University of South Florida, Tampa, Florida
Major: Computer Science
Dissertation: An Analysis of the Effects of Different Representation Schemes on Genetic Algorithms

2) Applied Scientist (Equivalent to M.S.C.S.) in Computer Science

Duration: Sept. 1988 - Aug. 1991
School: Department of Computer Science and Electrical Engineering
School of Engineering
George Washington University, Washington, D.C.

Major: Computer Science (Software & Systems)

3) M.S. in Computer Science
Duration: Mar. 1983 - Feb. 1985
School: Department of Computer Science
Korea Advanced Institute of Science & Technology, Seoul, Korea
Major: Computer Science
Thesis: A System for Generating VLSI Mask Pattern Check Plots from Caltech Intermediate Form File.

4) B.E.C.E. in Computer Engineering
Duration: Mar. 1979 - Feb. 1983
School: Department of Electronics
School of Engineering
Kyung Pook National University in Taegu, Korea
Major: Computer Engineering

ACADEMIC (TEACHING & SERVICE) EXPERIENCES

1) Associate Professor at the University of Washington, Tacoma
Duration: September 2007 – Present
Position: Full-time/Tenured
University: Computing & Software Systems
Institute of Technology
University of Washington Tacoma, Tacoma, WA
Duty: Teaching undergraduate and graduate courses,
Conducting researches in Intelligent Service-Oriented Computing,
Serving students for their research programs and activities,
Serving (non-)professional communities as a volunteer,
Courses: Object-Oriented Programming in Java and C#,
Information System Analysis & Design,
Software Reengineering,
Programming Practicum,
Client/Server Programming for Internet Applications,
Applied Distributed Computing,
Web Services,
Service-Oriented Software Reengineering

2) Distinguished Professor at Daegu Gyeongbuk Institute of Science & Technology (DGIST) during sabbatical leave
Duration: June 21, 2010 – June 20, 2011
Position: Full-time/Contract
University: Information & Communication Engineering
Daegu Gyeongbuk Institute of Science & Technology, Daegu, Korea
Duty: As the department chair, hiring faculty & staff members, recruiting students, developing curriculum, administering department budget, etc.

Setting up joint research programs with CIAC at UW Seattle and SSCRG at UW Tacoma

3) Adjunct Professor at Yabian University of Science and Technology

Duration: June 2004 – July 2004
Position: Full-time/Contract
University: Computer Science
Yabian University of Science and Technology
Duty: Teaching an undergraduate course
Courses: Applied Distributed Computing

4) Assistant Professor at the University of Washington, Tacoma

Duration: September 2001– June 2007
Position: Full-time/Tenure track
University: Computing & Software Systems
Institute of Technology
University of Washington Tacoma, Tacoma, WA
Duty: Teaching undergraduate and graduate courses,
Developing research/teaching environment,
Serving students for their research programs and activities,
Serving the community as volunteer
Courses: Computer Operating Systems, Database Systems Design,
Software Reengineering, Client/Server Programming for Internet Applications,
Development of Enterprise Applications, Applied Distributed Computing,
Web Services, Service-Oriented Computing, Discrete Mathematics,
Programming Practicum

5) Assistant Professor at the Pacific Lutheran University

Duration: September 2000 – August 2001
Position: Full-time/Tenure track
University: Department of Computer Science and Computer Engineering
College of Arts and Sciences
Pacific Lutheran University, Tacoma, WA
Duty: Teaching undergraduate courses,
Developing research/teaching environment,
Serving students for their research programs and activities,
Serving the community as a volunteer
Courses: Introduction to Computer Science
Programming Language Concepts
Capstone Seminar and Independent Study
Management of Information Technology & Systems (MBA Students)

6) Assistant Professor at the University of Texas of the Permian Basin

Duration: September 1998 – Summer 2000
Position: Full-time/Tenure track
University: Department of Science and Mathematics

College of Arts and Science
University of Texas of the Permian Basin, Odessa, TX

Duty: Teaching undergraduate courses.
Developing research/teaching environment
Serving students for their research programs and activities
Serving the university as committee members

Courses: Introduction to Computer Science I, Web Programming in Java
Information Systems Design, Database Systems
CS Research (Distributed Computing Systems),
Software Engineering

7) Adjunct Professor at Indiana University Purdue University Indianapolis

Duration: Fall 1996, spring/fall 1997
Position: Part-time/Contract
University: Department of Computer and Information Science
Purdue University School of Science
Indiana University Purdue University Indianapolis, Indianapolis, IN
Duty: Teaching undergraduate and graduate courses
Courses: Database Systems
Advanced Database Systems for graduate students
Object-Oriented Analysis and Design for undergraduate and graduate students

8) Instructor and Teaching Assistant at University of South Florida

Duration: Fall 1991 and spring 1994
Position: Part-time/Contract
University: Department of Computer Science & Engineering,
School of Engineering
University of South Florida, Tampa, Florida
Duty: Teaching computer logic labs and computer systems design labs
Helping and grading student's assignments and exams
Courses: Computer Logic Design Lab for undergraduate students (Instructor),
Computing Systems Design Lab for undergraduate students (Instructor)
Expert Systems for graduate students (TA)
Computer Graphics for graduate students (TA)

9) Grader at George Washington University

Duration: Spring 1989 and fall 1989
Position: Part-time/Contract
University: Department of Electrical Engineering & Computer Science
School of Engineering
George Washington University, Washington, D.C.
Duty: Grading and helping assignments and exams.
Courses: Interactive Computer Graphics I for graduate students
Automata and Formal Languages for graduate students
Digital Computer Design for graduate students

10) Instructor at the Korea National Open University

Duration: Spring 1986 and fall 1986
Position: Part-time/Contract
Address: Department of Computer Science
School of Engineering
Korea National Open University, Seoul, Korea
Duty: Teaching system programming and data structures courses for undergraduate students.
Courses: System Programming for undergraduate students
Data Structures for undergraduate students

PROFESSIONAL WORK EXPERIENCES

1) Systems Analyst & Programmer at the Regenstrief Institute

Duration: 5/6/1996- 7/31/1998
Position: Full Time/Permanent
Address: Regenstrief Institute for Health Care
Indiana University Medical Center
1001 West Tenth Street, Indianapolis, IN 46202-2859
Duty: Analyzing and improving the current huge medical record systems (combination of network and relational databases) for clinical abstract and recent results.
Analyzing and developing Health Level 7 Converter
Language: VAX Basic
DBMS: RDB (Regenstrief DB)
Methodology: OOA/OOD (by using Unified Modeling Language)
TOOLS: MS Office
GUI: VAX Basic Graphics
OS: VMS V5.4, Windows 95
H/W: VAX Clusters, IBM PC Clones

2) Senior Research & Development Specialist at the InterServ Service Cooperation

Duration: 1/3/1996-4/5/1996
Position: Full Time/Permanent
Address: InterServ Service Cooperation
4892 North Royal Atlanta Dr., Tucker, GA 30084
Duty: Analyzing, designing, implementing, and testing logical & physical relational databases for CTI applications with introducing new development methodology.
Language: SAGE script language 8.0, Embedded C, ISQL, FSQL
DBMS: Informix-ISQL 4.0, MS Access 2.0
Methodology: OOA/OOD
TOOLS: MS Office, Lotus Scheduler
GUI: BAM by Brock Control Systems, Inc.
OS: UNIX System V, MS Windows 3.1
H/W: UNIX Workstation, IBM PC Clones

3) DB Application Program Developer at the Korean Christian Times

Duration:	9/1/1996-12/31/1996
Position:	Full Time/Contract
Address:	5302 Buford Hwy. Suite B-1, Doraville, GA 30340
Duty:	Developing newspaper delivery & advertisement management relational DB system. Training desktop publishing S/W and MS Windows to employees
Language:	MS Access Basic 2.0, MS Visual Basic 3.0, MS Visual C++ 1.0,
DBMS:	MS Access 2.0
Methodology:	SA/SD (Structured Analysis/Structured Design)
TOOLS:	MS Office, HP Desk Scan
GUI:	MS Windows
OS:	MS Windows 3.1
H/W:	IBM PC Clones

4) Research Assistant at the University of South Florida

Duration:	Summer 1992 and summer 1993
Position:	Part Time/Contract
Address:	Department of Computer Science & Engineering School of Engineering University of South Florida 4202 East Fowler Ave. ENB 118, Tampa, FL 33620-5399
Duty:	Research on binary and symbolic Genetic Algorithms. Inventing new models for symbolic representations in GAs.
Leaving:	Because of Ph.D. graduation
Language:	C (ANSI C, Borland Turbo C, MS Visual C++ 1.0)
DBMS:	Ingres
Methodology:	SA/SD
TOOLS:	MS Office, MatLab, and X Lib
GUI:	X windows
OS:	MS Windows 3.1, UNIX
H/W:	SUN Workstation, IBM PCs

5) Department Programmer at the George Washington University

Duration:	10/1/1989-5/4/1991 (1.5 years)
Position:	PT/Contract
Address:	Dept. of Electrical Engineering & Computer Science George Washington University, Washington, D.C.
Duty:	Developing EECS Department databases
Language:	C, C Shell
DBMS:	/rdb, REFLEX
Methodology:	SA/SD
TOOLS:	X Lib
GUI:	X windows
OS:	Macintosh OS, UNIX
H/W:	SUN Workstation, Macintosh

RESEARCH PUBLICATIONS & PRESENTATION

Refereed Publications (International Conferences, Journals, & Book Chapters)

2012 (2 journals, pending)

- Hee Jung Yoon, Ho-Kyeong Ra, Taejoon Park, Sam Chung, Intelligent Video Surveillance: Behavioral Detection of Falls Based on Double-Layer Support Vector Machine, *IEEE Intelligent Systems* (submitted on 5/1/2012)
- Joel Morrah, Jie Sheng, Sam Chung, Seung-Ho Baeg, Sangdeok Park, An Evaluation of the Performance of the Joint Architecture for Unmanned Systems and Usage Recommendation, *IEEE Transactions on Systems, Man, and Cybernetics--Part C: Applications and Reviews* (submitted on 1/28/2012)

2012 (1 book chapter and 2 international conferences)

1) Meeta Sharma, Yan Bai, Sam Chung, and Lirong Dai. *Using Risk in Access Control for Cloud-Assisted eHealth*, the Fifth International Symposium on Advances in High Performance Computing and Networking (AHPCN 2012), June 25-27, 2012, Liverpool, UK.
2) Barbara Endicott-Popovsky, Sam Chung, and Viatcheslav Popovsky. *Provisioning Secure Coding Curricular Resources: Toward Robust Software*, the Proceedings of the 16th Colloquium for Information Systems Security Education (CISSE 2012), June 11-13, 2012, Orlando, FL.
3) Sam Chung, Conrado Crompton, Yan Bai, Barbara Endicott-Popovsky, Seung-Ho Baeg, and Sangdeok Park. *Analyses of Evolving Legacy Software into Secure Service-Oriented Software Using Scrum and a Visual Model*, AGILE AND LEAN SERVICE ORIENTED DEVELOPMENT: Foundations, Theory and Practice, IGI Global, 2012.

2011 (4 international conferences)

4) Leo Hansel, Sam Chung, Barbara Endicott-Popovsky. *Software Reengineering Approach to Teaching Secure Coding Practices*, the 15th Colloquium for Information Systems Security Education (CISSE 2011), June 13-15, 2011, Fairborn, Ohio.
5) Joel Morrah, Jie Sheng, Ho-Kyeong Ra, Sam Chung, *A JAUS-Compliant Test-Bed for Unmanned Vehicle Systems with Smartphone as Communication Media*, IASTED International Conference on Robotics and Applications , Jun 01, 2011 to Jun 03, 2011, Vancouver, BC, Canada.
6) Zane Madinger, Sam Chung, Seung-Ho Baeg, *Lessons Learned from Secure Service-Oriented Software Reengineering*, the 6th International Symposium on Embedded Technology (ISET 2011), May 20-21, 2011, Jeju, Korea.
7) Homin Park, Sam Chung, Seung-Ho Baeg, Sangdeok Park, *An Integrated Modernization Approach for Software Reengineering: IMA4SR*, the 6th International Symposium on Embedded Technology (ISET 2011), May 20-21, 2011, Jeju, Korea.

2010 (4 international conferences)

8) Apaporn Boonyarattaphan, Yan Bai, Sam Chung, *Spatial-Temporal Access Control for e-Health Services*, The 5th IEEE International Conference on Networking, Architecture, and Storage (NAS 2010), July 15 − 17, 2010, the University of Macau, Macau SAR, China.
9) Sam Chung, Barbara Endicott-Popovsky, *Software Reengineering Based Security Teaching*,

International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2010). June 29 - July 2, 2010, Orlando, FL.

10) HK Ho-Kyeong Ra, Sam Chung, Jie Sheng, *Teaching the Way of Using Computers with Autonomous Robots for Junior-High Students*, International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2010). June 29 - July 2, 2010, Orlando, FL.
11) Rinkesh Nagmoti, Sam Chung, Barbara Endicott-Popovsky, *Game Programmers with Secure Coding*, The Third Annual International Conference on Computer Games Multimedia and Allied Technology (CGAT'10) April 6-7, 2010, Singapore

2009 (6 international conferences)

12) Sam Chung, Daehee Won, Seung-Ho Baeg, Sangdeok Park, *Service-Oriented Reverse Reengineering: 5W1H Model-Driven Re-Documentation and Candidate Services Identification*, IEEE International Conference on Service-Oriented Computing and Applications (SOCA'09) December 14-15, 2009, Taipei, Taiwan
13) Sam Chung, Daehee Won, Seung-Ho Baeg, Sangdeok Park, *A Model-Driven Scrum Process for Service-Oriented Software Reengineering: mScrum4SOSR*, The 2nd International Conference on Computer Science and its Applications (CSA 2009), December 10-12, 2009, Jeju Island, Korea.
14) Sam Chung, Sergio Davalos, Craig Niiyama, Daehee Won, Seung-Ho Baeg, Sangdeok Park, *A UML Model-Driven Business Process Development Methodology for a Virtual Enterprise using SOA & ESB*, 2009 IEEE Asia-Pacific Services Computing Conference (IEEE APSCC 2009). December 7-11, 2009, Biopolis, Singapore
15) Apaporn Boonyarattaphan, Yan Bai, and Sam Chung. *A Security Framework for e-Health Service Authentication and e-Health Data Transmission*, International Conference on Communication and Information Technology (ISCIT-09), Incheon, Korea. September 28-30, 2009.
16) Shima Akhavanfarid and Sam Chung. *QOWS: A QoS Ontology Framework for Web Services*, International Conference on Enterprise Information Systems and Web Technologies (EISWT-09), July 13-16 2009, Orlando, FL.
17) Ernest Cho, Sam Chung, and Daniel Zimmerman. (2009). *Automatic Web Services Generation*. The Technology and Strategies for Service-Oriented Architectures track of the 42nd Annual Hawaii International Conference on Systems Sciences (HICSS 2009). January 5-8, 2009. Waikoloa, Big Island, Hawaii.

2008 (1 journal & 3 international conferences)

18) Phi Nguyen, Sam Chung. (2008). *Generating Semantic Web Services Using Lattices and SAWSDL*. The 2008 International Symposium on Modeling, Assembly and Management for Service Oriented Engineering (MamSOE 2008). In conjunction with The 3rd IEEE Asia-Pacific Service Computing Conference (APSCC 2008). Yilan, Taiwan – December 9-12, 2008
19) Phil Bonderud, Sam Chung, Barbara Endicott-Popovsky (2008). *Toward Trustworthy Service Consumers and Producers.* The Third International Conference on Internet and Web Applications and Services (ICIW 2008). June 8-13, 2008. Athens, Greece.
20) Robert Bunge, Sam Chung, Barbara Endicott-Popovsky, Don McLane. *An Operational Framework for Service Oriented Architecture Network Security***.** The Technology and Strategies for Service-Oriented Architectures track of the 41st Annual Hawaii International Conference on Systems Sciences (HICSS 2008). January 7-10, 2008. Waikoloa, Big Island,

Hawaii.

21) Sam Chung, Sergio Davalos, Joseph An, Katsumi Iwahara. "*Legacy to Web Migration: Service-Oriented Software Reengineering (SoSR) Methodology*." International Journal of Services Sciences 2008, Vol. 1, No.3/4 pp. 333 – 365. ISSN (Online): 1753-1454 - ISSN (Print): 1753-1446

2007 (2 international conferences)

22) Martine De Cock, Sam Chung, *Omar Hafeez*. *Intelligent Selection of Web Services with Imprecise QoS*. The IEEE/WIC/ACM Conference on Web Intelligence (WI 2007). Silicon Valley, CA, USA. November 2-5, 2007.

23) Sam Chung, *Joseph Byung Chul An*, Sergio Davalos (2007). *Service-Oriented Software Reengineering: SoSR*. The mini-track "Technology and Strategies for Realizing Service-oriented Architectures with Web services" of the 40th Annual Hawaii International Conference on Systems Sciences (HICSS 2007). January 3-6, 2007. Waikoloa, Big Island Hawaii.

2006 (1 journal, 1 book chapter, & 6 international conferences)

24) Sam Chung, *Zac Bylin*, and Sergio Davalos. (2006). *Case Study: Service-Oriented Retail Business Information System*. Enterprise Architecture and Integration: Methods, Implementation and Technologies. Edited by Wing Lam and Venky Shankararaman, Idea Group Inc. (ISSN 978-1-59904-189-6)

25) Sam Chung and Sergio Davalos (2006). *Toward Next Generation Distributed Business Information Systems: Five Inherent Capabilities of Service-Oriented Computing*. IPSI BgD Transactions on Internet Research. V. 2. No. 1. New York, Frankfurt, Tokyo, Belgrade: IPSI BgD Internet Research Society. pp. 9 – 15. (ISSN 1820-4503)

26) *Luiz Russo* and Sam Chung (2006). *A Service Mediator Based Information System: Service-Oriented Federated Multiple Document Management*. 2006 Middleware for Web Services (MWS 2006) Workshop at the 10th International IEEE Enterprise Computing Conference (EDOC 2006). October 16-20, 2006, Hong Kong.

27) *Christopher A. Perryea* and Sam Chung (2006). *Community-Based Service Discovery*. The Proceedings of 2006 IEEE International Conference on Web Services (ICWS 2006). September 18-22, 2006, Chicago, Illinois.

28) *Dan W. Henricks* and Sam Chung. (2006). *Latency and Bandwidth Comparison of Distributed Middleware Technologies for Broadband Communication Systems: RMI, Mobile Objects, and Web Services*. The Second International Symposium on Broadband Communications (ISBC 2006). September 10-14, 2006. Moscow & St. Petersburg, Russia.

29) Sam Chung and *George Orriss*. (2006). *A Grid Service Computing Environment for Supply Chain Management*. Proceedings of Software Agents and Internet Computing. The 8-th International Conference on Enterprise Information System (ICEIS 2006). May 23 – 27 2006. Paphos, Cyprus. Pp. 112-117. (ISBN 972-8865-44-9, 6 pages)

30) Sam Chung and *Eric Hartford*. (2006). *Bridging the Gap between Data Models and Implementations: XMI2SQL*. Proceedings of the Advanced International Conference on Telecommunications and International Conference on Internet and Web Applications and Services (AICT/ICIW 2006). February 19 - 25, 2006. Guadeloupe, French Caribbean. IEEE Computer Society. pp. 201. (ISBN 0-7695-2522-9)

31) Sam Chung, *Jennifer Pan*, and Sergio Davalos (2006). *A Special Web Service Mechanism:*

Asynchronous .NET Web Services. Proceedings of the Advanced International Conference on Telecommunications and International Conference on Internet and Web Applications and Services (AICT/ICIW 2006). February 23 - 25, 2006. Guadeloupe, French Caribbean. IEEE Computer Society. pp. 212. (ISBN 0-7695-2522-9)

2005 (1 journal & 3 international conferences)

32) Sam Chung, Sergio Davalos, and Amandeep Saini (2005). *Extending a UDDI Registry with Recursive Service-Oriented Architecture: A Service-Oriented UDDI Registry*. GESTS International Transactions on Computer Science and Engineering. Vol. 21. No. 1. pp. 125 – 146. America, Canada, China, and Korea: GESTS Publishing Team (Invited, Selected as the best of paper this month) (ISBN 89-953729-5-8)

33) Sam Chung (2005). *Modeling Service-Oriented Software Development: Services Ecosystem*. The 6-th International Conference on Computers, Communication, and Systems (ICCCS 2005). November 25, 2005. Daegu, Korea. pp. 1-6. (The invited keynote speaker, 6 pages)

34) Sam Chung, *Peter S. Young*, and Jack Nelson (2005). *Service-Oriented Software Reengineering: Bertie3 as Web Services*. The Proceedings of 2005 IEEE International Conference on Web Services (ICWS 2005). July 11-15, 2005, Orlando, Florida. IEEE Computer Society. pp. 837-838. (ISBN 0-7695-2409-5, 2 pages)

35) Sam Chung, *Zac Bylin*, and Sergio Davalos (2005). *Service-Oriented Development and Integration: Toward Web-Services-Based Business Information System*. The Proceedings of 2005 IEEE International Conference on Web Services (ICWS 2005). July 11-15, 2005, Orlando, Florida. IEEE Computer Society. pp. 791-792. (ISBN 0-7695-2409-5, 2 pages)

2004 (1 international conference)

36) Sam Chung, *Lai Hong Tang*, and Sergio Davalos. (2004). *A Web Service Oriented Integration Approach for Enterprise and Business-to-Business Applications*. Lecture Notes in Computer Science (LNCS) 3306. Web Information Systems – WISE 2004: 5th International Conference on Web Information Systems Engineering, Brisbane, Australia, November 22-24, 2004. Berlin, Heidelberg, Germany: Springer-Verlag. pp. 510 – 515. 2004. (ISSN: 0302-9743, 6 pages)

2003 (1 international conference)

37) Sam Chung and Yun-Sik Lee. (2003). *Modeling Web Applications Using Java And XML Related Technologies*. The Proceedings of the 36th Annual Hawaii International Conference on Systems Sciences 2003 (HICSS 2003). Hawaii, January 6-9, 2003. IEEE Computer Society. pp. 322. (ISBN 0-7695-1874-5, 10 pages)

2002 (3 international conferences)

38) Sam Chung and Don McLane. (2002). *Developing and Enhancing a Client/Server Programming for Internet Applications Course*. Journal of Computing Sciences in Colleges. Vol. 18, No. 2. December 2002. pp. 79-91. (13 pages)

39) Sam Chung, *Brent Chamberlain*, and Sun Mi Jeon. (2002). *Modeling an eBusiness System using Java and Open Source Technologies: The First Step of Case-Based Reasoning for Software Design*. Intelligent Engineering Systems through Artificial Neural Networks (ANNIE 2002). Volume 12. New York, NY: ASME Press. 1033-1038. (6 pages)

40) Sam Chung, *Bong Hwan Cho*, and Sun Mi Jeon. (2002). *Reverse Engineering a Point of*

Service System Using JavaPOS with UML and RUP. 2002 US-Korea Conference on Science, Technology, and Entrepreneurship (UKC 2002). Seoul, Korea. 2002. pp. 318-325. (8 pages)

Before joining UW Tacoma

41) Sam Chung and Yun-Sik Lee (2000). *Reverse Software Engineering with UML for Web Site Maintenance*. The 1st International Conference on Web Information Systems Engineering (WISE 2000). Hong Kong, June 19-20, 2000. Vol. 2, IEEE. pp. 157-161. (ISBN 0-7695-0577-5, 5 pages**)**
42) Suna Chung and Sam Chung. (1998*). A Multimedia System for Interactive Learning of Organ Literature*. Proceedings on the 1998 ACM Symposium on Applied Computing (SAC 1998). New York, NY: ACM, Inc. pp. 117-121 (ISBN 0-89791-969-6, 5 pages)
43) Sam Chung and Rafael Perez. (1997). *Why Is Problem-Dependent and High-Level Representation Scheme Better in a Genetic Algorithm?* Proceedings on the 1997 ACM Symposium on Applied Computing (SAC 1997). New York, NY: ACM, Inc. pp. 239-246. (ISBN 0-89791-850-9, 8 pages)
44) Padmanabha V. Bedarahally, Rafael A. Perez and Sam Chung. (1996). *A Family Elitist Approach in Genetic Algorithms*. Proceedings on the 1996 ACM Symposium on Applied Computing (SAC 1996). New York, NY: ACM, Inc. pp. 238-244 (ISBN 0-89791-820-7, 7 pages)
45) Sam Chung and Rafael Perez. (1995) *Novel Markov Chain Models for GAs Using Different Representation Schemes,* Intelligent Engineering System Through Artificial Neural Networks (ANNIE 1995). New York, NY: ASME Press.
46) Sam Chung, Rafael A. Perez, and Eun Ryung Lee. (1995). *A New Markov Chain Analysis for a GA Using Symbolic Representation,* IEEE International Conference on Evolutionary Computation (ICEC 1995). Vol. 1., November 29 – December 1, 1995. IEEE. pp. 356. (ISBN 0-7803-2759-4, 5 pages)
47) Sam Chung and Rafael A. Perez. (1994) *The Schema Theorem Considered Insufficient,* Proceedings of the Sixth International Conference on Tools with Artificial Intelligence (ICTAI 1994). November 6-9, 1994, New Orleans, Louisiana. IEEE Computer Society. pp. 748-751. (ISBN 0-8186-6785-0, 4 pages)
48) Sam Chung, Rafael Perez, and Oscar N. Garcia. (1994). *How Schemata Affect Genetic Algorithm Search,* Intelligent Engineering System Through Artificial Neural Networks (ANNIE 1994). Volume 4. New York, NY: ASME Press. pp. 303-311. (9 pages)

Refereed Abstract

1) Sam Chung, Lai Hong Tang, Sergio Davalos, and Saechul Park (2005). *Toward Next Generation Business Information Systems: Four Inherent Capabilities of Service Oriented Computing.* The Proceedings of the 2004 International Conference on IPSI-2005 Hawaii. January 6-9, 2005, Big Islands, Hawaii.
2) Sutham Cheurprakobkit and Sam Chung. (2000). *Using a Web-Based Information System (WIS) to Make Survey Studies More Effective and More Efficient*. The 2000 Annual Meeting of the American Society of Criminology. November 15-18, 2000.
3) Suna Chung and Sam Chung. (2000). *Developing a Multimedia CD-ROM and Hypermedia Based College Music Literature Learning Environment.* College Music Society 2000 South Central Regional Conference. University of Texas at San Antonio.
4) Sam Chung and Suna Chung. (1999). *Learning Environment for College Music Literature*

Classes. The UT System Telecommunications and Information Technology Conference. Brownsville, Texas.

5) Suna Chung and Sam Chung. (1998). *A Multimedia CD-ROM Development for Cesar Franck Organ Chorale in B Minor Analysis and Performance*. The 1998 Annual Meeting of the College Music Society Great Lake Chapter.

Presentation

1) Tom Rochat, Sam Chung, Barbara Endicott-Popovsky. *Assuring a Private Cloud for Academic Computing with High Assurance Platform Framework*, the 16th Colloquium for Information Systems Security Education (CISSE 2012), June 11-13, 2012, Orlando, FL.
2) Brook Alemayehu, Gary D. Armstrong, Kultar Khatra, Josh Calderon, and Sam Chung. *A Cloud Based Shopping Cart Development with Agility for Small Photography*, the Annual UW Undergraduate Research Symposium, May 18, 2012. University of Washington, Seattle, WA.
3) Josh Phelps and Sam Chung. *Build, Attack, Analyze and Patch: Iterated Security of Web and Email Servers in a Virtual Cloud Infrastructure*, the Annual UW Undergraduate Research Symposium, May 18, 2012. University of Washington, Seattle, WA.
4) Vera V. Kayky and Sam Chung. *Cyber Bounty Hunter*, the Annual UW Undergraduate Research Symposium, May 18, 2012. University of Washington, Seattle, WA.
5) D.C. Grant, Christopher Ritchie, and Sam Chung. *A Modular Web Application for Virtual Machine Management*, the Annual UW Undergraduate Research Symposium, May 18, 2012. University of Washington, Seattle, WA.
6) Tom Rochat and Sam Chung. *Hardening our Common Computing Landscape: Toward a High Assurance Private Cloud*, the Annual UW Undergraduate Research Symposium, May 18, 2012. University of Washington, Seattle, WA.
7) Barbara Endicott-Popovsky, Sam Chung, Mark Kochanski, Slava Popovsky, and Leo Hansel. *Integrating Security into Your Current Courses with Minimal Effort*, Secure Coding Workshop, September 22, 2011, University of Hawai'i at Manor
8) Sam Chung, Secure Service-Oriented Software Reengineering, KSEA NWRC 2011, November 19, 2011, San Jose, CA
9) Sam Chung. *Service-Oriented Software Reengineering for a Virtual Enterprise: Toward Smart Cyber Systems.* The 11-th International Conference on Computers, Communication, and Systems. November 4, 2010. Daegu, Korea. (Keynote speaker)
10) Rinkesh Nagmoti, Sam Chung, Barbara Endicott-Popovsky, *Game Programmers with Secure Coding*, The Third Annual International Conference on Computer Games Multimedia and Allied Technology (CGAT'10) April 6-7, 2009, Singapore
11) Sam Chung, Daehee Won, Seung-Ho Baeg, Sangdeok Park, *Service-Oriented Reverse Reengineering: 5W1H Model-Driven Re-Documentation and Candidate Services Identification*, IEEE International Conference on Service-Oriented Computing and Applications (SOCA'09) December 14-15, 2009, Taipei, Taiwan
12) Sam Chung, Daehee Won, Seung-Ho Baeg, Sangdeok Park. *A Model-Driven Scrum Process for Service-Oriented Software Reengineering: mScrum4SOSR*, The 2nd International Conference on Computer Science and its Applications (CSA 2009), December 10-12, 2009, Jeju Island, Korea.
13) Sam Chung, Sergio Davalos, Craig Niiyama, Daehee Won, Seung-Ho Baeg, Sangdeok Park, *A UML Model-Driven Business Process Development Methodology for a Virtual Enterprise*

using SOA & ESB, 2009 IEEE Asia-Pacific Services Computing Conference (IEEE APSCC 2009). December 7-11, 2009, Biopolis, Singapore

14) Sam Chung. *A Virtual Enterprise Integration Project using Service-Oriented Architecture and Enterprise Service Bus*. The Fourth Northwest US-Korea Conference, October 24 - 25, 2009. Bellevue, WA.
15) Sam Chung. *Robotics Software at KITECH: Toward Higher Reusability & Lower Maintainability*. Northwest Regional Conference (NWRC) 2008. November 1, 2008. Sacramento, CA.
16) Sam Chung. *Education in Computing at UW Tacoma: Industry Partnership and Software Professionals.* 2007 NEXUS Expo at Changwon National University. November 29, 2007
17) Sam Chung. *Next Generation Business Services*. E-Business Day 2007. The School of Business and ePLU e-Commerce & Technology Management Center at Pacific Lutheran University. November 13, 2007.
18) Leon Yip, Sam Chung, Ji Yeam, Yoon Kim, Andrew Homin Park. *Toward a Web-Based National Math Competition Management System: eMath4KSEA.* 2007 US-Korea Conference on Science, Technology, and Entrepreneurship (UKC 2007). August 9-12, 2007. Reston, VA.
19) Dan W. Henricks and Sam Chung. *Latency and Bandwidth Comparison of Distributed Middleware Technologies for Broadband Communication Systems: RMI, Mobile Objects, and Web Services*. The Second International Symposium on Broadband Communications (ISBC). September 10-14, 2006. Moscow, Russia.
20) Sam Chung and George Orris. *A Grid Service Computing Environment For Supply Chain Management*. The 8-th International Conference on Enterprise Information System (ICEIS). May 23 – 27, 2006. Paphos, Cyprus.
21) Sam Chung, Jennifer Pan, and Sergio Davalos. *A Special Web Service Mechanism: Asynchronous .NET Web Services*. Proceedings of the Advanced International Conference on Telecommunications and International Conference on Internet and Web Applications and Services (AICT/ICIW 2006). February 23 - 25, 2006. Guadeloupe, French Caribbean. IEEE Computer Society.
22) Sam Chung and Eric Hartford. *Bridging the Gap between Data Models and Implementations: XMI2SQL*. Proceedings of the Advanced International Conference on Telecommunications and International Conference on Internet and Web Applications and Services (AICT/ICIW 2006). February 23 - 25, 2006. Guadeloupe, French Caribbean. IEEE Computer Society.
23) Sam Chung. *Modeling Service-Oriented Software Development: Services Ecosystem*. The 6-th International Conference on Computers, Communication, and Systems. November 25, 2005. Daegu, Korea. (Keynote speaker)
24) Sam Chung. *Modeling Service-Oriented Software Development: Services Ecosystem.* The Computer Club. The University of Texas of the Permian Basin. September 6, 2005.
25) Sam Chung. *A Web Service Oriented Integration Approach for Enterprise and Business-to-Business Applications.* The 2004 International Conference on Web Information Systems Engineering (WISE04). November 22-24, 2004, Brisbane, Australia.
26) Sam Chung. *Intelligent Service Oriented Computing Researches at the UW Tacoma.* IT/CSS Spring 2004 Seminar. The University of Washington Tacoma. May 5, 2004.
27) Sam Chung. *Modeling Web Applications Using Java And XML Related Technologies*. The 36th Annual Hawaii International Conference on Systems Sciences 2003 (HICSS-36). Hawaii, January 6-9, 2003.

28) Sam Chung and Michael Park. *Modeling Web Services with 4+1+3 Views.* IT/CSS Autumn 2003 Seminar. The University of Washington Tacoma. October 23, 2003
29) Joseph An and Sam Chung. *A Framework for an Intelligent eBusiness Information System for Small Business*. KSEA-PNC Topical Seminar. February 15, 2003.
30) Sam Chung. *Modeling Software Systems Visually*. RATS (Research at Tacoma Seminar). The University of Washington Tacoma. February 7, 2003.
31) Sam Chung, Joseph An, and Chung-Shing Lee. *A Framework for an Intelligent eBusiness Information System for Small Retail Business.* IT/CSS Winter 2003 Seminar. The University of Washington Tacoma. February 4, 2003
32) Sam Chung. *Modeling an eBusiness System using Java and Open Source Technologies: The First Step of case-Based reasoning for Software Design.* ANNIE (Annual Neural Network in Engineering) 2002 Smart Engineering System Design: Neural Networks, Fuzzy Logic, Evolutionary Programming, Artificial Life and data Mining. Marriott's Pavilion Hotel, St. Louis, MO 11/10/2002 – 11/13/2002
33) Sam Chung. *Reverse Engineering a Point of Service System Using JavaPOS with UML and RUP*. IT/CSS Spring 2002 Seminar. The University of Washington Tacoma. May 28, 2002.
34) Sam Chung. *Enhancing a Database Systems Design Course with Object-Oriented Data Modeling – UML*. IT/CSS Winter 2002 Seminar. University of Washington Tacoma. February 19, 2002.
35) Sam Chung, Douglas Hale, Maggie Ma, Van Trinh, Kathy Miller, Cherry Owen. (2000). *Renovating Web Sites by Using Round-Trip Software Engineering with UML*. The University of Texas System, Information Technology and Distance Education Conference. Galveston, TX. May 16-18, 2000.
36) Sam Chung. *An Object-Oriented Software Engineering Approach in Web-Based Information Systems Development*. The Pishon Technology Inc., Seoul, Korea.
37) Sam Chung, Douglas Hale, David Reck, and Thomas Thatcher. *A Pedagogical Approach to Enhance Participation and Collaboration in a Non-Traditional Student Dominated Computer Class.* The UT System Telecommunications and Information Technology Conference. Brownsville, Texas.
38) Thomas Thatcher and Sam Chung. *Utilizing a 3-Tier Architecture to Enhance Collaboration Between Non-Traditional Students*. The UTPB Student Research Forum, Odessa, Texas.

Poster

1) HK Ho-Kyeong Ra, Sam Chung, Jie Sheng (2010). *Is OpenJAUS Really Open to its Unmanned Systems Development Community?* The Annual UW Undergraduate Research Symposium (UW URS) 2010, May 21, 2010, Seattle, Washington.
2) HK Ho-Kyeong Ra, Katie Sangyon Park, Sam Chung. (2009). *Can Robot Programming Save Our Youth From Computer Game and Chatting Addiction*? The Eleventh Annual Northwestern Regional Conference Consortium for Computing Sciences in Colleges, October 9-10, 2009, Pacific Lutheran University, Tacoma, WA
3) Yoon Kim and Sam Chung (2009). *Ruby on Rails vs. Java Enterprise Edition: No Experience in Web Programming! Which One Will Be Your First Choice?* The Eleventh Annual Northwestern Regional Conference Consortium for Computing Sciences in Colleges, October 9-10, 2009, Pacific Lutheran University, Tacoma, WA

4) Leon Yip, Yoon Kim, Sam Chung. (2008). *Securing a Web Application: eMath4KSEA*. The Eleventh Annual UW Undergraduate Research Symposium (UW URS), May 16th, 2008, Seattle, Washington.
5) Nika Pelc and Sam Chung (2001). *Enhancing GA reusability by Modeling Genetic Algorithms with UML*. Tenth Regional Conference on Undergraduate Research. Murdock College Science Research Program. Gonzaga University. Spokane, WA. November 2 -3, 2001.
6) Brent Chamberlain and Sam Chung. (2001). *Modeling Objected-Oriented and Component-Based Java Designs with UML*. Tenth Regional Conference on Undergraduate Research. Murdock College Science Research Program. Gonzaga University. Spokane, WA. November 2 - 3, 2001.

Conference/Workshop Attendance

1) Software Assurance (SwA) Forum, March 26-30, 2012, MITRE, McLean, VA
2) International Conference on Information Warfare & Security (ICIW), March 22-23, 2012, University of Washington, Seattle, WA
3) Software Assurance (SwA) Forum, September 12-16, 2011, Software Engineering Institute, Arlington, VA
4) Sam Chung. *Service-Oriented Software Reengineering for a Virtual Enterprise: Toward Smart Cyber Systems.* The 11-th International Conference on Computers, Communication, and Systems. November 4, 2010. Daegu, Korea. (Keynote speaker)
5) KSEA NWRC 2009, October 31 – November 1, 2009. Bellevue, Washington
6) eCrime Researchers Summit 2009, October 20-21, 2009, Tacoma, WA
7) Eleventh Annual Northwestern Regional Conference Consortium for Computing Sciences in Colleges, October 9-10, 2009, Pacific Lutheran University, Tacoma, WA
8) The Agora, HUB Auditorium, Husky Union Building, UW Campus, Seattle, Washington, September 12, 2009
9) The 9th International Conference on Quality Software (QSIC 2009), August 24-25, 2009, Jeju, Korea.
10) Agile Journal Seminar, July 28, 2009, the Westine Bellevue, Bellevue, WA.
11) US-Korea Conference (UKC) 2009, July 16-19, 2009. Raleigh, North Carolina
12) International Conference on Enterprise Information Systems and Web Technologies (EISWT-09), Orlando, FL. July 13-16 2009.
13) KSEA Northwest Regional Conference (NWRC) 2008. November 1, 2008. University of Phoenix, Sacramento, CA.
14) The Third International Conference on Internet and Web Applications and Services (ICIW 2008). June 8-13, 2008. Athens, Greece.
15) KSEA Northwest Regional Conference (NWRC) 2007. November 10, 2007 (Saturday) – November 11, 2007 (Sunday). Portland State University. Portland, Oregon
16) Joe Hummel's Microsoft .NET Training Program. July 31 – August 4, 2007, Lake Forest, Illinois.
17) Institute of Teaching Excellence (ITE) 2007 at Olympic Natural Resources Center in Forks, Washington. June 10 – 16, 2007.
18) KSEA Northwest Regional Conference (NWRC) 2006. December 1-2 in 2006. Sheraton Hotel Tacoma in Washington.

19) SDL-IT Process of Secure Software System Workshop in Redmond. February 15 through February 17, 2006 in Redmond, Washington.
20) SDL-IT Engineering of Secure Software System Workshop in Redmond. December 7 through December 9, 2005 in Redmond, Washington.
21) Microsoft Academic Days on Web Development. The Aladdin Hotel in Las Vegas, Friday November 11th through Sunday November 13th, 2005.
22) The 5th Annual South Sound Technology (SST) Conference. The Sheraton Convention Center, Tacoma, Washington. May 21, 2004.
23) IBM Technical Briefings – Web Services on the On Demand Era. IBM Sheraton Seattle Hotel and Towers. July 18, 2003.
24) The 4th Annual South Sound Technology (SST) Conference. The Sheraton Convention Center, Tacoma, Washington. May 28, 2003.
25) IBM Technical Briefings – e-Business On Demand. IBM Sheraton Seattle Hotel and Towers. March 2003.
26) The Fourth Annual Consortium for Computing in Small Colleges Northwest Conference (CCSC-NW) (2002). Seattle Pacific University. Washington, WA. October 4-5, 2002.
27) US-Korea Conference (UKC) on Science, Technology, and Entrepreneurship 2002. Seoul, Korea. July 8-13, 2002.
28) The 3rd Annual South Sound Technology (SST) Conference. The Sheraton Convention Center, Tacoma, Washington. May 30, 2002.
29) Computer Professionals for Social Responsibility (CPSR) Directions and Implications of Advanced Computing (DIAC-02) Symposium. (2002). Shaping the Network Society – Patterns for Participation, Action, and Change. University of Washington. Seattle, WA. May 16-19, 2002.
30) Technology Alliance. (2002). The State of Technology Annual Luncheon. Seattle, WA. May 17, 2002.
31) Rational Software. (2002). Rational Unified Process Seminar. Bellevue, WA. May 6, 2002.
32) EPLU Mini-Conference. (2001). What's in IT for you? - Career Advising and Questions for Non-Technical Majors. Pacific Lutheran University. Tacoma, WA. November 27, 2001.
33) The Tenth Regional Conference on Undergraduate Research. Murdock College Science Research Program. (2001) Gonzaga University. Spokane, WA. November 2 - 3, 2001.
34) The Third Annual Consortium for Computing in Small Colleges Northwest Conference (CCSC-NW) (2001). Pacific Lutheran University. Tacoma, WA. October 5-6, 2001.
35) Blackboard Training by the UWT Media Services. October 1, 2001.
36) Media Equipment Training by the UWT Media Services. October 3, 2001
37) UW Faculty Orientation. September 13 – September 21 2001.

Ph.D. Dissertation

1) Sam Chung. (1995). *An Analysis of the Effects of Different Representation Schemes on Genetic Algorithms*. Doctoral Dissertation. Tampa, FL: University of South Florida. (Advisor: Dr. Rafael Perez)

Master Thesis

1) Sam Chung. (1985). *A System for Generating VLSI Mask Pattern Check Plots from Caltech Intermediate Form File*. Master Thesis. Seoul, Korea: Korea Advanced Institute of Science and Technology. (Advisor: Dr. Won Lyang Chung)

RESEARCH EXPERIENCES THROUGH FUNDED PROJECTS

At the University of Washington Tacoma (September 2001– Present)

1) Sam Chung, Mark Kochanski, and Jan Whittington. *SFS: Building Student-Oriented Capacity in Cloud-Based Software Assurance: Student-Driven Hands-on Workshops*. NSF, 9/15/2012-9/15/2015. ($899,666, Pending)
2) Barbara Endicott-Popovsky, Radha Poovendran, Sam Chung et al. *A Bridge of Bridges: Deploying Processes for Integrated Engineered Solutions to Online Liability, Identity Assurance, Security and Privacy*. NIST, 2012 – 2013. ($1,800,000, Pending)
3) Barbara Endicott-Popovsky, Sam Chung, and Jan Whittington. *High Assurance Cloud: Maintaining Trust Collaboration between Domains*. NSF, 9/16/2012 to 9/15/2017 ($9,168,277, Pending)
4) Barbara Endicott-Popovsky, Sam Chung, and Jan Whittington. *Application for a Scholarship for Service (SFS) Program at the University of Washington Center for Information Assurance and Cybersecurity (CIAC)*. NSF SFS, October 1, 2011 – June 30, 2013. ($2,100,000, Awarded, co-PI application was submitted.)
5) Sam Chung. *Software Reengineering and Integration for Intelligent, Trustworthy, and Robust Robot Software Architecture*. Korea Institute of Industrial Technology (KITECH) in Korea. September 1, 2009 – December 31, 2011. ($129,000, Awarded)
6) Barbara Endicott-Popovsky (PI) and Sam Chung. *Building Instructional Capacity for Instructors Unfamiliarity with Security*. NSF (National Science Foundation) DUE (Division of Undergraduate Education) Federal Cyber Service: Scholarship for Service (SFS). October 1, 2009 – September 30, 2011 (#0912109, $299,901, Awarded)
7) Yan Bai, Sam Chung, and Apaporn Boonyarattaphan, *Authentication and Access Control for e-Healthcare Applications*, The University of Washington Tacoma Chancellor's Fund for Research and Scholarship Support. May 15, 2009 – December 31, 2010. ($2,709.60, Awarded)
8) Sam Chung. *A Development of Software Modules Integration Technology for Administering a Quadruped Walking Robot: 5W1H Based Software Reengineering Process*. Supported by Korea Institute of Industrial Technology (KITECH) in Korea. September 1, 2008 – August 31, 2009. ($45,000, Awarded)
9) Leon Yip, Yoon Kim, Sam Chung (as an academic advisor). *Developing a Series of Self Study-Based Distance Learning Workshop Modules for Enhancing Competency Level of Students' Hands-on Skills in Internet Computing.* The University of Washington Tacoma Founders Endowment. February 15, 2008. ($3,000)
10) Sam Chung and Sergio Davalos. *Service-Oriented Software Reengineering*. The University of Washington Tacoma Chancellor's Fund for Research and Scholarship Support. April 3, 2007 – December 31, 2008. ($5,000)
11) Sam Chung. *Developing a Series of Discrete Teaching Modules for Trustworthy Distributed Computing Courses Using the Internet and Web Technologies*. The University of Washington Tacoma Founders Endowment. April 3, 2007 – December 31, 2008. ($7,732)
12) Sam Chung. *A travel award to assist with airfare to "International Conference on Enterprise Information" in Paphos, Cyprus*. The Graduate School Fund for Excellence and Innovation (GSFEI) at the University of Washington. May 4, 2006. ($1,000.00)
13) Sam Chung. *Microsoft SDL-IT Process of Secure Software System Workshop in Redmond*. February 15 through February 17, 2006 in Redmond, Washington. ($311.38)

14) Sam Chung. *Microsoft SDL-IT Engineering of Secure Software System Workshop in Redmond*. December 7 through December 9, 2005 in Redmond, Washington. ($600)
15) Sam Chung. *Microsoft Academic Days on Web Development*. The Aladdin Hotel in Las Vegas, Friday November 11th through Sunday November 13th, 2005. ($1,250)
16) Sam Chung and Sergio Davalos. *A Model-Driven Service-Oriented Business Process Design Methodology: Toward Next Generation Business Information System*. Funded by the University of Washington Tacoma Founder's Endowment. March 2005 – December 2006. ($7,500)
17) Sam Chung. *Service-Oriented Computing and Its Application to Small Retail Business*. Funded by the UW Tacoma Scholarship Support Program. January 2004 – March 2004. (One quarter course release)
18) Sam Chung. *Modernizing a Legacy Retail Business Information System using Service-Oriented Computing*. Funded by the TIENDAS DE TODO INC. SOPHIA & FASHION MART. December 2003 – December 2004. ($13,800)
19) Sam Chung. *SoEDI4Retail: Service Oriented Electronic Data Interchange for Small Retail Business*. Funded by the GRANMERCADO. June 2003 – December 2003. ($4,000)
20) Sam Chung. *SoPOS System: Service-Oriented Point of Sale System*. Funded by the UW Tacoma Founder's Endowment Award Committee. March 2003 – December 2004. ($6,260)

At the Pacific Lutheran University (September 2000 – August 2001)

21) Sam Chung. *Modeling Genetic Algorithms with UML to Enhance GA Reusability*. Funded by M. J. Murdock Charitable Trust College Science Research Program. Summer 2001. ($13,000)

At the University of Texas of the Permian Basin (September 1998 – Summer 2000)

22) Douglas Hale and Sam Chung, Computer Science Laboratory, United States Air Force Office of Scientific Research. Project to greatly enhance the computer science laboratory facilities at UTPB. (1999 - Total funding $110,088)
23) Sam Chung. *UTPB Web Site Development*. Funded by the Vice President of Business Affairs and UTPB Web Advisory Committee. May 1999-November 1999.
24) Sam Chung and Vince Matthews. *Permian Basin Digital Petroleum Library*. Funded by CEED Research Grant. September 1999-May 2000
25) Sam Chung and Troy Williamson. *A Web site for EDA-UC* (Economic Development Administration – University Center). Funded by EDA-UC. September 1999-April 2000
26) Sam Chung. *Modeling Genetic Algorithms and Their Applications*" Funded by AMP (American Minority Program). November 1999 – March 2000.

DIRECT TEACHING AT THE UWT CSS

Quarter/Year	Course #	Topic (Class size)	Level
Academic Year	2011-2012		
Spring 2012	TINFO 390	Undergraduate Seminar in ITS (14)	Undergrad. Elective
	TINFO 431	Server Side Web Applications (27)	Undergrad. Elective
	TCSS 497	Undergraduate Internship in CSS (1)	Undergrad. Elective
	TCSS 498	Directed Readings in CSS (1)	Undergrad. Elective

Winter 2012	TINFO 390	Undergraduate Seminar in ITS (9)	Undergrad. Core
	TINFO 482A	Senior Project II (20)	Undergrad. Required
	TINFO 482B	Senior Project II (6)	Undergrad. Required
	TCSS 558	Applied Distributed Computing (9)	Grad. Core
	TCSS 600	Research in CSS (3)	Grad. Elective
Autumn 2011	TINFO 300	Programming II for ITS (30)	Undergrad. Core
	TINFO 390	Undergraduate Seminar in ITS (13)	Undergrad. Elective
	TINFO 498	Directed Reading in ITS (7)	Undergrad. Elective
	TINFO 499	Undergraduate Research in ITS (2)	Undergrad. Elective
	TCSS 559	Web Services (16)	Grad. Elective
Academic Year	2010-2011		
Spring 2010	TCSS 702	Design Project in CSS (1)	
Winter 2010	TCSS 702	Design Project in CSS (1)	
Academic Year	2009-2010		
Spring 2010	TINFO 390	Undergraduate Seminar in ITS (12)	Undergrad. Elective
	TINFO 431	Server Side Web Applications (20)	Undergrad. Elective
	TCSS 498	Directed Readings in CSS (1)	Undergrad. Elective
	TCSS 702	Design Project in CSS (1)	
Winter 2010	TINFO 360	Foundations of Info. System Analysis & Design (22)	Undergrad. Core
	TCSS 558	Applied Distributed Computing (14)	Grad. Core
	TCSS 600	Research in CSS (1)	
Autumn 2009	TINFO 300	Programming II for Information Professionals (18)	Undergrad. Core
	TCSS 559	Web Services (11)	Grad. Elective
Summer 2009	TCSS 497	Undergraduate Internship in CSS (1)	Undergrad. Elective
	TCSS 498	Directed Readings in CSS (1)	Undergrad. Elective
Academic Year	2008-2009		
Spring 2009	TCSS 460	Client/Server Programming for Internet Applications (30)	Undergrad. Elective
	TCSS 590	Special Topics in CSS – Service-Oriented Software Reengineering (3)	Grad. Elective
Winter 2009	TCSS 305	Programming Practicum (28)	Undergrad. Core
	TCSS 497	Internship in CSS (2)	
	TCSS 499	Directed Research in CSS (1)	
	TCSS 558	Applied Distributed Computing (8)	Grad. Core
Autumn 2008	TCSS 470	Software Reengineering (16)	Undergrad. Elective
Academic Year	2007-2008		
Spring 2008	TCSS 321	Discrete Structures I (29)	Undergrad. Core
	TCSS 497	Internship in CSS (1)	
	TCSS 559	Web Services (13)	Grad. Elective
Winter 2008	TCSS 445	DB Systems Design (24)	Undergrad. Elective
	TCSS 545	DB Systems Design (3)	Grad. Bridge
	TCSS 558	Applied Distributed Computing (8)	Grad. Core
	TCSS 600	Research in CSS (1)	
	TCSS 702	Design Project in CSS (3)	

Autumn 2007 (Leave of Absence)	TCSS 702	Design Project in CSS (2)	
Academic Year	2006-2007		
Spring 2007	TCSS 460 TCSS 497 TCSS 702	C/S Prog. for Internet App. (21) Internship in CSS (2) Design Project in CSS (2)	Undergrad. Elective
Winter 2007	TCSS 445 TCSS 545 TCSS 558	DB Systems Design (33) DB Systems Design (4) Applied Distributed Computing (19)	Undergrad. Elective Grad. Bridge Grad. Core
Autumn 2006	TCSS 305	Programming Practicum (19)	Undergrad. Core
Academic Year	2005-2006		
Spring 2006	TCSS 460 TCSS 558	C/S Prog. for Internet App. Applied Distributed Computing	Undergrad. Elective Grad. Core
Winter 2006	TCSS 545 TCSS 559	DB Systems Design Web Services	Grad. Bridge Grad. Elective
Autumn 2005	TCSS 460 TCSS 558	C/S Programming for Internet App. Applied Distributed Computing	Undergrad. Elective Grad. Core
Academic Year	2004-2005		
Spring 2005	TCSS 460 TCSS 568	C/S Programming for Internet App. Service-Oriented Computing	Undergrad. Elective Grad. Elective
Winter 2005	TCSS 445 TCSS 455	DB Systems Design Dev. of Enterprise Application	Undergrad. Elective Undergrad. Elective
Autumn 2004	TCSS 460 TCSS 558	C/S Programming for Internet App. Applied Distributed Computing	Undergrad. Elective Grad. Core
Academic Year	2003-2004		
Spring 2004	TCSS 460 TCSS 559	C/S Programming for Internet App. Web Services	Undergrad. Elective Grad. Elective
Autumn 2003	TCSS 460 TCSS 558	C/S Programming for Internet App. Applied Distributed Computing	Undergrad. Elective Grad. Core
Academic Year	2002-2003		
Spring 2003	TCSS 470 TCSS 460	Software Reengineering C/S Programming for Internet App.	Undergrad. Elective Undergrad. Elective
Winter 2003	TCSS 422 TCSS 522	Computer Operating Systems Computer Operating Systems	Undergrad. Core Grad. Bridge
Autumn 2002	TCSS 470 TCSS 558	Software Reengineering Applied Distributed Computing	Undergrad. Elective Grad. Core
Summer 2002	TCSS 341	Fundamentals & Theory of Object-Oriented Computer Programming	Undergrad. Core
Academic Year	2001-2002		
Spring 2002	TCSS 422 TCSS 445	Computer Operating Systems DB Systems Design	Undergrad. Core Undergrad. Elective
Winter 2002	TCSS 422 TCSS 460	Computer Operating Systems C/S Programming for Internet App.	Undergrad. Core Undergrad. Elective
Autumn 2001	TCSS 422 TCSS 445	Computer Operating Systems DB Systems Design	Undergrad. Core Undergrad. Elective

INDIRECT TEACHING AT THE UWT CSS

Research Supervision and Advising as the Major Advisor for Undergraduate/Graduate Students:

Graduate

	Name	Title	Working Period	Graduation	Type	Paper Publication
1	Nundhini Ravi	Graduate Student	Spring 2012		TCSS 598 Prep	
2	Fnu Swathi Balakrishna	Graduate Student	Spring 2012		TCSS 598 Prep	
3	Alan Miles	Graduate Student	Winter 2012		TCSS 598 Prep	
4	Devin McBride	Graduate Student	Winter 2012		Independent Study (TCSS 600)	
5	Mythreyee Sunil	Graduate Student	Winter 2012		Independent Study (TCSS 600)	
6	Shilpa Nangalia	Graduate Student	Winter 2012		Independent Study (TCSS 600)	
7	Chuck Costarella*	NSF SFS Graduate Student	Autumn 2011 – Spring 2013		NSF SFS Scholarship	
8	Michael Schweiger*	NSF SFS Graduate Student	Autumn 2011 – Spring 2013		NSF SFS Scholarship	
9	Leo Hansel*	RA	Spring 2010 – Spring 2011	Spring 2011	NSF and KITECH Grants	CISSE2011
10	Rinkesh Nagmoti*	RA	Autumn 2009- Winter 2010	Spring 2010	NSF Grant & TCSS 600	CGAT 2010
11	Joel Morrah*	Graduate Student Worker	Spring 2010	Spring 2011	UWT Endowment	
12	Apaporn Boonyarattaphan*	Graduate Student	Spring 2009 – Winter 2010	Spring 2010	KITECH	IEEE NSA 2010, ISCIT 2009
13	Conrado Crompton	Graduate student	Autumn 2009 – Summer 2010	Summer 2010	TCSS 702	
14	Zane Madinger*	Graduate Research	Summer 2009	Spring 2010	KITECH, Institute	ISET 2011

		Assistant			Support	
15	Ruslan Slobodyanik*	Student Worker	Autumn 2008 – Spring 2009	Autumn 2009		
16	Phi Nguyen	Research Volunteer	Spring 2008	Spring 2008	Elective Course	MomSOE 2008
17	Omar Hafezz*	Student Worker	Autumn 2007 - Spring 2008	Spring 2008	Capstone Project	WI 2007
18	Craig Niiyama	Washington State	Spring 2008	Spring 2008	Capstone Project	
19	Ernest Cho*		Spring 2008	Spring 2008	Capstone Project	HICSS 2009
20	Phil Bonderud*	Costco	Spring 2007	Spring 2007	Capstone Project	ICIW 2008
21	Robert Bunge	DeVry Univ.	Winter 2007	Winter 2007	Capstone Project	HICSS 2008
22	James Gordon		Summer 200 6	Summer 2006	Capstone Project	
23	Byungchugn An*	WA State	Spring 2006	Spring 2006	Capstone Project	HICSS 2007 IJSC 2008 (journal)
24	Danny Hericks	Northrop Grumman	Winter 2006	Winter 2006	Independent Study	ISBC 2006
25	Li Jiao		Winter 2006	Winter 2006	Capstone Project	
26	Christopher Perryea*	Avue Technologies	Winter 2006	Winter 2006	Capstone Project	IEEE ICWS 2006
27	Luiz Russo	Boeing	Winter 2006	Winter 2006	Capstone Project	IEEE EDOC 2006
28	Chunguang Wang	WA State	Autumn 2005	Autumn 2005	Capstone Project	
29	Geoffrey Beers	IBM	Spring 2005	Spring 2005	MS Thesis	
30	Eric Hartford	Boeing	Spring 2005	Spring 2005	Capstone Project	ICIW 2006
31	Jennifer Pan	Volt	Spring 2005	Spring 2005	Capstone Project	ICIW 2006
32	George Orris*	Sogeti USA	Winter 2005	Winter 2005	Capstone Project	ICEIS 2006
33	Amandeep Saini	Boeing	Autumn 2004	Autumn 2004	Capstone Project	GETS 2005 (journal)
34	Peter Young*	UIUC	Summer 2004	Summer 2004	Capstone Project	IEEE ICWS 2005
35	Zachary Bylin*	Boeing	Summer 2004	Summer 2004	Capstone Project	IEEE ICWS 2005, A book

						chapter
36	Lai Hong Tang	Giant Campus, Inc.	Spring 2004	Spring 2004	Capstone Project	WISE 2004, IPSI 2005

- Total 36 graduate students were served.
- The * symbol denotes the students whom I supported financially through funded projects at least one time. (total 15 students)
- 24 papers were published.

Undergraduate

	Name	**Job**	**Working Period**	**Graduation**	**Type**	**Paper Publication**
1	Tom Rochat	ITS Student	Winter 2012 – Present		Work Study	
2	Sky Moon	Post Baccalaureate CSS Student	Summer 2011 – Present		Undergrad Research	
3	William Kim	Post Baccala CSS Student	Summer 2011 – Present		Undergrad Research	
4	Yun-Tse Windsor Wu	ITS Pre-Major Student	Summer 2011 – Present		Undergrad Research	
5	Katie Park*	CSS Undergraduate Research Assistant	Autumn 2008, Summer 2009	Spring 2012	TCSS 498 KITECH & UWT Endowment	CCSC-NW 2010
6	HK Ra	CES Student	Autumn 2008 - Spring 2011	Spring 2011	Undergrad Research	UW URS 2010, CISTA 2010, CCSC-NW 2010
7	Andrew Homin Park	CSS Student	Spring 2007 – Summer 2008, Spring 2010	Spring 2010	Undergrad Research	ISET 2011
8	Hing Yon*	ITS Student	Spring 2010	Spring 2011	UWT Endowment	
9	Michael Wascher*	CSS Student Worker	Autumn 2008 – Spring 200	Spring 2011	Institute Support	
10	Yoon Kim*	CSS Student	Spring 2007 –	Spring 2010	UWT Research,	CCSC-NW 2010

			Summer 2009		Institute Support	
11	Curt Small	CSS Student	Winter 2009	Spring 2009	TCSS 499	
12	Leon Yip*	CSS Student	Winter 2007 - Spring 2008	Spring 2008	Undergrad Research	UW URS 2008, UKC 2007
13	Ji Yeam	UWT Student	Autumn 2006 – Winter 2007	Spring 2010	Undergrad Research	UKC 2007

- Total 13 undergraduate students were served.
- The * symbol denotes the students whom I supported financially through funded projects at least one time. (total 5 students)
- 2 papers and 7 posters were published.

Internship, Directed Reading, Directed Research Supervision and Advising as the Major Advisor for Undergraduate Students:

TINFO 498: Directed Readings in Information Technology & Systems
TINFO 499: Undergraduate Research in Information Technology Software Systems
TCSS 497: Internship in Computing and Software Systems
TCSS 498: Directed Readings in Computing and Software Systems
TCSS 499: Undergraduate Research in Computing and Software Systems

	Quarter/Year	Name	Type
1	Spring 2012 (2)	Katie Park	TINFO 497
2		Katie Park	TINFO 498
3	Autumn 2011 (2)	Brandon Son	TINFO 499
4		Tyler Withrow	TINFO 499
5	Autumn 2011 (7)	Brookneh Alemayehu	TINFO 498
6		Gary Armstrong	TINFO 498
7		Brandon Son	TINFO 498
8		Tyler Withrow	TINFO 498
9		Andrew Gee	TINFO 498
10		Vera Kayky	TINFO 498
11		Kurt Wondra	TINFO 498
12	Spring 2010 (1)	Andrew Homin Park	TCSS 498
13	Summer 2009 (2)	Jamie Monroe	TCSS 497
14		Seid Adem	TCSS 498
15	Winter 2009 (3)	Curtis Dean Small	TCSS 499
16		Kristoffer Karlo Canilang	TCSS 497
17		Chelsea M. Lopez	TCSS 497
18	Spring 2008 (1)	Kyung Simmons	TCSS 497
19	Spring 2007 (2)	Huso Hadzic	TCSS 497
20		Joel Robert Sztmczak	TCSS 497

21	Summer 2006 (6)	Carlos Colon-Maldonado	TCSS 497
22		Joseph Stinson	TCSS 497
23		Brandon Berndtson	TCSS 498
24		Katsumi Iwahara	TCSS 498
25		John Reed	TCSS 498
26		Katsumi Iwahara	TCSS 499
27	Spring 2006 (1)	Daniel Dinh	TCSS 497
28	Winter 2006 (1)	Chao Ma	TCSS 497
29	Spring 2005 (1)	Douglas Hudak	TCSS 497
30	Autumn 2004 (2)	Jeffrey Fair	TCSS 497
31		Hung Nguyen	TCSS 499
32	Autumn 2003(1)	Yat Shum	TCSS 497
33	Spring 2003 (1)	Tatyana Nielson	TCSS 498
34	Winter 2003 (2)	Matthew Rein	TCSS 498
35		Ruben Manzanares	TCSS 498
36	Summer 2002 (8)	Rumi Olsen	TCSS 497
37		Sara Smith	TCSS 497
38		Travis Matthews	TCSS 497
39		Michael Hongkun Ao	TCSS 498
40		Lai Tang	TCSS 498
41		Bong Cho	TCSS 498
42		Phi Tran	TCSS 498
43		Chris Dickson	TCSS 498

SERVICES

Department Services

2011-2012

- Serving the Institute as the ITS Program Coordinator
- Serving the Institute Director's Kitchen Cabinet
- Serving the ITS Undergraduate Curriculum Committee as the chair
- Serving the ITS Lecturer Search Committee as the chair (March – May, 2012)
- Serving the ITS Research Associate Search Committee as the chair (March – May, 2012)
- Serving the CSS Graduate Curriculum Committee
- Serving the Institute Facility Committee

2010-2011

- N/A (Sabbatical Leave)

2009-2010

- Launching a new BS degree program in Information Technology & Systems (ITS).
  - Approved by HECB (July 2009)
- Serving the Institute Undergraduate Curriculum Committee
- Serving the ITS Ad-hoc Undergraduate Curriculum Committee
  - 11 new courses were developed.
- Serving Institute Director Search Committee

2008-2009

- Developing a new BS degree program in Information Technology & Systems (ITS).
    - Submitted the proposal to three external reviewers (December, 2008)
    - Submitted the proposal to Tri-campus review (January, 2009)
    - Submitted the proposal to UW New Program Coordinator (February, 2009)
    - Submitted the proposal to HECB (March - June, 2009)
    - Developing TINFO 300 and 330 curriculum (May, 2009)
- Serving the UWT-CTC Partnership Committee as a co-chair.
    - "Demystifying CS Degree" Workshop at GRCC on January 16, 2009
    - "Demystifying CS Degree" Workshop at HCC on January 30, 2009
    - "Demystifying CS Degree" Workshop at CPTC on May 12, 2009
- Serving the ad-hoc UWT IT P&T Committee (Winter 2009 – Spring 2009)

2007-2008

- Developing a new BS degree program in Information Technology & Systems (ITS).
- Serving the UWT-CTC Partnership Committee as a co-chair. 2007-2008
    - "Demystifying CS Degree" Workshop at CPTC on May 6, 2008
    - "Demystifying CS Degree" Workshop at TCC on February 22, 2008
    - "Demystifying Information Technology Degree" Workshop at UW Tacoma on June 1, 2007
- Serving the ad-hoc UWT IT P&T Committee
- Serving the Undergraduate and Graduate Advisors Search Committee. Spring 2008
- Serving the ITS Search Committee as a co-chair. Winter 2008
- A volunteer/director of the University Of Washington Tacoma Information Session for the Korean-American Community in Puget Sound area on March 2, 2007.

2006-2007

- Serving the UWT-CTC Partnership Committee as a co-chair. 2006-2007
- The Undergraduate Program Coordinator. July 2006 – May 2007
- A volunteered speaker at UWT CSS Scholars Night on May 22, 2007
- A volunteer/director of the University Of Washington Tacoma Information Session for the Korean-American Community in Puget Sound area on March 5, 2007
- The Director of the Applied Distributed Computing Laboratory of the CSS/IT at the University of Washington Tacoma.
- The Facility Committee Member of the CSS/IT at the University of Washington Tacoma
- The Graduate Curriculum Committee Member of the CSS/IT at the University of Washington Tacoma.
- ACM Student Chapter Co-Advisor.
- The Program Administrator Search Committee Member of the CSS/IT at the University of Washington Tacoma. June 2006 – July 2006

2005 - 2006

- The Director Search Committee Member of the CSS/IT at the University of Washington Tacoma. November 2004 – May 2005
- The Director of the Applied Distributed Computing Laboratory of the CSS/IT at the University of Washington Tacoma.
- The Retreat Committee Member (Chair) of the CSS/IT at the University of Washington Tacoma. (Autumn 2005, the committee was closed)
- The Facility Committee Member of the CSS/IT at the University of Washington Tacoma

- The Graduate Curriculum Committee Member of the CSS/IT at the University of Washington Tacoma.
- ACM Student Chapter Co-Advisor.

2004 - 2005

- The Director of the Applied Distributed Computing Laboratory of the CSS/IT at the University of Washington Tacoma
- The Director Search Committee Member of the CSS/IT at the University of Washington Tacoma. November 2004 – May 2005
- The Retreat Committee Member (Chair) of the CSS/IT at the University of Washington Tacoma
- The Facility Committee Member of the CSS/IT at the University of Washington Tacoma.
- The Colloquium Committee Member (the CSS Seminar Coordinator) of the CSS/IT at the University of Washington Tacoma
- The Undergraduate Curriculum Committee Member of the CSS/IT at the University of Washington Tacoma
- The Graduate Curriculum Committee Member of the CSS/IT at the University of Washington Tacoma.
- ACM Student Chapter Co-Advisor

2003 - 2004

- ACM Student Chapter Co-Advisor
- The Retreat Committee Member and the chair of the CSS/IT at the University of Washington Tacoma
- The Facility Committee Member of the CSS/IT at the University of Washington Tacoma
- The Colloquium Committee Member of the CSS/IT at the University of Washington Tacoma
- The Facility Committee Member and the chair of the CSS/IT at the University of Washington Tacoma
- ACM Student Chapter Co-Advisor

2002 - 2003

- The Facility Committee Member of the CSS/IT at the University of Washington Tacoma.
- An Ad-hoc Retreat Committee Member of the CSS/IT at the University of Washington Tacoma. Summer 2002

2001 - 2002

- The Retention Coordinator Search Committee Member of the CSS/IT at the University of Washington Tacoma. September 2001 – March 2002
- The Institute of Technology Workshop at the University of Washington Tacoma. February 15, 2002
- The Institute of Technology Spring Fling at the University of Washington Tacoma. April 27, 2002

2000 - 2001

- Pacific Lutheran University Computer Science and Computer Engineering Department Web Coordinator
- Pacific Lutheran University Computer Club Advisor

1999 - 2000

- An Undergraduate Adviser at the UTPB

University Services

2011-2012
- Associate Director of Cyber Physical Systems at Center for Information Assurance and Cyber Security at University of Washington, Tacoma.
- Advisor of Korean American International Student Team (KAIST)

2010-2011
- N/A (Sabbatical Leave)

2009-2010
- Advisor of Korean American International Student Team (KAIST)
- Faculty Affairs Committee (Autumn 2009)

2008-2009
- Advising Task Force Committee
- Advisor of Korean American International Student Team (KAIST)

2007 – 2008
- Serving the IT Director's Review Committee. Winter – Spring 2008
- The UWT Faculty Assembly Curriculum Committee Member at the University of Washington Tacoma

2006 – 2007
- The Computer Technology Committee Member at the University of Washington Tacoma
- The UWT Faculty Assembly Curriculum Committee Member at the University of Washington Tacoma

2005 – 2006
- The Computer Technology Committee Member at the University of Washington Tacoma
- A volunteer to the University of Washington Tacoma Science Day. March 12, 2005

2004 – 2005
- The Admissions, Academic Standards, and Graduation Committee Member at the University of Washington Tacoma
- A volunteer to the University of Washington Tacoma Science Day. May 2004

2003 - 2004
- Japanese Language School Committee Member at the University of Washington Tacoma. September 2003 – November 2003.
- The University of Washington Faculty Field Tour. June 16 – June 20, 2003
- The Admissions, Academic Standards, and Graduation Committee Member at the University of Washington Tacoma.

2002 - 2003
- The Admissions, Academic Standards, and Graduation Committee Member at the University of Washington Tacoma.

2002 - 2001
- The Ko-PLU Advisor at the Pacific Lutheran University.

1999 - 2000
- The UTPB Web Advisory Committee.
- The UTPB Commencement Committee.
- The UTPB ISO (International Students Organization) Faculty member.
- The UTPB CSL (Computer Science Lab) Development Committee.

1998 - 1999
- The UTPB Web Advisory Committee.

- The UTPB Commencement Committee.
- The UTPB CSL (Computer Science Lab) Development Committee.

Professional Services

2011-2012

- Reviewer
  - The 16-th IEEE International EDOC Conference (EDOC 2012), September 2012, Beijing, China
  - IEEE Computer, Special Issue on Computing in Asia
  - The 5-th India Software Engineering Conference (ISEC 2012), IIT Kanpur, Feb 22-25, 2012
  - The 1-st International Conference on Advanced Information Technology and Sensor Application, Ubiquitous Computing and Industrial Applications (UCIA 2012) Session, February 28-29, 2012, at Sunshine Hotel, Daejeon, Korea.
- Program committee member
  - The 8th International Conference on Information Warfare and Security (ICIW 2013), Regis University, Denver, Colorado, USA, March 25-26, 2013
  - The 11th IEEE/ACM International Conference on Ubiquitous Computing and Communications (IUCC 2012), Liverpool, UK, June 25-27, 2012.

2010-2011

- Serving an international conference as the program co-chair
  - The 6th International Symposium on Embedded Technology (ISET 2011), May 20-21, 2011, Jeju, Korea.
- Serving an international workshop as an organizing chair
  - International Workshop on Cyber-Physical Systems 2011, April 8, 2011, Daegu, Korea
- Serving international conferences as a Technical Program Committee member
  - The First International Conference on Cloud Computing and Services Science (CLOSER 2010), October 20-22, Valencio, Spain
  - The Sixth International Conference on Internet and Web Applications and Services (ICIW) 2011, March 20-25, 2011, St. Maarten, The Netherlands Antilles

2009-2010

- Serving international conferences as a Technical Program Committee member
  - The 10th International Conference on Quality Software (QSIC 2010), Zhangjiajie, China, July 14-15, 2010.
  - International Conference on Internet and Web Applications and Services (ICIW) 2010
- Conference Session Chair
  - KSEA NWRC (Northwest Regional Conference) 2009, October 31 - November 1, 2009. Seattle, CA.
  - International Conference on Quality Software (QSIC) 2009, August 24-25, 2009, Jeju, Korea.
  - The Third Annual International Conference on Computer Games Multimedia and Allied Technology (CGAT'10) April 6-7, 2009, Singapore
- Conference Organizer

  - Executive Committee, United Korea Conference (UKC) 2010, August 11-15, 2010, Seattle, WA
- KSEA (Korean-American Scientists and Engineers Association)
  - Young Generation Committee Chair (July 2009 – June 2010)
  - Young Generation Chapter Advisor at UW Tacoma (March 2009 – Present)

2008-2009
- Serving international conferences as a Technical Program Committee member
  - CLOSER 2010: International Conference on Cloud Computing and Services Science
  - IWAS 2009: Internet and Web-based Applications and Services – the third International Conference on Internet and Web Applications and Services (ICIW) 2009
  - QSIC 2009: The Ninth International Conference on Quality Software 2009
  - ScalCom 2009: IEEE International Conference on Scalable Computing and Communications
- Conference Session Chair
  - KSEA NWRC (Northwest Regional Conference) 2008 at University of Phoenix, November 1, 2008. Sacramento, CA.
- KSEA (Korean-American Scientists and Engineers Association)
  - Young Generation Committee Chair (July 2008 – June 2009)
  - Young Generation Chapter Advisor at UW Tacoma (March 2009 – Present)
  - National Math and Science Competition (NMSC) 2009 Volunteer (April 18, 2009)

2007-2008
- Book chapter reviewer
  - The Handbook of Technology Management, Hossein Bidgoli, Editor-in-Chief
- Journal reviewer
  - DATA & KNOWLEDGE ENGINEERING
  - International Journal of Pervasive Computing and Communications
    Special Issue on Towards Merging Grid and Pervasive Computing (IJPCC)
  - Special Issue on Service Oriented Grid and Pervasive Technologies, International Journal of Autonomous and Adaptive Communication Systems (IJAACS)
- Conference paper reviewer
  - Internet and Web Applications and Services (ICIW) 2008
  - The 10th IEEE International Conference on High Performance Computing and Communications (HPCC 2008)
- Conference Session Chair
  - KSEA NWRC (Northwest Regional Conference) 2007, Portland Oregon.
  - KSEA Northwest Regional Conference (NWRC 2007), November 10, 2007 (Saturday) – November 11, 2007 (Sunday), Portland State University, Portland, Oregon)
  - Internet and Web Applications and Services (ICIW) 2008, Athens, Greece. June 8-13, 2008
- Serving a Technical Program Committee member
  - Web Services and Internet Computing - The 10th IEEE International Conference on High Performance Computing and Communications (HPCC 2008)
  - IWAS: Internet and Web-based Applications and Services – the third International Conference on Internet and Web Applications and Services (ICIW) 2008

2006-2007

- MESA Volunteer at the Pacific Lutheran University. March 27, 2007.
- Book Chapter Review 2006. Enterprise Systems Architecture in Practice. Editor: Dr. Pallab Saha.
- Internet and Web-based Applications and Services (ICIWA) 2006: Internet and Web-based Applications and Services Session Chair
- Serving an ICIWA Technical Program Committee member
- Serving an editor of International Journal of Information Processing Systems (DIVISION D: INFORMATION SYSTEM AND APPLICATION) of Korea Information Processing Society (KIPS)
- Book Review 2006. Client/Server Computing Basics Chapter in the Handbook of Computer Networks. John Wiley & Sons, Inc.

Before 2005

- Yanbian University of Science and Technology Summer Short Course – Distributed Computing
  - Yanji, China. July 2004.
- The Consortium for Computing Sciences in Colleges Northwest (CCSC-NW) Conference
  - Paper Reviewer. 2003.
  - Paper Reviewer. 2002.
  - Paper Reviewer. 2001.
  - The CCSC-NW Region 2001 Conference Site Co-chair. October 2000 to October 2001.
- Hawaii International Conference On Systems Sciences
  - Paper Reviewer. 2002.
- The Korean-American Scientists and Engineers Association (KSEA)
  - The KSEA Mathematics Competition Volunteer. 2001 - Present
  - The KSEA-Pacific Northwest Chapter (KSEA-PNC) Vice-President. July 2001 – February 2006
  - The KSEA-Pacific Northwest Chapter (KSEA-PNC) President. March 2006 – June 2007
  - The KSEA-Indiana Chapter Director of General Affairs. 1997 – July 1998
- An External Review Committee Member at the Southern Oregon University Computer Science Program. April 11-12, 2002.
- A Book Review.
  - Morrison and Morrison's Creating DB Applications with SQL Server, 1e. Prentice Hall. 2005
  - Database Processing Concepts. Prentice Hall. 2001.
  - Introduction to CS via Software Development in Java. Addison-Wesley. 2000.
- ACM Symposium on Applied Computing
  - Paper Reviewer. 1998.
  - Paper Reviewer. 1997.
  - Paper Reviewer. 1996.
  - Paper Reviewer. 1995.

ACADEMIC HONORS and AWARDS/COMMENDATION LETTER

* Appointed to the Endowed Chair Professor of Information Systems and Information Security for 3 years (2012-2015)
* ACM Senior member since January 28, 2010
* Nominated to the 2010 UW Tacoma Distinguished Research Award on January 15, 2010
* Nominated to the 2009 UW Tacoma Distinguished Research Award on January 23, 2009
* Nominated to the 2008 Marsha L. Landolt Distinguished Graduate Mentor Award on March 17, 2008
* Nominated to the 2008 UW Tacoma Distinguished Research Award on February 1, 2008
* Upsilon Pi Epsilon, University of South Florida.
  - An International Honor Society for Computer Science and Engineering.
* Thank you cards from the Vice Chancellor for Academic Affairs. For example, the student evaluation of the TCSS 568 Service-Oriented Computing course has a high average rating (4.6 or above) in spring 2005.
* International WHO'S WHO of Professional (October, 1999)
  1650 A Gumbranch Rd
  Jacksonville, NC 28540
* The Falcon Award (May, 1999)
  The University of Texas of the Permian Basin
  Odessa, TX
  - Selected as the best professor of student services by the Office of Vice President of Student Services.
* The Teacher of This Year (May 2, 1997)
  Department of Computer and Information Science
  Purdue University School of Science
  Indiana University Purdue University Indianapolis, Indianapolis, IN
  - Selected as the best part-time professor by CS major students.
* Graduate Examination Committee Chair Commendation Letter (Dec. 2, 1992)
  Depart of Computer Science & Engineering
  School of Engineering
  University of South Florida
  - Attained a perfect score in the Computer Architecture portion of the Ph.D. Diagnostic Examination in fall, 1992
* Honor Student Scholarship Award (1980)
  School of Engineering
  Kyungpook National University, Taegu, Korea
  -Ranked in the top 1% in 1979

LIST OF SCHOLARSHIPS

* USF CS&E Teaching/Research Assistantship (Sep. 1991 - May. 1994)
  Depart of Computer Science & Engineering
  School of Engineering
  University of South Florida

* GWU EE&CS Senior Teaching Assistantship (Jan, 1990 - May, 1991)
  Department of Electrical Engineering and Computer Science

School of Engineering and Applied science
George Washington University

* KAIST Scholarship (Mar. 1983-Feb. 1985)
Department of Computer Science
Korea Advanced Institute of Science and Technology

* KNU Honor Student Scholarship (Feb. 1982)
Department of Electronics
School of Engineering
Kyungpook National University, Taegu, Korea

PROFESSIONAL AFFILIATIONS

* IEEE Computer Society member 1997-Present
* ACM Voting Member, 1997-Present
* Korean American Scientists Engineers Association, March 2002 – Present
* Information Systems Security Association (ISSA) Puget Sound Chapter
* CCSC (Consortium for Computing in Small Colleges) Northwest Chapter 2000, 2006, 2009
* CPSR (Computer Professionals for Social Responsibility) 2002 – 2003
* IEEE Computer Society Student Member, 1994-1995
* ACM Student Member, 1994-1996
* Korean American Scientists Engineers Association, Sep. 1996-Jul. 1998
* Korea Information and Science Association in Korea, Sep. 1979-Feb. 1981

VITA SUMMARY

Barbara Endicott-Popovsky, Ph.D.

Research Associate Professor Information School
University of Washington

Dir. Center of Information Assurance and Cybersecurity at UW
Academic Dir. Master Infrastructure Planning & Management, Urban Planning Dept., School of Built Environments

- Ph.D. Computer Science/Computer Security U of Idaho Center for Secure and Dependable Systems (2007)
- MS Information Systems Engineering Seattle Pacific U
- MBA U of Washington
- BA U of Pittsburgh

Barbara Endicott-Popovsky, Ph.D., uniquely integrates experience in Academia, Industry and Government. Her academic career follows 20 years in industry, where she pioneered IT executive management and consulting roles, and includes government service as a leader in the field of information assurance.

Academia

- Author of 76 publications (54 peer-reviewed)
- Recipient of $4.2M in grants and contracts
- Academic Production: 7 PhD and 27 Master students, 4 Visiting Scholars/Interns
- Recognized expert in information assurance, cybersecurity, digital forensics:
  - Inducted into the American Academy of Forensic Scientists
  - Requested on key NSF panels, planning grants
  - Invited speaker and keynote at international conferences
  - Sought after cybersecurity media spokesperson
- Demonstrated thought leadership
  - Established own information assurance course, certificate program
  - Pioneering research affiliation with the Cloud Security Alliance
  - Assumed leadership roles in key digital forensic conference venues
  - Produced *Unintended Consequences* UWTV series
- Forged international, national collaborations
  - Created MOU's/CIAC branches: Aberyswyth, UBC, DGIST (Korea), UHawaii Manoa
  - Founder/leader regional Pacific Rim Collegiate Cyber Defense Competition
- *Research interests*: security and forensics in the cloud, enterprise-wide IS security and compliance, forensic-readiness, secure coding practices, information warfare.

Government

- Led the CIAC to become one of the first DHS/NSA Centers of Excellence in IA Research
- Leader within the Colloquium for Information Systems Security Education
- Named to the National Board of Information Security Examiners

VITA

Barbara Endicott-Popovsky, Ph.D.

Information School
University of Washington,
Seattle, WA 98195-2500

(206) 284-6123 [Voice], (206) 240-0345 [Cell]
endicott@uw.edu

EDUCATION

BA. Liberal Arts (early admittance program)	U. Pittsburgh, Pittsburgh, PA	1963-1967
5th year Accounting	U. Washington, Seattle, WA	1971-1972
M.B.A.	U. Washington, Seattle, WA	1982-1985
M.S. Information Systems Engineering	Seattle Pacific U, Seattle, WA	1985-1987
Ph.D. Computer Science/Information Assurance	U. Idaho, Moscow, ID	2001-2007
	Center for Secure & Dependable Systems (*CAE*)	

Dissertation: A Methodology for Calibrating Forensic-Ready Low Layer Network Devices (August 2007)
Major Professor: Dr. Deborah Frincke

EMPLOYMENT RECORD

ACADEMIC

Faculty Appointments

Research Associate Professor, Information School, UW	January 2010 - present
Academic Director, Master of Infrastructure Planning and Management, College of Built Environments, UW	December 2010 - present
Director, Master in Strategic Planning for Critical Infrastructure College of Built Environments, UW	March 2010 – December 2010
Senior Lecturer, Joint Appointment, iSchool & UW Inst. of Technology/Col. of Built Environments	July 2005 -2009
Faculty, Computer Science, Seattle University	1999 - 2005
Adjunct Faculty, Mathematics and Business, Seattle Pacific University	1978 - 1997

Center of Academic Excellence in Information Assurance Education and Research (CAE-R)

Director, Center of Information Assurance and Cybersecurity (CIAC), UW	February 2006 - present
Asso. Director, Center of Information Assurance and Cybersecurity (CIAC), UW	December 2004 -2006

INDUSTRY

President, Endicott Consulting, Inc.	1995 - present
Sr. Manager/IT, The Boeing Company	1978 -1997

VISITING APPOINTMENTS

Lecturer (Full Professor rank), Info. and Computer Science Dept., UHawaii Manoa, Honolulu, HI	2005 - present

PROFESSIONAL ORGANIZATIONS

Agora *Pacific Northwest affiliation of cybersecurity experts led by UW CISO, Kirk Bailey*

American Academy of Forensic Scientists (AAFS): *Digital and Multimedia Section*
Premier international, professional organization dedicated to the application of science to the law

Cloud Security Alliance (CSA)
Broad international coalition of industry, professionals, key stakeholders who design and promote best practices for security assurances within cloud Computing

Colloquium for Information Systems Security Education (CISSE)

The leading international proponent for connecting academia, industry, and government stakeholders to design and promote universally accepted information assurance education standards

Honeynet Project, UW Chapter

Leading international security research organization, dedicated to investigating the latest attacks and developing open source security tools to improve Internet security

Institute of Electrical and Electronics Engineers (IEEE)

World's largest professional organization for the advancement of technology

Infragard *Partnership between the FBI and the private sector to promote cybersecurity information sharing*

Information Systems Security Association (ISSA)

Premier international organization of information security professionals and practitioners

Information Systems Audit and Control Association (ISACA)

Premier international professional IT governance association that promotes cybersecurity governance standards

National Board of Information Security Examiners, Smart Grid Cybersecurity Committee

Top national agency focused on improving the potential and performance of the cyber security workforce

RELEVANT AWARDS

2011: PI NSF-SFS: *Security in the Cloud*	($2.1M)
2011: Co-PI NSF-SFS: *Sea to Shining Sea* (collaboration with GWU and UHM)	($99k)
2011: PI NSF-SFS *Healthcare Information at Risk*	($93k)
2011: PI DOD/IASP: *VetsEngr – Phase II*	($74k)
2011: PI DOD/IASP: *IRMC/NDU Partnership*	($2.5k)
2011: PI KCo Public Health: *SMS Text Messaging:Risk Assessment to PHI*	($15k)
2011: PI DHS-CCDC: *4th Annual Pacific Rim Collegiate Cyber Defense Competition*	($25k)
2011: PI Industry Affiliates: *4th Annual Pacific Rim Collegiate Cyber Defense Competition*	($35k)
2010: PI NSF-IEECI: *VetsEngr – Phase I*	(189k)
2010: PI DOD/IASP: *IRMC/NDU Partnership*	($2.5k)
2010: PI DHS: *Pacific Rim Collegiate Cyber Defense Competition*	($24k)
2010: PI Industry Affiliates: *3rd Annual Pacific Rim Collegiate Cyber Defense Competition*	($35k)
2010: PI PNNL: *Next Generation Honeypots II*	($134k)
2009: PI DOD/IASP: *IRMC/NDU Partnership*	($2.5k)
2009: PI Microsoft Corp.: *2nd Annual Pacific Rim Collegiate Cyber Defense Competition*	($40k)
2009: PI NSF/SFS: *Building Instructional Capacity in Secure Coding Practices*	($300k)
2009: PI PNNL: *Next Generation Honeypots I*	($112k)
2009: PI WSDOT: *Indexing WSDOT Photographs*	($25k)
2008: PI DOD/IASP: *IRMC/NDU Partnership*	($2.5k)
2008: PI *1st Annual Pacific Rim Collegiate Cyber Defense Competition*	($55k)
2007: PI DOD/IASP *Scholarship Funding*	($37K)
2007: PI DOD/IASP: *Capacity Building Grant*	($36k)
2007: PI DOD/IASP: *IRMC/NDU Partnership*	($3k)
2007: PI W Provost: *Research Development Funding*	($100k)
2006: PI DOD/IASP *Scholarship Funding*	($38K)
2006: PI DOD/IASP: *Capacity Building Grant*	(103k)
2006: PI DOD/ IASP: *IRMC/NDU Partnership*	($10k)
2005: PI DOD/IASP *Scholarship Funding*	($63K)
2005: PI DOD/IASP: *Wireless Sensor & Network Security*	($80k)
2005: PI PNNL: *Unintended Consequences of the Information Age*	($43K)
2005: Subcontractor NSF/GWU *Portable IA Lab*	($25K)
2005: T-Mobile Gift: *Website Development*	($15k)
2004: Co-PI NSF CCLI: *Computer Forensics Capacity Building UW/HCC*	($276K)
2004: Seattle University: *Assessment Grant*	($2K)
2004: Seattle University: *Innovation Grant*	($10K)
2003: Seattle University: *Venture Grant*	($10K)

RELEVANT HONORS

2011: CIAC Named Cloud Security Alliance (CSA) Research Partner
2011: Promoted to Full Member American Academy of Forensic Scientists: Digital & Multimedia Sciences Section.
2011: Selected National Board of Information Security Examiners (NBISE) Smart Grid Cybersecurity Committee.
2010: Inducted into American Academy of Forensic Scientists: Digital & Multimedia Sciences Section.
2009: Named one of the Nation's Top Ten Cyber Security Programs, New New Internet.[1]
2009: Feature article Here We Have Idaho, Barbara Endicott-Popovsky, UW/CIAC, distinguished alum.
2008: Excellence in Teaching Award – Technology, UWEO.
2008: Certification of the CIAC as one of the first NSA/CAE in IA Research
2008: Appointment to the US Dept of Energy Transformational Cybersecurity Committee.
2007: Recertification of the CIAC as an NSA/CAE in IA Education.

PUBLICATIONS/PRESENTATIONS

Peer-Reviewed Conference Papers

1. Lysenko, V., Endicott-Popovsky, B. (2012). Hackers at the state service: Cyberwars against Estonia and Georgia. (2012) In *Proceedings from 7th International Conference on Information Warfare and Security ICIW*. Seattle, Washington.
2. Kuntze, N., Rudolph, C., Alva. A., Endicott-Popovsky, and Christiansen, J. (2012). On the Creation of Reliable Digital Evidence. In the Proceedings of the *8th Annual IFIP WG 11.9 Conference.* Pretoria, South Africa.
3. Wainwright, K., Endicott-Popovsky, B., Rajala, S. (2011). Alternative Approach to Assessing Military Training for Advanced Plancement into Engineering and Technology Programs. In *Proceedings from 118th Annual ASEE Conference and Exposition*. Vancouver, British Columbia. (AC 2011-165). http://search.asee.org/search/fetch;jsessionid=1j8np4l4ku7n9?url=file%3A%2F%2Flocalhost%2FE%3A%2Fsearch%2Fconference%2FAC2011%2FASEE_AC2011_165.pdf&index=conference_papers&space=129746797203605791716676178&type=application%2Fpdf&charset=
4. Hansel, L., Chung, S. and Endicott-Popovsky, B. (2011). Software reengineering approach to teaching secure coding practices. In *Proceedings from the 15th Colloquium for Information Systems Security Education*. (pp. 29-36). Fairhaven, Ohio.
5. Malviya, A., Fink, G., Sego, L. and Endicott-Popovsky, B. (2011). Situational awareness as a measure of performance in cyber security collaborative work. In *Proceedings from the IEEE 8th International Conference on Information Technology: New Generation* (ITNG). (pp. 937-942). Las Vegas, Nevada.
6. Chung, S. and Endicott-Popovsky, B. (2010). Software reengineering based security teaching. In *Proceedings of the 7th Annual International Conference on International Conference on Cybernetics and Information Technologies, Systems and Applications(CITSA 2010) that will take place in the context of the 3rd International Multi-Conference on Engineering and Technological Innovation (IMETI 2010)*. (pp.1-7). Orlando, FL. http://www.iiis.org/CDs2010/CD2010SCI/CITSA_2010/PapersPdf/IA607LF.pdf
7. Simpson, J. and Endicott-Popovsky, B. (2010). A systematic approach to information systems security education. In *Proceedings from the 14th Colloquium for Information Systems Security Education*. (pp.173-179). Baltimore, MD.
8. Dupuis, M., Endicott-Popovsky, B., Wang, H., Subramaniam, I. and Du, Y. (2010). Top-down mandates and the need for organizational governance, risk management, and compliance in China: A discussion. In *Proceedings of the 6th Asian-Pacific Economic Association Conference* (APEA). (pp. 1-17). Hong Kong. http://www.apeaweb.org/confer/hk10/papers/dupuis_m.pdf
9. Duranti, L. and Endicott-Popovsky, B. (2010). Digital records forensics: An interdisciplinary program for forensic readiness. In *Proceedings of the Conference on Digital Forensics, Security and Law*. St. Paul, MN. http://www.digitalforensics-conference.org/subscriptions/proceedings_2010.htm
10. Narvaez, J., Aval, C., Endicott-Popovsky, B., Seifert, C., Malviya, A., and Nordwall, D. (2010). Assessment of virtualization as a sensor technique. In *Proceedings of the 5th International Workshop on Systematic Approaches to Digital Forensic Engineering,* in conjunction with the IEEE Security and Privacy Symposium. (pp.61-65). Oakland, CA.
11. Simpson, J. and Endicott-Popovsky, B. (2010). System security capability assessment model development and application. In *Proceedings of the 20th Anniversary INCOSE International Symposium* (INCOSE). (CD-ID535) Chicago, IL. http://www.incose.org/symp2010/index.php?option=com_content&view=article&id=56&Itemid=62
12. Nagmoti, R, Chung, S. and Endicott-Popovsky, B. (2010). Game programmers with secure coding: From

[1] http://thenewnewinternet.com/2009/09/16/top-10-universities-preparing-future

console to web services applications. In *Proceedings of the 3rd Annual International Conference on Computer Games, Multimedia and Allied Technology* (CGAT). Singapore.
http://dl.globalstf.org/index.php?page=shop.product_details&flypage=flypage_images.tpl&product_id=77&category_id=14&option=com_virtuemart&Itemid=4&vmcchk=1&Itemid=4

13. Narvaez, J., Endicott-Popovsky, B., Seifert, C., Aval, C. and Frincke, D. (2010). Drive-by downloads. In *Proceedings of the Hawaii International Conference on System Sciences* (43). (pp.1-10). Kauai, HI.
14. Endicott-Popovsky, B., Narvaez, J., Seifert, C., Frincke, D., O'Neil, L., and Aval,C. (2009). Use of deception to improve client honeypot detection of drive-by-download attack. In *Proceedings of the Human Computer Interface (HCI) Conference*. (pp. 138-147). San Diego, CA.
15. Aval, C., Seifert, C., Welch, I., Komisarczuk, P., Endicott-Popovsky, B. (2008). Identification of malicious web pages through analysis of underlying DNS and web server relationships. In *Proceedings of the 4th IEEE LCN Workshop on Network Security*. (pp. 935-941). Montreal, Canada.
16. Boucher, K., and Endicott-Popovsky, B. (2008). Digital forensics and records management: What we can learn from the discipline of archiving. In *Proceedings of the Information Systems Compliance and Risk Management Institute.* Seattle, WA: University of Washington.
17. Nevins, T., Narvaez, J., Marriott, W. and Endicott-Popovsky, B. (2008). Data classification and binding: Models for compliance. In *Proceedings of the Information Systems Compliance and Risk Management Institute*. Seattle,WA.
18. Bonderud, P., Chung, S. and Endicott-Popovsky, B. (2008). Toward trustworthy service consumers and producers. In *Proceedings of the Third International Conference on Internet and Web Applications and Services.* (pp. 451-456). Athens, Greece.
19. Seifert, C, Endicott-Popovsky, B., Frincke, D., Komisarczuk, P., Muschevici, R, and Welch, I. (2008). Justifying the need for forensically ready protocols: A case study of identifying malicious web servers using client honeypots. Paper presented at the *4th Annual IFIP WG 11.9 Conference.* Kyoto, Japan.
20. Bunge, R., Chung, S. Endicott-Popovsky, B., McLane, D. (2008). An operational framework for service oriented architecture network security. In *Proceedings of the Hawaii International Conference on System Sciences* (41). (pp. 1- 9). Hilo, HI.
http://csdl.computer.org/comp/proceedings/hicss/2008/3075/00/30750312.pdf
21. Taylor, C., Endicott-Popovsky, B. and Frincke, D. (2007). Specifying digital forensics: Formalizing forensics policies. Paper presented at the *Annual Meeting of the Institute for Operations Research and Management Science Conference*. Seattle, WA.
22. Endicott-Popovsky, B and Frincke, D. (2007). The observability calibration test development framework. In *Proceedings of the 8th IEEE Systems, Man and Cybernetics Information Assurance Workshop*. (pp. 61-66). West Point, NY: United States Military Academy.
23. Seifert, C., Steenson, R., Welch, I., Komisarczuk, Endicott-Popovsky, B. (2007). Capture: A tool for behavioral analysis of applications and documents. In *Proceedings of the 7th Digital Forensic Research Workshop*. (pp.23-30). Pittsburgh, PA.
24. Taylor, C., Endicott-Popovsky, B., and Frincke, D. (2007). Specifying digital forensics: A forensics policy approach. In *Proceedings of the 7th Digital Forensic Research Workshop*. (pp.101-104). Pittsburgh, PA.
25. Endicott-Popovsky, B. and Frincke, D. (2007). Embedding Hercule Poirot in networks: Addressing inefficiencies in digital forensic investigations. In *Proceedings of the Human Computer Interface (HCI) Conference.* (pp. 364-372). Beijing, China.
26. Endicott-Popovsky, B., Fluckiger, J. and Frincke, D. (2007). Establishing tap reliability in expert witness testimony: Using scenarios to identify calibration need. In *Proceedings of the 2nd International Workshop on Systematic Approaches to Digital Forensic Engineering*. (pp.131-146). Seattle, WA.
27. Taylor, C., Endicott-Popovsky, B., and Phillips, A. (2007). Forensics education: Assessment and measures of excellence. In *Proceedings of the 2nd International Workshop on Systematic Approaches to Digital Forensic Engineering*. (pp.155-165). Seattle, WA.
28. Endicott-Popovsky, B., Chee, B. and Frincke, D. (2007). Role of calibration as part of establishing foundation for expert testimony. Paper presented at the *3rd Annual IFIP WG 11.9 Conference*. Orlando, FL.
29. Endicott-Popovsky, B. and Frincke, D. (2006). Embedding forensic capabilities into networks: Addressing inefficiencies in digital forensics investigations. In the *Proceedings from the 7th IEEE Systems, Man and Cybernetics Information Assurance Workshop.* (pp.133-139). West Point, NY: United States Military Academy.
30. Endicott-Popovsky, B, Ryan, D., Frincke, D. (2005). The New Zealand Hacker Case: A post mortem. In *Proceedings of the Safety and Security in a Networked World: Balancing Cyber-Rights & Responsibilities*

Conference. Oxford, England: Oxford Internet Institute. Retrieved September 9, 2005, from: http://www.oii.ox.ac.uk/research/cybersafety/?view=papers.

31. Endicott-Popovsky, B.E., Seifert, C. Frincke, D. (2005). Adopting extreme programming on a graduate student project. In *Proceedings from the 6th IEEE Systems, Man and Cybernetics Information Assurance Workshop.* (pp.454-455). West Point, NY: United States Military Academy.
32. Endicott-Popovsky, B., Orton, I., Bailey, K. Frincke, D. (2005). Community security awareness training. In *Proceedings from the 6th IEEE Systems, Man and Cybernetics Information Assurance Workshop.* (pp.373-379). West Point, NY: United States Military Academy.
33. Endicott-Popovsky, B., Frincke, D., Popovsky, V. (2005). Secure code: The capstone class in an IA track. In *Proceedings from the 9th Colloquium for Information Systems Security Education*. (pp.100-108). Atlanta, GA: Georgia Institute of Technology.
34. Taylor, C., Popovsky, V., Endicott-Popovsky, B. (2005). International curriculum design for undergraduate computer science. Paper presented at *ACM Special Interest Group on Computer Science Education (SigCSE)*. St. Louis, MO.
35. Endicott-Popovsky, B., Frincke, D., Popovsky, V. (2004). Designing a computer forensics course for an information assurance track. In *Proceedings from the 8th Colloquium for Information Systems Security Education*. (pp.59-64). West Point, NY: United States Military Academy.
36. Endicott-Popovsky, B.E., Frincke, D., Dittrich, D., et.al. (2004). The Manuka Project. In *Proceedings from the 5th IEEE Systems, Man and Cybernetics Information Assurance Workshop.* (pp.314-320). West Point, NY: United States Military Academy.
37. Endicott-Popovsky, B. and Frincke, D. (2004). A case study in rapid introduction of a computer security track into a software engineering curriculum. In *Proceedings of IEEE Computer Society Press 17th Conference on Software Engineering Education and Training.* (pp. 118-123). Norfolk, VA.
38. Endicott-Popovsky, B. and Frincke, D. (2003). A case study in rapid introduction of computer security curricula. In *Proceedings of 7th Colloquium for Information Systems Security Education*. Washington, D.C.
39. Endicott-Popovsky, B. and Lockwood, D. (2002). Social engineering in a computer security course. Paper presented at *Academy of Info & Mgmt Sciences*. Las Vegas, NV.

Peer-Reviewed Journal Articles

1. Endicott-Popovsky, B. An Unintended Consequence of the Information Age: Challenges of digital forensics. IEEE Security and Privacy. (TBD)
2. Padith, A. and Endicott-Popovsky, B. Fuzzy Clustering-Based Anomaly Detection for Updating Intrusion Detection Signature Files, *Journal of Information Assurance and Security*, ISSN 1554-1010, Volume 6, pp. 462–468, 2011.
3. Dupuis, M., Endicott-Popovsky, B., Wang, H., Subramaniam, I., Du, Y. Top-Down Mandates and the Need for Organizational Governance, Risk Management, and Compliance in China: A discussion. *China-USA Business Review,* 10(5), May, 2011, pp.319-335.
4. Duranti, L. and Endicott-Popovsky, B. (2010). Digital records forensics: An interdisciplinary program for forensic readiness. In Journal on Digital Forensics, Security and Law. St. Paul, MN, 5(2), pp.1-12.
5. Simpson, J., Simpson, M., Endicott-Popovsky, B., and V. Popovsky. Secure software education: A contextual model-based approach. *International Journal of Secure Software Engineering*, 1(4), 35-61, Oct-Dec 2010.
6. Endicott-Popovsky, B., Frincke, D., and Taylor, C. (2007). A theoretical framework for organizational network forensic readiness. *The Journal of Computers*, 2 (3), 1-11.
7. Endicott-Popovsky, B. and Lockwood, D. (2006). A social engineering project in a computer security course. *Academy of Information & Management Sciences Journal*, 9 (1), 37-44.
   http://findarticles.com/p/articles/mi_hb6073/is_1_9/ai_n29362882/
8. Endicott-Popovsky, B. and Lockwood, D. (2005). Deriving a capability maturity model for assessing the security of electric utilities. *Academy of Information & Management Sciences Journal*, 8 (1), 1-18.
   http://findarticles.com/p/articles/mi_hb6073/is_1_8/ai_n29241313/

Peer-Reviewed Posters

1. Le Mieux, V., Endicott-Popovsky, B., Eckler,K., Dang. T. and Jansen, A. (2011). *Visualizing an Information Assurance Risk Taxonomy*, *In Proceedings from IEEE Conference on Visual Analytics and Technology (VAST)*, (pp. 287-288). Providence, RI.

2. Endicott-Popovsky, B. and Frincke, D. (2005, September). *Redefining computer security to include forensics*. Presented at the 8th Annual Recent Advances in Intrusion Detection (RAID) Conference, Seattle, WA.
3. Endicott-Popovsky, B., Frincke, D. (2004, June). *Adding the fourth "R."* Presented at the 5th IEEE Systems, Man and Cybernetics Information Assurance Workshop, West Point, NY, and published in *Proceedings from the 5th IEEE Systems, Man and Cybernetics Information Assurance Workshop*. (pp.442-443). West Point, NY: United States Military Academy.

Invited Conference Abstracts/Papers

1. Duranti, L. and Endicott-Popovsky, B. (2010). Digital records forensics: An interdisciplinary program for forensic readiness. In *Proceedings of the 2nd Annual ACM Northeast Digital Forensics (Nefx).* Georgetown U, VA. http://nefx.cs.georgetown.edu/program.html
2. Endicott-Popovsky, B. and Whittington, J. (2010). *Dams: Our critical infrastructure, an educational model*. In *Proceedings of the ASDSO 2010 Dam Safety Conference*. Seattle, Washington.
3. Aval, C., Narvaez, J., Seifert, C., Endicott-Popovsky, B. (2010). Bare-Metal Support for Capture-HPC. *Annual Honeynet Alliance Workshop*. Mexico City, Mexico.
4. Eisenberg, M., Endicott-Popovsky, B and Popovsky, V. (2009). Information, sports and academia. In *Proceedings from Sports Games: At Present and the Future in Honor of the 75-Year Anniversary of the Sports Game Department of the Lesgaft State University*. (pp. 222-225). St. Petersburg, Russia.
5. Popovsky, V. and Endicott-Popovsky, B. (2008). Integrating academics, the community and industry. In *Proceedings from Physical Culture and Sports: Analysis of Social Processes*. (pp. 239-243). St. Petersburg, Russia.
6. Popovsky, V. and Endicott-Popovsky, B. (2007). Physical culture pedagogical system. *III International Congress: People, Sport and Health.* (pp. 322-324). St. Petersburg, Russia**.**
7. Erbacher, R., Endicott-Popovsky, B., and Frincke, D. (2007). Challenge paper: Validation of forensic techniques for criminal prosecution. In *Proceedings of the 2nd International Workshop on Systematic Approaches to Digital Forensic Engineering.* (pp. 150-151). Seattle, WA.
8. Endicott-Popovsky, B. and Frincke, D. (2006). Adding the Fourth 'R': A systems approach to solving the hacker's arms race. In *Proceedings of Hawaii International Conference on System Sciences (HICSS) 39 Symposium: Skilled Human-intelligent Agent Performance: Measurement, Application and Sympiosium*. Kauai, HI. Retrieved January 4, 2006 from: http://www.itl.nist.gov/iaui/vvrg/hicss39/4_r_s_rev_3_HICSS_2006.doc
9. Popovsky, V. and Endicott-Popovsky, B. (2005). In Grigoriev, V.E. (Ed.), Physical culture pedagogy: Coaching by design (pp. 176-187). In Proceedings from *Methods for Modernizing Physical Culture: Selection of Scientific and Methodological Works*. St. Petersburg, Russia.

Invited Journal Articles

1. Weller, A. and Endicott-Popovsky, B. (May, 2010). Securing virtual worlds. *SC Magazine*, pp. TBD. http://www.scmagazineus.com/securing-virtual-worlds/article/167979/
2. Endicott-Popovsky, B. (December 2009) Seeking a balance: Online safety for our children. *Teacher Librarian*, 37:2, 29-34.
3. Frincke, D., Oudekirk, S. and Endicott-Popovsky, B. (2006). Editorial: Resources for the computer and information assurance curriculum. *ACM Journal on Educational Resources in Computing*, 6 (4), 1.
4. Endicott-Popovsky, B.E, (2003, July/August). Ethics and teaching information assurance, *IEEE Security and Privacy*, pp. 6-8.

Book Chapters

1. Lysenko, V., Endicott-Popovsky, B., and Garrido M. (2012). Disruptive political use of ICTs in contentious politics: the between-cases analysis. *Politics in the Information Age*. Solo, A. (ed.) Springer. (in editorial revision)
2. Chung, S., Crompton, C., Endicott-Popovsky, B., Bai, Y. (2012). Analyses of the Effects of New Technology and Security Requirements on Service-Oriented Software Reengineering. Agile and Lean Service-Oriented Development: Foundations, Theory and Practice. Wan, X. (ed.) IGI Global. (in editorial revision)
3. Seifert, C., Endicott-Popovsky, B., Frincke, D., Komisarczuk, P., Muschevici, R, and Welch, I. (2008). I. Ray and S. Shenoi**.** IFIP WG 11.9 (Eds.), Identifying and analyzing web server attacks (Chapter 11). *Advances in Digital Forensics IV*, New York: Springer, pp.151-162.

4. Endicott-Popovsky, B.E., Chee, B. and Frincke, D.A. (2007). Shenoi, S. IFIP WG 11.9 (Ed.), Calibration testing of network tap devices (Chapter 1). *Advances in Digital Forensics III*, New York: Springer, pp.1-13.

White Papers/Technical Reports/Proceedings

1. Fink, G., Best, D., Manz, D., Endicott-Popovsky, B. and Popovsky, V. (2010). Pacific Rim Collegiate Cyber Defense Competition as a venue for scientific inquiry and experimentation. Pacific Northwest National Laboratory Technical Report.
2. Endicott-Popovsky, B., Alkire, S., Call, C., Narvaez, J., Ng, T., Reber, L., Stewart, T. (2009). *Round table at the Talaris Conference Center: Breakout sessions*. Seattle, WA: DOE Cybersecurity Grass Roots Community.
3. Endicott-Popovsky, B., Aval, C., Narvaez, J. and Seifert, C. (2009). *Final report: Next generation honeypots: The value of virtualization*. Seattle, WA: University of Washington.
4. Catlett, C. and Cybersecurity Community.*(2009). *A scientific research and development approach to transforming cybersecurity*. Chicago, IL: Transforming CyberSecurity Initiative, DOE.
5. Endicott-Popovsky, B., Aval, C. Narvaez, J., and Seifert, C., (2008). *Interim Report: Next generation honeypots project: The value of virtualization*. Seattle, WA: University of Washington.
6. Daly, J., Endicott-Popovsky, B., Foster, I., Petravic, D., Siebenlist, F. and Wendelberger, J. (2008) *Transforming cybersecurity research: The Deming analogy* (White Paper #2). Chicago, IL: Transforming CyberSecurity Initiative, DOE.
7. Altunay, M., Bailey, K., Crawford, M., Endicott-Popovsky, B., Goldfarb, J., and Schur, A. (2008) *Practical answers: A practitioner's roll call of cybersecurity research opportunities* (White Paper #6). Chicago, IL: Transforming CyberSecurity Initiative, DOE.
8. Endicott-Popovsky, B., et.al., (2008). *Proceedings for 2nd Annual Information Security and Risk Management Institute (ISCRMI) Proceedings*. Seattle, WA: University of Washington.
9. Endicott-Popovsky, B., Narvaez, J., Aval, C., Seifert, C., Thompson, T., Mauth, J., Wolf, K. (2008). The Honeynet Technical Exchange Report. PNNL/UW-CIAC.

***** Endicott-Popovsky, B., University of Washington, academic representative.

SELECTED PANELS

1. Endicott-Popovsky, B., Adler, J., Chase, M., Christiansen, J., Ferguson-Boucher, K., Frincke, D., Lazowska, E. Panel on Privacy in the Cloud. (2011). iConference. Seattle, Wa.
2. Duranti, L., Jansen, A., Endicott-Popovsky, and Cohen, F. (2011). Panel on Methods to Ensure Authentic Preservation of Digital Evidence. 9th Annual IFIP WG 11.9 Digital Forensics Conference. Orlando, Florida.
3. Endicott-Popovsky, B., Dupuis, M., industry representatives. (w/ Howard Schmidt, White House Cybersecurity Czar) (2010). Panel on Cybersecurity, "Cybersecurity Awareness Month," Seattle Public Library, Seattle, WA.
4. Endicott-Popovsky, B., Richards, G., Shaw, C. (2010). Panel on Digital Forensic Readiness. National Security Agency, Washington, D.C.
5. Endicott, B., (2010). Panel on IA Research. Intelligence Community Colloquium: Information and Intelligence in Open Society, University of Washington, Seattle, WA.
6. LeMieux, V. and Endicott-Popovsky, B., (2010) Panel on Risk Management. *SLAIS Conference*, University of British Columbia, Vancouver, BC.
7. Taylor, C., Endicott-Popovsky, B., Phillips, A., Shumba, R., and Dampier, D. (2010). Panel on Digital Forensics Education: A cross institutional perspective. *5th International Workshop on Systematic Approaches to Digital Forensic Engineering,* in conjunction with the IEEE Security and Privacy Symposium. Oakland, CA.
8. Greitzer, F. and Endicott-Popovsky, B. (2008). Panel on Security and Privacy in an Expanding Cyber World. 24th *Annual Computer Security Applications Conference (ACSAC)*, Anaheim, CA.
9. Endicott-Popovsky, Erbacher, R., Hazelkorn, M., Kohno, Y., B., Kuszler, P., Mason, R (2008). Panel on Privacy Considerations and the Evolution of Technology. PNNL at University of Washington.

INVITED PRESENTATIONS

1. Keynote: *Challenges Securing the Smart Grid: Lessons learned from cybersecurity.* 2011 ISET. 6th International Symposium on Embedded Technology, Institute of Embedded Engineering of Korea, Jeju, Korea.

2. *Developing Cyber Defenders to Protect the Homeland: One university's approach*. 2011 Cyber Physical Systems Day, DGIST University, Daegu, Korea.
3. *Forensic Readiness and the Challenges of the Cloud* (w/ Kirsten Ferguson-Boucher). (2011). Cloud Futures: Advancing Research and Education with Cloud Computing, Microsoft, Redmond, WA.
4. *Transitioning America's Veterans to STEM Academic Programs* (2011): Veterans Education in Science and Engineering, Arlington, VA.
5. *Forensic Readiness and the Challenges of the Cloud* (w/ Kirsten Ferguson-Boucher). Association of Canadian Archivists@UBC 2011 International Symposium: The Law of Unintended Consequences, Vancouver, BC.
6. *Cyber Security and Critical Infrastructure*. Dam Safety 2010. Association of Dam Safety Officials, Seattle.
7. Keynote: *Digital Records Forensics: An interdisciplinary program for forensic readiness*. SECAU 2010 Security Congress. Security Research Center, Edith Cowan University, Perth, Australia.
8. *Legal and Technical Aspects of Digital Forensics: An update on the state of the practice*. (w/Jim Lyle, Matt Salincski) (2010) Supreme Court Judges'*Conference on cybercrime*, Helena Montana.
9. *Legal and Technical Aspects of Digital Forensics: An update on the state of the practice*. (w/Ivan Orton) (2010). Supreme Court Judges'Conference. Guam/Seattle.
10. *Virtual World Security*. (2010). Intelligence Community Colloquium: Information and Intelligence in Open Society. University of Washington.
11. *The CIAC*. (2010). Microsoft Research. Bellevue, WA.
12. *The CIAC*. (2009). Secure World. Bellevue, WA.
13. *The CIAC*. (2009). *IARPA Conference*. CSE, University of Washington.
14. *IA Research at the University of Washington*. (2009). APWG eCrime Research Congress. Tacoma, WA.
15. *IA for Personal Computers* (2009) Workshop, McKinstry Corp.
16. *Collision of Events*. (w/Orton, I. and Ryan, D.) (2007). Digital forensics workshop. A-Star Science and Technology Judges Training, UW Law School, Seattle, WA.

MEDIA APPEARANCES AND CITATIONS

1. *UW team wins cyber defense competition* (April 11, 2011). Seattle Times Interview with Brittany Wong.
2. *PRCCDC.* (April 11, 2011). KGNW 820AM Radio Interview *Live from Seattle* with Doug Bursch.
3. *UW cyber team plays defense on a national level* (April 7, 2011). Seattle Times Interview with Brittany Wong.
4. *Teen America Digital Patriots*. (June 2010). Wired UK Interview with Mark Harris.
5. *Cyberhacking.* (April, 2010). Renay San Miguel, Reporter/Columnist, ECT News Network.
6. *Physical and Cybersecurity in the Skies*. (December, 2009). Seattle Times.
7. *Internet Fraud*. (November, 2009). KCTS 9 Interview with Lesley McClurg.
8. *Conficker Worm*. (March, 2009). King 5 News Interview by Renay San Miguel.
9. *Unintended Consequences*. (February, 2009). UWTV Insider.
10. *Geeks Under Attack* (2009) UWTV/Research Channel documentary.
11. *Unintended Consequences of the Information Age* (2007-9) Lecture Series UWTV/Research Channel.

LEADERSHIP CONTRIBUTIONS

1. Executed MOU's to establish IA research collabration, pursue grant funding, dissminate IA curriculum, issue CNSS certifications:
    a. Aberyswyth University, Wales
    b. Daegu Gyeongbuk Institute of Science and Technology (DGIST), Daegu, Korea
    c. University of Hawaii Manoa
    d. University of British Columbia (in review)
    e. VSB-Technical University of Ostrava/MIR Labs, Czech Republic (in review).
2. Established own course defining new direction for the field of information assurance.
3. Built Cybersecurity Island (2009) with Virtual Worlds Certificate program.
4. Established (2008) Pacific Rim Collegiate Cyber Defense Competition in its 4th year. UW won Nationals.
5. Founded (2008) Honeynet Project Chapter U of Washington/PNNL Chapter, Seattle, WA.
6. Founded the Information Security and Risk Management Certificate (2004-2012), PCE.
7. Produced the *Unintended Consequences of the Information Age* Lecture Series UWTV and Research Channel.

PROFESSIONAL ACTIVITIES

- Conference Chair, (2012) 7th International Conference on Information Warfare and Security ICIW, University of Washington, Seattle March 22-23.
- *Program Committee*, (2010-12) American Academy of Forensic Scientists: Digital & Multimedia Sciences.
- *NSF Planning grant*, (2011-12) Determining a Climate of Interdisciplinary Computing.
- *Advisory Board*, (2009-2012) Information Systems Security certificate, PCE.
- *Advisory Board*, (2004-2012) Information Security and Risk Management certificate, PCE.
- *Panel reviews*, (2008-2011) NSF Cybersecurity Programs, Arlington, VA.
- *Workshop Chair / host*, (2010) Northwest Region NIST/Boeing Smart Grid Cyber Security Guide launch, UW.
- *Leadership roles*, Systematic Approaches to Digital Forensics Engineering (SADFE).
    - *Program Chair* (2010). Oakland, CA.
    - *Program Committee* (2008-2012)
    - *Planning Committee* (2007). Seattle, WA.
- *Program Committee*, (2008-2012) IFIP WG 11.9 International Conference on Digital Forensics.
- *Program Committee*, (2009-2012) HICCS e-government section.
- *Program Committee*, (2010) Information Systems for Crisis Response and Management (ISCRAM), Seattle.
- *NSF Planning grant*, (2010-2012) Transitioning America's Veterans to STEM Programs, Arlington, VA.
- *Program Committee*, (2010) 1st Int'l. Workshop on Quality Software Practices (IWQSP) w/ 10th Int'l. Conference on Quality Software (QSIC), Zhangjiajie, China.
- *Site Co-Chair*, (2009) ACSAC Conference, Honolulu, Hawaii.
- *Site Chair*, (2009) Talaris DOE Grassroots Cybersecurity Workshop.
- *Site Chair*, (2009) NSA/DHS CISSE Conference, Seattle, WA.
- *Co-Chair*, (2008-9) Annual Information Security Compliance and Risk Management Institute, Seattle, WA.
- *Chair,* (2008) The Honeynet Technical Exchange, PNNL/CIAC, University of Washington.
- *Founder/Chair,* (2007-8) NWSec, University of Washington Institute of Technology.
- *Founder/Sponsor* (2007-12) Grey Hat Group: Informatics iSchool, UW Bothell, UW Tacoma, U Hawaii Manoa
- *Chair*, (2007) Global Security Initiative University of Washington and Pacific Northwest National Labs.
- *Editor,* (2006) of Special Issue on Resources for the Computer Security and IA Curriculum, JERIC (ACM).
- *Planning Committee*, (2005) Recent Advances in Intrusion Detection (RAID), Seattle, WA.
- *Reviewer*, IEEE Journal of Computer Security, Communications of the ACM
- *Founder*, (2004) Computer Forensics Regional Cooperative.

University Committees

- Tri-Campus Review Committee (2008-13) (two 3-yr terms).
- Information School MSIM and Informatics programs (2007-2012) admissions and curriculum committees.
- Faculty sponsor (2009-10) Data Breach Working Group, University of Washington.

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators and co-authors and editors past 48 months

Alves-Foss, Jim, U of Idaho
Bailey, Kirk, UW CISO
Baiocchi, Orlando, UW Tacoma
Bunge, Bob, DeVry U
Chung, Sam, UW Tacoma
Crosby, Martha, UHawaii Manoa
Crossler, Rob, MSU
Dampier, Dave, MSU
Dodge, Ron, USMA, West Point
Duranti, Luciana, UBC, Canada
Ferguson-Boucher, Kirsten, Aberyswyth U Wales
Fink, Glenn, PNNL
Friedman, Rob, UW Tacoma
Kang, Jin Kyo, DGIST U, Korea
Keller, Rachelle, Geo.Washington U
Kochanski, Mark, UW Bothell
Kohno, Tadayoshi, UW CSE
Lau, Gerald, UHawaii Manoa
Lazowska, Ed, UW CSE
Lee, Dong Ha, DGIST U, Korea
LeMieux, Vicki, UBC, Canada
Manz, David, PNNL
McLane, Don, UW Tacoma
Oman, Paul, U of Idaho
Orton, Ivan, J.D. K Co Prosecutor
Padith, Anish, UW/MIR, Czech Rep.
Sande, Corrinne, WCC Cyberwatch W
Seifert, Christian, CEO Honeynet Proj.
Shapiro, Seth, Kibble & Prentice
Shen, Qing, UW Urban Planning
Shenoi, Sujeet, U of Tulsa
Simon, Mike, Pres. Infragard
Stiber, Michael, UW Bothell
Stoll, Sharon, U of Idaho
Subramanian, Ilanko, Microsoft
Taylor, Carol, E Washington U
Taylor, Hazel, UW iSchool
Toregas, Costis, Geo. Washington U
Vaughn, Ray, VP Research, MSU

Frincke, Deb, NSA
Greitzer, Frank, PNNL
Hoffman, Lance, Geo.Washington U
Iatoga, Steve, UHawaii Manoa
Jones, David, UW APL
Phillips, Amelia, Dean HCC
Popovsky, Viatcheslav, U of Idaho
Rajala, Sara, Dean Engr, MSU
Ryan, Dan, National Defense U
Ryan, Julie, Geo. Washington U
Vick, Rita, UHawaii Manoa
Wainwright, Kevin, BCIT, Canada
Whittington, Jan, UW Urban Planning

GRADUATE ADVISORS

- Dr. Deborah Frincke, Deputy Director Research NSA (formerly PNNL Chief Scientist, Cybersecurity and Professor, University of Idaho).
- Dr. Jim Alves Foss, University of Idaho
- Dan Ryan, J.D., National Defense University
- Orton, Ivan, J.D., K Co. Prosecutor

GRADUATE ADVISEES

PhD Thesis Committee Membership (7)

University of Washington: Norah Aboudakhair (2017)
University of Washington: Marc Dupuis (2012)
University of Washington: Volodymyr Lysenko (2011) graduated
University of Washington: Timothy Pasch (2008) graduated

University of British Columbia/SLAIS: Adam Jansen (2013)
University of British Columbia/SLAIS: Corinne Rogers (2013)
Capella University: Ron J. Smith (2009) graduated

MS Thesis/Capstone Projects Supervised and Completed (27)

University of Washington: Mimi Bidar, Ryan Bird, Phil Bonderud, Robert Bunge, Cornado Crompton, Rowena Martinez, Chiraag Aval, Anastassia Gillam, Ashish Malviya, Rinkesh Nagmoti, Julia Narvaez, Nick Sweers, Megga Thakar, Cheryl Ream, Mike Hogsett, Ashish Malviya, Leo Hansel, Anish Abraham Padath, Debbie Bryan, Michael Ellington
Seattle University: Christian Seifert, Marty Lyons, Jose Chavez, Jenks Gibbons, Don Nguyen, Amy Shepherd

Visiting Scholars & Interns (4)

Turku University, *Finland*: Kimberly Lukin, CS doctoral candidate (pending)—Information Warfare
University of Stellenbosch, South Africa: Christopher Shear, IS doctoral candidate—IA in Knowledge Management
Harbin University, *China*: Yeujin Du, Ph.D. now CTO China CERT
Victoria University of Wellington, New Zealand: Christian Seifert, Ph.D. now Microsoft Research & Honeynet Project CEO

Total: 38 graduate advisees

Ph.D. (4 current, 3 graduated); M.S. (3 current, 24 graduated); Visiting scholars/interns (1 current, 1 pending, 2 completed)

Curriculum Vitae

Bryan S. Goda

3110 S. 13th St. Tacoma WA 98405

(W) 253-692-4581, (H) 845-551-3873 godab@uw.edu

Qualifications

Multitalented professional in undergraduate Electrical Engineering, Computer Engineering, and Information Technology education. Capable of leading large organizations through the use of outstanding communications and planning skills. Extensive experience in team building and accomplishing complex tasks.

Professional Experience

University of Washington, Tacoma, Institute of Technology

Acting Professor (2012-present)

- Teaches college level instruction in the Computer Engineering, Information Technology, and Computer Science and Systems programs.
- Coordinator with the Joint Base Lewis-McChord for the design of a Masters in Cybersecurity and increased student enrollment from JBLM.

Department of Electrical Engineering and Computer Science, West Point NY

Deputy Department Head (2010-2012)

- Oversees the operations of the 3rd leading undergraduate Electrical Engineering, Computer Science, Information Technology, and Core programs consisting of 72 staff and faculty. The Department teaches over 1500 students annually. Direct supervisor of the engineering support section (4), computer support group (4), and the headquarters section (3).
- Responsible for personnel hirings, contractor requirements, faculty recruiting, and teaching assignments. Approximately ¼ of our faculty turns over each year, so the recruiting quality instructors is a constantly ongoing process.
- Department Budget manager, responsible for 15 EE&CS labs and an annual operating budget of $2M.

Association of Graduates Diversity Leadership Conference Co-Chair (2007-Present)

- Co-Chair of an annual conference sponsored by Association of Graduates centered on Diversity Leadership. The 3-day conference is now in its 11th year and has over 300 attendees. The conference is entirely funded by donor funds. The Co-Chair's main tasks are to plan the program, coordinate speakers, and organize the 50 faculty volunteers to help put on the conference. The Co-Chair also advises the Academy leadership on program content. Past speakers have included Cabinet Secretaries, Ambassadors, members of Congress, Fortune 500 CEOs, and Senior Army Officers. Conference website:

  http://www.eecs.usma.edu/webs/events/diversity/dlc2010/default.html

United States Military Academy ABET Committee Co-Chair (2005-2012)

Co-Chair of a 33 member committee designated to assist the 10 engineering programs with ABET accreditation. The self studies from the 2008 visit were used by ABET as display examples at the 2009 ABET Symposium. Advised the Dean and Superintendent on latest ABET issues and changes. Attends the ABET Annual meeting and commission summits. Coordinates the Academy wide self study preparation efforts.

IT Program Director (2005-2009)

- Created an IT program in 2005 with no faculty or students assigned. The program in 5 years has grown to 7 faculty, 75 students, and 40 graduates. Coordinated with 5 other departments in the development of the program and the submission of curriculum changes.
- Prepared the program for accreditation, wrote a 300 page self study, and created an assessment system. The IT Program became 1 of 14 ABET accredited programs on its first attempt in 2008, a nationally rare event.

Information Technology Goal Team Chair (2005-2012)

- Chair of a 10 member team designated to assess the accomplishment of the Military Academy's IT goal. Tasks include benchmarking against other institutions, collecting assessment data, and writing an annual report.

Deputy EE Program Director (2001-2004)
Instructor (1993-1996)

- Developed the computer engineering section of the EE program. Recruited 100 cadets into the program over a 3-year period. Assisted the program director in curriculum development and ABET preparation.

US Army, Kitzingen Germany 1996-1998
Simulations Projects Officer (1998)
Battalion Commander (1997)
Battalion Executive Officer (1996-1997)

- Designed and created simulations for four division sized headquarters for units stationed in Germany. Supervised command post exercises involving 300 soldiers throughout Germany.
- Partnership officer with a sister German Unit. Organized team building events and coordinated with the local community.
- Commander and Executive Officer of a 550 person communications unit. Provided communications to 20k soldiers over a 200sq km area over a 6 month period. Worked with military and UN Agencies from 7 other nations in Peacekeeping Operations in Bosnia Herzegovina.

US Army, Frankfurt Germany
Operations Officer (1988-1990)

- Operations Officer for a 780 person unit in the Gulf War. Earned a Bronze Star for the communications support provided to 25k soldiers moving over 300 km in 4 days.

Teaching Experience

University of Washington Tacoma
- TINFO 360 Foundations of Information Systems Analysis and Design, Spring 2012
- TCSS 321 Discrete Structures I, Spring 2012

United States Military Academy, West Point NY – Associate Professor 2002
- EE484 Advanced Computer Architecture, Course Director, 2010
- IT401 IT Senior Design I, Course Director, 2008-09
- IT402 IT Senior Design II, Course Director, 2009-10
- IT305 Military Information Technology Systems 2005- 07
- EE301 Fundamentals of Electrical Engineering, 2004
- EE484 Advanced Computer Architecture Using VHDL, Course Director, 2003-04
- MS402, Transition to Officership, Intersession 1996
- EE475, Introduction to Computer Architecture, Course Director, 1996, 2001-03
- Platoon Trainer, Camp Buckner 1995
- MS302, Combined Arms Tactics, Intersession 1995
- EE302, Introduction to Electrical Engineering, Fall 1994, 1995, 2001
- CS380, Introduction to Computer Organization, Course Director, 1994, 1995, 1996, 2002
- EE408, Senior Design Project Advisor, 1994-96, 2002, 2003, 2004
- CS402, Senior Design Project Advisor, 1994-96, 2003

Army War College, Carlisle PA – Guest Instructor while a student at the War College
- 182 Research & Development for Transformation, Army War College 2005

Rensselaer Polytechnic Institute, Troy NY – Taught the lab portion of the VLSI Design course
- ECSE 4220 Introduction to VLSI Design, Rensselaer Polytechnic Institute, 2000-2001

Hudson Valley Community College, Troy NY – Adjunct Professor
- 4713 Introduction to E Commerce, Spring 2001
- 6315 Intermediate Algebra, Fall 2000, Spring 2001
- 6305 Technical Math, Fall 2000, Spring 2001, Summer 2001
- 4357 Systems Analysis and Design II, Spring 2001, Summer 2001
- 5004 Telecommunications and Information Processing, Fall 1999
- 6121 Computer Science II, Fall 1999, Summer 2000
- 4356 Systems Analysis and Design, Spring 2000, Fall 2000
- 6129 Engineering Tools, Fall 1999
- 4359 Understanding and Using the Microcomputer, Summer 1999
- 4350 Fundamentals of Data Processing, Spring 1999, Fall 1999
- 44358 Programming and Logic II, Spring 1998

Ph.D. Advisor, SUNY Binghamton 2008- Present, Capella University 2009-Present

Education and Honors

Ph.D., Computer Engineering, Rensselaer Polytechnic Institute, 2001
Masters of Strategic Studies, Army War College, 2005
Masters of Science, Electrical Engineering, University of Colorado, 1993
Bachelors of Science, Electrical Engineering and Computer Science, United States Military Academy, 1982

Professor of Information Technology, USMA, 2011
Black/Gold Volunteer Award (2009, 2006) – Military Academy recognition award for volunteer service
IEEE Senior Member (2006), awarded to 10% of the IEEE membership based on scholarly achievement and peer recommendations

ABET Outstanding Educator Award (2003) – Selected from a pool of 400 educators by ABET to help develop ABET directions for the future
Upsilon Pi Upsilon (2003) – Computer Science National Honor Society
Charles M. Close RPI Outstanding Electrical, Computer and Systems Engineering Doctoral Student Award (2001) - Awarded to the outstanding graduating Ph.D. student of the year
Engineer in Training (EIT 1996)
Phi Kappa Phi Outstanding Faculty Award (1996) - Chosen as the outstanding faculty member from the EECS department based on scholarly achievement and teaching performance.
Member, Signal Regiment (1995)
Member, Eta Kappa Nu (1993) – Electrical Engineering National Honor Society

Professional Societies:

American Society for Engineering Education
Association of Graduates USMA
Engineer in Training (EIT) NY
Eta Kappa Nu (Electrical Engineering Honor Society)
Federal Asian Pacific American Council
Institute of Electrical and Electronics Engineers, Mid-Hudson Branch, Senior Member
National Japanese American Memorial Foundation
Pan Pacific American Leaders and Mentors Organization
Phi Kappa Phi
Signal Regiment Association
Upsilon Pi Epsilon (Computer Science Honor Society)
United States Chess Federation

Reviewer: IEEE Transactions on Electron Devices, Special Interest Group for IT Educators, Frontiers In Education.

Professional Service:

Chair, Special Interest Group for IT Educators, 2011

USMA Faculty Council Diversity Subcommittee (2004-present) Member of a Dean's committee that examines diversity issues.

Admissions Committee (2006-2007, 2009) Reviews student applications for admissions to USMA.

Center for Teaching Excellence Apgar Award Committee (2007-present) Member of a committee that selects the most innovative instructor at the Academy.

Association of American Colleges and Universities USMA Representative (2006-2009) Member of an Academy committee that participates in summer workshops to improve the quality of undergraduate education in a globally interdependent society.

Special Interest Group for Information Technology Educators 2011 Conference Chair. Chair of annual conference attended by 150 educators that specialize in IT education advancement.

2007 Department of the Army LTC Selection Board Member.

Watervliet Arsenal Emergency Operations Officer, volunteer position to help the Watervliet Arsenal Commander in event of an emergency.

West Point Society of Albany volunteer Field Officer, interview and screen prospective cadet candidates.

Scholarly Publications

(Available at http://www.eecs.usma.edu/webs/people/goda/Publications2.html)

Journal Articles

Improving Outcome Assessment in Information Technology Program Accreditation
B. Goda, C. Reynolds
Journal of Information Technology Education, Vol 9, 2010, pp.49-59.

A 12Gb/s Demux Implemented with SiGe High Speed FPGA Circuits
C. You, J. Guo, R. Kraft, M. Chu, B.Goda, J. McDonald
Transactions on Very Large Scale Integration, March 2007

Silicon Germanium Programmable Circuits for Gigahertz Applications
J. Guo, C. You, M. Chu, P. Curran, J. Diao, B. Goda, P. Jin, J. McDonald
IET Circuits, Devices and Systems, Feb 2007, pp. 27-33

A 10GHz 4:1 Mux and 1:4 Demux implemeted by a Gigahertz SiGe FPGA for fast ADC
J.R. Guo, C. You, K. Zhou, M. Chu, P. Curran, D. Diao, B. Goda, R. Kraft, J. McDonald
Integration, the VSLI Journal, #38, 2005, pp. 525-540

Multi-GHz SiGe BiCMOS FPGAs with new architecture and novel power management
K. Zhou, J.R. Guo, C. You, J. Mayega, R. Kraft, T. Zhang, B. Goda and J. McDonald
Journal of Circuits, Systems, and Computers, vol. 14, no. 2, 2005, pp. 179-193

A 5-10 GHz SiGe BiCMOS FPGA with new Configurable Lock Blocks
C. You, J.R. Guo, R. Kraft, M. Chu, P. Curran, B. Goda, J. McDonald
Microprocessors and Microsystems, 2004, pp. 1-11

Gigahertz Reconfigurable Computing Using SiGe HBT BiCMOS FPGAs
B. Goda, R. Kraft, S. Carlough, T. Krawcyzk, J. McDonald
Lecture Notes in Computer Science, ISSN 0302-9743, 2001

SiGe HBT BiCMOS FPGAs for Fast Reconfigurable Computing
B. Goda,, J. McDonald, S. Carlough, T. Krawczyk, R. Kraft
Proceedings of Computers and Digital Techniques, Vol. 147, No. 3, May 2000, pp. 189-194

Academic Publications

Safeguarding Military Critical Technologies
Army War College Master's Thesis, Storming Media, 18 Mar 2005

SiGe HBT BiCMOS Filed Programmable Gate Arrays for Fast Reconfigurable Computing
Ph.D. Thesis, Rensselaer Polytechnic Institute, 2001

A Survey of Cache Coherency Schemes
University of Colorado, Master's Thesis, May 1993

Refereed Conference Publications

Developing a Reconfigurable Network Lab
S. McCune, AJ Newtson, B. Goda, J. Girard
SIGITE Conference 2008, Cincinnati Ohio, 15-17 October 2008

The Affective Dimension of Pervasive Themes in the Information Technology Curriculum
C. Reynolds, B. Goda
SIGITE Conference 2007, Destin Florida, 18-20 October 2007

Active-HDL, Multisim, Cadence, There has got to be a better way to teach CAD/E Tools
J. Gribschaw, P. Patterson, B. Goda
ASEE Annual Conference 2007, Honolulu Hawaii, 23-27 June 2007

A Deliberate Integration of Information Technology Into the Classroom
D. Fairfax, K. Huggins, B. Goda
ASEE Annual Conference 2007, Honolulu Hawaii, 23-27 June 2007

Faculty Development in Information Technology Education
J. Blair, D. Fairfax, B. Goda, K. Huggins, M. Lemanski, W. Suchan
SIGITE 2006, Minneapolis MN, 18-20 Oct 2006

Designing an Interdisciplinary Information Technology Program
E. Sobiesk, J. Blair, J. Cook, J. Giordano, B. Goda, C. Reynolds
SIGITE 2006, Minneapolis MN, 18-20 Oct 2006

A 11 GHz FPGA with Test Applications
C. You, J. Guo, M. Chu, K. Zhou, R. Kraft, B. Goda, J. McDonald
Proceedings of the Field Programmable Logic Conference (FPL05), Paper 3.A.2
Tempere Finland, pp. 101-105, 2005

The 10GHz 4: 1 MUX and 1: 4 DEMUX implemented via the gigahertz SiGe FPGA
J.R. Guo, C. You, P. Curran, M. Chu, K. Zhou, J. Diao, A. George, B. Goda, R. Kraft
ACM Great Lakes Symposium on VLSI 2004: pp. 141-144

Outcome Assessment at the US Military Academy
L. Shay, B. Goda
2004 ASEE Annual Conference, Salt Lake City, 22-24 June 2004

Experience with Multi-Disciplinary Design Projects at the US Military Academy
P. Hanlon, B. Goda
2004 ASEE Annual Conference, Salt Lake City, 22-24 June 2004

A Scalable 2 V, 20 GHz FPGA Using SiGe HBT BiCMOS Technology
J.R. Guo, C. You, K. Zhou, B. Goda, R. Kraft, J. McDonald
FPGA 2003: pp.145-153

SiGe HBT BiCMOS Field Programmable Gate Arrays for Agile Mixed Signal Applications
J.F. McDonald, R. Kraft, K. Zhou, J.R. Guo, Y. Chao, R. Heikaus, M. Chu, B. Goda
28th Annual Government Microcircuit Applications & Critical Technology Conference
31 March - 3 April 2003, Tampa Florida, pp. 560-563

GHz FPGA by SiGe BiCMOS Technology for Low Power, High Speed Computing with Memory
C. You, J.R. Guo, R. Kraft, M. Chu, R. Heikaus, O. Erdogan, P.Curran, B. Goda, K. Zhou, J. McDonald
FPL 2003: pp. 11-20

A Scalable 2V, 20 GHz FPGA using SiGe BiCMOS Technology
J.R. Guo, C. You, K. Zhou, M. Chu, B. Goda, R. Kraft, J. McDonald
11th International Symposium of Field Programmable Gate Arrays, February 23-25 2003, Monterey CA

A Novel Multi-Speed, Power Saving Architecture for a SiGe HBT FPGAs
J.R. Guo, C. You, K. Zhou, M. Chu, B. Goda, R. Kraft, J. McDonald
The 2003 International Conference on Engineering of Reconfigurable Systems and Algorithms
23-26 June 2003, Las Vegas Nevada

Fast SiGe HBT BiCMOS FPGAs with a new Architecture and Power Saving Techniques
K. Zhou, J.R.. Guo, C. You,, R. Kraft, B. Goda, J. McDonald
12th International Conference on Field Programmable Logic, 2-4 Sept 2002, Montipellier France
pp. 414-423

SiGe HBT BiCMOS FPGAs
B. Goda, J. McDonald, R. Kraft
FPGA 2001 Proceedings, August 11-13, 2001, Dublin Ireland. pp. 59-69

Reconfigurable FPGA's in the 1-20 GHz Band with HBT BiCMOS
J. McDonald, B. Goda
1st Annual Conference on Evolvable Hardware, July 19-21 1999, Pasadena Calif, pp 188-192

Non-Refereed Publications

The *Cadet Chess Club Wins the Armed Forces Championship for the 3rd Time*
Assembly, March 2007, pp. 26-27

Board of Education
C. Kief
Xcell Journal, Winter 2004

The Gigahertz FPGA: Design Considerations and Applications
J.R. Guo, C. You, K. Zhou, M. Chu, R. Heilkaus, O. Erdogan, B. Goda, R. Kraft, J. McDonald
12th International Symposium of Field Programmable Gate Arrays, February 22-24 2004, Monterey CA, p. 248

A four-bit full adder implemented on fast SiGe FPGAs with novel power control scheme
K. Zhou, M. Chu, C. You, C. Channakeshav, J. Mayega, J. McDonald, R. Kraft, B. Goda
FPGA 2003: p. 248

How to Develop an Assessment Plan
J. Hill, B. Goda
Fifth Annual Symposium on Best Assessment Practices, 24-26 April, 2003, Rose-Hulman University, Terra Haute, Indiana

Implementation of a Gigahertz 1 bit Full Adder on a SiGe FPGA
K. Zhou, J.R. Guo, C. You, J. Mayega, B. Goda, M. Chu, Y. Kim, P. Curran, R. Kraft, J. McDonald
5th MALPD Conference, 9-12 Sept 2002, Laurel Maryland, pp. B1-B2

Experiences in Preparing Multiple Programs for a Joint ABET Accreditation General Review
K. Huggins, L. Shay, J. Hill, B. Goda, E. Ressler
32nd ASEE/IEEE Frontiers in Education Conference, Nov 6-9, 2002, Boston MA

Providing Communications to Task Force Eagle in Bosnia
B. Goda, D. Babb
Army Communicator, pp. 7-12, Fall 1997

One Approach to Multidisciplinary Senior Design Projects
B. Goda, A. Sayles, D. Gray
26th Annual Frontiers in Education Conference, Nov 1996

Optoelectrical Error Diffusion Neural Network
B. Shoop, E. Ressler, A. Sayles, J. Loy, G. Tait, D. Gray, B. Goda, J.Wise
MIT Website 1996

Talkin' Track
L. Bernardinis, B. Goda
Machine Design Magazine, pp. 102-110, Mar 9 1995

Teaching Computer Architecture in a PC Equipped Lab Using Turbo and Sun Assembly Language
B. Goda, D. Gray, J. Loy
25th Annual Frontiers in Education Conference, pp. 2a5.14-17, Nov 1995

HO scale model trains provide opportunities for student innovation in the laboratory
A.H. Sayles, B.S. Goda, and J.H. Wise
Proceedings of the Annual Meeting of the American Society for Engineering Education, Middle Atlantic Section, November 1994

HO Scale Model Trains Provide a Vehicle for Curriculum Fusion
B. Goda, J. Wise, M. McConkey, J. Loy
24th Annual Frontiers in Education Conference, pp. 361-365, Nov. 1994

Communications on a Mobile Battlefield in the 100 Hours War
B. Goda, R. Prudhomme
Army Communicator, pp. 42-47, Spring 1991

Family:

Spouse – Gloria, employed at US Mint
Son – George, Age 28, CPT Air Defense Artillery, Brigade S4, USMA Class of 2006
Daughter – Sharon, Age 23, College Junior at Dominican College

G. KENT NELSON, Ph.D.
University of Washington, Tacoma
Milgard School of Business
1900 Commerce Street, Box 358420
Tacoma, WA 98402-3100
253.692.5683 gknelson@u.washington.edu

EDUCATION

1994 — Ph.D. in Speech Communication
University of Washington
Major Field: Organizational Communication
Supporting Fields: Leadership; Group/Team Dynamics; Managerial and Co-worker Communication; Social Cognition

1989 — M.A. in Speech Communication
University of Washington
Major Field: Interpersonal Communication
Supporting Fields: Conflict Management; Social Relationships

1984 — B.A. in Communication
Boise State University

ACADEMIC POSITIONS

2009–present — Associate Dean
Milgard School of Business
University of Washington, Tacoma

1998-present — Senior Lecturer
Milgard School of Business
University of Washington, Tacoma

1995-1998 — Adjunct Lecturer
Business Administration
University of Washington, Tacoma

1994-1997 — Adjunct Faculty Member
Department of Speech Communication
Green River Community College
Auburn, WA

1987-1993 — Graduate Teaching Assistant
Department of Speech Communication
University of Washington , Seattle

PROFESSIONAL EXPERIENCE

1992 - 1994 — Director of Marketing and Communication, Access Technologies, Inc.
Redmond, WA

1984 - 1987 Coordinator of Marketing and Communications
Creative Source, Inc.
Boise, ID

TRAINING AND CONSULTING

September/October, 2011. Milgard School of Business Essentials of Management Program, Tacoma, WA. Facilitated two 3-hour training sessions on leadership and communication.

September, 2010. Milgard School of Business Essentials of Management Program, Tacoma, WA. Facilitated two 3-hour training sessions on leadership and communication.

2003 – Present. KeyBank Professional Development Center, Tacoma, WA. Provide training and facilitation in leadership (Leadership Certification Series: Leadership in a Changing World, 6-part series, half-day sessions) and Effective Managerial Communication (Project Management Series).

February, 2008. Microsoft, India. Provided two days of executive education training on executive presence and maturity in the workplace.

May, 2007. Microsoft, India. Provided full day of executive education training on emotional intelligence and communication in the workplace

1999 – 2004. South King County Medic One, Kent, WA. Provided training and facilitation in organizational development, leadership, teamwork, communication, and strategic planning.

2000 – 2002. Advanced Communication Services, Port Orchard, WA. Provided training and facilitation in organizational development, leadership, teamwork, technical writing and presentations, communication, and strategic planning.

2000 – 2002. Pierce County Fire Chiefs Association, Lakewood, WA. Provided strategic advice in organizational development and leadership.

SCHOLARLY PRESENTATIONS

NELSON, G.K. (April, 2010). Underlying Concepts of Emotional Intelligence. Presented to Intel Corp, DuPont, WA.

NELSON, G.K. (January, 2010). Social Toxicity in Organizations. Presented to MultiCare Health System, Tacoma, WA.

NELSON, G.K. (September, 2008). Pillars and Strategies of Personal Mastery. Presented to Farrelli's Pizza, DuPont, WA

NELSON, G.K. (October, 2006). Dealing with Toxic Leaders. Presented to Human Resource Network (professional association), Tacoma, WA.

NELSON, G.K. (May, 2005). Achieving Personal Mastery. Presented at the N.W. Leadership Conference and Expedition, Bremerton, WA.

NELSON, G.K. (May, 2005). Understanding Communication Styles. Presented at the N.W. Leadership Conference and Expedition, Bremerton, WA.

NELSON, G.K. (March, 2005). Improving Interpersonal Communication Styles. Presented to UWT MBA students, Tacoma, WA.

NELSON, G.K. (March, 2005). Toxic Leadership. Presented to Human Resource Network (professional association), Tacoma, WA.

NELSON, G.K. (October, 2004). Principles and Practices of Powerful Communication. Presented at UWT Alumni Lecture Series, Tacoma, WA.

NELSON, G.K. (April, 2004). Inspiring a Shared Vision. Presented at the N.W. Leadership Conference and Expedition, Seabeck, WA.

NELSON, G.K. (April, 2004). The Reality of Leadership Challenges. Presented at the N.W. Leadership Conference and Expedition, Seabeck, WA.

NELSON, G.K. (April, 2004). Principles of Interpersonal Communication in Organizations. Presented to Batdorf & Bronson Coffee Roasters, Olympia, WA.

NELSON, G.K. (February, 2004). Leveraging Communication for Personal and Professional Success. Presented at the Rainier Chapter of the Institute of Management Accountants, Tacoma, WA.

NELSON, G.K. (February, 2004). Using Communication Styles to Enhance Instruction. Presented to the Motorcycle Safety Company, Federal Way, WA.

NELSON, G.K. (January, 2004). Collaborative Communication. Presented to Venture Bank, Tacoma, WA.

NELSON, G.K. (October, 2002). Evaluating and Implementing Strategic Organizational Direction: Communication and Collaboration. Presented to State Farm Insurance, DuPont, WA.

NELSON, G.K. (April, 2002). Resolving Leadership Dilemmas: Applications of a Polarity Management Model. Presented at Northwest Communication Association Conference, Coeur d'Alene, ID.

NELSON, G.K. (May, 2002). Challenges and Strategies of Workplace Communication and Collaboration. Presented to UWT Academic Programs staff members. Tacoma, WA.

NELSON, G.K. & Kalikoff, B. (October, 2001). Writing in Times of Crisis. Presented at UWT Teach-in. Tacoma, WA.

NELSON, G.K. (August, 2001). The Role of Meta-Communication in Workplace Relationships. Presented to UWT Office of Enrollment Services and Student Affairs. Tacoma, WA.

NELSON, G.K. (December, 2000). Heroism and Leadership in Public Service. Presented to Pierce County Fire Chiefs Association, Tacoma, WA.

NELSON, G.K. & Kalikoff, B. (November, 2000). Widening the Circle of Compassion in Organizations. Presented at The Professional and Organizational Development (POD) Network in Higher Education Annual Conference, Vancouver, B.C.

NELSON, G.K. (September, 2000). Meta-messages and Their Role in the Classroom. Presented at UWT Business Administration Faculty Orientation, Tacoma, WA.

NELSON, G.K. (April, 2000). Implementing Strategic Organizational Change. Presented to South King County Medic One, Kent, WA.

NELSON, G.K. (April, 2000). Techniques of Organizational Diagnosis and Information Gathering. Presented to South King County Medic One, Kent, WA.

NELSON, G.K. (April, 2000). Strategic Feedback in the Classroom: Form and Function. Presented at UWT Conversations on Teaching 2000 - Teaching and Transformation, Tacoma, WA.

NELSON, G.K. (March, 2000). Communication Methods for Creating Strategic Action in Non-profit Organizations. Presented to South King County Medic One, Kent, WA.

NELSON, G.K. (March, 2000). Evaluating and Implementing Strategic Organizational Direction: Communication Methods and Processes. Presented to Advanced Communication Services, Port Orchard, WA.

NELSON, G.K. (January, 2000). Improving Workplace Relationships: the Role of Confirming versus Disconfirming Communication. Presented at the Western Association of Colleges and Employers Annual Conference. Bellevue, WA.

NELSON, G.K. (February, 2000). Teaching Organizational Communication. Presented at the Western States Communication Association annual conference. Sacramento, CA.

NELSON, G.K. (January, 2000). The Mission Driven Non-Profit Organization. Presented to King County Medic One. Kent, WA.

NELSON, G.K. (January, 2000). Achieving Alignment between Personal and Organizational Values: Process and Product. Presented to King County Medic One. Kent, WA.

NELSON, G.K. (January, 2000). Converting Organizational Values into Personal Action. Presented to King County Medic One. Kent, WA.

NELSON, G.K. (February, 2000). Identifying and Measuring Performance Objectives in the Strategic Planning Process. Presented to King County Medic One. Kent, WA.

NELSON, G.K. and Purdy, J.M. (February, 2000). Disconfirming Communication and Conflict Management Strategies. Presented to the Institute of Management Accountants, UWT Student Chapter, Tacoma, WA.

NELSON, G.K. (September, 1999). Leadership and Communication in Non-profit Organizations. King County Medic One. Kent, WA.

NELSON, G.K. (1998). Crazy-making Communication in Organizations.
Presented to the Rainier Chapter of the Institute of Management Accountants. Tacoma, WA.

NELSON, G.K. (1998). Managing Polarities: Strategic Communication in Organizations.
Presented to the Rainier Chapter of the Institute of Management Accountants. Tacoma, WA.

NELSON, G.K. (1995). Planning for Quality Improvement. Green River Community College. Auburn, WA.

NELSON, G.K., & Lawless, P.H. (1994). Information Technology Audit and Recommendations: Presentation of Findings for CellPro, Inc. Bothell, WA.

NELSON, G.K., & Lawless, P.H. (1994). The Application Development Process: Procedures and Parameters for CellPro, Inc. Bothell, WA.

NELSON, G.K., & Lawless, P.H. (1993). Information Technology Audit and Recommendations: Presentation of Findings for BMC West Corporation. Boise, ID.

NELSON, G.K. (1993). Data Warehousing: Why and How. Technical White Paper presented at the HP User Conference and Expo. San Franciso, CA.

SCHOLARSHIP IN PROGRESS

NELSON, G.K. "Toxic Leadership."

NELSON, G. K. "Crazy-making Communication in Organizations."

NELSON, G.K. "Improving Workplace Relationships: the Role of Confirming Communication."

GRANTS AND FUNDING

NELSON, G.K. (Winter, 2001). University of Washington, Tacoma Founder's Endowment Fund. Awarded $1,500 to conduct research and present findings on collaborative communication in organization.

NELSON, G.K. (Winter, 1999). University of Washington, Tacoma Founder's Endowment Fund. Awarded $2,663.00 to conduct research on disconfirming communication in organizations.

TEACHING EXPERIENCE

Undergraduate

Interpersonal Skills in the Workplace
Persuasive Communication
Managing in Organizations
Effective Managerial Communication
Managing and Motivating Work Teams
Captivating Your Audience: Presentation Skills for Success
A Writer's Workshop: Skills for Success
Dynamics of Leadership
Small Group Discussion
Small Group Leadership
Interpersonal Skills
Basic Speech Communication
Fundamentals of Oral Communication
Principles of Group Discussion
Interpersonal Communication
Public Speaking
Interviewing

Graduate (MBA)

Business Communication

SELECTED INSTRUCTIONAL INNOVATION

Provide detailed oral feedback on student performance using digital audio recorder attached as audio files on e-mail

Conduct, and provide training on, Small Group Instructional Diagnosis (SGID) methods and procedures.

Conduct annual focus groups with students to gather input about issues of curriculum, instruction (etc) in the Milgard School of Business.

Organize and sponsor writing workshops for faculty about assignments, standards, expectations and ways of giving constructive feedback.

Conduct training workshops for staff and consultants of the Teaching and Learning Center on standards and techniques of business writing.

Have designed and taught four new courses in the Milgard School of Business. Researched course content, developed specific course objectives, created course assignments and activities, developed evaluation criteria and instruments.

Created faculty home page with links to course syllabi, course assignments, and related instructional materials.

Use Blackboard for interactive instruction.

Collaborated in the design and delivery of a workshop to improve business writing skills, including

sample papers and PowerPoint presentation for student development.

Designed and developed distance learning web site for "A Writer's Workshop: Skills for Success"

Developed and composed "Standard Components of Business Documents" outlining departmental writing standards. Collaborated in researching and editing the "Uniform Style Guide" to provide documentation on citing references in written documents.

INTERNAL SERVICE ACTIVITIES

University of Washington, Tacoma

2012	Chair, Faculty Assembly Ad Hoc Task Force
2012	Member, Selection Committee for Director of Keybank PDC
2004-Present	Member, Campus Curriculum Committee
2008-09	Member, Selection Committee for Director of General Education
2009	Chair, Selection Committee for UWT Distinguished Teaching Award
2008	Chair, Selection Committee for UWT Distinguished Teaching Award
2004-2005	Selection Committee for UWT Distinguished Teaching Award
2002-2003	Facilitator, Ad Hoc Strategic Planning Task Force
2003	Founder's Endowment Grant Selection Committee
2002	UWT Distinguished Staff Award Committee
2002	Ad Hoc Committee on Distinguished Teaching Award Process
2000- 2002	Distance Learning Task Force
1998- 2000	Campus Library Committee
1999- Present	Teaching and Learning Roundtable Task Force
1999	Teaching and Learning with Technology Roundtable Committee
1998	Selection Committee for UWT Distinguished Teaching Award

Milgard School of Business, University of Washington, Tacoma

2009 – 2012	Acting Associate Dean
2008 - 2010	Member, Business Leadership Awards Selection Committee
2008 - present	Member, Strategic Planning Steering Committee
2008 - present	Faculty Advisory Committee: Center for Leadership & Social Responsibility
2006-2008	Economics Faculty Search Committee
2006	Member, Undergraduate Curriculum Committee
2002– 2005	Chair, Undergraduate Curriculum Committee
2005-2006	Management Faculty Search Committee
2004- 2006	Business Leader of the Year Selection Committee member

2004-2005	Faculty Advisor, Business Student Ambassadors
2000-2002	Admissions Committee
1999-2000	Library collection development: Represented the Business Program in researching and gathering reference materials to add to the Business Program's collection of printed and video materials available at the Tacoma library.
1998-2000	Accreditation Self-Review Committee: Research and Write Self-review Document for "Instructional Resources and Responsibilities"
1998	Communication Curriculum Development
1997	Strategic Planning Committee

EXTERNAL SERVICE ACTIVITIES

2004 Paper Reviewer, Conflict Management Division, Academy of Management

2001 Paper Reviewer, Conflict Management Division, Academy of Management

2002 Paper Reviewer, Conflict Management Division, Academy of Management

PROFESSIONAL AFFILIATIONS

Northwest Communication Association

HONORS

2011	Milgard School of Business Undergraduate "Most Inspirational Faculty"
2010	Milgard School of Business Undergraduate "Most Inspirational Faculty"
2009	Milgard School of Business "Undergraduate Faculty of the Year"
2006/07	"Distinguished Teaching Award" Recipient
2005/06	Nominated for Distinguished Teaching Award
2001/02	Nominated for Distinguished Teaching Award
2000/01	Nominated for Distinguished Teaching Award
1999/00	Nominated for Distinguished Teaching Award
1988	Graduate Professional and Student Senate
1985	Northwest Addy Award of Merit, Direct Mail Piece, Writer
1985	Idaho Advertising Silver Rockie, Sales Promotion Ad Campaign, Writer
1984	Idaho Advertising Federation Gold Rockie, Best of Sales Promotion, Writer
1984	Phi Kappa Phi

TRACY A. THOMPSON, Ph.D.

University of Washington, Tacoma
Milgard School of Business
1900 Commerce Street, Box 358420
Tacoma, WA 98402-3100
253.692.5636 tracyat@u.washington.edu

EDUCATION

1994	Ph.D. in Organization Behavior J.L. Kellogg Graduate School of Management, Northwestern University Major Field: Organization Theory and Strategy Dissertation: *Business logics in professional organizations: Adaptation in the daily newspaper industry.* Northwestern University, 1994
1991	M.S. in Organization Behavior J.L. Kellogg Graduate School of Management, Northwestern University
1986	B.A. in Sociology with Honors Stanford University

ACADEMIC POSITIONS

2000- present	Associate Professor Milgard School of Business, University of Washington, Tacoma
2008-2009	Visiting Scholar, BI Norwegian School of Management, Strategy & Logistics Department
1994-2000	Assistant Professor Business Administration Program, University of Washington, Tacoma
1992-1994	Lecturer J.L. Kellogg Graduate School of Management, Northwestern University
1990-2001	Academic Affiliate NMC, Evanston, IL

PROFESSIONAL EXPERIENCE

1986 – 1989	Research Assistant: Analysis Group, Inc., Los Angeles, California

EXECUTIVE DEVELOPMENT AND CONSULTING

2010	Executive Management Program, Milgard School of Business (module on Strategic Management)
2009	Stockholm International School (Workshop on Vision, Culture and Change Management)
	Nordic Network (Workshops on Organizational Change and Cross-Cultural Communication)
2008	Strategy and Organization Change Consultant to V.P. of Sales for Dakota Milling Company (formerly Roman Meal Milling Company)
2007-2008	Multicare Health Systems (Leaders' Edge Program – Executive Development Series on Implementing Strategy and Power & Influence: Managing across Boundaries.)
2007-2008	Strategy and Organization Change Consultant to State Farm Pacific Northwest Executive Team
2007	Microsoft India Legal Affairs Team (Executive Development Series on Organization Change)
2006-2007	State Farm Pacific Northwest (Taught Executive Development Series on Implementing Strategy and Organizational Change; Ongoing Strategy Coach to Executive Team)
2004	Active Light, Inc. (Strategic Planning Workshop with Leadership Team)
1997-2001	Adjunct Faculty, NMC, Advanced Executive Program.

SCHOLARLY CONTRIBUTIONS SSIR

THOMPSON, T., Helmke, S., Shanaman, J. *Yes We Can: Circles, Women and Social Change.* Spokane, WA: Berkana Institute.

THOMPSON, T.A., Purdy, J.M. (2009) "When a Good Idea Isn't Good Enough: Curricular Innovation as a Political Process," *Academy of Management Learning and Education*, 8(2): 188-207.

THOMPSON T.A., Purdy, J.M., & Summers, D. (2008) "A Five Factor Framework for Coaching Middle Managers," *Organization Development Journal*, 26(3): 63-71.

THOMPSON, T.A. (2006). "Safety Culture and Communication Study," Totally Kids Employee Newsletter article, February 8, 2006.

THOMPSON, T. A., Rindova V. (2000). *Starbucks International*, Teaching case produced for the Center for International Business Education and Research, University of Washington.

THOMPSON, T. A., Valley, K., & Smith, M. P. (2000). *The range, part A,* Boston, MA: Harvard Business School Publishing (Case: N9-800-245).

THOMPSON, T. A. (2000). *The range, part B*, Boston, MA: Harvard Business School Publishing (Case: N9-800-246).

THOMPSON, T. A. (1999). *How do you know if your newsroom is doing a good job? Measurement in newsrooms.* A Research Report Funded by the Editorial Leadership Initiative, Evanston, IL (Northwestern University): NMC.

THOMPSON, T. A. (1999). *The range, part B*, Evanston, IL (Northwestern University): NMC.

THOMPSON, T. A. & Valley, K. L. (1998). "Changing formal and informal structure to enhance organizational knowledge. In G. Hamel, C.K. Prahalad, H. Thomas and D. O'Neal (eds) *Strategic Flexibility: Managing in a Turbulent Economy*, Chichester, England: John Wiley & Sons, 137-154.

THOMPSON, T. A. (1998, August). "New technology means new skills." *Ideas for Editorial Leadership,* 2(2), 5.

Valley, K. L. & THOMPSON, T. A. (1998). "Sticky ties and bad attitudes: Relational and individual bases of resistance to change." In R. M. Kramer and M. A. Neale (eds) *Power and Influence in Organizations,* Palo Alto, CA: Stanford University Press, 39-66.

THOMPSON, T. A. (1997). "Insight for managers." In G. Graham and T. A. THOMPSON (Eds.) *Inside newsroom teams: An editor's guide to the promise and problems,* Evanston, IL: NMC, 13-22.

Graham, G. & THOMPSON, T. A. (Eds.) (1997). *Inside newsroom teams: An editor's guide to the promise and problems.* Evanston, IL: NMC, ISBN 0-9656018-3-8.

THOMPSON, T. A., Valley, K., & Smith, M. P. (1997). *The range*, Evanston, IL (Northwestern University): NMC.

THOMPSON, T. A. & Davis, G. F. (1997). "The politics of corporate control and the future of shareholder activism in the united states." *Corporate Governance: An International Review*, (5)3: 152-159.

THOMPSON, T. A. & Valley, K. L. (1997). "Enhancing organizational effectiveness: Knowledge creation in teams through task-related and expressive interaction." *Academy of Management Best Paper Proceedings 1997* (Abstract), 618.

THOMPSON, T. A., Purdy, J. M. & Fandt, P. M. (1997). "Building a strong foundation: Using a computer simulation in an introductory management course." *Journal of Management Education*, (21)3: 418-434.

THOMPSON, T. A. (1997). "An international negotiation exercise using electronic mail." *Western Organization and Management Teaching Conference* (Abstract).

Valley, K. L. & THOMPSON, T. A. (1997). "Sticky ties and bad attitudes: Relational and individual bases of resistance to changes in organizational structure." *Harvard Business School Division of Research Working Paper.*

Purdy, J. M., THOMPSON, T. & Fandt, P. M. (1996). "Building a strong foundation: Computer simulations and introductory management." *Academy of Management Best Papers Proceedings 1996* (Abstract), 505.

THOMPSON, T. & Valley, K.L. (1996). "The management of organizational knowledge and corporate restructuring." *16th Annual International Conference Strategic Management Society*, (Abstract), 82.

THOMPSON, T. A. (1995). Business logics in professional organizations: Adaptation in the daily newspaper industry [CD-ROM]. Abstract from : ProQuest File: *Dissertation Abstracts International,* 56(03), 1026. (University Microfilms No. AAT 9521821.)

Davis, G. F. & THOMPSON, T. A. (1994). "A social movement perspective on corporate control." *Administrative Science Quarterly,* 39: 141-173.

Hirsch, P. M. & THOMPSON, T. A. (1994). "The stock market as audience: The impact of public ownership on newspapers." In J. S. Ettema and D. C. Whitney (Eds.) *Audiencemaking,* Thousand Oaks, CA: Sage, 142-158.

THOMPSON, T. A., Lavine, J. M. & Longson, J. (1993). "Business development in changing environments: Examples from the media industries. *Integrating Strategy: The Power of Synthesis Pocket Program, Strategic Management Society 13th Annual International Conference* (Abstract).

THOMPSON, T. & Davis, G. F. (1992). "Collective action and the battle for corporate control: Institutional Investors as a social movement." *Academy of Management Best Papers Proceedings 1992*, 190-194.

SCHOLARLY PRESENTATIONS

THOMPSON, T.A. & Purdy, J.M., (August, 2010) Independent Innovation: Organizations as Vessels for Praxis, International Academy of Management Annual Meeting, Montreal, Canada.

THOMPSON, T.A. & Purdy, J.M. (June 2009) The Genesis of Institutional Change: Organizations as Vessels for Praxis, BI Norwegian School of Management, Strategy & Logistics Departmental Retreat, Oslo, Norway.

THOMPSON, T.A. & Purdy, J.M. (October 2008) When a Good Idea Isn't Good Enough: Curricular Innovation as a Political Process, BI Norwegian School of Management, Strategy & Logistics Department Speaker Series, Oslo, Norway

THOMPSON, T.A. & Purdy, J. M. (April 2008) Middle Manager Agency During Organizational Change, Society for Industrial and Organizational Psychology, San Francisco, CA.

THOMPSON, T.A., Purdy, J.M. and Summers. D. (August 2007) Organizational Change and the Communication Roles of Middle Managers, Academy of Management Annual Meeting, Philadelphia, PA.

THOMPSON, T.A. (December 2006) The Communication Roles of Middle Managers, Invited address at HR Network Meeting, Bellevue, WA.

THOMPSON, T.A. (September 2006) Communication and Safety: A Social Network Approach to Understanding Reliability. Invited address at California State Lands Commission, Safety First Conference, Long Beach, CA.

THOMPSON, T.A. (April 2006) A Social Network Approach to Measuring Reliability. Grouping for Solutions: Increasing Organizational Reliability by Bringing Academicians and Practitioners Together, Ontario, CA.

Purdy, J. M. & THOMPSON, T. A. (August, 2005) The Influence of Local Environments on Institutional Agency. Academy of Management Annual Meeting, Honolulu, HI.

THOMPSON, T.A. (November 2004) Faculty Development in International Business. Northwest International Business Educator's Network Workshop, Seattle, WA.

THOMPSON, T.A. (August 2003) Faculty Careers at "Non-Traditional" Schools. Panelist for OMT Junior Faculty Consortium, International Academy of Management Preconference Workshop, New Orleans, LA.

THOMPSON, T.A. (August 2003) The Pros and Cons of Shareholder Activism and Shareholder Proposals. All Academy Panel Symposium, Seattle, WA.

THOMPSON, T.A. & Purdy, J. (April 2002) Creating a Holistic Capstone Experience for Undergraduate Business Students. OBTC Annual Meeting, Chapman University, Orange, CA

THOMPSON, T.A. (August 2001) OMT Teaching Roundtable -- Assessing OnLine Discussions. Panel discussant at Academy of Management Annual Meeting, Washington, D.C.

Valley, K.L., THOMPSON, T.A. & J. Evans. (August, 2000) Duality in action: A longitudinal study of relationships and attitudes. Academy of Management Annual Meeting, Toronto, Canada.

THOMPSON, T.A. (December, 1999) Creating a global brand: The international expansion of Starbucks Coffee, Institutions, Conflict and Change Workshop, Northwestern University, Evanston, IL

THOMPSON, T.A. (August, 1999) Sharing resources for managing experiential learning. "Team Consulting Projects" Academy of Management Annual Meeting, Chicago, IL.

THOMPSON, T. A. (December, 1998) Shifting craft norms: The use of measurement logic in newsrooms. Institutions, Conflict and Change Research and Professional Development Workshop at the James C. Allen Center, Kellogg Graduate School of Management, Northwestern University, Evanston, IL.

THOMPSON, T. A. (November, 1998) Developing teams through reorganization: The effects of task-related and expressive interaction. 2nd Annual University of British Columbia-Simon Frasier University Human Resource Management Conference, Vancouver, BC.

THOMPSON, T. A. (November, 1997) Does restructuring lead to cultural change? Editorial Leadership Initiative Editors' Forum (NMC Executive Education, Research and Partnerships), Evanston, IL.

THOMPSON, T. A. & Valley, K. L. (August, 1997) Enhancing organizational effectiveness: Knowledge creation through task-related and expressive interaction. Academy of Management Annual Conference. Boston, MA.

THOMPSON, T. A., Purdy, J. M. & Laverty, K. (April, 1997) Building bridges and making a difference at your university. Western Academy of Management, Squaw Valley, CA.

THOMPSON T. A. (March, 1997) An international negotiation exercise using email. Western Organization and Management Teaching Conference, University of San Francisco, CA.

THOMPSON, T. & Valley, K. L. (November, 1996) The management of organizational knowledge and corporate restructuring. 16th Annual International Strategic Management Society Conference, Phoenix, AZ.

Purdy, J. M., THOMPSON, T. A. & Fandt, P. M. (August, 1996) Building a strong foundation: Computer simulations and introductory management. Academy of Management Annual Meeting, Cincinnati, OH.

THOMPSON, T. A. & Valley, K. L. (May, 1996) Transformation to teams: A longitudinal study of social structure and organizational change. Pacific Northwest Management Scholars' Conference, Seattle, WA.

Valley, K. L. & THOMPSON, T. A. (May, 1996) Social influences on formal structure: A longitudinal study of organizational change. Power, Politics and Influence in Organizations conference at Stanford University. Palo Alto, CA.

Valley, K. L. & THOMPSON, T. A. (April, 1996) Social structure and organizational structure: A longitudinal study of change. Society of Industrial and Organizational Psychologists Annual Conference, San Diego, CA.

THOMPSON, T. A. (July, 1995) Shareholder activism and the politics of corporate control in the united states. Hong Kong University of Science and Technology, Hong Kong.

THOMPSON, T.A. (June, 1995) Environmental Change in the Newspaper Industry, invited address to the Senior Editors at the *Tacoma News Tribune*, Tacoma, WA.

THOMPSON, T. A. & Davis, G. F. (August, 1992) The battle for corporate control: Shareholder activism as a social movement, Academy of Management Annual Meeting, Los Vegas, NV.

MANUSCRIPTS UNDER SUBMISSION

THOMPSON, T. "Social Engineering Self Help through Circles." (Under 3rd round of review at *Stanford Social Innovation Review*, last submitted March 28, 2011.)

WORKING PAPERS

THOMPSON, T.A. & Purdy, J.M., "Independent Innovation: Organizations as Vessels for Praxis"

GRANTS AND FUNDING

THOMPSON, T., Shanaman, J. & Helmke, S. (Spring, 2010). Greater Tacoma Community Foundation Women and Girls' Fund. Awarded $7,000 for "Evaluation of the We-Can Circles Project."

THOMPSON, T. (Spring, 2006). UWT Chancellor's Fund for Research and Scholarship. Awarded $3,623 for study entitled, "Effect of an HRO Intervention on Workplace Communication."

THOMPSON, T. (Fall, 2004). Northwest International Business Educators Network (NIBEN). Awarded $1,200 to attend Intercultural Development Inventory workshop.

THOMPSON, T. (Winter, 2000). UWT Arts and Lectures Grant. Awarded $1,640 to plan and run a conference on developing teaching skills at U.W. Tacoma.

THOMPSON, T. (Winter, 1999). NIBEN. Awarded $1,200 to develop a case study on Starbucks Coffee Company's international expansion.

THOMPSON, T. Purdy, J. and Fandt, P. (Winter, 1999). UWT Seed Grant in the Development/Application of Educational Technologies. Awarded $14,781.92 for the development of Educational Technology.

THOMPSON, T. (Summer, 1998). Editorial Leadership Initiative, NMC, Northwestern University. Awarded $6,805 for research on measurement in newsrooms.

THOMPSON, T. (Spring, 1998). University of South Carolina's Center for International Business Education and Research. Awarded $500 towards tuition for Faculty Development Workshop in International Management.

THOMPSON, T. (Spring, 1998). NIBEN. Awarded $2,500 to attend University of South Carolina's Faculty Development in International Business Workshop.

THOMPSON, T. (Winter, 1998). UWT Founders' Endowment Fund. Awarded $3,258 for the development of a conference on teaching held in Spring 1998 University of Washington, Tacoma.

THOMPSON, T. (Summer, 1996). NMC, Northwestern University. Awarded $6,000 for research on strategic change in the newspaper industry.

THOMPSON, T., and Ilinitch, A. (Winter, 1996). Organization, Management Theory Division and Business Policy and Strategy Division. Awarded $1,000 to support the Pacific Northwest Management Scholars' Conference.

THOMPSON, T. (Spring, 1996). NIBEN. Awarded $650 to support the development of a class in International Business.

THOMPSON, T. (Spring, 1996). UW Center for International Business and Education Research (CIBER). Awarded $500 towards tuition for Faculty Development Workshop in International Business.

THOMPSON, T. (Autumn, 1994). UWT Founders Endowment Fund. Awarded $2,000 for the development of a class in International Business.

PROFESSIONAL DEVELOPMENT RELATED TO SCHOLARSHIP

2005 Intercultural Development Inventory Qualifying Seminar, Portland, OR, 2/24-2/27/05.

1996 Business Policy and Strategy Junior Faculty Symposium at the Academy of Management, Cincinnati, OH, 8/9-8/10/96.

1995 Organization and Management Theory/Organization Behavior Junior Faculty Symposium at the Academy of Management meetings, Vancouver, BC, 8/4-8/6/95.

1994-1996 University of Washington Junior Business Faculty Research Colloquium.

SCHOLARLY REVIEWS

1998-2003, 2010 Academy of Management Journal

2010 Academy of Management Learning & Education

2006-2007 Administrative Science Quarterly

2007 Journal of Business Research

2004 Journal of Management Inquiry

2002 Mobilization

2002-2003 (1) Corporate Strategy, Hitt, M., Ireland, R. E. & Hoskisson, R. D., (2) anonymous strategy text proposal, Southwestern Publishers

1999-2000 Corporate Governance: An International Review

1995 Contemporary Business Communication, Boone, L. & Kurtz, D., Simon & Schuster

1995, 2000, 2005 Organization Science

1993 Journal of Management Studies

1992-present Organization and Management Theory Division, Academy of Management

1992-1997 Business Policy and Strategy Division, Academy of Management

TEACHING EXPERIENCE AND CURRICULUM DEVELOPMENT

Graduate

J. L. Kellogg Graduate School of Management

Power and Politics in Organizations (D-53)

BI Norwegian School of Management

Organization Design and Change in a Multinational Context (co-taught) (GRA 8033)

University of Washington, Tacoma

Organizational Change (TBUS 570)

Organizational Strategy (TBUS 506)

Leadership in a Changing World (TBUS 553)

Organizations as Systems (TBUS 501)

Environmental Context of Organizations (TBUS 510)

Undergraduate

BI Norwegian School of Management

Strategy II (EXC 2500)

University of Washington, Tacoma

Creating, Leading and Implementing Change (TMGMT 475)

Strategic Management and Business Policy (TBUS 470; now TBUS 400)

Power and Politics in Organizations (TMGMT 456, TMGMT 490)

International Business (TBGEN 480)

International Management (TMGMT 480)

Effective Managerial Communications (TBUS 310)

SERVICE ACTIVITIES

University of Washington (Tacoma, Seattle, Bothell)

2009-present	Member of Faculty Assembly Executive Council
2009-2010	Member of the Paulsen Lecture Series Committee
2004	Chair, Council on Promotion & Tenure
2001-2003	Member of the UWT International Task Force
2001-2002	Member of search committee for the Technology Institute's Manager of Industrial Partnerships
2001-2002	Member of UWT Development Director Search Committee
2001-2002	Member of the UWT Distinguished Teacher Award Committee
2000-2001	Co-Chair of UWT Vice Chancellor's Search Committee
2000-2001	Review and Approval of Programs Process Committee
2000	Developed and executed "UWT Conversations on Teaching: Teaching & Transformation" workshop at U.W. Tacoma.
1999-2001	Master Plan Facilities Planning Committee
1999-2001	Phase 3 Facilities Planning Committee
1998-1999	Founders' Endowment Award Committee
1998-2001	Building and Facility Use Committee
1998	Panelist for Discussion on Distance Learning
1997-2001	Phase 2a and 2b Facilities Planning Committees
1997-1998	U. W. Tacoma Masters in Social Work Program Search Committee
1997-1998	Developed and executed "Conversations on Teaching" workshop at U.W. Tacoma
1994-2002	Arts & Lectures Committee
1994-1997	Student Affairs Committee
1994-1997	Commencement Committee
1994-1995	U. W. Tacoma Dean's Search Committee

University of Washington, Milgard School of Business

2010-2011	Member, Graduate Committee Member, Faculty Council
2009-2010	Member, Faculty Council Member, Third Year Review for Dr. Alexander Member, Third Year Review for Dr. Norman
2007-2008	Chair, Graduate Committee Chair, Management Faculty Search Committee Member, Faculty Council

2006-2007	Chair, Graduate Committee Member, Third Year Review for Dr. Kimbro Member, Faculty Council Member, Task Force for Milgard Center on Corporate Leadership and Social Responsibility
2005-2006	Chair – Promotion & Tenure Committee for Dr. Chio Member – Faculty Council Chair – Management Search Committee
2005-2006	Member – Promotion & Tenure Committee for Dr. Barsness Member – 3rd Year Review Committee for Dr. Davalos
2003-2004	Member – 3rd Year Review Committees for Dr. Neill
2002-2003	Chair – Promotion & Tenure Committee for Dr. Stackman Chair – 3rd Year Review Committee for Dr. Chio
2001-2002	Chair – Promotion & Tenure Committee for Dr. Stackman Chair – 3rd Year Review Committee for Dr. Barsness & Dr. Mobus
2000-2003	Business Administration MBA Planning Committee
1999-2000	Chair, Business Administration Faculty Search Committee
1998-2001	Faculty Advisor, Global Business Society
1997-1998	Marketing and Management Faculty Search Committee
1997-present	Chair, Strategic Planning Committee
1996-1997	Accounting Search Committee
1996-present	Faculty Advisor, International Business Concentration
1994-1996	Career Workshop Committee
1994-present	Faculty Advisor, Beta Gamma Sigma
Professional	
2000-2008	Member of Executive Committee and OMT Communications Coordinator, Organization Management Theory Division of the Academy of Management
2002-2003	Member, Academy of Management Local Arrangements Committee
2001-present	Member of Executive Board for Northwest International Business Educator's Network
1998-1999	Chair, "Resources for International Business Instructors." 1999 NIBEN Meeting
1996-1998	Western Correspondent, Business Policy and Strategy Division Newsletter
1995-1997	Developed and executed the 1st and 2nd Annual Northwest Management Scholars' Conference
1995	Chair, "Managing the Acquisition Process." Business Policy and Strategic Management Division. Academy of Management
Community	
2011	Organizer, Community Forum on Microfinance in Pierce County
2008	Volunteer, Eastside Baby Corner
1998-2000	Judge, News Tribune Foundation Scholarship
1998	Represented U.W. Tacoma at the Washington Council on International Trade meeting
1996	Presented "Environmental Change in the Newspaper Industry," to the senior editors at the Tacoma News Tribune
1994-1998	Represented UW Tacoma at the World Trade Center Tacoma's World Globe Awards

1994 Presented "Challenges in the 21st Century" with J. Purdy at the Tacoma Business Exposition

PROFESSIONAL AFFILIATIONS

Academy of Management

HONORS

2010 ABCD Award for Reviewing – Organization Management & Theory Division

1997 Beta Gamma Sigma, University of Washington, Tacoma

1994 Outstanding Reviewer Award – Business Policy and Strategy Division

1986 Phi Beta Kappa, Stanford University

1986 Firestone Medal for Excellence in Undergraduate Research, Stanford University

Dr. Jonathan Wilson

(Permanent US resident - National Interest Waiver)

Home : 425 292 0i40
Fax: 425 990 1601
www.major-markets.com

Education

Award	Institution	Dates	Focus
PhD	University of Surrey, UK	1996 - 2000	Strategic Management: Thesis: *An Output Based View of Business Performance*
MPhil	Cranfield University, UK	1987 - 1990	Global Logistics and Supply Chain Management: Thesis: *The role of information systems integration in the development of competitive global supply chains*
MBA	University of Cape Town, SA	1985 - 1986	General Management: Thesis *An Economic Justification for the Privatisation of Atlantis Diesel Engines*
FCMA	Chartered Institute of Management Accountants, UK	1980 - 1983	Management Accounting (Fellow)
APICS	American Production and Inventory Control Society	1984 - 1985	Production and Supply Chain Management
NACVA	National Association of Certified Valuation Analysts	2008	Business valuation

Experience in Academia

Project	Institution	Dates
Adjunct Lecturer	City University of Seattle	2008 – Current Key Deliverables: 1. Teaching Strategic Management to MBA students in Seattle, Beijing and Bulgaria 2. Teaching Operations Management to MBA students in Seattle, Beijing and Bulgaria 3. Rated top visiting lecturer in Beijing out of 54 visiting lecturers 4. Traditional, on-line and hybrid delivery
Visiting Lecturer	University of Washington	2007 – 2007 Key Deliverables: 1. Teaching Corporate Strategy to MBA and final year business students 2. Teaching Advanced Managerial Accounting to MBA students 3. Overall student evaluation 3.8 out of a maximum of 4
International Development Director	Euromed-Marseille, France	2004 - 2007 Key deliverables: 1. Develop English language postgraduate degree portfolio targeting the international market. 2. Increase in full time postgraduate international student numbers at Euromed-Marseille 3. Develop and implement latest international recruitment methods 4. Develop strategic platforms in China, India and Middle East for delivery of executive versions of international postgraduate programmes 5. 30% of revenues to be derived from the international market within 5 years
MBA Director	University of Surrey UK	1995 – 2003 Key deliverables: 1. Academic development of MBA programmes 2. Development of web based learning tools 3. Monitoring of teaching quality 4. Consistency in assessment 5. Chair academic misconduct panel 6. Chair examination board 7. Represent the Business School on various University wide committees 8. Start AACSB accreditation process 9. Hiring of faculty 10. Development of overseas platforms 11. MBA marketing and recruitment 12. Student mentoring 13. Teaching

Subjects taught on Postgraduate Degree Programmes

Corporate Strategy
International Management
Marketing
Marketing of High Technology Products and Services
Marketing Strategy
Quantitative Methods
Operations Management
Management Accounting
Introduction to Financial Management
International Economics

Teaching Institutions

City University of Seattle
University of Washington Business School
Euromed-Marseille Grande Ecole
HEC Paris
ESADE Business School Barcelona
University of Athens Business School
University of Surrey
University of Cranfield
University of Cape Town

Professional Experience

Director	Major Markets LLC	Current Providing valuation and managerial support for attorneys engaged in patent damages litigation. Market research in high technology products and services
Senior consultant	PriceWaterhouseCoopers	1986 - 1995 1. Financial director in the start up phase of British Satellite Broadcasting (BSB) with an initial investment of £222m. £50 million shareholders funds, £172 million negotiated long term loan with a club of banks. Responsible for developing tax efficient structures, business planning and liaison with merchant bankers and corporate lawyers. Purchased two Hughes satellites, MD rocket launchers and the up link ground station. Business sold to BSkyB. Formulated marketing strategy for high tech receivers and programs. 2. Participated in an investigation into a major take-over fraud in the British brewing industry. Implemented integrated financial and costing systems in a manufacturing company 3. Developed integrated manufacturing, costing, financial and scheduling systems for a Daimler Benz licensee company. Achieved major customer service and productivity gains through company wide education, executive commitment, integrated project management and partnership with suppliers and customers. Working Capital reduced from £150 million to £25 million and on time deliveries improved from 65% to 98% 4. Capital mining equipment goods manufacturer Developed integrated management accounts and costing systems Managed warehousing and purchasing operations Responsible for monthly financial reports to US holding company Responsible for tax, audit and information systems. Implemented manufacturing resource planning system (MRPII) with significant productivity improvements 5. For Matsushita introduced new global demand information systems, consolidated logistics in USA from 53 warehouses to 5. Substantial cost savings, (in excess of $100 million) reductions in working capital (in excess of 50%) and improvements in customer service. Lead advisor for acquisition investigations and targeting in the European logistics industry. 6. Market research through advanced profiling of consumer preference structures in the automotive, financial services, pharmaceutical and on-line shopping industries
IT Director	Daimler Benz	1982 - 1986 Developed integrated manufacturing, costing, financial and scheduling systems for a Daimler Benz licensee company. Achieved major customer service and productivity gains through company wide education, executive commitment, integrated project management and partnership with suppliers and customers. Working Capital reduced from £150 million to £25 million and on time deliveries improved from 65% to 98%

Financial Director	Gardner Denver	1978-1982 Capital mining equipment goods manufacturer Developed integrated management accounts and costing systems Managed warehousing and purchasing operations Responsible for monthly financial reports to US holding company Responsible for tax, audit and information systems. Implemented manufacturing resource planning system (MRPII) with significant productivity improvements

Consulting

Privatisation of IDRO	IDRO	1999 – 2003 Privatisation of $1.3bn portfolio of 127 Iranian companies
Advisor on global supply chain strategy formulation and implementation	Matsushita, Osaka	1995 -1999 Introduced new global demand information systems, consolidated logistics in USA from 53 warehouses to 5. Substantial cost savings, (in excess of $100 million) reductions in working capital (in excess of 50%) and improvements in customer service. Lead advisor for acquisition investigations and targeting in the European logistics industry.
Market Research		Profiling consumer preference structures in the automotive, financial services, pharmaceutical and on-line shopping industries

Charities

Chairman	UNIAID	2002 - 2004 National UK charity focused on developing financial responsibility in matters of student funding

2009 Publications

M. Wilson-Jeanselme, J. Wilson (2009), "Is There a Better Way to Determine Fair Value for Innovative Assets?", Business Valuation Update, Vol. 15, No. 6, pp. 1-5, June 2009

M. Wilson-Jeanselme, J. Wilson (2009), "The Simulated Transaction Method - STM", Business Valuation Update, Vol. 15, No7, pp 1-5, July 2009

M. Wilson-Jeanselme, J. Wilson (2009), "Special Report – The Valuation of Innovation – The Simulated Transaction Method", Business Valuation Resources, July 2009

M. Wilson-Jeanselme, J. Wilson (2009), "Future Transactions – Techniques in Wealth Creation", completed Strategy/Marketing text book manuscript.

Appendix D: Form 4 – Required Course Work Part 1

Include this form with new degree program proposals. Staff will post this information and the program proposal on the HECB web site during the public comment period.

PREREQUISITE COURSES		
Course Number	**Course / Background Title**	**Credits**
	Baccalaureate Degree	180
	Total Credits	180

PREREQUISITE COURSES		
Course Number	**Course / Background Title**	**Credits**
TINFO 501*	Principles of Cyber Security	4
TINFO 502*	Information Assurance / Cyber Security and Risk Management in Context	4
TINFO 503*	Designing and Executing Information Assurance and Cyber Security Strategies	4
TINFO 504*	Network and Internet Security	4
TINFO 505*	Building an Information Risk Management Toolkit	4
TMGMT 516	Business Communication	4
TMGMT 512	Business Ethics and Social Responsibility	4
TBUS 506	Strategic Management	4
TBUS 507	Individual and Group Dynamics	4
TBUS 570	Organization Change	4
	Total Credits	40

* Tentative Course Number

Appendix D: Form 5

Enrollment and Graduation Targets Part 1

Include this form with a new degree program proposal or a Notification of Intent to extend an existing program. Staff will post this information to the HECB web site during the comment period.

Year	1 2013	2 2014	3 2015	4 2016	5 2017
Headcount	24	30	40	50	50
FTE	24	30	40	50	50
Program Graduates	21	27	36	45	45

Appendix E: Form 6 Program Personnel Part 2

FACULTY				
Name	**Degree (M.A., M.S., Ph.D., J.D.)**	**Rank**	**Status (full-time / part-time)**	**% Effort in Program**
Bryan Goda	Ph. D.	Acting Professor	Full-time	
Yan Bai	Ph. D.	Assistant Professor	Full-time	
Sam Chung	Ph. D.	Associate Professor	Full-time	
Barbara Endicott-Pokovsky				
Aux. Faculty	Ph.D.		Part-time	
Zoe Barsness	Ph.D.	Associate Professor	Full-time	
Kent Nelson	Ph.D.	Senior Lecturer	Full-time	
Tracy Thompson	Ph.D.	Associate Professor	Full-time	
Jonathan Wilson	Ph.D.	Lecturer	Part-time	

ADMINISTRATION AND STAFF			
Name	Title	Responsibilities	% Effort in Program
Bryan Goda and Milgard School TBD	Co-Directors	Program Direction	.15 FTE
TBD	Program Coordinator	Recruitment and Advisor YR 1-4	.50 FTE
		Recruitment and Advisor YR 4	1.0 FTE
		Total Staff FTE	.65/1.15 FTE

Appendix E: Form 7 Summary of Program Costs and Revenue Part 2

Include with a new program proposal or Notification of Intent to extend an existing program. This information will not be posted to the HECB web site during the public comment period, but it will be available upon request.

PROGRAM EXPENSES					
	Year 1 2013	**Year 2 2014**	**Year 3 2015**	**Year 4 2016**	**Year 5 2017**
Administrative Salaries	N/A	N/A	N/A	N/A	N/A
Faculty Salaries (1.5 FTE) Benefits @ 23.6%	136,000	140,000	145,000	150,000	155,000
Auxiliary Faculty Salaries Benefits @ 25.7%					
TA/RA Salaries	N/A	N/A	N/A	N/A	N/A
Professional Staff Salaries (.5/1.0 FTE) Benefits @ 29.3%	36,000	37,000	38,200	39,300	81,000
Other Salaries	N/A	N/A	N/A	N/A	N/A
Director's Administrative Stipend	N/A	N/A	N/A	N/A	N/A
Financial Aid, specific to the program	N/A	N/A	N/A	N/A	N/A
Contract Services					
Goods and Services (supplies, software, honoraria, course developer fees)	15,000	18,000	22,500	27,000	32,400
Travel	N/A	N/A	N/A	N/A	N/A
Equipment	N/A	N/A	N/A	N/A	N/A
Lease or Acquisition (attach Form iii.a)	N/A	N/A	N/A	N/A	N/A
Indirect (if applied to the Program)	68,130	88,560	122,820	159,670	166,100
Total Costs	255,130	283,560	328,520	375,970	434,500

PROGRAM REVENUE					
	Year 1 2013	**Year 2 2014**	**Year 3 2015**	**Year 4 2016**	**Year 5 2017**
General Fund: State Support	N/A	N/A	N/A	N/A	N/A
Tuition and Fees (total)	451,200	586,500	813,400	1,057,400	1,100,000
Corporate Grants / Donations	N/A	N/A	N/A	N/A	N/A
Internal Reallocation*	N/A	N/A	N/A	N/A	N/A
Other Fund Source (specify)	N/A	N/A	N/A	N/A	N/A
Total Revenue	451,200	586,500	813,400	1,057,400	1,100,000
* If revenues are projected through internal reallocation, please attach an explanation of the impact the reallocation would have on other departments or programs.					

March 1, 2016

Jill Purdy
Interim Dean
University of Washington Tacoma
Milgard School of Business
1900 Commerce Street
Dougan 401
Tacoma WA 98402

Email: jpurdy@uw.edu

Dear Dean Purdy:

It is my pleasure to inform you that the peer review team recommendation to extend accreditation for the undergraduate and master's degree programs in business offered by University of Washington Tacoma is concurred with by the Continuous Improvement Review Committee and ratified by the Board of Directors. Congratulations to you, the faculty, the students, the staff, and all supporters of the Milgard School of Business.

One purpose of peer review is to stimulate further continuous improvement of quality programs. As noted in the team report, University of Washington Tacoma is to be commended on the following strengths, innovations, unique features and effective practices:

- The School of Business has three programs that represent its strengths, unique features, effective practices as well as opportunities. They include the Master of Accounting (MAcc) program that was approved by the Washington Higher Education Coordinating Board in September 2011 and by the University of Washington Board of Regents in October 2011, and launched in autumn 2012. Based on current enrollments as well as student interest in the undergraduate accounting major, accounting represents an area and academic discipline of strategic opportunity for the Milgard School. In addition the Milgard School's Center for Leadership and Social Responsibility provides a high level of activity reflecting the School's engagement and innovation. Finally, The Master in Cybersecurity and Leadership (MCL), offered jointly with the UW Tacoma Institute of Technology, was launched in 2013 to train graduates for positions and of responsibilities in the growth areas of cybersecurity operations.

Additionally, in the interest of continuous improvement, the school should begin to address the following items and be prepared to update the Committee on progress made in the Continuous Improvement Review Application that is discussed below:

1. In 2007, the school engaged in an extensive strategic planning process that resulted in the current strategic plan. Primary groups involved in that planning effort were the Business Advisory Board (members of the business community), Administrative Leadership Team (Dean, Associate, Dean, Directors of Undergraduate and MBA Program and Program Administrator), Undergraduate Committee, Graduate Committee, Faculty Council, and Faculty Advisory Board.

   The School notes: "in 2014, a committee of MSB faculty conducted strategic planning meetings to update the strategic planning process and mission. The planning process was based on an examination of the situational analysis and a strategic assessment of strengths, weaknesses, opportunities, and threats. It resulted in the development of an updated mission and set of strategic initiatives."

   While the groups consulted seem appropriate, it is unclear about the nature of the actual process in seeking stakeholder input or in the completeness of the strategic plan. That process should be more fully defined. Given the listed strategic initiatives, responsibility for coordination, measurement and ongoing

assessment should also be identified. [Standard 1: Mission, Impact, and Innovation and Standard 3: Financial Strategies and Allocation of Resources]

2. Past budget cuts and current funding represent a significant concern. The amount of funding the state of Washington has been providing to universities has rapidly declined in recent years. Additionally, the general economic downturn has had a significant impact on the area. Recently the area has shown signs of recovery. The Schools budget has started to increase over recent years. As part of its strategic plan the Milgard School should address how it intends to manage those budge issues. [Standard 1: Mission, Impact, and Innovation and Standard 3: Financial Strategies and Allocation of Resources]

3. The standards for achieving scholarly academic status (nature and number of intellectual contributions) are in the opinion of the team members "light' and should be reconsidered by investigating comparable peer expectations. The Milgard School should increase its expectations to align with those of its peers. While considering those peers it should include factors such mission and operating budget and operating budget per faculty. [Standard 3: Financial Strategies and Allocation of Resources and Standard 15: Faculty Qualifications and Engagement]

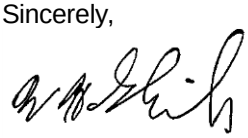
University of Washington Tacoma has achieved accreditation for five additional years. The next on-site continuous improvement review occurs in the fifth year, 2020-2021. A timeline specific to the school's visit year is attached.

Please note that the Continuous Improvement Review Application is due on July 1st, two years prior to the review year. This application initiates the continuous improvement review process. In this application, please provide an update on progress in addressing the concerns stated above in addition to other relevant information for initiation of the next continuous improvement review.

Please refer to the ***Continuous Improvement Review Handbook*** for more information regarding the processes for continuous improvement reviews. The handbook is evolving and will be updated frequently to provide the latest revisions to the CIR process. Continue to monitor the website for the most current version of the handbook.

Again, congratulations from the Accreditation Council and AACSB International - The Association to Advance Collegiate Schools of Business. Thank you for participating in the continuous improvement review process and for providing valuable feedback that is essential to a meaningful and beneficial review.

Sincerely,



William H. Glick, Chair
Board of Directors

cc: Peer Review Team
Gregory C. Mosier, Chair
Carolyn Callahan, Team Member
Michael A. Mazzeo, Team Member

SCOPE OF ACCREDITATION
Continuous Improvement Review January, 2016

Name of Institution: University of Washington Tacoma

Name of Business Academic Unit: Milgard School of Business

List of Degree Programs Reviewed:
Bachelor of Arts in Business Administration
Master of Business Administration
Master in Accountancy
Master in Cyber Security & Leadership

CONTINUOUS IMPROVEMENT REVIEW TIMELINE

2020-2021 Visit Year

The Continuous Improvement Review Process is displayed below as a timeline. This five-year review cycle remains constant throughout the cycle of consecutive review for a school, irrespective of whether a continuous improvement review 2 is required. Therefore, Year 1 represents the academic year immediately following an on-site review, regardless of whether or not an accreditation decision has been made. The next visit will occur in Year 5. The Continuous Improvement Review Committee is responsible for oversight of the Continuous Improvement Review process for review.

Year 1 (July 1, 2016 – June 30, 2017)	Year 2 (July 1, 2017 – June 30, 2018)	Year 3 (July 1, 2018 – June 30, 2019)	Year 4 (July 1, 2019 – June 30, 2020)	Year 5 (July 1, 2020 – June 30, 2021)
• Review and Refine Strategic Management Plan	• Review and Refine Strategic Management Plan	• Review and Refine Strategic Management Plan	• Review and Refine Strategic Management Plan	• Review and Refine Strategic Management Plan
• Complete Key Data and Accreditation Data Sections of the *Business School Questionnaire* for prior academic year	• Complete Key Data and Accreditation Data Sections of the *Business School Questionnaire* for prior academic year	• Complete Key Data and Accreditation Data Sections of the *Business School Questionnaire* for prior academic year	• Complete Key Data and Accreditation Data Sections of the *Business School Questionnaire* for prior academic year	• Complete Key Data and Accreditation Data Sections of the *Business School Questionnaire* for prior academic year
		• July 1, 2018 - Submit CIR Review Application via myAccreditation, which includes preferred visit season, list of degree programs for review, any program exclusions and list of Comparison Groups (Peer, Competitive, and Aspirant). CIR applications will be available in myAccreditation early January of submission year	• Work with AACSB to review proposed Peer Review Team for potential conflicts of interest. See Accreditation Policies & Procedures for Volunteer Deployment and Selection	• Submit Continuous Improvement Review Report via myAccreditation at least 60 days prior to start of visit. CIR Reports will be available in myAccreditation approximately 12-16 months prior to visit date
		• Committee on Accreditation Policy (CAP) rules on exclusions and the scope of the accreditation visit	• Begin communications with the team	• Accreditation Statistical Reports will be distributed to applicant and team members by AACSB at least 60 days prior to visit date upon request only
		• Submit Date and Team Suggestions as Requested		• Work with Peer Review Team Chair to finalize the Visit Schedule
				• Peer Review Team Visit

Master of Cybersecurity and Leadership

Institute of Technology

TMCL 510 Syllabus

Principles of Cybersecurity

Description: This course serves as the introductory course for cyber security students to give students the basics of information security and lay a foundation for taking advanced courses. Introductory concepts of confidentiality, integrity and availability are explored. Risk analysis and risk management is also presented. Threats, including virii and other types of malicious code, hackers, cyber terrorists, spies and information warriors are discussed. Vulnerabilities and countermeasures for both computer systems and networks are explored.

Prerequisites: None.

Student Learning Goals: Upon successful completion of the course, students should be able to:

- Identify and critically assess issues and concepts related to the protection of information and information systems.
- Understand the McCumber Cube and be able to relate and apply its concepts to information assurance policies and procedures.
- Provide a foundation for the many different areas that make up an effective security plan.
- Understand the threats and dangers were are vulnerable to and steps that can be taken to mitigate them.

Program Outcomes: This course supports the achievement of the following program outcomes:

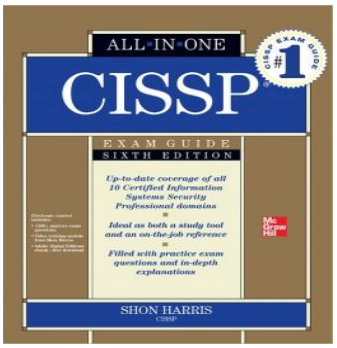
- Identify and critically assess issues and concepts related to the protection of information and information systems. Develop and articulate an organization's strategic direction.
- Assess an organization's security attributes: confidentiality, integrity, and availability. Understand an organization as complex, interdependent systems operating in an ever-changing and uncertain environment.
- Analyze and evaluate proposed or extant information security policies, practices and procedures in order to assess potential advantages and disadvantages that might flow from implementing them. Provide leadership so that confidentiality, integrity and availability can be protected. Insure an environment of threat reduction is maintained in an organization.
- Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems. Perform a risk analysis for an environment. Create a management plan for security in an environment. Analyze and

diagnose complex organizational problems, design effective solutions, and implement change.
- Create policies, strategies and standard operating procedures for securing information and communication systems. Manage people, information, and processes to accomplish organizational goals and objectives.
- Identify and critically assess the social political, economic, and ethical dimensions of IA and CS in an organizational context.

In addition, the course covers a majority of the Information Assurance and Policy (IAS) and Social and Professional Issues (SP) of the Information Technology Body of Knowledge, including but not limited to:

- ITF Pervasive Themes in IT
- IAS Fundamental Aspects, Countermeasures, Operational Issues, Policy, Attack, Vulnerabilities, Threat Analysis
- IM Information Concepts and Fundamentals
- NET Network Management
- SP Legal Issues in Computing, Privacy and Civil Liberties

Textbook: Certified Information Systems Security Professional Exam Guide, 6th Edition, by Shon Harris, 2012, ISBN 9780071781749.



Create policies, strategies and standard operating procedures for securing information and communication systems. Manage people, information, and processes to accomplish organizational goals and objectives.

- Identify and critically assess the social political, economic, and ethical dimensions of IA and CS in an organizational context.

In addition, the course covers a majority of the Information Assurance and Policy (IAS) and Social and Professional Issues (SP) of the Information Technology Body of Knowledge, including but not limited to:

- ITF Pervasive Themes in IT

- IAS Fundamental Aspects, Countermeasures, Operational Issues, Policy, Attack, Vulnerabilities, Threat Analysis
- IM Information Concepts and Fundamentals
- NET Network Management
- SP Legal Issues in Computing, Privacy and Civil Liberties

UWT Student Learning Goals that this course contributes to

- *Inquiry and Critical Thinking*: Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.
- *Civic Engagement*: Students will define their roles and responsibilities as members of a broader community and develop an understanding of how they can contribute to that community for the greater good.
- *Communication/Self-Expression*: Students will gain experience with oral, written, symbolic and artistic forms of communication and the ability to communicate with diverse audiences. They will also have the opportunity to increase their understanding of communication through collaboration with others to solve problems or advance knowledge.

Topics Covered

- Access Control – Security Models, Access Control Administration, Attack Methods
- Telecommunications and Network Security – OSI Model and Layers, Networks, Internet Issues, Virtual Private Networks, Topologies, Attack Methods
- Information Security and Risk Management - Data Classification, Risk Assessment and Management, Personnel Security and Management
- Applications Security – Data Warehousing and Data Mining, Malicious Code
- Business Continuity Planning and Disaster Recovery Planning
- Legal Regulations, Compliance, and Investigation
- Operations and Physical Security
- Cryptography
- Security Architecture and Design
- Software Development Security
- Security Operations

Grading:

Assignment	*Percentage*
Homework	20%
Midterm Exam	30%
Final Exam	40%
Class Participation	10%
Total	100%

Weekly Schedule

Week	Topic	Reading	Assignment(s)	Due
1	Security Trends, Lab overview of Kali Linux, Top 10 security tools	Chapter 2		
2	Access Control Lab Encryption vs Open Communications	Chapter 3	HW1	
3	Security Architecture and Design Lab Sniffing, Firewall	Chapter 4		
4	Physical and Applications Security Lab Layers of Security Patching Midterm	Chapter 5	Midterm	HW1
5	Telecommunications and Network Security Lab: USB Drives	Chapter 6	HW2	
6	Crytography Lab: Faux Security, Webapp	Chapter 7		
7	Business Continuity and Disaster Recovery Lab: Hacking, VOIP, IP Cameras	Chapter 8	HW3	HW2
8	Legal Regulations, Compliance and Investigations Lab: Hash Cracking	Chapter 9		
9	Software Development Security Lab: Forensics	Chapter 10	HW4	HW3
10	Security Operations Review	Chapter 11		HW5
11	Final Exam			

MILGARD
SCHOOL OF BUSINESS

UNIVERSITY OF WASHINGTON, TACOMA

TMCL 520 Business Essentials
Autumn 2014
Syllabus and Course Information

Course Coordinator: Haluk Demirkan	E-mail: haluk@uw.edu
Office: DOU 410	Phone: 253-692-5751 Fax: 253-692-4523
Office Hours:	and by advance appointment
Class Dates/Hours:	Class Location:
Instructions: Sept 24, 2014 – Dec 5, 2014	Final Exams: Dec 6-12, 2014

COURSE DESCRIPTION

News headlines in recent years have demonstrated the importance to the business of an effective approach to information security management by illustrating what can happen in its absence. This course offers an overview of the key concepts, tools, and techniques that are required to succeed in today's challenging business environment. It introduces various essential business aspects such as communication, marketing, accounting, finance, business law and ethics. Through participation in discussions, exercises and assignments, students gain experience in applying their knowledge to business situations and making business decisions. Interpersonal, technical and problem solving skills are emphasized. These essential topics are

The Cyber Security/Business Interface: As the information communication technologies (ICTs) infrastructure and everyday activities of business have become increasingly dependent on information technology, the security of information in many organizations has been perceived as an IT responsibility. But there is a limit to the protection the IT department can offer without a whole-business approach – the best firewall in the world will not prevent an ignorant employee sending critical data out of the organization. Integration of security best practices into leadership and service management best practices processes enables the organization to lower the overall cost of maintaining acceptable security levels, effectively manage risks and reduce overall risk levels. This module starts with explaining the goal and objectives of this course. After briefly explaining some of the information security challenges and opportunities, it provides a brief overview of Information Technology Infrastructure Library's (ITIL) Information Security Model and ISO 27001/2 security best practices.

Business Communication (1): This module is designed to enhance students' understanding of leadership and communication by examining one of the key pillars of personal mastery and communication competence: emotional intelligence. Research has clearly demonstrated the importance of emotional intelligence in personal and professional success, including leadership effectiveness. In this session we will discuss the key skill sets of emotional intelligence, and ways to enhance these skills. Key topics include the underlying concepts of emotional intelligence, stages of development in emotional intelligence, and key skill sets in emotional intelligence related to leadership effectiveness.

Business Communication (2): This module focuses on a second critical skill set related to competence in communication and leadership: strategic flexibility. Specifically, this module explores practical research describing "communication styles" and how they impact the way we interact and relate with others. Communication styles reflect peoples' preferences, tendencies and patterns when interacting with others, including what people say and how they say it. Research has demonstrated a range of specific styles of communication that drive the dynamics and outcomes of interactions and relationships. In this module we will identify and describe these styles, and the ways a person can improve the quality of his/her interactions with others by practicing strategic flexibility in the use of these styles. Topics include the features of the main styles, the strengths and weaknesses corresponding to these styles, and ways to tailor interactions with others to accommodate different styles.

Business Communication (3): This module is designed to help students develop more effective written and oral communication skills that are important for leaders in organizations. Specifically, it provides opportunities for students to develop skills in business writing and presentations. The module will help students understand the factors that are important in developing effective communication strategies, with an emphasis on organizing and presenting information in a professional and strategic manner in both written and oral formats, including various kinds of business documents and public presentations. Topics include document/presentation planning and preparation, strategies for organizing information, rhetorical techniques in business writing, presentation delivery techniques, and use of visual aids in presentations.

Financial Accounting: Financial accounting focuses on the process by which firms report economic information to users outside the firm (e.g., stockholders, potential investors, creditors, regulatory agencies, etc.). This module is designed to acquaint you with the basic concepts of financial accounting. It is an introduction to financial statements and the financial reporting process from a user's perspective. Detailed accounting rules are beyond the scope of this module. Rather we will focus on fundamental concepts with an emphasis on applications and analysis. We will use a corporate annual report to gain familiarity with the important sections that users should turn to. With the knowledge gained in this module, you should be better able to read, interpret, and analyze financial statements.

Managerial Accounting: A tool for decision making and control enormous changes have taken place in the field of management accounting in the past two decades. After a century of relative inactivity, we now see many firms investing considerable resources to revamp their management accounting systems. The emphasis has changed from mechanical preparation of financial reports to generations of information useful for management decision making in competitive environments. This module focuses on how manager may use financial and non-financial information to assist them in making decisions and evaluate performance. Topics such as Cost Structure Analysis, Cost Driver Analysis, Profitability Analysis, Variance Analysis and performance evaluation will be covered.

Marketing: What is Marketing? Marketing is about customer identification, creation, and customer retention (loyalty, satisfaction). It is about creating value for the customer. Marketing is a core business function as without customers, no organization can survive for long. Yes, every organization has customers (including not-for-profits). Marketing involves truly understanding customer needs (market research, competitive intelligence), creating products and services (new product development) that meet the needs of a specific group of customers (market segmentation), more efficiently and effectively (pricing) than competition. It is about communicating (advertising, sales, etc.) and delivering (distribution) value (branding) to the customer. Marketing is about maintaining and growing your business.

Finance Fundamentals: The purpose of the module is to acquaint students with the role finance plays in the economy through its various branches. Students will develop a basic understanding of the functioning of financial markets and what drives the demand and supply of capital. The various financial instruments available in capital markets will be discussed.

Business Law: This module explores the impact of the changing legal environment on managerial decision making and issues that business managers confront to establish appropriate managerial strategies to function effectively and develop compliance guidelines. It utilizes specific tools to access legal resources for proactively recognizing, framing and analyzing opportunities and problems and developing solutions.

Business Intelligence & Analytics: In today's very complex business world, many organizations noticed that the data they own and how they use it can make them different than others to innovate and compete better, and stay in business. Students will learn how to collect, process and transform data into information processes, knowledge, actionable decisions and processes with some of today's most current information management solutions, e.g. business-, mobile-, social-, and cloud-intelligence & analytics.

There are two key objectives of this course: 1) to provide students with an understanding of the business essentials, and 2) to help students to improve creativity, critical thinking, problem solving, technology utilization and team work skills. The course will adapt cooperative learning methodology by incorporating teacher-led instruction, classroom case discussion, hands-on practicing with applied examples, increasing utilization of technology in the classroom, encouraging contact with students outside the class, upholding high expectations, and respecting diverse talents and different ways of learning.

SPECIFIC COURSE OBJECTIVES

Upon completion of this course you should be able to:

- Examine the functions that a company must effectively manage to be successful, such as accounting, finance, marketing, and communications.
- Understand the importance of effective communication
- Identify their own communication style and patterns associated with it
- Understand how to formulate a strategy of communication in written and oral formats
- Build familiarity with information security frameworks/best practices.
- Pay particular attention to the legal environment in which businesses operate and the importance of business ethics and corporate citizenship.
- Describe the different types of regulations regarding to information security
- Learn fundamentals of evidence-based decision-making with data and analytics

COMPETENCY DEVELOPMENT

TMCL 580 contributes to the development of four core competencies in the Milgard School: strategic thinking, quantitative analysis, technology and teamwork. The course is designed to meet these competencies by building your knowledge and skills utilizing: (1) readings and classroom discussions; (2) individual and group-based activities designed to reinforce concepts and skills; and (3) case studies which link the concepts covered in class with actual experience.

WHAT ARE THE PREREQUISITES?

N/A

WHAT ARE THE COURSE MATERIALS?

You must have access to course readings which come from multiple sources:

- Textbook: “Business: A Changing World” Textbook ISBN: 9780078023132; Publisher: McGraw-Hill; Author: O. C. Ferrell, Geoffrey Hirt, Linda Ferrell; Edition: 9th; 2013.
- A Course Pak that will include a set of articles and cases will be available through the UWT Copy Center. This reading packet consists of copyrighted material.
- Some course materials and assignments available on Canvas.
- We will have also several readings through direct links provided in the syllabus, on the CANVAS and via UW Libraries research/article database(s).
- You need to regularly access CANVAS for announcements, overheads, additional proprietary readings and exercises there.
- Please make sure that both the email address you have on file through the UW registrar's office AND the one you use in CANVAS are ones you regularly check. Please let me know if you are not receiving regular emails from me as there may be something wrong with how you've set up your email in either CANVAS or through the UW.

In addition to the course textbook, notes and cases, additional reading materials, sample study questions will be handed out in class, or be available through our course website. Some readings and/or class notes may not be discussed in class; they might be just supplemental materials.

HOW WILL MY PERFORMANCE BE ASSESSED?

Your assessment in this course will have the following components at the weights shown:

	Grading Criteria	Format	Weight (%)
1	Participation/contribution	Individual	20
2	Module Exercises/Assignments/Quizzes	Individual	50
3	Final Project Paper	Individual	30
	Total		**100**

Grading Scale

The final grade will be based on total accumulated points of weighted course components. Attendance and classroom discussion will also be taken into account. The final grades in the course may be based on a curve depending on the distribution. As a consequence you cannot count on your final point total alone to determine your final grade. Assignment of a grade will be based on percentage of points earned versus total possible points. This percentage will then be converted to the 4 point scale.

1. **Attendance, classroom participation/contribution, in-class exercises and peer evaluations**

Attendance is strongly suggested. Any student missing more than two days of class for any reason should discuss attendance with the leader. Some assignment work may be required in order to make up for lost in-class time.

For assessing your class contribution, we will rely on as many relevant 360 degree feedback measures as possible. In addition to the evaluation by the leader, you will often be asked for peer evaluations of group members and evaluations by rest of the class members. Time by time, you will also complete in-class exercises, quizzes and turn in the results of your work. Most of your learning will occur in preparation for and participating in the case discussions, readings and discussion board both online with your cohort and in your personal teams.

2. **Module Exercises/Assignments/Quizzes**

For each module, in-class or out-of-class assignments/exercises and/or short online quizzes containing approximately 10-15 multiple choice questions has been designed as a self-assessment learning tool. The purpose of these assignments is to provide students with a gauge to determine if they have understood key points from each module. Feedback on your performance for each quiz will be given after the quiz deadline has passed. Because the quizzes are an individually graded component, there should be no form of communication regarding the quizzes until the quiz submission deadline has passed. NO extensions for the these items.

3. **Final Project Paper**

This final paper will be a capstone learning experience. No make-up exams will be given.

Assignment Return Policy

The solution methodology that you use should reflect the subjects covered in this course. If you cannot attend class on the day an assignment is due, submit the assignment earlier, ask a friend to submit it for you, or submit it through the course web site.

The solution methodology that you use should reflect the subjects covered in this course. Assignments are to be turned in through the course website (online submission) at the beginning of class on the scheduled date. E-mails will not be accepted. Unless the instructor has granted prior permission, any assignment submitted after the due date will be assessed a penalty of 10% per calendar day. For example, an assignment due on a Friday and submitted the following Monday would have a 30% penalty. No assignments accepted after last day of class.

All written work and class presentations should be of professional quality. Written work should be designed for ease of reading. Written communication is extremely important in today's business and academic world.

Guidelines for Assessing Class Contribution

Grade	Criteria
Excellent (100)	Demonstrates analysis of readings exceptionally well, relating it to other material (e.g., course material, discussions, and experiences). Offers analysis, synthesis, and evaluation of case material, e.g., puts together pieces of the discussion to develop new approaches that take the class forward. Keeps focus, responds thoughtfully to others' comments. Consistent involvement.
Very Good (90)	Shows thorough knowledge of case and readings, has thought through implications. Offers interpretations and analysis of case material. Integrates multiple observations cohesively. Responds to others' points, thinks through own points, questions others in a constructive way, offers suggestions. Ongoing involvement.
Good (80)	Shows knowledge of case and readings. Builds on others' contributions. Shows some evidence of trying to interpret or analyze facts. Uneven involvement.
Satisfactory (70)	Knows facts, issues from the case or readings. Helps move along the discussion in an incremental manner (e.g., facts embedded in the case or reading). Offers viewpoints based on beliefs and opinion more than on analysis. Not much new thought; rephrases, clarifies, underlines importance of earlier comments. Peripheral involvement.
Needs Improvement (60)	Does not demonstrate preparation. Present in class. Not disruptive. Does not offer to contribute to discussion. States straight facts from the case when called on or directly asked.
Poor (50)	If present, demonstrates no preparation. Shows lack of interest or respect for other's contributions.
NA (0)	Absent. If present, engages in disruptive behaviour.

EXPECTATIONS AND POLICIES

My top professional goal is for students to succeed in my courses! Accordingly I will do whatever I can to be available to answer questions, to explain concepts in alternative ways, and to revisit prior material. I will also try hard to make this class interesting. However, it is very possible for you to receive a poor (or failing) grade by ignoring the following suggestions:

1. It is vital that you be proactive about your learning experience in this course by planning for and completing readings, assignments and activities. Please read this syllabus and the assignment descriptions carefully to understand what is expected of you, and to manage your personal resources effectively. An outline of topics, readings and due dates for assignments are provided at the end of this syllabus.

   Detailed descriptions of the course assignments are available on Blackboard under "Assignments." Please read these descriptions carefully. If you have any questions, please let me know in a timely fashion. I have designed this course to minimize "busy work" and rote memorization of materials (there are no exams!) in order to allow you to devote your time and energy to these substantive assignments. Therefore, I urge you to think carefully about the assignments early in the quarter, and to begin working on them in a timely fashion.

2. Portions of class modules will devoted to traditional "lectures" and discussions around concepts, frameworks, and models that may be applied to a real-life situation described in course content.

3. As a manager you will have to contribute to a project both as an individual contributor and as a member of a team. You will also have to think on your feet and participate in discussions where you have to be aware of group dynamics and how to best get an individual or a group to listen to you and accept and act on your recommendations. The ability to cultivate and present your ideas, convincingly

and tactfully, to an audience is an important skill in management. To help cultivate these skills, all students are expected to be fully prepared for each class by completing assignments (reading and writing) and participate actively in class. For each class, you will be required to read one or more articles and/or a case study. As you read, think about the problems and opportunities offered. If the articles (including those from earlier class modules) offer insights to the case, try to see how you can apply them. In order to get the most from this class, you need to identify the major issues brought forth in the cases and come ready to share your views, listen, build upon the discussion, offer alternatives and solutions, reason and justify your stand, and move the thinking forward. Class modules devoted to cases will be very interactive and all students will be provided ample opportunity to participate. The specific questions guiding your case analysis can be broad, nevertheless, make sure that you address the issues raised in the questions. Remember, there are no right answers, but you can always take a stand after proper analysis. For preparing for a case study:

- Read the case and the associated reading material, if any.
- Read the discussion questions and analyze the case in their context.
- Meet with your study group (this is strongly suggested) and discuss the issues.
- Prepare your own notes with possible responses for each discussion question.

4. This course will be scenario based discussion-oriented (case studies, real life examples, etc.) and collaborative in nature, and meaningful class participation is very important. Most of the learning will occur while preparing, exchanging ideas with study groups, and participating in the class discussions. Thus, your class's learning experience depends on the level of responsibility you take for contributing to the discussion. You are judged not by what you know, but by what you contribute. You will not be penalized for comments that do not seem to be "right answers"; in fact, seldom, are there any right answers. Although, taking up an advocating or a challenging position can be discomforting for some; healthy disagreements, discussions, and problem-solving on a real-time basis are day-to-day duties of most managers. The skills needed to contribute to case discussions are the same as those needed to be responsible managers and effective leaders. Your obligation is not just to learn but also to assist in the learning of your classmates. Effective class contribution is characterized by:
   - Ability to listen. (Are you jumping to what "you want to say" without understanding earlier comments?)
   - Relevant contribution to discussion. (Do your comments relate to the comments of others…to the themes that the class is exploring together?)
   - Adding to understanding of the situation. (Are you incisive? Do you cut to the core?)
   - Willingness to challenge ideas respectfully, not contentiously.
   - Integration of material from past classes, readings, cases, etc.
   - Testing new ideas, not being "safe". (Are you analyzing/concluding and not just repeating facts, comments?)
5. Technology Discussions and Experimentation: A few class modules will be devoted to hands-on computer use for exposure to technologies to further the understanding of concepts introduced in lectures.
6. Student Led Presentations/Discussions: Students teams will be asked to make a presentation in front of the class, debate with another group, etc., to provide a deeper understanding of a topic or to illustrate relevance of a topic to real-life situations.
7. In-class Work: Students will be asked to work individually or in groups on topics of the day, problem-solve, generate ideas, write short answers to questions, etc.
8. Hands on Exercises: Portions of a few class modules will be devoted to technologies that underlie BI systems – data warehousing, business process management, performance management, dashboards, cloud computing, social media intelligence, mobile intelligence – including hands-on computer use to further the understanding of concepts introduced in the class.

9. Guest Presentations: Guest speakers may be invited to relate their experiences in the trenches. Please maximize these opportunities by engaging in a discussion with them during and after their presentations. At the same time, treat them with respect; they are volunteering their time and they are our guests.

10. The topics covered in this course are difficult to master without substantial amount of effort. You will need a great deal of time for reading, experimenting and practicing the material. Read the assigned material and complete the assignments. Don't get behind and don't miss class. New concepts build on earlier concepts. Attendance is strongly suggested. If a student must miss a class, he/she is responsible for getting a copy of the assignment from his/her classmates or the class website.

11. The due dates for assignments can be found in two places: (1) the "Course Outline and Schedule" at the end of this syllabus, and (2) at the top of each assignment description as posted on Blackboard. Assignments that are submitted late will be subject to penalty. Specific information regarding the submission of the final research paper and group critique reports will be discussed in class and on Blackboard announcements. The schedule of the in-class group responses will be determined throughout the quarter.

12. I will do my best to create a constructive, productive learning environment. I only ask that you show respect for me and for your fellow students by being prompt, attending class regularly, listening to others without interruption, participating constructively in class discussions and activities, and avoiding unnecessary interruptions, such as leaving the classroom while class is in module. Please do NOT use the group break-out discussions as an opportunity to check e-mail and/or phone messages, or to engage in text messaging or phone conversations, or to take a break from class.

13. **How do we communicate?** I will do my best to be accessible to you and respond to your questions and concerns. The best way to reach me is through e-mail. I check e-mail regularly and try to respond in a timely fashion. The subject line in my emails will start with “TMCL 580”. I will appreciate if you can start your subject with “TMCL 580” for your course related emails. On class days, you may also be able to reach me via my office phone. You should establish an e-mail account and check it regularly for course and program messages. You should also be enrolled for this course on Blackboard, which we will use to share information and discuss course issues and ideas. Please check Blackboard regularly for announcements and posting of course activities and materials. Also, if you wish to meet with me during my office hours, please contact me by e-mail at least a day in advance. If you need to meet with me outside of my office hours, please contact me to set up a day and time. The material on course web sites is intended for class use only. It is not to be copied, transmitted, or reproduced in any form without the written permission of the instructor.

14. **PLEASE NOTE: The Milgard School of Business “Policy on the Appropriate Use of Hand-held and Wireless Technologies”** is in effect for this class. Please read this policy carefully at http://www.tacoma.washington.edu/business/docs/general/policy_handheld_devices_wireless_technology.pdf To summarize this policy: (a) please silence or turn off cell phones during class, and do not use them for text messaging (etc) except during designated class breaks; (b) please do NOT open and/or use laptops during class lectures, discussions and videos. In class I will discuss what constitutes appropriate use of laptops, which includes note-taking during group break-out modules (but NOT during class lectures, discussions or videos), opening and referring to course materials I have posted on Blackboard (in lieu of printing them), and submitting written responses to group break-out activities in the form of an e-mail attachment. Again, I will clarify any questions you may have about this in class, but please do read the policy carefully at the link provided above. Inappropriate use of electronic devices will be subject to penalty of the student’s participation grade.

15. In the event of **inclement weather or emergency situations** that may lead to class cancellation or campus closure, the most efficient ways to receive information are to: (1) check Blackboard and e-mail for an announcement; (2) check the UWT home page. Please do NOT call the main School of

Business number. Again, I strongly urge you to check Blackboard and e-mail prior to class for information that may affect our class module. Call (253) 383-INFO to determine whether campus operations have been suspended.

16. **Counseling Center (Student Health and Wellness - SHAW)**: The Counseling Center offers short-term, problem-focused counseling to UW Tacoma students who may feel overwhelmed by the responsibilities of college, work, family, and relationships. Counselors are available to help students cope with stresses and personal issues that may interfere with their ability to perform in school. The service is provided confidentially and without additional charge to currently enrolled undergraduate and graduate students. To schedule an appointment, please call 692-4522 or stop by the Student Counseling Center (SCC), temporarily located in Cherry Parkes 206. Additional information can also be found by visiting http://www.tacoma.washington.edu/studentaffairs/SHW/scc_about.cfm/

17. **Disability Support Services (Student Health and Wellness - SHAW):** The University of Washington Tacoma is committed to making physical facilities and instructional programs accessible to students with disabilities. Disability Support Services (DSS) functions as the focal point for coordination of services for students with disabilities. In compliance with Title II of the Americans with Disabilities Act, any enrolled student at UW Tacoma who has an appropriately documented physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," is eligible for services from DSS. If you are wondering if you may be eligible for accommodations on our campus, please contact the DSS reception desk at 692-4522, or visit http://www.tacoma.washington.edu/studentaffairs/SHW/dss_about.cfm/

18. **Teaching and Learning Center (TLC):** The Teaching and Learning Center (TLC) offers free academic support for students at all levels. For writing, reading, learning strategies and public speaking needs, please make an appointment online at: http://rich65.com/uwttlc/ or drop by KEY 202 during drop-in hours: 10-11 and 3-4 (M-Th); 10-11 (F). Writing support is also available at our online writing center at: uwtwrite@u.washington.edu More information about our online writing center is available at: http://www.tacoma.washington.edu/tlc/writing/onlinewritingcenter.cfm

    For math, stats and quantitative needs, assistance is available on a drop-in basis in KEY 202. Please check our schedule at: http://www.tacoma.washington.edu/tlc/math/schedule.cfm For special needs, please contact Ingrid Horakova at: horaki@u.washington.edu

19. **Library:** The UWT Library provides resources and services to support students at all levels of expertise. We guide students through the research process, helping them learn how to develop effective research strategies and find and evaluate appropriate resources. For assistance or to schedule an appointment, visit us at the Reference Desk in the Library, email tacref@u.washington.edu or phone 253-692-4442. For more information about the Library and its services, see http://www.tacoma.washington.edu/library/.

20. **Campus Safety Information:** (a) Safety Escorts are available Monday - Thursday 5:00pm - 10:30pm. They can be reached either through the duty officer or by dialing #300 from a campus phone; (b) In case of a fire alarm, take your valuables and leave the building. Plan to return to class once the alarm has stopped. Do not return until you have received an all-clear from somebody "official," the web or email; (c) In case of an earthquake, DROP, COVER, and HOLD. Once the shaking stops, take your valuables and leave the building. Do not plan to return for the rest of the day. Do not return to the building until you have received an all-clear from somebody "official," the web or email.

    For more information, please refer to the Emergency and Safety Plan prepared by the UWT Safety Committee: http://www.tacoma.washington.edu/security/eop/

21. **PLEASE READ THIS CAREFULLY**. Each assignment you complete must be your own original

work. This means that: (a) you alone have produced the work; i.e., it is your own unique contribution. Please note that "borrowing" the work of other students and treating their work as your own is a serious ethical violation that will be subject to penalty. This includes using the work of students from previous quarters as the basis for your own assignments; (b) the work has never been completed as an assignment in another course or for another purpose. If you are uncertain or unclear about fulfilling the letter or spirit of this code, please bring it to my attention. Each student is on his/her honor with respect to this matter. Failure to follow the honor code will result in a failing grade for the assignment.

Please read the UWT plagiarism code below:

"A major part of your experience in the class will be reading, synthesizing, and using the knowledge and ideas of others. It is the responsibility of the faculty to help you in this process and to be certain you learn to credit the work of others upon which you draw. To plagiarize is to appropriate, and to pass off as one's own ideas, writing or works of another. Ignorance of proper documentation procedures is the usual cause of plagiarism. This ignorance does not excuse the act. Students are responsible for learning how and when to document and attribute resources used in preparing a written or oral presentation."

Please also read the Milgard School of Business Student Code of Integrity:

"We, the students of the Milgard School of Business, believe that integrity, honesty and professionalism are integral to our educational experience and our lives. We aspire to hold ourselves and our fellow students to the highest ethical standards and will not engage in activities that are improper or have the appearance of impropriety in our academic lives. We intend to maintain these standards as graduates of UW Tacoma."

22. **E-mail Policy:** Please review the email policy set for student use of email using UW computers and technology. http://www.tacoma.washington.edu/policies_procedures/E-mail_Policy.pdf

23. **Withdrawal:** Students dropping from class have the responsibility of officially withdrawing from the course or face a possible failure grade.

24. **Updates:** Please be aware that the syllabus is tentative. The instructor can make changes on the schedule and the order of subjects covered. If there is any change, the instructor will inform the class through the course website. Therefore, please visit the course website frequently.

25. **Grade disputes on specific assignments, exams etc. are** handled in writing. If you want more information on your grade, or would like to request a regrade of an assignment, please send a brief email message or letter that explains your concerns. The purpose of a written appeal is to allow the instructor to find the student's grade (from among those of numerous current students) and to then consider the appeal on its merits without distraction. Student grade appeals will be reviewed quickly and fairly. Appeals concerning validity of exam/quiz questions or posted answers must be made within 24 hours of exam/quiz administration. Other types of grade appeals must be made within one week of the time your grade is posted. In this memo describe the disputed item, and information explaining your concerns, position, or recommendations.

26. Classroom Conduct At the University of Washington, an instructor has the authority to exclude a student from any class module in which the student is disorderly or disruptive. Please avoid any behavior that distracts you or other students, or interferes with my ability to teach. Activities not related to the course such as texting, Internet or E-mail use, and side conversations are disruptive and are not permitted during class.

Please show respect for the learning environment by:

- Silencing or turning off your cell phone.
- Using your laptop only for class-related activities such as taking notes, reviewing readings, etc.
- Focusing your attention on the class discussion and contributing appropriately. Whispering, interrupting others, and holding side conversations are disruptive to the entire class.

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Tentative Course Outline:

This is a very tentative schedule. More accurate schedules will be shown in class in week segments. You should read the assigned materials before the class we will be discussing the material. The instructors reserve the right, when necessary, to alter the grading policy, change examination dates, and modify the syllabus and course content. Modifications will be announced in class. Students are responsible for the announced changes.

Week	Date	Key Topics	Readings & Assignments – Due Dates	Module Objectives
Week 1		• Introduction & review of the course • Today's issues & opportunities • Security controls in service management	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**The Cyber Security/Business Interface** • Understand the importance of today's cybersecurity issues and opportunities • Learn basic IT Services • Became familiar with the Information Technology Infrastructure Library's (ITIL) Information Security Model
Week 2		• Characteristics of communication competence • Underlying concepts of emotional intelligence, including components of personal mastery related to emotional intelligence • Stages of development in emotional intelligence • Guidelines and practices for using humanistic assertion skills	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Business Communication (1)** • Understand the pillars of communication competence that will improve leadership effectiveness • Understand the critical role of emotions in creating the patterns of outcomes people experience in their interpersonal exchanges and relationships • Understand the key elements and stages of emotional intelligence in order to improve personal mastery and relational effectiveness • Increase their understanding of forms of potentially destructive communication, specifically toxic patterns of relational behavior • Improve their ability to use humanistic assertion skills effectively when dealing with others
Week 3		• Strategic flexibility • Strengths and weaknesses associated with the main communication styles • How to communicate strategically and effectively with the main communication styles • How emotional intelligence intersects with communication styles	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Business Communication (2)** • Identify their own communication style, with corresponding tendencies, preferences and patterns • Understand how to maximize the strengths of their communication style and minimize its downsides • Identify areas for development and improvement in the way they communicate with others • Be able to identify and recognize the various communication styles used by others • Understand strategies for adapting to people who use the various communication styles
Week 4		• Written and oral communication skills • Effective communication strategies • Public presentations	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Business Communication (3)** • Understand how to formulate a strategy of communication in written and oral formats, including rhetorical techniques for delivering information in business documents and presentations

Week 5		• Demand and supply of funds in capital markets • Interest rates • Risk and Return • Derivatives • Exchange Rates	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Financial Accounting** • Who lenders and borrowers are in financial markets and how and equilibrium is reached • Interest rates as the price of money, and drivers of interest rates • Risk, and the tradeoff between risk and return • Risk management and the use of derivative securities • Exchange rates as prices
Week 6		• The basic concepts to understand how managers' actions affect cost. • Information generated for managers and other employees to support decisions that enhance the value of the firm. • The study of performance measurement and evaluation.	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Managerial Accounting** • Understand the concepts and logic underlying the applications of accounting information to management problems. • Learn how to analyze complex business issues using quantitative and qualitative information. • Understand the difference between long run and short run decisions.
Week 7		• Market Segmentation • New Product Marketing • Overview of the marketing process	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Marketing** • Provide an overview of marketing • Understand the 4 P's of marketing • Understand the marketing process using a new product launch case
Week 8		• The role of Capital Markets and Participants in these Markets • Capital Market Instruments • The tradeoff between Risk and Return • Managing Risk • Currencies and Currency Instruments	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Finance Fundamentals** • Distinguish between Lenders, Borrowers, and Intermediaries • Understand the differences between Bonds, Stocks, and Derivative Instruments • Understand the meaning of Asset Classes and Asset Allocation • Distinguish between different types of Risk and their affect on Return • Understand how Derivative Instruments can be used to Manage Risk • Gain an understanding of Exchange Rates and Currency Risk

Week 9		• Intro to the law
		• Contracts, service level agreements
		• Attorney-client
		• Regulations, investigations and compliance
		• Most relevant regulations and compliance
		• Investigations
			Individual Assignments:
			• Read
			• Participation/contribution
			• Module exercise/assignment
				Business Law
				• Learn about law and constitution
				• Distinguish between civil law and common law
				• Overview of personal property law; and employer-employee law
				• Understand the regulations regarding to cybersecurity and leadership, e.g.
				  • HIPAA – Health Insurance Portability and Accountability Act
				  • Computer Fraud and Abuse Act – Title 18 Section 1030
				  • Electronic Communications Privacy Act
				  • Patriot Act of 2001
				  • Gramm-Leach-Biley Act
				  • Sarbanes-Oxley Act of 2002

				• Payment Card Industry Data Security Standards version 2.0 • Family Educational Rights and Privacy Act of 1974 • There are also a number of different Breach Laws which, at present, are only at the state level. Investigations: what constitutes acceptable evidence, understand forensics
Week 10		• Managing information • Principles of information delivery • Introduction to business intelligence &analytics • Business analytics and visualization	Individual Assignments: • Read • Participation/contribution • Module exercise/assignment	**Business Intelligence & Analytics** • Develop an understanding of the value of evidence-based decision-making • Learn fundamentals of database management, and relationship between data, information and knowledge • Understand the directions in which BI is evolving. Which are the cutting-edge practices and solutions (e.g. mobile, social, cloud intelligence) within BI through which competitive advantage can be built? • Understand the BI governance structures (competency centers, decentralized governance, etc.). What are the key success factors about changing people's decision making processes, and cultural change? • Learn the foundations of analytics with different levels of analytics, such as standard reporting, ad hoc reports, OLAP, alerts, statistical analysis, forecasting, predictive modeling and data/text mining.

	July 22	**Final Paper**
		Grades available on MyUW

Master of Cybersecurity and Leadership

Institute of Technology

TMCL 530 Syllabus

Designing and Executing Information Assurance and Cybersecurity Strategies

Description: Examines the concepts, processes, and skills related to risk management in information assurance involving risk assessment, risk analysis, and mitigation planning. Analysis of the risk management process through several structured approaches that facilitate information assurance decision-making. This course builds on the foundations established in TMCL 510 and TMCL 520, which covered organizational information assurance. This course applies principals from earlier courses in this series to examine real world case studies in Information Assurance. Choices must be made about how to invest in security, where and when. This course examines methods and techniques for applying industry methodology to problems in information assurance. Mastering this material will make the IA professional a better executive.

Prerequisites: A minimum grade of 2.7 in TMCL 510, Principles of Cybersecurity.

Student Learning Goals: Upon successful completion of the course, students should be able to:

- Understand the nature of security risk in a business and an IT context
- Compare and apply several models for security risk assessment
- Facilitate a risk assessment process and gain consensus on risk-based decisions
- Incorporate risk assessment into an IT security plan
- Determine best practices concerning how to invest in security, where and when
- Be able to apply industry methodology to problems in information assurance

Program Outcomes: This course supports the following MCL program outcomes:

- Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems.
- Analyze and evaluate proposed or extant risk management policies, practices, procedures and technologies in order to assess potential advantages and disadvantages that might flow from implementing them.
- Be able to discuss the historical, philosophical and emerging trends in risk assessment methodology and the parallel contributions to security and the control of information environments.

Body of Knowledge: The course covers the areas of Information Assurance and Policy (IAS) and Social and Professional Issues (SP) of the Information Technology Body of Knowledge, including but not limited to:

- IAS Operational Issues, Policy, Security Domains, Threat Analysis Model, Vulnerabilities

- MS Sampling and Descriptive Statistics, Application of Math and Statistics to IT
- SP Professional Communications, Teamwork Concepts and Issues, Social Context of Computing, Legal Issues in Computing, Organizational Context, Professional and Ethical Issues and Responsibilities

UWT Student Learning Goals that this course contributes to

- *Inquiry and Critical Thinking*: Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.
- *Civic Engagement*: Students will define their roles and responsibilities as members of a broader community and develop an understanding of how they can contribute to that community for the greater good.
- *Communication/Self-Expression*: Students will gain experience with oral, written, symbolic and artistic forms of communication and the ability to communicate with diverse audiences. They will also have the opportunity to increase their understanding of communication through collaboration with others to solve problems or advance knowledge.

Textbook:

Gibson, D. (2011). Managing risk in information systems. Sudbury, MA: Jones & Bartlett Learning. ISBN: 978-0763791872

Laboratory Manual Version **1.5** To Accompany Managing Risk In Information Systems Paperback – June 10, 2013. ISBN: **978-1284037593**

Harris, S. (2013). CISSP All-in-One Exam Guide, Sixth Edition. McGraw-Hill/Osborne. ISBN: **978-0071781749**

Recommended:

Hubbard, Douglas W. (2009). The Failure of Risk Management: Why It's Broken and How to Fix It . Hoboken, NJ: John Wiley and Sons. ISBN 978-0-470-38795-5 (also available in a Kindle version)

Hubbard, Douglas W. (2010). *How to Measure Anything: Finding the Value of Intangibles in Business*. Hoboken, NJ: John Wiley and Sons. ISBN 978-0-470-53939-2

Topics Covered

1. Developing and maintaining risk assessments (RA)
2. Developing and maintaining risk management plans (RM)
3. Regulatory and legal compliance issues affecting risk plans
4. Developing a control framework for mitigating risks; risk transfer
5. Business continuity and disaster recovery planning from the information security perspective.

This course looks at information assurance risk management in context and is designed for managers, and those interested in management, who are charged with responsibility for making decisions about the security of information systems. Since there is no 100% secure system and since there are no unlimited budgets to spend on securing systems, choices must be made about how to invest in security--

where and when. Mastering this material will make the information assurance (IA) professional a better leader in their organization.

In this course, you will explore several structured, risk management approaches that guide information security decision-making. Course topics include: developing and maintaining risk assessments (RA); developing and maintaining risk management plans (RM); regulatory and legal compliance issues affecting risk plans; developing a control framework for mitigating risks; risk transfer; business continuity and disaster recovery planning from the information security perspective. Students will conduct risk analysis/risk management on real-world risk management projects.

The course is designed to meet the education and training standards described in the Committee on National Security Systems (CNSS, http://www.cnss.gov/) 4012 & 4016.

We prepare you to manage information security within an organizational context. This course provides you with a set of risk management tools for decision-making in the information security arena. Since there are no 100% secure systems, trade-offs are made constantly between acceptable levels of risk and security.

Activity-based/Project-based learning and real world cases are emphasized. The breadth and depth of the security experts brought into the classroom as guest lecturers ensures that students are kept current with the latest advances in the field and are exposed to a network of local security professionals who can aid them in career advancement. Students are encouraged to transfer learning, where appropriate, to the workplace.

Assignments for the Course

In-Class Quizzes: There will be 8 in-class multiple choice quizzes. These quizzes will cover the material for the week, including the assigned reading(s). These quizzes are individual closed-book and closed-note efforts.

Labs: There will be 10 written labs, 1 each week. You will be asked to apply the knowledge you have acquired from that week to a scenario, set of tasks, etc. They will be due the Sunday following Thursday's class.

Individual Assignments: There are 5 individual assignments in addition to the labs and quizzes. They will provide you with an opportunity to work on a specific problem so that you may better understand the concepts of this course.

Team Project: You will self-select teams of 3-4 individuals. The course long project will result in a complete risk management plan for a specific scenario that you will be given. It is important that you involve yourself in each deliverable so that you have a solid foundation for applying the knowledge and skills you will acquire in this project to an actual organization once you enter the workforce.

Midterm and Final: There will be a comprehensive midterm during Week 5 and final during Week 10. Each exam will consist of approximately 120 questions multiple choice questions.

Assignment	*Week(s)*	*Points*	*Percentage*
In-Class Quizzes (8 total)	**1-4; 6-9**	**200**	**20%**
Labs (10 total; 20 points each)	**1-10** (Sun.)	**200**	**20%**
Individual Assignments		**200**	**20%**
Assignment 1: PCI DSS and the Seven Domains	1 (Tues.)	40	4%
Assignment 2: Application of Risk Management Techniques	2 (Tues.)	40	4%
Assignment 3: Risk Management Process	3 (Tues.)	40	4%
Assignment 4: Risk Assessment Approaches	4 (Tues.)	40	4%
Assignment 5: Risk Assessment and Risk Mitigation Control	5 (Tues.)	40	4%
Team Project Deliverables		**200**	**20%**
Deliverable 1: Project Part 1 Task 1: Risk Management Plan	3 (Fri.)	15	1.5%
Deliverable 2: Project Part 1 Task 2: Risk Assessment Plan	5 (Fri.)	15	1.5%
Deliverable 3: Project Part 1 Task 3: Risk Mitigation Plan	6 (Fri.)	15	1.5%
Deliverable 4: Project Part 2 Task 1: Introduction and Business Impact Analysis Plan	7 (Fri.)	15	1.5%
Deliverable 5: Project Part 2 Task 2: Business Continuity Plan	8 (Fri.)	15	1.5%
Deliverable 6: Project Part 2 Task 3: Disaster Recovery Plan	9 (Fri.)	15	1.5%
Deliverable 7: Risk Management Plan Presentation	10	30	3%
Deliverable 8: Project Part 2 Task 4: Computer Incident Response Team Plan	10 (Fri.)	15	1.5%
Deliverable 9: Risk Management Plan Final Submission	10 (Fri.)	15	1.5%
Deliverable 10: Project Peer Evaluations	11 (Tues.)	50	5%
Comprehensive Exams		**200**	**20%**
Midterm	5	100	10%
Final	10	100	10%
TOTAL		**1000**	**100%**

Weekly Schedule

Week	Topic	Reading	Assignment(s)	Due
1	Risk Management Fundamentals, Compliance Laws, Standards, and Best Practices	Chapters 1 & 3	A1 L1 Q1	Q1
2	Risk Management Planning	Chapters 2 & 4	A2 L2 Q2 TP1	A1 L1 Q2
3	Concepts of Risk Assessment	Chapters 5 & 6	A3 L3 Q3	A2 L2 Q3 TP1
4	Key Components of Risk Assessment	Chapters 7, 8, & 9	A4 L4 Q4 TP2	A3 L3 Q4
5	Strategies for Mitigating Risk	Chapters 10 & 11	A5 L5 TP3 MIDTERM	A4 L4 TP2 MIDTERM
6	Business Impact Analysis	Chapter 12	Q5 TP4	A5 L5 Q5 TP3
7	Business Continuity Planning	Chapter 13	Q6 TP5	Q6 TP4
8	Disaster Recovery Planning	Chapter 14	Q7 TP6	Q7 TP5
9	Structuring Computer Incident Response Team and Plan	Chapter 15	Q8 TP7, TP8, TP9	Q8 TP6
10	Course Review, Final Examination, and Team Presentations		TP10 FINAL EXAM	TP7, TP8, TP9 FINAL EXAM
11				TP10

TMCL 540 – LEADSHIP AND TEAM DYNAMICS
Spring 2015

Instructor:	Dr. Zoe Barsness	Phone:	253.692.5884
Office:	Dougan 418	Email:	zib@uw.edu
Office Hours:	Tu/W 3:30 – 5:00pm or by appointment	Classroom:	XXX

COURSE DESCRIPTION

The purpose of this course is to enhance your leadership and management skills. The course focuses on conceptual training and practice designed to hone your ability to analyse and diagnose individual, group and network dynamics, evaluate the influence of organization structures and processes on each of these, determine your strategic and tactical options as a manager and engage in managerial action that enhances individual, team, and organizational performance. The course focuses in particular on developing your critical thinking, communication, collaboration and leadership skills.

COURSE OBJECTIVES

Successful cyber leaders manage diverse people, information, and processes in order to bring together the resources necessary to address complex, often unfamiliar and sometimes controversial challenges. You are often required to communicate complex technical matters in a manner that other organization members can understand. You must also understand how to introduce your own skills and abilities into your teams and organizations without undermining others' ability or willingness to contribute. To execute these goals successfully, cyber leaders must be able to make sound decisions, influence and motivate others, develop diverse networks and relationships within and outside the organization, build and optimize cross-functional teams, manage conflict, set direction, and shape the organization's culture. However smart and capable you may be, however impressive your technical expertise, your success as a cyber-leader greatly depends on your ability to influence and engage others in the pursuit of collective goals, secure resources for your team, and align your team's technical efforts with the organization's broader mission and competitive strategy.

Our specific learning objectives in this course are to:

- Sharpen your understanding of the conditions that foster individual, team and organizational effectiveness and the disruptive forces that can derail them;
- Strengthen your ability to diagnose complex interpersonal and team dynamics and take concrete action to improve individual, team and organizational performance;
- Develop the communication, interpersonal and managerial skills you will need to lead individuals and teams successfully across a variety of organizational settings.
- Enhance your understanding of the importance of informal relationships and how to leverage diverse networks to accomplish organizational objectives, as well as your own professional goals.
- Cultivate a sense of professional and social responsibility in the conduct of managerial affairs

This course maps onto the following objectives of the MCL Program:

- Manage and motivate individuals and teams in order to enhance individual, group and organizational performance.
- Recognize ethical dilemmas and social responsibilities.
- Formulate and implement strategy and effectively manage change.

COURSE FORMAT

Each day we will focus on a particular set of managerial challenges and leadership skills. Our goal will be to distinguish between effective and ineffective strategies. The readings and other preparation materials on Canvas are provided to give theoretical grounding for each day's discussion. Case studies, video clips, and experiential exercises provide opportunities to apply theories, concepts, and research findings to particular situations and to hone your skills in problem definition, diagnosis, solution identification and implementation. Written assignments provide an opportunity to consolidate your insights and develop your analytic and communication skills further.

REQUIRED MATERIALS:

Course Packet: A course packet containing the required cases and other readings is available for purchase from the UWT copy center. The cost of the course pack includes the licensing fees and photocopying costs (where applicable) for all exercises and cases distributed in class as well as the materials provided in the course packet itself. **Purchase is required**. The copy center is located on the ground level of the Mattress Factory building in suite 053. Further references to the course packet in the class schedule are abbreviated CP.

Electronic Reserves: Several of the required and other supplementary readings are available through electronic reserves at the UWT library. Further references to electronic reserves are abbreviated ER. You can access these remotely through the UWT library website.

Digital Library Many of the required and supplementary readings are available electronically through the UWT library's Business Source Complete electronic database (EBSCO) or other electronic databases for no additional charge to you. (You've paid for your individual access to these materials through your tuition and library fees.) You are responsible for retrieving these articles yourself. Further references to articles available through UWT's digital library resources are abbreviated EBSCO. It is often easiest to use the library's "electronic journal" search feature to find access to the particular journal for which you are looking. You'll then want to search within that publication for the particular author or article you seek.

Email Account: E-mail account that you access regularly. You will be registered on Canvas using your UW email address. Course announcements will be disseminated via the Canvas interface. Please make sure to check your UW email account regularly.

Canvas: Students will be enrolled on the course website on Canvas. The Canvas site for the course includes several required readings for class as well as information about the experiential exercises (e.g., your role assignments, confidential role materials), lecture notes and other class information. References in the course schedule to articles provided via electronic reserves are followed by (CAN).

EVALUATION AND GRADING

Your final grade is composed of:

- Class Discussion Contribution 25%
- Exercise Preparation and Participation 10%
- Reflection Papers (2 @ 15% each) 30%
- Top Leadership Group Case Analysis 35%

Evaluation of Written Work

The following criteria will be used to evaluate your written work. Excellent (A) papers and written assignments will satisfy all of the following criteria:

- Your paper addresses all of the issues and questions posed in the assignment.
- Your paper demonstrates your mastery of course concepts. It reveals a clear understanding of the analytical framework(s) or theory (theories) at hand and how they can be applied to real situations. You've drawn upon the relevant readings, class discussions, and your own experience, and you've moved beyond the simple application of course material to generate sophisticated insights.
- Your paper is a well written piece of work. It is coherent and organized, there are no spelling and grammatical errors, and it uses APA (American Psychological Association) formatting (or an equivalent format) for references.

Class Discussion Contribution (25%):

All class sessions involve active discussion based on the readings, cases, video clips, and exercises with an emphasis both on theoretical questions and practical implications. Your contribution to the course not only reflects what you do in the class, but also the work you do outside of the class preparing for our case discussions and experiential exercises. You should come to class prepared to summarize key points from the day's readings. As you complete each reading, ask yourself:

- What is the basic argument the author makes?

- What are the key concepts/principles presented?
- So what? How does this matter for an individual, a team, or an organization?
- What are the implications for the kinds of challenges I face as a leader? My professional behavior and success?
- How can I apply this to my organization, my team, my job, and my career?
- How can I critique the arguments being made?

You should be prepared to share your ideas, reactions to the theoretical readings, and in-class cases, video clips and exercises with your classmates. You should also demonstrate a willingness to listen to, interpret, and respond to the issues presented in class by others.

As is the case with real world work environments, you will be judged not by what you know but by what you **contribute**. One necessary skill for managers at any organizational level is to articulate effectively the methods and results of business analysis; a second is to convince others of recommendations based on such analysis. Active class participation is an invaluable opportunity to acquire these skills, and is also an essential part of the learning experience in this course. By failing to attend and take an active role in class discussions, you lose a major incentive to prepare your analysis with the thoroughness that leads to real understanding, and you forego the opportunity to develop communication skills. Additionally, because your contributions to the class shape our learning community, your own learning, and the learning of your peers will be significantly reduced when you are absent or are not actively participating.

In this spirit, please carefully review the readings and case or simulation materials for every class session. Although most participation will be voluntary, in order to insure that everyone has the opportunity to be involved, individuals will occasionally be called upon "cold." Since every student is an important cog in the class discussion, it is equally important that each of us listens carefully to one another and attempts to build on or constructively critique prior comments. Please resist the temptation to jump to topics that are not specifically open for discussion.

Some of the specific things that will have an impact on effective class participation and on which you will be evaluated include:

- Is the participant a good listener?
- Are the points made relevant to the discussion? Are they linked to the comments of others and to the themes that the class is exploring together?
- Do the comments add to our understanding of the situation? Are they incisive? Do they cut to the core of the problem? Is the participant's analysis careful and insightful?
- Is there a willingness to challenge the ideas that are being expressed?
- Is there a willingness to test new ideas, or are all comments "safe"? (For example, repetition of case facts without analysis or conclusions, or repeating comments that have already been made by someone else.)
- Does the participant integrate material from past classes (or personal experience) and apply the theory and concepts offered in the readings where appropriate? Do the comments reflect cumulative learning over the course and the curriculum, or does the participant merely consider each case or exercise in isolation?

Bottom line*:* To achieve a high course contribution grade, you must participate in all class exercises and actively participate in class discussion, providing high quality comments throughout the course.

Consideration for Classmates: If you miss a class, it is your responsibility to find out from your classmates what material was covered, what additional assignments were made, and what handouts you may have missed. Always let me know as early as possible (preferably at least 24 hours in advance) if you will miss a class session. This will enable me to make arrangements for any in-class exercises to be certain that your classmates do not suffer from your absence. This advance notice will also allow us to make arrangements to ensure that you get all of the materials distributed in during that class period.

If you are familiar with a case or an exercise utilized in class, please do not discuss your prior knowledge with other students as this can ruin the learning experience for them. If you are concerned that your prior experience with a case might be an issue, please let me know prior to class.

Exercise Preparation Assignments and Exercise Participation (10%)
Each student is responsible for completing several preparation assignments during the term and participating in each of the experiential exercises in class. Due dates for each of these preparation assignments are indicated in the course

schedule. Dates for each of the experiential exercises are also indicated in the course schedule. Grades on preparation assignments and exercise participation will be either "Complete" or "Incomplete".

Reflection Papers (30%)
A key part of the learning process in this course is to take the lessons you are learning and apply them to real business situations. This will help to ensure that you are prepared to apply these lessons within your own professional career. In order to facilitate this, you will be asked to complete two reflection papers each focusing on one or two particular levers that a leader can use to achieve success. Each of these papers will be completed individually and each is worth 15% of your overall course grade. These brief written assignments (2-3 pages each) will challenge you to use the concepts presented in the course to analyze a business case. More detailed information about each of these assignments is provided on Canvas.

Top Leadership Case Analysis (35%)
Your own career success will depend at least in part on how effectively you manage yourself, your teams, and your professional relationships. Your professional relationships in particular will give you access to information, skills, and expertise and will help to determine your power, control, and opportunities. This project provides an opportunity to spend some time reaching a deeper understanding of how the social relationships of successful leaders are developed, managed, and executed to get things done and the particular challenges that cyber leaders face leading teams and coordinating with the broader organization.

To complete this assignment you will form a 3-5 person project team. Each project team is required to interview at least two senior cyber executives regarding their experiences leading teams, developing professional relationships, and managing their own careers. Your team can choose to interview more leaders, but at least two executives must be interviewed. These executives can be from organizations you previously worked for, from organizations you would like to work for, or from organizations that simply interest you. If you need assistance in locating executives to interview, please let me know.

Anticipate having to interview each leader at least once to gain an understanding of his or her situation, the nature of his or her network, how this network is managed, and how he or she uses this network to tackle the organizational challenges discussed in class (focusing in particular on the challenges associated with leading and managing individuals and teams). Following these interviews, your team will write an analysis of two (or more) executives' networks. In this analysis, you will compare and contrast the executives' approaches to meeting the management and leadership challenges they face. The names of the executives will be kept strictly confidential; you may use an alias when discussing your interviewees in your analysis if you feel this is appropriate.

Detailed information on this assignment is available on Canvas. As a part of the team assignment, you will be asked to evaluate the performance of all of the members of your team, including yourself. The evaluation form is available on Canvas. Your peer evaluations will be factored into your top leadership case analysis grade. ***Your completed case analysis and individual team member evaluation forms are due at the beginning of scheduled exam time. Both the top leadership case analysis and team member evaluation forms should be submitted electronically to zib@uw.edu.***

COURSE POLICIES

Classroom Conduct
At the University of Washington, an instructor has the authority to exclude a student from any class session in which the student is disorderly or disruptive. Please avoid any behavior that distracts you or other students, or interferes with my ability to teach. *Activities not related to the course such as texting, Internet or E-mail use, and side conversations are disruptive and are not permitted during class.* The inappropriate use of any electronic devices during class activities such as an experiential exercise, quiz or exam will result in a score of zero on that in-class exercise, quiz or exam.

Please show respect for the learning environment by:

- Silencing or turning off your cell phone.
- Using your laptop only for class-related activities such as taking notes, reviewing readings, etc.
- Focusing your attention on the class discussion and contributing appropriately. Whispering, interrupting others, and holding side conversations are disruptive to the entire class.

Course Honor Code
This course requires that you uphold the following honor code standards:

- You are expected to be prepared for all simulations, exercises, and case discussions.
- You may not show your confidential role instructions to any other of your assigned team members, though you are free to tell other team members whatever you would like about your confidential information.
- Do not discuss exercises or borrow/share notes with people not enrolled in the class. Please allow other students taking the course in other years to enjoy the same opportunities to learn as you.
- You are encouraged to discuss course readings and lecture material with one another. However, *discussion of ideas for written assignments is not allowed*, unless you have explicit instructions from me indicating otherwise. *Every assignment must be an original piece of work you have written and created solely for this class*.
- You are expected to uphold standards of academic honesty and integrity. Failure to do so (i.e., plagiarism, cheating, etc.) may result in failure of the course (see section on Academic Standards).

Late Papers
Written papers are to be turned in at beginning of the class or at the time indicated in the schedule. Late papers will be penalized. A penalty of 2.5 on a scale of 1-100 (or a 0.25 deduction on the UW 4.0 grade scale) will be applied for each hour past the deadline. This policy maintains fairness by ensuring all students have the same amount of time to demonstrate their learning on an assignment. Exceptions to this policy include those who have made prior arrangements due to a documented disability, a medical issue or another kind of extreme extenuating circumstance. If you have having a problem (sickness or otherwise) that might prevent you from completing an assignment on time, please email me *before the assignment is due* to let me know what is going on. Advance notice always helps me in my deliberation.

Late Preparation Assignments and Missed Participation
Exercise preparation assignments are to be turned in at beginning of the class or at the time indicated in the schedule. Late exercise preparation submissions will **NOT** be accepted and will receive an incomplete grade. Make-up assignments for missed work (i.e., exercise preparation assignments and course contribution) are **NOT** provided. Absentees can earn back some of any missed class discussion contribution credit, by contributing back to the learning community in some way. For example, you might write an email to the class or make a brief presentation during the next class period that applies the readings or topic of missed class session to something in your own workplace or current events. Other creative ideas for contributing to the learning community are also welcomed and encouraged. Feel free to discuss these ideas with me if you are pursuing this opportunity.

Incomplete
An Incomplete is given only when the student has been in attendance and has done satisfactory work until within two weeks of the end of the quarter and has furnished proof satisfactory to the instructor that the work cannot be completed because of illness or other circumstances beyond the student's control. A written statement of the reason for the giving of the Incomplete, listing the work which the student will need to do to remove it, must be filed by the instructor with the head of the department or the dean of the college in which the course is given. For more information, please see: http://www.washington.edu/students/gencat/front/Grading_Sys.html#I

ACADEMIC STANDARDS
Students in this course are asked to abide by the business school's integrity code:

> We the students of the Milgard School of Business believe that integrity and honesty are integral to our educational experience and our lives. We aspire to hold ourselves and our fellow students to the highest ethical standards and will not engage in activities that are improper or have the appearance of impropriety in our academic lives. We intend to maintain these standards as graduates of UW Tacoma." (More information on this can be found at: http://www.tacoma.uw.edu/clsr/student-integrity-code (*December 2009)*

In addition to living by the Milgard Business Student Integrity Code, I also expect you to abide by the academic standards as published in the UWT Catalog.

A major part of your experience in the class will be reading, synthesizing, and using the knowledge and ideas of others. To plagiarize is to appropriate and to pass off, as one's own ideas, writing or works of another. Plagiarism is no less of a misconduct violation than vandalism or assault. Ignorance of proper documentation procedures is the usual cause of plagiarism. This ignorance does not excuse the act. You are responsible for learning how and when to document and attribute resources used in preparing a written or oral presentation (e.g. how to use APA or another

consistent referencing system). If any ambiguity or uncertainty arises, or if there is any question about whether you or anyone else is fulfilling the letter or spirit of Milgard Student Code of Ethics and the UWT's Academic Standards, please bring it to my attention. A violation of academic standards in this course means you will not receive credit for the assignment and will be subject to disciplinary action. I will be using a plagiarism checker for written assignments in this class.

For more information, please refer to the Academic Honesty: Cheating and Plagiarism document prepared by the Committee on Academic Conduct in the College of Arts and Sciences, UW Seattle: http://depts.washington.edu/grading/issue1/honesty.htm and to the UW Student Conduct Code. You are reminded that "as a student of the University of Washington, you are expected to not only hold yourself accountable, but to hold others accountable to the Student Conduct Code. If you believe another student violated the Student Conduct Code, please complete the Incident Form to document the situation and formally report the incident." A copy is located at: http://www.tacoma.washington.edu/studentaffairs/SS/conduct_students.cfm.

CAMPUS SAFETY

- Escort Service - Safety Escorts are available Monday - Thursday 6:00am - 11:00pm. They can be reached either through the duty officer or by dialing 253-692-4416.

- In case of a fire alarm - Take your valuables and leave the building. Plan to return to class once the alarm has stopped. Do not return until you have received an all-clear from somebody "official," the web or email.

- In case of an earthquake - DROP, COVER, and HOLD. Once the shaking stops, take your valuables and leave the building. Do not plan to return for the rest of the day. Do not return to the building until you have received an all-clear from somebody "official," the web or email.

For more information, please refer to the Emergency and Safety Plan prepared by the UWT Safety Committee: http://www.tacoma.washington.edu/security/eop/

COUNSELING CENTER (Student Health and Wellness - SHAW)

The Counseling Center offers short-term, problem-focused counseling to UWT students who may feel overwhelmed by the responsibilities of college, work, family, and relationships. Counselors are available to help students cope with stresses and personal issues that may interfere with their ability to perform in school. The service is provided confidentially and without additional charge to currently enrolled undergraduate and graduate students. To schedule an appointment, please call 253-692-4522 or stop by the Student Counseling Center (SCC), located in MAT 354. Additional information can also be found by visiting http://www.tacoma.uw.edu/counseling.

DISABILITY AND SUPPORT SERVICES (Student Health and Wellness - SHAW)

The University of Washington Tacoma is committed to making physical facilities and instructional programs accessible to students with disabilities. Disability Support Services (DSS) functions as the focal point for coordination of services for students with disabilities. In compliance with Title II of the Americans with Disabilities Act, any enrolled student at UW Tacoma who has an appropriately documented physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," is eligible for services from DSS. If you are wondering if you may be eligible for accommodations on our campus, please contact the DSS reception desk at 692-4522, or visit http://www.tacoma.uw.edu/dss.

INCLEMENT WEATHER

In the event of bad weather, class may be cancelled. (I live in Seattle, and I may have trouble getting down to campus even if there is no snow in Tacoma.) To find out about the status of class, do not call the Business Administration Program Office. Instead, follow these steps:

1. Call the campus closure information line, (253) 383- INFO (4636). If the campus is closed, then there is definitely no class. However, sometimes the campus may be open, but I may not be able to drive there. So, you should move to the next steps.
2. Check your email to see if there is a message from me.

3. Check Canvas to see if there is an announcement from me.
4. Call my office (253-692-5884) to see if I've changed my voice mail message to indicate the status of class.

TEACHING AND LEARNING CENTER (TLC)

The Teaching and Learning Center (TLC) offers free academic support for students at all levels. Writing support is also available at our online writing center at: uwtwrite@u.washington.edu More information about our online writing center is available at: http://www.tacoma.uw.edu/teaching-learning-center/online-writing-center For math, stats and quantitative needs, assistance is available on a drop-in basis in KEY 202. Please check our schedule at: http://www.tacoma.uw.edu/teaching-learning-center/math-quantitative-tutoring-schedule For special needs, please contact Ingrid Horakova at: horaki@u.washington.edu

TMCL 540 Class Schedule
Spring 2015 (Subject to Change)

WEEK 1

Topic 1: Introduction to Organizational Behavior

- Pfeffer, J., & Veiga, J. F. (1999). Putting people first for organizational success. *Academy of Management Executive, 13*(2), 37-48. (EBSCO)
- Pfeffer, J. & Sutton, B. 2006. "Evidence-Based Management," *Harvard Business Review*, Jan: 63-74. (EBSCO)
- Denrell, J. (2005). Selection bias and the perils of benchmarking, *Harvard Business Review*, April: 114-119. (EBSCO)

Topic 2: Managing for Integrity

- Paine, L. S. (1994). "Managing for Organizational Integrity." *Harvard Business Review*, March/April: 106-117. (EBSCO)
- Bazerman, M. H. & Tenbrunsel, A. E. (2011). "Ethical Breakdowns." *Harvard Business Review*, April: 58-65. (EBSCO)

Case: Vandivier, K. (1972). "Why Should My Conscience Bother Me?" From *In the Name of Profit* (pp. 3-31). (ER)

Case: **"**The Psychology of Fraud: Why Good People Do Bad Things" – The Toby Graves Story

You may listen to this story at the following National Public Radio Link:
http://www.npr.org/2012/05/01/151764534/psychology-of-fraud-why-good-people-do-bad-things

A written transcript of this radio segment is also available at the above link. The radio segment is 18 minutes and 34 seconds long. An interesting online discussion that occurred following the segments initial broadcast is also posted on the NPR website.

DUE: *Decision-Making Quiz***.** This quiz is available on Canvas. Please submit a completed hard copy in class.

DO NOT conduct any research in order to answer the quiz questions. This is a light-hearted-test of your general knowledge. Please submit a hardcopy of your answers at the beginning of class.

WEEK 2

Topic: Managerial Decision Making

- Hammond, J.S., Keeney, R. L., & Raiffa, H. (2006). The Hidden Traps in Decision Making. *Harvard Business Review*. January: 118-126 (EBSCO)
- Gino, F. & Pisano, G. P. (2011). "Why Leaders Don't Learn From Success." *Harvard Business Review*, April: 68-74. (EBSCO)
- McGrath, R. G. (2011). "Failing by Design." *Harvard Business Review*, April: 76-83. (EBSCO)
- Sadler-Smith, E. and Shefy, E. (2004). "The Intuitive Executive: Understanding and applying 'gut feel' in decision-making." *Academy of Management Executive*, 18(4): 76-91. (EBSCO)
- Banaji, M.R., Bazerman, M. H., & Chugh, D. 2003. How (Un)ethical are you? *Harvard Business Review*. December: 56-64.

Exercise: Brittain, J., and S. Sitkin. (1986). *Carter Racing: Parts A&B*, Evanston, IL: Dispute Resolution Research Center. (Canvas)

DUE: *Carter Racing* preparation worksheet (Available on Canvas).

WEEK 3

Topic 1: Exercising Influence

- Cialdini, R. B. (2001). "Harnessing the Science of Persuasion". *Harvard Business Review*, October: 73-79. (EBSCO)
- Heath, C., and Heath, D. (2008). Introduction (pp. 3-24) and Epilogue (pp. 238-252) from *Made to Stick.* New York: Random House. (ER)

Case: Cohen, A., Gadon, H., Fink. S, & Willits, R. (2003). *Who's in Charge? The Jim Davis Case*. Harvard Business School Case #BAB586. Boston, MA: Harvard Business School Publishing. (CP)

Topic 2: Strategic Networks, Power & Politics

- Baker, W. (2000). "What is Social Capital?" In *Achieving Success Through Social Capital*, 1-25. (ER)
- Cross, R., and L. Prusak. (2002). "The People Who Make Organizations Go – or Stop," *Harvard Business Review*, June: 104-111. (EBSCO)
- Hill, L. A. (1999). *What It Really Means to Manage: Exercising Power and Influence*. Harvard Business School Note #9-400-041. Boston, MA: Harvard Business School Publishing. (CP)
- Uzzi, B., and S. Dunlap. (2005). "How to Build Your Network." *Harvard Business Review*, December: 53-60. (EBSCO)

Case: Ibarra, H. (1996). *Managing Xerox's Multinational Development Center*. Harvard Business School Case #9-496-047. Boston, MA: Harvard Business School Publishing. (CP)

DUE: *Six Degrees Worksheet* preparation document (Available on *Canvas*)

WEEK 4

Topic: Building and Managing a Team

- Edmonson, A. (2012). "A new way of working." From *Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy*, San Francisco, CA: Jossey-Bass (pp. 11-43). (ER)
- Polzer, J. T. (2003) *Leading Teams*. Harvard Business School Note #9-403-094. Boston, MA: Harvard Business School Publishing. (CP)
- Gratton, L. and Erickson, T. J. (2007). "Eight Ways to Build Collaborative Teams." *Harvard Business Review*, November: 100-109. (EBSCO)
- Druskat, V. U. and Wolff, S. B. (2001). "Building the Emotional Intelligence of Teams *Harvard Business Review*, March: 80-90. (EBSCO)

Case: *Ozark River Bank.* (Case materials available on Canvas.)

Case: *Tanagram* exercise. (Exercise materials will be distributed in class.)

DUE: Reflection Paper 1

WEEK 5

Topic: Information Sharing, Communication, and Decision Making in Teams

- Edmonson, A. (2012). "Making it Safe to Team." From *Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy*, San Francisco, CA: Jossey-Bass (pp. 115 – 148). (ER)
- Garvin, D. A., and M. A. Roberto (2001). "What You Don't Know About Making Decisions." *Harvard Business Review*, September: 108-116. (EBSCO)
- Edmonson, A. C. (2008). The competitive imperative of learning. *Harvard Business Review*, July-August: 60- 67.
- Thompson, L. (2011). "Team Decision Making: Pitfalls and Solutions." In Leigh Thompson's *Making the Team 4th Edition)*, pp. 150 – 181. New York: PrenticeHall. (ER)

Case: *Endowed Chair* exercise. (Prepare your role prior to class. Your role assignments, confidential role materials, and preparation worksheet are available on Canvas.)

Case: Donnellon, A. & Margolis, J. D. (2009). *MedisSys Corp.: The IntensCare Product Development Team.* Harvard Business School Case #4062. Boston, MA: Harvard Business School Publishing. (CP)

DUE: *Endowed Chair* preparation document (available on Canvas)

WEEK 6

Topic: Motivating and Managing Performance

- Thomas, K. W. (2000) Intrinsic motivation and how it works. *Training, 37*(10), 130-135. (EBSCO)
- Nohria, N., Groysberg, B. and Lee, L-E. (2008). "Employee motivation: A powerful new model." *Harvard Business Review*, July-August: 78-84. (EBSCO)
- Latham, G. (2003) Goal setting. *Organizational* Dynamics, 32(3): 309-318. (EBSCO)
- Ordonex, L. D., M. E. Schweitzer, A. D. Galinsky, and M. H. Bazerman. (2009). "Goals gone wild: The systematic side effects of overprescribing goal setting." *Academy of Management Perspective*, February: 6-16. (EBSCO)
- Cropanzano, R., Bowen, D. E., and Gilliland, S. W. (2007). "The Management of Organizational Justice." *Academy of Management Perspective*, November: 34-48. (EBSCO)

Video: *Dan Pink: The Puzzle of Motivation*
What's in it for the Fish?

Case: Groysberg, B. & Healy, P. (2004). *10 Uncommon Values®: Optimizing the Stock-Selection Process*. Harvard Business School Case #9-405-022. Boston, MA: Harvard Business School Publishing. (CP)

WEEK 7

Topic: Managing Conflict and Leveraging Diversity

- Ancona, D., Bresman, H., & Kaeufer, K. (2002). "The Comparative Advantage of X-Teams." *MIT Sloan Management Review*, Spring, Vol. 43(3): 33-39. (EBSCO)
- Eisenhardt, K. M, Kahwajy, J. L., & Bourgeouis III, L. J. (1997). "How Management Teams Can Have a Good Fight." *Harvard Business Review*, July-August: 77-85. (EBSCO)
- Gratton, L., Voigt, A. & Erickson, T. (2007). "Bridging Faultlines in Diverse Teams." *MIT Sloan Management Review*, Summer: 22-29. (EBSCO)
- Brett, J., Behfar, K. & Kern, M. C. "Managing Multicultural Teams," *Harvard Business Review*, November: 84-91. (EBSCO)

Case: *Universal Telecomm* Exercise (Materials available on Canvas.)

Case: Neeley, T., Hernandez. P. & Shafer, S. (2012). *Managing A Global Team: Greg James at Sun Microsystems, Inc. (A).* Harvard Business School Case #9-409-004. Boston, MA: Harvard Business School Publishing. (CP).

DUE: Reflection paper 2

WEEK 8

Topic: Leading in Organizations

- Kotter, J. (2001). "What Leaders Really Do" *Harvard Business Review*, December: 85-96. (EBSCO)
- Heifetz, R. A., and D. L. Laurie. (2001). "The Work of Leadership," *Harvard Business Review*, December: 131-141 (EBSCO)
- Ibarra, H., and M. Hunter. (2007). "How Leaders Create and Use Networks." *Harvard Business Review*, January: 40-47. (EBSCO)
- Hill, L. A and Lindback. K. (2011). "Are You a Good Boss or A Great One?" *Harvard Business Review*, Jan/Feb: 124-131. (EBSCO)

Case: Snook, S. A. (2006). *Coach Knight: The Will to Win*. Harvard Business School Case #9-406-043. Boston, MA: Harvard Business School Publishing. (CP)

Case: Snook, S. A. (2006). *Coach K: A Matter of the Heart*. Harvard Business School Case #9-406-044. Boston, MA: Harvard Business School Publishing. (CP)

DUE: Top Leadership Case Analysis & peer evaluations. Please submit all materials electronically to zib@uw.edu

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WEEK 9

Topic: Managing Work Relationships and Your Career

- Gabbaro, J. J. & Kotter, J. P. (2005). "Managing Your Boss." *Harvard Business Review*, January: 92-99. (EBSCO)
- Hill, L. A. "Becoming the Boss. (2007). "*Harvard Business Review*, January: 48-56. (EBSCO)
- Hill, L. A. (1996). *Building Effective One-on-One Work Relationships*. Harvard Business School Note #9-497-028. Boston, MA: Harvard Business School Publishing. (CP)
- Bossidy, L. "What Your Leader Expects of You." (2007) *Harvard Business Review*, April: 58-65. (EBSCO)

Case: Anteby, M & Nohria, N. (2008). *Michael Fernandes at Nicholas Piramal*. Harvard Business School Case #9-408-001. Boston, MA: Harvard Business School Publishing. (CP)

Guest Speaker: TBD

DUE: Completed *Developmental Network Questionnaire* (Available in CP).

WEEK 10

Topic: Competitive Advantage through Organizational Culture

- O'Reilly. C. A. III. (1989). "Corporations, Culture, and Commitment: Motivations and Social Control in Organizations." *California Management Review, 31*, 9-25. (EBSCO)
- Gratton, L. (2007). "For ways to encourage more productive teamwork." *Harvard Management Update*, November: 1-5.
- Chatman, J. A. & Cha, S. E. (2003). "Leading by Leveraging Culture." *California Management Review, 45*: 20 – 32. (EBSCO)

Case: Phillittere, D. A. (2008). *Acme Medical Imaging*. Ivey Case#808D04. London, ON: Ivey Publishing. (CP)

Case: Bartlett, C. A. & Beckham, H.. (2010). *Applied Research Technologies, Inc.: Global Innovation's Challenges*. Harvard Business School Case #4169. Boston, MA: Harvard Business School Publishing. (CP)

DUE: Bring artifacts of your company's culture to class.

June XX:

DUE; Top Leadership Case Analysis & peer evaluations. Please submit all materials electronically to zib@uw.edu

Master of Cybersecurity and Leadership
Institute of Technology

TMCL 550 Syllabus
Network and Internet Security

Description: Studies the technologies of information security policies, standards, and procedures. Topics include: security policy design and incident response; and tools and techniques to defend against, react to, and recover from a cyber attack. Covers cryptographic methods including public and private key algorithms and their applications on confidentiality, authentication, and data integrity.

Prerequisites: A minimum grade of 2.7 in TMCL530 , Information Assurance, Risk Management, and Security Strategies.

Student Learning Goals: Upon successful completion of the course, students should be able to:

- Illustrate and explain fundamental architectures of networks and the Internet as well as their underlying protocols.
- Identify and define security issues, problems and vulnerabilities in voice, data, and wireless networks.
- Describe and analyze Internet security issues and available countermeasures.
- Apply industry standard security concepts and techniques to specific network environments.
- Evaluate trends in network security policies and technology as well as their impact on the future network development.
- Conduct a vulnerability analysis of an organization network.

Program Outcomes: This course supports the following MCL program outcomes:

- Identify and critically assess issues and concepts related to the protection of information and information systems. Develop and articulate an organization's strategic direction.
- Assess an organization's security attributes: confidentiality, integrity, and availability. Understand an organization as complex, interdependent systems operating in an ever-changing and uncertain environment.
- Analyze and evaluate proposed or extant information security policies, practices and procedures in order to assess potential advantages and disadvantages that might flow from implementing them. Provide leadership so that confidentiality, integrity and availability can be protected. Insure an environment of threat reduction is maintained in an organization.
- Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems. Perform a risk analysis for an environment. Create a management plan for security in an environment. Analyze and diagnose complex organizational problems, design effective solutions, and implement change.
- Create policies, strategies and standard operating procedures for securing information and communication systems. Manage people, information, and processes to accomplish organizational goals and objectives.

In addition, the course covers a majority of the Networking (NET) of the Information Technology Body of Knowledge, including but not limited to:

- NET Foundations of Networking, Routing and Switching, Security, Network Management Pervasive Themes in IT
- IAS Fundamental Aspects, Countermeasures, Operational Issues, Policy, Attack, Vulnerabilities, Threat Analysis

UWT Student Learning Goals that this course contributes to

- *Inquiry and Critical Thinking*: Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.
- *Communication/Self-Expression*: Students will gain experience with oral, written, symbolic and artistic forms of communication and the ability to communicate with diverse audiences. They will also have the opportunity to increase their understanding of communication through collaboration with others to solve problems or advance knowledge.

Textbook: Security in Computing, 4th edition, by Charles Pfleeger and Shari Lawrence Pfleeger. Prentice Hall. ISBN: 978-0132390774.

Topics Covered

- Internet Security – Operating System Attacks and Countermeasures
- Network Security – Application Attacks and Countermeasures
- Cryptography - Applications
- Managing Security – Planning, Economics, Operations
- Legal and Ethics – Privacy Concerns, Security of Data

Overview of Course Assignment Grading:

Quizzes	30%
Project	20%
Labs	20%
Exams	30%
Total	**100%**

Weekly Schedule

Week #	Topics	Readings	Work Due
1	Introduction to Internet security	Pfleeger Ch1	Quiz 1, Lab1
2	Computer Networking Overview	Handout	Quiz 2, Lab2
3	Computer Networking Overview (Cont'd)	Handout	Quiz 3, Lab3
4	Operating system attacks and countermeasures	Pfleeger Ch4	Quiz 4, Lab4
5	Network attacks and countermeasures	Pfleeger Ch7	**Midterm Exam**
6	Classical cryptography and its applications	Pfleeger Ch2	Quiz 5, Lab5
7	Modern cryptography and its applications	Handout	Quiz 6, Lab6
8	Administering security; The economics of cyber security	Pfleeger Ch8 Pfleeger Ch9	Project Report
9	Privacy in computing	Pfleeger Ch10	Project presentation
10	Legal and ethical issues in Internet Security	Pfleeger Ch11	
11			**Final Exam**

MILGARD
SCHOOL OF BUSINESS

TCSL 560 – STRATEGIC ORGANIZATION CHANGE
Spring 2017

Professor Tracy A. Thompson
Tues 5:00-9:10, MDS 313
Office Hours: Tues 3:00-5:00 or by Appt.

Office: GWP 427
Phone: (253) 692-5636
E-mail: tracyat@uw.edu

Course Description

This course prepares students to be effective cyber leaders and change agents by exploring concepts, tools, and techniques for leading and managing strategic organizational change at multiple levels. Students will learn concepts, tools and techniques for strategy formulation. They will also learn how to implement those strategies to create change inside their organization. Students will examine different perspectives on strategic change, consider various change methodologies, and learn evidence based change management and decision making practices.

Course Objectives

This course addresses the several of the MCL program learning outcomes including:
Communication Skills

- Our graduates are effective interdisciplinary communicators who can integrate the technical aspects of cybersecurity with the strategic and managerial concerns of their organization.
- They are fluent in concepts and terminology appropriate for a leader in cybersecurity.

Leadership and Interpersonal Skills:

- Our graduates are change-savvy managers who can effectively coordinate activities and lead individuals and teams.
- They understand how to launch and assess organizational change initiatives.

Understanding strategic organizational change and how to lead it is far from a straightforward endeavor. I hope to increase your ability to see beyond the IT / Cybersecurity function of your organization. After successfully completing this class, you should be able to:

- Explain the role of strategic management in an organization and understand how to align an organization's strategy to its environment.
- Understand the complexity of change as a process and be able to analyze, plan and implement strategic change.
- Possess enhanced personal capabilities and awareness of how you navigate change.
- Practice an evidence based approach to making managerial decisions relating to change management.

TCSL 560 has been designed to meet these objectives by building your managerial knowledge and skills using directed readings, case analyses, discussions, experiential exercises and reflective and analytical writing assignments. The *readings* will give you a foundation for understanding several different theoretical lenses related to strategic management, organizational change and the practice of evidence-based management. The *case discussions* will help you to apply that material to real industries and organizations. *Class discussions* of the readings and cases will enable you to more fully comprehend the

course material. Finally, the *experiential exercise and written assignments* will enable you to develop your managerial skills as they relate to strategic management, organizational change and an evidence-based approach to decision making. One assignment bears special mention here.

Required Materials

- Access to Canvas. In addition to getting class materials posted on Canvas (non-copyrighted readings, assignments, overheads, etc.), I also frequently post announcements and updates so you will need to have regular access to Canvas.
- Required reading materials.
    - A Reading Pack containing copyrighted material you must purchase at the UWT Copy Center.
    - Online readings: Several readings can be found online, either by clicking on the direct links I've provided in Canvas or, when indicated, by going to the UW Libraries research/article database(s) and finding the article yourself. If you don´t know how to do this, contact a librarian for help.
- Simulation. Each individual must purchase access their own access to the HBS Change Management Simulation. Information on how to purchase this will be in the Canvas calendar.
- Email (in addition to Canvas). Please let me know if you are not receiving regular emails from me via Canvas as there may be something wrong with how you've set up your email in either Canvas or through the UW.

Evaluation and Grading

Your grade in the class will be based on the following elements:

Assignment	**Percentage**
Class Contribution • Online participation (assignments, discussions, peer feedback) • In-person class contribution	 10% 10%
Strategic Analysis Exam	20%
Simulation Reflection Paper *(You must pay for and participate in the HBS Change Management simulation in class in order to write this paper.)*	20%
Critically Appraised Topic (CAT) Project • Practical Problem Description & Research Question (credit/no credit) • PICOC Keyword Assignment (credit/no credit) • Critical Appraisal: Question, PICOC, Search Strategy, List of Articles Found So Far + Sample Research Summary for 1 article (credit/no credit) • CAT Summary (Final Paper) • CAT Walk (Online Presentation)	 1% 1% 3% 20% 5%
Final Reflection Paper	10%

Evaluation of Written Work

The following criteria will be used to evaluate your written work. Excellent (A) papers and written assignments will satisfy all of the following criteria:

- Your written work addresses all of the issues and questions posed in the question or assignment.
- Your written work demonstrates your mastery of course concepts. It reveals a clear understanding of the analytical framework(s) or theory (theories) at hand and how they can be applied to real situations. You've drawn upon the relevant readings, class discussions, and your own experience, and you've moved beyond the simple application of course material to generate sophisticated insights.
- Your writing is coherent and organized, there are very few, if any, spelling and grammatical errors, and it uses APA formatting (or an equivalent format) for references.

Class Contribution

A graduate class succeeds or fails depending on the quality and scope of participation. We all learn from each other. **Your goal should be to engage each other, not just me.** Those of us who are quite comfortable with speaking our minds can sometimes dominate the conversation. If this describes you, help me by bringing others into the conversation. If you're the more quiet or reserved type, know that we're here to help and that we do want to hear your voice!

Your contribution will be assessed by the quality of your input into creating a great discussion, either in person or online (when required). Are you consistently bringing in concepts and ideas from the course readings, building on others' ideas, and expanding our understanding of the topic by asking clarifying and/or thought-stimulating questions? Are you supporting your peers by giving constructive feedback that improves their work? I will do my best to create the right environment that encourages you to be a curious learner – one who shares his or her ideas and comments about the conundrums and challenges of navigating change in a supportive and respectful way.

When reading and preparing for class, ask yourself:

- What is the basic argument the author makes?
- What are the key concepts/principles presented?
- So what? How does this matter for an organization, a team, or an individual?
- What are the implications for the kinds of challenges I face as a leader?
- How can I apply this to my organization, my team, my job and my career?

After you have finished preparing all of the materials for class, ask yourself:

- Why did I assign these materials together?
- What are the key points from these materials when taken together?
- What two pieces of advice would you give based on the materials for today's class?

Class contribution is evaluated after each class or online assignment according to the following criteria:

Excellent (100): You consistently demonstrate your own learning and contribute to the learning of others by asking good and relevant questions, synthesizing the contributions of others, summarizing and/or moving class discussions ahead, effectively using assignment criteria to improve and comment upon the work of your peers, and offering complete analysis that show you have thought deeply about the readings and the issue/question at hand.

Very good (92.5): You often demonstrate your own learning and contribute to the learning of others by asking questions, effectively responding to others, using assignment

	criteria to improve and comment the work of your peers, and substantiating your position with well-rounded analysis.
Good (87.5):	You usually demonstrate your preparation by asking questions, responding to others, helping your peers to improve, and substantiating your position with well-rounded analysis.
Satisfactory (80):	You are mostly prepared when called upon, you sometimes respond to others in ways that further the conversation, you offer some useful feedback to your peers, and your responses show basic understanding.
Unsatisfactory (0):	You are generally unprepared when called upon, your analysis is unsubstantiated, faulty or off-track, your criticisms are directed at others versus towards their ideas, you are silent or are absent.

If you must miss an in-person class, you can still earn credit toward in-person class contribution for that day by providing a written assessment of the readings for the day, including discussion of how the readings relate to each other and how they link to larger themes of the course. Because I don't want you to fall behind too much, *this work is due before the next class meets* (the one right after the one you missed). This make-up opportunity applies only to the first class missed; any subsequent missed classes receive no credit for in-person class contribution for that day.

Strategic Analysis Exam/Assignment

You will be given written material on a company (a mini case drawn from the popular press), and answer questions that will require you to identify, analyze and evaluate the company's strategy. More details will be given in class.

Strategy Analysis Grading: This assignment will be graded with respect to the effectiveness with which you use course concepts in your analysis (you've chosen relevant concepts/theory, your analysis reflects a good understanding of them, etc.,) and the quality of your writing.

Simulation Reflection Paper

After completing the simulation in class, you will individually write a paper that analyzes and reflects upon the simulation. I want you to think deeply about what the simulation is trying to teach you, how that connects to "theory", and what that means to you in light of your own real-life experience (past, present, future). Focus your paper on the central ideas this simulation seeks to teach you about managing change. What were/are these lessons, how did you "learn" them via the simulation (e.g., make clear links between what happened and how that relates to the theories and concepts of change we've covered), and what does that mean to you personally in your own life (past, present, future)?

Format: 2-3 pages, single spaced, 1-inch global margins, page numbers, Times New Roman 12 point font, references in APA format. *Do not put your name on your paper; instead put your student ID# at the top.* Deposit an electronic copy of this paper (file name = your student ID#) in the correct Canvas Assignment by the published deadline.

Simulation Reflection Paper Grading: This assignment will be graded with respect to the effectiveness with which you use course concepts in your analysis of your simulation experience (you've chosen relevant concepts/theory, your analysis reflects a good understanding of them, etc.,), the insightfulness of your personal reflection about what the simulation has taught or tried to teach you, and the quality of your writing. See the evaluation rubric in the assignment on Canvas. Use APA format for your citations.

Critically Appraised Topic (CAT) Project

This project is a central feature of the class. I've designed a series of assignments to help you to develop an evidence-based approach to any kind of planned changes whether it is cybersecurity-related or more managerial in nature. Evidence Based Management is the systematic use of logic and the best available evidence to improve management practice (Pfeffer & Sutton, 2006; Rousseau, 2006). **Planned** organizational changes or 'interventions' involve decisions to invest time, resources, and money in order to improve or change perceptions, organizational culture, work processes, and/or performance outcomes. Through a series of CAT assignments, you will begin to learn the practice of evidence-based management so that you can make better decisions.

Your CAT starts with identifying a practical and real management challenge you or others in your organization are facing, a challenge that has a clear implication or relationship to a planned change (could be cybersecurity related or other). You'll then transform that challenge into a research question, search for the best available evidence on that question, critically appraise that evidence, integrate that evidence with your managerial expertise and organizational concerns and summarize your major findings and recommendations in a four-page paper (aka the 'CAT Summary Paper'). You will also present your CAT summary in video format (aka the 'CAT Walk').

There are multiple parts to this project. Some are scored as credit/no credit assignments which will enable me to give you feedback along the way.

Critically Appraised Topic (CAT) Overview

This project is a central feature of the class. I've designed a series of assignments to help you to develop an evidence-based approach to any kind of planned changes whether it is cybersecurity-related or more managerial in nature. Evidence Based Management is the systematic use of logic and the best available evidence to improve management practice (Pfeffer & Sutton, 2006; Rousseau, 2006). **Planned** organizational changes or 'interventions' involve decisions to invest time, resources, and money in order to improve or change perceptions, organizational culture, work processes, and/or performance outcomes. Through a series of CAT assignments, you will begin to learn the practice of evidence-based management so that you can make better decisions.
Your CAT starts with identifying a practical and real management challenge you or others in your organization are facing, a challenge that has a clear implication or relationship to a planned change (could be cybersecurity related or other). You'll then transform that challenge into a research question, search for the best available evidence on that question, critically appraise that evidence, integrate that evidence with your managerial expertise and organizational concerns and summarize your major findings and recommendations in a four-page paper (aka the 'CAT Summary Paper'). See https://www.cebma.org/wp-content/uploads/CEBMa-Guideline-CAT-vs-1-1.pdf for an overview. You will also present your CAT summary in video format (aka the 'CAT Walk').
There are multiple parts to this project. Some are scored as credit/no credit assignments which will enable me to give you feedback along the way.

1. **Practical Problem & Research Question**. A CAT begins with a practical and real management challenge. This challenge should be relevant to you and/or your organization and have a clear implication or relationship to a planned change (could be cybersecurity related or other). Describe this practical problem in one or two paragraphs, making sure to explain its relevancy to you. Then formulate two or three possible CAT questions (we will talk about the form of the question in class). Post your practical problem/challenge and question to the **Research Question Assignment**.

Research Question Grading: Credit/No Credit. Posting a reasonable problem statement and initial question(s) on Canvas by the deadline receives full credit. Late assignments receive half-credit.

2. **PICOC Keyword Assignment:** In class, before this assignment is due, you will be introduced to research strategies, including the PICOC technique. After the class discussion, you will use the **PICOC template.docx** to generate your starting PICOC. Adapting and modifying your practical problem into a question using PICOC terms reflected in academic research will be critical to your success in completing the CAT.

   Helpful hints:
   - The PICOC sets you up to conduct research on your own. I am available to help you as are the UWT Librarians. Do not wait until the last minute to begin using your PICOC to find the best available studies for your CAT. It may take time to get articles not in the UW Library collection via interlibrary loan and/or document retrieval.
   - You are entering into a very uncertain and iterative process, where you will likely need to learn more about your topic which will cause you to **revise your practical problem, the decision to be made, your research question and your PICOC which, in turn, will reshape your search terms and strategy.** Start by using the terms in your first PICOC to do background reading to find research (review articles are good for this) related to your dependent (intervention) and/or dependent (outcome) variables. Once you have a sense of the constructs (the conceptual terms used in academic research) that are most closely related to your intervention and outcome, then you will be in a much better position to revise your practical problem, the decision to be made, your research question and your PICOC terms so that you can find studies that test the causal relationship specified in your PICOC/question.
   - Your final CAT paper will require a section where you document your search strategy so once you have refined your terms enough to find studies that include both your "Intervention" (independent variable) and your "outcome" (dependent variable), be sure to track your methods and outputs. Here are examples of how to do that.
   - You will want to find approximately 8-10 relevant scientific studies with data, either qualitative or quantitative. They do not have to be “good” studies (what that means is defined when we get to critical appraisal); they just have to be studies where a researcher has identified a question, developed a methodology to collect data (could be qualitative or quantitative data) and uses that data to test or answer the research question. You want to find studies that include both the independent (intervention) and the dependent (outcome) variables specified in your question. Note that in some cases, there isn't a lot of research on your topic. See the CAT Likely Problems document (in Folders/CAT docs) for more help if you are encountering this problem.

   PICOC Grading: Credit/No Credit. Submitting a reasonable initial PICOC on Canvas by the published deadline receives full credit. Late assignments receive half-credit.

3. **Critical Appraisal of One Study**: In this assignment, you will practice your skills in critical appraisal by evaluating one of the studies you’ve found so far. You will submit two files for this assignment.
   a. The CAT Critical Appraisal Assignment Template.docx is where you will report your (revised) practical problem/situation, the decision to be made, your (revised) research question, your (revised) PICOC, your search strategy (document using Examples of Reporting on Your Search Strategy.docx as a guide), your inclusion criteria, a list of relevant research studies you have found thus far (it's ok if you only have a few), and your critical appraisal of **ONE**

study (see the 2nd page of the template doc). Append your name or initials to the file name. For example, my submission would be CAT Critical Appraisal Assignment Template TAT.docx.

b. Submit a copy of the research study you critically appraised in #1 above. Name this file as the last name of the author and year of the publication, so an article authored by myself and Jill Purdy published in 2015 would be Thompson Purdy, 2015. If there are more than 2 authors, it would be Thompson et al, 2015.

Early the next morning, you will be prompted to do peer evaluations. In addition to general feedback on the practical problem, whether you see a focused causal question, and the description of the search strategy, you also should be evaluating the quality of the one critical appraisal provided. Based on the pdf your peer should have provided in this assignment, do you come up with the same description of the study's design? If not, explain your choices to your peer.

Helpful hints:

- For your final CAT paper, you will want approximately 8-10 relevant articles (scientific studies with data, either qualitative or quantitative), but it's ok if you haven't found them all for this assignment.
- Where you are heading: Every study you include in your final CAT needs to be critically evaluated. You should use the CAT Manager to develop the rating and also record the other information required in this assignment. You will not include a separate critical appraisal page for each study with your final CAT Summary Paper. Instead, you will transform the information from these critical appraisal pages into a summary table (see the research summary table template). This summary table document is **not** due with this current assignment.

Critical Appraisal Grading: Credit/No Credit. Submitting complete versions of the requested documents to the appropriate assignment in Canvas by the deadline receives full credit. Late assignments receive half-credit and may not receive the opportunity to do peer reviews or receive the benefit of peer reviews.

4. **CAT Summary:** Your CAT Summary is a short (up to 4) page executive summary. Please follow these instructions and the templates I've given you to produce your CAT summary. For more detail on these sections, see CEBMa-Guideline-CAT-vs-1-1.pdf. Use the following outline:

- Description/background of your management challenge, the decision to be made and your research question.
- Main Findings of Best Available Scientific Research: Provide most common definition(s) of the key elements/constructs in your CAT question (your X and Y), and the causal mechanism(s). Also include an overview of the main findings relevant to your CAT question, including the level of trustworthiness and effect size. This discussion is supported by a summary table in the paper which is referenced in the text as needed; this table doesn't count toward the 4 pages. End this section with a conclusion, a concise statement (2 or 3 sentences) about the main findings, related to the CAT question.
- Limitations: Describe all limitations relevant to your CAT.

- Implications and Recommendations: This is where you provide your recommended decision for action that was set up in your practical problem/question, linking back to the theme of planned organizational change.
- Material that doesn't count towards the page limit:
  - References (These don't count toward page limit; Minimum six studies/articles used but shoot for 8 or more for completeness)
  - PICO(C) Table (original submission and final, if adjusted)
  - Description of search strategy, including terms used for study replication and numbers
  - Results/evidence summary table
  - Other relevant information (any additional tables, charts, etc., to establish your position)

Format: Single spaced, 1-inch global margins, page numbers, Times New Roman 12 point font, references in APA format. *Do not put your name on your paper; instead put your student ID# at the top.* Deposit an electronic copy of this paper (file name = your student ID#) in the correct Assignment by the published deadline on Canvas.
CAT Summary Grading: Content, writing style, formatting, spelling, grammar, proper reference format and number of references, within page limits, use of appendices, etc. Evaluation rubric will be posted with the assignment on Canvas. Late assignments receive a 10 pt. penalty.

5. **CAT Walk:** You are to create, record and upload a presentation that summarizes your CAT. Use no more than 5 minutes to present the highlights of your CAT including your practical problem and decision, the resulting research question, your PICOC, your search strategy (w/ #s), your summary of the "best available scientific evidence" on your question, your evaluation of the quality of the body of scientific evidence you found, and your conclusion/ recommendation. This is your time to display your critical thinking skills as an evidence based manager.

   Record your presentation and upload it for this assignment. Most students use Power Point as that seems to be a universally available program which others can view. Limit your slides to 5-6 as more than that often results in going over the time limit.
   You will be assigned three of your peers' presentations and will give them each feedback in Canvas by 11:59 pm, the following Sunday. Be sure to review the evaluation rubric including the additional information provided in the links in the rubric and to use the rubric including writing comments.
   CAT Walk Grading: Evaluation of your presentation is based on the content and logic of what you say and your presentation skills. Late assignments receive a 10 pt. deduction and may not receive the opportunity to do peer reviews or receive the benefit of peer reviews.

Final Reflection Paper
Instead of a final exam, you will write a final paper 3-4 pages) where you are to reflect on the course including what you have learned and can take away to use throughout your careers. However you choose to organize it, the paper should address the following prompt:

What were the most important, significant or meaningful things you have learned about change from the class? Be specific and give examples from what we have read, done and discussed. Make sure to explain why these were significant to you. For example, they might apply to your past, current or future situation and/or they might also have helped you learned about how you handle change personally.

Format: Single spaced, 1-inch global margins, page numbers, Times New Roman 12 point font, references in APA format. *Do not put your name on your paper; instead put your student ID# at the top.* Deposit an electronic copy of this paper (file name = your student ID#) in the correct Assignment on Canvas before the end of the officially scheduled final exam period indicated in the schedule on Canvas.

Final Thought Paper Grading: This assignment will be graded with respect to the accuracy and effectiveness with which you integrate course concepts in your analysis, the quality and thoroughness of your analysis, including how insightfully you respond to the prompt above, and the quality of your writing (see the writing rubric posted for this assignment on Canvas).

COURSE POLICIES
See "Class Policies" posted on Canvas for a more complete statement of policies related to this class.

Late Assignments
Let me encourage you to turn in work even if it is late. You may earn 50% of the graded points for late work. If you are having a problem (sickness or otherwise) that might prevent you from completing an assignment on time, please communicate with me *before the assignment is due*. Let me know what is going on, and if you've got some sort of extreme extenuating circumstance, we can probably work something out. Advance notice always helps me in my deliberation.

Integrity & Academic Standards
Students in this course are asked to abide by the business school's integrity code:

> We the students of the Milgard School of Business believe that integrity and honesty are integral to our educational experience and our lives. We aspire to hold ourselves and our fellow students to the highest ethical standards and will not engage in activities that are improper or have the appearance of impropriety in our academic lives. We intend to maintain these standards as graduates of UW Tacoma." (More information on this can be found at: http://www.tacoma.uw.edu/node/37128.)

In addition to living by the Milgard Business Student Integrity Code, I also expect you to abide by the academic standards as published in the UWT Catalog. You are encouraged to discuss course readings and lecture material with one another. However, ***discussion of ideas for written assignments is not allowed***, unless you have explicit instructions from me indicating otherwise. ***Every assignment must be an original piece of work you have written and created solely for this class*.**

A major part of your experience in the class will be reading, synthesizing, and using the knowledge and ideas of others. To plagiarize is to appropriate and to pass off, as one's own ideas, writing or works of another. Plagiarism is no less of a misconduct violation than vandalism or assault. Ignorance of proper documentation procedures is the usual cause of plagiarism. This ignorance does not excuse the act. You are responsible for learning how and when to document and attribute resources used in preparing a written or oral presentation (e.g. how to use APA or another consistent referencing system). If any ambiguity or uncertainty arises, or if there is any question about whether you or anyone else is fulfilling the letter or spirit of Milgard Student Code of Ethics and the UWT's Academic Standards, please bring it to my attention. A violation of academic standards in this course means you will not receive credit for the assignment and will be subject to disciplinary action. I will be using a plagiarism checker for written assignments in this class.

For more information, please refer to the Academic Honesty: Cheating and Plagiarism document prepared by the Committee on Academic Conduct in the College of Arts and Sciences, UW Seattle: http://depts.washington.edu/grading/issue1/honesty.htm and to the UW Student Conduct Code. You are reminded that "as a student of the University of Washington, you are expected to not only hold yourself accountable, but to hold others accountable to the Student Conduct Code. If you believe another student violated the Student Conduct Code, please complete the Incident Form to document the situation and formally report the incident." A copy is located at: http://www.tacoma.washington.edu/studentaffairs/SS/conduct_students.cfm.

MILGARD
SCHOOL OF BUSINESS

Schedule and Readings
TCSL560

Class 1 – March 28

Topic 1: What is Strategic Management and Steps for Strategic Thinking

- Introduction to Strategic Management
- What Is Strategy
- McKinsey – The Art of Strategy
- Rumelt, R. 2011. "The Perils of Bad Strategy", McKinsey Quarterly, June 2011, p. 1-10.
- Chinn, D., Kaplan, J. & Weinberg, A. 2014. "Risk and Responsibility in a Hyperconnected World: Implications for Enterprises" McKinsey & Company, p. 1-5.
- Hooper, V., & McKissack, 2016. "The Emerging Role of the CISO", *Business* Horizons, 59: 585-591.

Topic 2: Evidence-Based Management Practices and Strategic Change

- Barends, E., Rousseau, D. and Briner, R. 2014. "Evidence Based Management: The Basic Principles".
- Go into Canvas Modules and click on the Evidence Based Management module. This will bring you into an Evidence Based Management course run by Carnegie Mellon's Online Learning Initiative (OLI). Follow the registration process and complete the Introduction module AND The Basic Principles module. (You'll do the third module later in the quarter.)
- Case: Beers, M. 1996. "The Strategy That Wouldn't Travel," *Harvard Business Review*, Nov-Dec, p. 18-22. (UW Library)

Class 2 – April 4

Topic 1: Three Views of Competitive Advantage

Coulter, M. 2013. "The Context of Managing Strategically," Ch. 2, pages 27-34, p. 50. (RP)

Read this page: http://www.strategicmanagementinsight.com/topics/resource-based-view.html (Links to an external site.)

Case: Electronic Arts

- Game Not Over Yet (p. 50, at the end of the Coulter reading)
- Is it Time to Bet on EA's Stock?
- EA Priced for a Perfect Game

- EA Leads the Pack

Case: Kodak: Out of Focus (first page of the Coulter Reading)

Topic 2: External Situation Analysis

Videos:

- PEST Analysis
- Clearly Defining Your Industry
- I O View Five Forces Overview

Porter, M. 2008. "The Five Competitive Forces that Shape Strategy," *Harvard Business Review*, January, pp. 79-93. (Available at the UWT library.)

Case/Industry Analyses:

- IBISWorld Industry Report 51121f, Security Software Publishing in the US
- F-Secure Corporation: Software as a Service (SaaS) in the Security Solutions Market (HBS 9-809-099)

Using data from the IBISWorld Industry Report 51121f, Security Software Publishing in the US as a start coupled with your own inferences from the F Secure Case, develop conclusions about the strength of each force for F-Secure: (1) Overview of how to do a Five Forces Analysis - IndustryAnalysisInSteps.pdf, (2) A simplified overview of the factors to use when considering a force's strength or weakness: FiveForcesWorksheet.pdf, and (3) a much more detailed worksheet to understand how the concepts in the FiveForcesWorksheet.pdf manifest in data you might see in the IBISWorld report: Industry Attractiveness Five Forces.docx. You will be asked to input your conclusions about the strength of each force on the ForClass assignment for F-Secure.
Topic 2: CAT Projects

Topic 3: CAT Projects

More on EBMgt: Read these FAQs: http://www.cebma.org/frequently-asked-questions

We will discuss the CAT projects in class.

Due the following Sunday: Practical Problem and CAT Question at 11:45 PM; Peer feedback due before next class.

Class 3 – April 11

Topic 1: Internal Situation Analysis

Videos: "Why Internal Analysis" and "Resource Based View"

Value Chain Analysis

Duncan, W.J., Ginter P.M. & Swayne, L.G. 1998. "Competitive Advantage and Internal Organizational Assessment," *Academy of Management Executive*, 12-3: 6-16.

Case: Growing Pains at Storz Friedberg (313023)

IBISWorld e-Discovery Consulting Services Report OD5420

IBISWorld Digital Forensic Services Industry Report OD4585

Topic 2: CAT Projects

Introduction to PICOCs

PICOC Keyword Assignment Due by 11:45 pm; submit via the Assignments folder on Canvas; Peer feedback due by next class.

Class 4 – April 18

Topic 1: Competitive Strategy

Videos to watch before class:

- Generic Strategies
- Cost Advantage
- Differentiation Advantage

Guest Speaker - Information Security Consulting

Topic 2: Linking Strategy to Change – Strategy Implementation

Video: Strategy Implementation

Congruence Theory or 7S Theory Reading

Integrative Case: Eden-McCallum: A Network-Based Consulting Group (A) (9-410-056)

Industry IBISWorld Industry Report OD4584, IT Security Consulting

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Class 5- April 25

Topic 1: Implementing Information Security in Organizations

Dutta, A. & McCrohan, K. 2002. "Management's Role in Information Security in a Cyber Economy," *California Management Review,* 45-1: 67-97. (UWT Library)

Cybersecurity's human factor: Lessons from the Pentagon
http://offcampus.lib.washington.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=108820482&site=ehost-live

Topic 2: Creating Change – The Human Dimension

The Change Game (Instructions will be given in class)

A fun survey: Go to this link, read the page, complete the survey, print your results and bring that to class. This is a well-researched instrument by Dr. Shaul Oreg, author of "The Psychology of Organizational Change: Viewing Change from the Employee's Perspective").

Strategy Analysis Exam Due at the end of class (in-class exam)

Class 6 – May 2

BRING A LAPTOP TO CLASS – CHANGE SIMULATION IS TONIGHT IN CLASS

Topic 1: "Change Management" Approaches to Implementing Change

Case: Spectrum Foreground Reading (this pdf is available in the simulation)

Kotter, J. P. 2012. "Accelerate," *Harvard Business Review*, November 2012, p. 45-58.

Appelbaum, S.H., Habashy, S., Malo, J., & Shafiq, H. 2012. "Back to the Future: Revisiting Kotter's 1996 Change Model," *Journal of Management Development,* 31-8: 764-782.

Kotter, J. P. & Schlesinger, L.A. 2008. "Choosing Strategies for Change" *Harvard Business Review* July-Aug, p. 130-139.

Topic 2: CAT - Critical Appraisal

Go into the Modules section on Canvas and click on Evidence Based Management. Complete the 3rd module on Critical Appraisal.

Sunday: Simulation Reflection Paper due at 11:45 pm, submit in Assignments on Canvas. (Don't put your name on your paper.)

Class 7 – May 9

Topic 1: "Organizational Development" Approaches to Implementing Change

Palmer, I., Dunford, R., Akin, G. 2009. (Excerpt from Ch. 7 & 8), in *Managing Organizational Change: A Multiple Perspectives Approach,* Irwin/McGraw-Hill, pp. 191-202; 224-229. (RP)

Quinn, R. W. & Wellman, N. "Change the Way You Lead Change", White paper from the Center for Positive Organizations.

Dutton, J.E. *Fostering high quality connections through respectful engagement*. Stanford Social Innovation Review, Winter, 54-57, 2003.

Cameron, K. & Plews, E. 2012. "Positive Leadership in Action: Applications of POS by Jim Mallozzi, CEO, Prudential Real Estate and Location", *Organizational Dynamics*, 41: 99-105.

The Power of Positivity

Case: Johnsonville Sausage A (9-387-103) (RP)

Chen, R., Ravichandar, R. & Proctor, D. 2016. "Managing the Transition to the New Agile Business and Product Development Model: Lessons from Cisco Systems", *Business Horizons,* 59: 635-644.

Optional vides/readings:

- Gervase Bushe on Dialogic OD: http://www.youtube.com/watch?v=myyj15AfH3Q
- Inman, J. & Thompson, T. 2013. "Using Dialogue Then Deliberation to Transform a Warring Leadership Team," *Organization Development Practitioner*, p. 36-40. (Posted on Canvas)

Topic 2: CAT Projects – Critical Appraisal

Sunday: **CAT Critical Appraisal due by 11:45pm; submit in Assignments on Canvas. Peer feedback due by following Wed.**

Class 8 – May 16

Topic 1: Tactics for Managing Change from the Middle

Ancona, Kochan, Scully, Van Maanan & Westney, 2005. "Issue Selling." Module #13 in Managing for the Future: Organizational Behavior and Process, 3e, pages M13-4 and M13-6 to M13-19. (RP)

Case: Chris Peters and the "People" Issue (in above reading)

Case: Inex (in above reading)

Oshry, B. 2003. "Converting Middle Powerlessness into Middle Power: A Systems Approach" In T. Jick (Ed). *Managing Change*, McGraw Hill-Irwin, pp. 402-416. (RP)

Huy, Q.N. 2001. "In Praise of Middle Managers," *Harvard Business Review*, Sept, p. 72-79. (UW Library)

Case: John Smithers (HBS 402041) (RP)

OPTIONAL: Thompson, T. Purdy, J. & Summers, D. (2009). "A Five Factor Framework for Coaching Middle Managers," *Organizational Development Journal.* (posted on Canvas)

How Cybersecurity teams Can Convince the C Suite of Their Value:
https://hbr.org/2016/09/how-cybersecurity-teams-can-convince-the-c-suite-of-their-value

Proactive Cybersecurity: https://secludit.com/en/blog/proactive-cyber-security/

Class 9 – May 23

CYBER RESILIENCY EVENT in WPH

Career insights:
https://blog.clearedjobs.net/cybersecurity-career-insights-from-facebook-security-engineers/
http://blog.clearedjobs.net/what-hooked-you-on-cybersecurity/

Class 10 – May 30

CAT Walk Presentation Due

CAT Summary Due

Final Paper – June 6

Final Reflection Paper deposited in the Assignments folder on Canvas during Final Exam period. (Don't put your name on your paper.)

Master of Cybersecurity and Leadership
Institute of Technology

TMCL 570 Syllabus
Cybersecurity Management

Description: Studies how an organization approaches technology decisions, including consideration of specific security requirements and goals that technology investments must address in support of the organization's mission. Explores how technology investments reduce the cost and complexity of managing and operation an information infrastructure while maintaining appropriate levels of cyber security.

Prerequisites: A minimum grade of 2.7 in TMCL 550, Network and Internet Security.

Student Learning Goals: Upon successful completion of the course, students should be able to:

- Understand the importance of various tradeoffs within the security architecture.
- Be able to function effectively in a team and be ready to enter the Cybersecurity job market.
- Be able to plan, design, and execute a Cybersecurity program.

Program Outcomes: This course supports the following MCL program outcomes:

- Identify and critically assess issues and concepts related to the protection of information and information systems.
- Use risk management principles to assess threats, vulnerabilities, countermeasures and impact contributions to risk in information systems.
- Understand the key functions and challenges of organizational communication, including the factors that can hinder and facilitate effective communication in business settings.
- Analyze and evaluate proposed or extant risk management policies, practices, procedures and technologies in order to assess potential advantages and disadvantages that might flow from implementing them.
- Recognize ethical dilemmas and social responsibilities.
- Formulate and implement strategy and effectively manage change.

Body of Knowledge: The course covers the areas of Information Assurance and Policy (IAS), Integrative Programming and Technologies (IPT), Networking (NET), Platform Technologies (PT), System Integration and Architecture (SIA), Social and Professional Issues (SP), and Web Systems and Technologies (WS) of the Information Technology Body of Knowledge, including but not limited to:

- IAS Security Mechanisms (Countermeasures), Operational Issues, Policy, Security Domains, Security Services, and Threat Analysis Model
- IPT Software Security Practices
- NET Security
- PT Architecture and Organization and Computing Infrastructures
- SIA Requirements, Acquisition and Sourcing, Integration and Deployment, Project Management, Testing and Quality Assurance, Organizational Context, and Architecture
- SP Professional Communications, Teamwork Concepts and Issues, Social Context of Computing, Legal Issues in Computing, Organizational Context, Professional and Ethical Issues and Responsibilities, and Privacy and Civil Liberties
- WS Vulnerabilities

UWT Student Learning Goals that this course contributes to

- *Global Perspective:* Students will develop an awareness of the interrelationships among personal, local, and global entities, as well as gain understanding of issues of well-being and sustainability. Students will also learn about the importance of social, cultural, economic, scientific and environmental differences that mark world regions.
- *Inquiry and Critical Thinking*: Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.
- *Diversity:* Students will gain an understanding of the multiplicity of human experience and the roles that culture, environment, historical processes, and differential treatment play in shaping the diverse experiences of groups in society.
- *Civic Engagement*: Students will define their roles and responsibilities as members of a broader community and develop an understanding of how they can contribute to that community for the greater good.
- *Communication/Self-Expression*: Students will gain experience with oral, written, symbolic and artistic forms of communication and the ability to communicate with diverse audiences. They will also have the opportunity to increase their understanding of communication through collaboration with others to solve problems or advance knowledge.

Textbook:

Whitman, M. E., & Mattord, H. J. (2014). Management of Information Security, 4th edition. Course Technology Ptr.

Topics Covered:

1. Managing information in an organization
2. Planning for security and contingencies
3. Information security policies
4. Developing a security program

This course combines elements from the first four courses, as well as introduces new concepts and approaches. It serves as the capstone course for the MCL program.

Students will be meeting as team with individual project sponsors every other week. A consultant will help provide on-site assistance with the student projects.

Overview of Course Assignment Grading

Assignment	***Percentage***
Sponsor Feedback	50%
End of Course Presentation	35%
Project Website (Work History)	15%
TOTAL	**100%**

Weekly Course Outline

W	Date	Topic	Reading	HW	Due
1		Managing Information Security and Planning for Security Project IPR	Whitman Chapters 1 & 2	Project IPR	
2		Onsite Project			
3		Information Security Policy and Developing the Security Program	Whitman Chapters 4,5		
4		Onsite Project			
5		Security Management Models Security Management Practices Project IPR	Whitman Chapters 6.7		
6		Onsite Project			
7		Risk Management: IDing Risk Risk Management: Controlling Risk	Whitman, Chapters 8.9		
8		Onsite Project			
9		Personnel and Security Law and Ethics	Whitman Chapters 11.12		
10		Onsite Project			
11		Final Presentation			Website, Sponsor Gradesheet

MILGARD
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UNIVERSITY OF WASHINGTON, TACOMA
MILGARD SCHOOL OF BUSINESS

TMCL 580 Project Management
Summer Quarter A - 2015
Syllabus and Course Information

Professor: Dr. Haluk Demirkan	E-mail: haluk@uw.edu
Office: DOU 410	Office Phone: 253-692-5751 Fax: 253-692-4523
Office Hours:	and by advance appointment
Class Dates/Hours:	Class Location:
Instructions: June 22, 2015 – July 22, 2015	Final Exams: Typically the last class day

COURSE DESCRIPTION

Projects are the instruments of strategic change in organizations. The outcomes of projects include new products, new processes and new services, which lead to renewed organizational competitiveness. Best-in-class competitors can be characterized by careful management of their project portfolio as well as effective project management planning, and control processes and tools. The fundamental philosophy of this course is that project management is a process that can be utilized for change regardless of the industrial context; thus the best project management theories and practices are relatively insensitive to the organizational context. The primary goal of this course is to prepare you to effectively manage projects in organizations regardless of the industry and the position you work in.

For example, of the $2.5 trillion spent on information technology during 1997-2001, nearly $1 trillion was spent on underperforming information systems projects[1]. A large number of these projects eventually fail, costing US firms more than $ 78 billion each year[2.] Many information technology/system projects tend to go over budget, not be on time and don't meet the end user's needs. This leads to customer dissatisfaction. Most often the root cause of these troubled projects can be traced to simply not following sound project management principles.

This course builds the foundations for information technology services and project management by focusing on key aspects of commoditization of hardware (e.g., on-demand, utility computing, cloud computing), software (the software-as-a-service model), and even business processes. The course introduces the IT product development and service delivery processes with sound management principles for on-budget and on-time projects that meet end users' needs (high quality of service). The course also discusses the added complexity introduced by globalization and virtualization of IT projects. The main objectives are to review the fundamentals and to offer practical solutions for these challenges.

The scope of course topics will include initiating, planning, executing, controlling and completing projects in a variety of environments (such as business, marketing, management, accounting, finance, operations management, supply chain management, information systems, design, art, engineering, education, legal, etc.) as well as the strategic context for projects. Topics covered will include the strategic role of projects, types of projects and planning methods appropriate for each type, financial considerations, project scheduling, project resource management, project monitoring and controlling, and management of project organizations including human resources.

This course focuses on a number of skills that are very important for professional career and personal growth. It provides opportunities to think critically, diagnose problems, and formulate effective business solutions with best project management practices. It also creates an environment for students to learn and

[1] C. Benko and W. McFarlan, Connecting the Dots: Aligning Projects with Objectives in Unpredictable Times. Boston, MA: Harvard Bus. Sch. Press, 2003.
[2] M. Levinson, "Let's stop wasting $78 billion a year," CIO, pp. 78–83, Oct. 15, 2001.

practice organization, planning, teamwork, analytical thinking, problem solving skills and professionalism.

There are two key objectives of this course: 1) to provide students with an understanding of the project environment complexities and entities, and 2) to help students to improve creativity, critical thinking, problem solving, technology utilization and team work skills. The course will adapt cooperative learning methodology by incorporating teacher-led instruction, classroom case discussion, hands-on practicing with applied examples, increasing utilization of technology in the classroom, encouraging contact with students outside the class, upholding high expectations, and respecting diverse talents and different ways of learning.

SPECIFIC COURSE OBJECTIVES

Upon completion of this course you should be able to:

- Describe the strategic role of projects in organizations and describe the characteristics and implications of mature project management processes.
- Identify the phases in the project management process and describe the essential activities in each phase.
- Describe the different types of projects that are found in business organizations and the appropriate planning methods and project team structure for each type.
- Develop a project schedule, resource plan and budget, and understand the essential steps in initializing and creating a Microsoft Project file for a project that reflects these plans.
- Monitor project performance, communication and lessons learned, and take appropriate action in response to variation in each of these processes.
- Review of IT service design & delivery processes, and key project management knowledge areas
- Introduction to IT product development, project management and service delivery processes
- An understanding of the globalization and virtualization with project complexity

COMPETENCY DEVELOPMENT

TMCL 580 contributes to the development of four core competencies in the Milgard School: strategic thinking, quantitative analysis, technology and teamwork. The course is designed to meet these competencies by building your knowledge and skills utilizing: (1) readings and classroom discussions; (2) individual and group-based activities designed to reinforce concepts and skills; and (3) MS project which link the concepts covered in class with actual experience.

WHAT ARE THE PREREQUISITES?

N/A

WHAT ARE THE COURSE MATERIALS?

You must have access to course readings which come from multiple sources:
Software:

- MS Project 2007, 2010, 2013 (MSDNAA)
- Get an access to Microsoft 2007, 2010 or 2013 through Microsoft Dream Spark (University of Washington Tacoma - Milgard School of Business - DreamSpark Premium) or University of Washington Microsoft Resources for students (https://www.washington.edu/itconnect/wares/uware/microsoft/students-frequently-asked-questions-about-microsoft-software/)
- Some course materials and assignments available on Canvas.
- A Course Pak that includes the below articles and cases will be available through the UWT Copy Center. This reading packet consists of copyrighted material.
- We will have also several readings through direct links provided in the syllabus, on the CANVAS and via UW Libraries research/article database(s).
- You need to regularly access CANVAS for announcements, overheads, additional proprietary

readings and exercises there.
- Please make sure that both the email address you have on file through the UW registrar's office AND the one you use in CANVAS are ones you regularly check. Please let me know if you are not receiving regular emails from me as there may be something wrong with how you've set up your email in either CANVAS or through the UW.

Case Studies
- Volkswagen of America: Managing IT Priorities. Robert D. Austin, Warren Ritchie, Greggory Garrett, Harvard Business School, Revision Date: Jun 14, 2007, Publication Date: Oct 05, 2005, Product number:606003-PDF-ENG, Length: 19p
- Providian Trust: Tradition and Technology (A), Publication Date: Aug 22, 1997, Availability: In Stock, Author(s): F. Warren McFarlan, Melissa Dailey Type: Case (Field) Product Number: 9-398-008, Revision Date: Jun 7, 1999, Length: 20p, Discipline: Management of information systems.
- A&D High Tech (A): Managing Projects for Success, Mark Jeffery, Derek Yung, Alex Gershbeyn Product Type: Case (Field), Product#: KEL156 Pub. Date: January 01, 2006, Revision Date: Mar 01, 2008, Product number: KEL156-PDF-ENG, Length: 20p Discipline: Competitive strategy.
- Siemens AG: Global Development Strategy (A). Thomke, Stefan; Nimgade, Ashok. In Harvard Business Review, Case No. 9-602-061. Published 10/16/2001, Revised 03/18/2002. Harvard Business School Publishing, (27 pages).
- Dragonfly: Developing a Proposal for an Uninhabited Aerial Vehicle (UAV). Kavadias, Stylianos; Loch, Christoph; De Meyer, Arnoud. Case No. 4885. Published 02/00, 2000. INSEAD, (9 pages).

Articles
- You Need to Focus on Tactics, and IT Needs Strategic Alignment: How to Derive an IT-Enabled Business Strategy by Susan Cramm, 25 pages. Publication date: Mar 29, 2010. Prod. #: 5829BC-HCB-ENG, HBS PRESS CHAPTER
- Managing IT as a Portfolio of Services, Joe Peppard, European Management Journal, Volume (Year): 21 (2003), Issue (Month): 4 (August), Pages: 467-483. Available at http://www.som.cranfield.ac.uk/som/dinamic-content/media/ISRC/Managing%20IT%20as%20a%20Portfolio%20of%20Services.pdf
- Stopping Runaway IT Projects. Awazu, Yukika; DeSouza, Kevin C.; Evaristo, J. Roberto. In Business Horizons. Published 01/15/2004, Indiana University Kelley School of Business, (8 pages).
- Putting the Service-Profit Chain to Work (HBR Classic), James L. Heskett, Thomas O. Jones, Gary W. Loveman, W. Earl Sasser Jr., Leonard A. Schlesinger, Publication Date:Jul 01, 2008, Source:Harvard Business Review Product number: R0807L-PDF-ENG, Length:14p

Supplementary reading (not required)

- "A Guide to the Project Management Body of Knowledge," Fourth Edition (PMBOK Guides) by Project Management Institute"

In addition to the course textbook, notes and cases, additional reading materials, sample study questions will be handed out in class, or be available through our course website. Some readings and/or class notes may not be discussed in class; they might be just supplemental materials.

HOW WILL MY PERFORMANCE BE ASSESSED?

Your assessment in this course will have the following components at the weights shown:

	Grading Criteria	Format	Weight (%)
1	Attendance, discussions, contributions & peer evaluations	Individual	10
2	Team Case Assignments	Team	20

3	Team Case Discussion/Presentation	Team/Individual	10
4	MS Project Tutorial with Practice Assignment	Individual	10
5	5 Self-Assessment quizzes	Individual	20
6	Final exam	Individual	30
	Total		**100**

Grading Scale

The final grade will be based on total accumulated points of weighted course components. Attendance and classroom discussion will also be taken into account. The final grades in the course may be based on a curve depending on the distribution. As a consequence you cannot count on your final point total alone to determine your final grade. Assignment of a grade will be based on percentage of points earned versus total possible points. This percentage will then be converted to the 4 point scale.

1. **Attendance, classroom contribution, in-class exercises and peer evaluations**

Attendance is strongly suggested. Any student missing more than two days of class for any reason should discuss attendance with the leader. Some assignment work may be required in order to make up for lost in-class time.

For assessing your class contribution, we will rely on as many relevant 360 degree feedback measures as possible. In addition to the evaluation by the leader, you will often be asked for peer evaluations of group members and evaluations by rest of the class members. Time by time, you will also complete in-class exercises, quizzes and turn in the results of your work. Most of your learning will occur in preparation for and participating in the case discussions, readings and discussion board both online with your cohort and in your personal teams.

2. **Team case assignments**

One of the key factors in a successful project is the performance of cooperative activities in project teams. Shared team vision, team communication, and team cooperation are among the most mentioned reasons for team success. To continue the development of these team-based project skills, one team-based learning exercise will be required for each case study. These exercises include analyzing cases about project situations as well as completing a set of Microsoft Project exercises and a short case requiring the use of MS Project.

A set of questions will be posted for each exercise. Students are required to work within their pre-assigned teams to develop answers to the case questions and post a team response in the appropriate format to the online environment. Specific dates are provided for each exercise in the course schedule.

Students will select their own teams for a case discussion. Please assemble your project team for a case discussion and report in groups of X. When forming groups, it is STRONGLY recommended that you communicate frankly about work schedules and grade expectations. Teams will be administered as much like teams in organizations as possible. Team members will fill out peer evaluation forms at the completion of the course.

3. **Team Case Discussion/Presentation**

Project teams will present their assigned cases and facilitate discussions to address problems/ issues/ opportunities from a case study. This is not a traditional team presentation; it is more about facilitation of discussions. Each group case analysis will last around 25-30 minutes. Each person in the team should contribute equally to both the preparations and presentations. The goal is to facilitate students learning with as much proactive interactions.

A clear understanding of team expectations and goals from the beginning may avoid many problems later in the semester when everyone is under considerable pressure. An important portion of the project grade will be assigned based on group peer evaluations. Additional information on project will be provided later in the semester. It is essential that team members participate in the entire process, rather than assigning

individuals to data analysis, report writing etc. Several parts of the project will be done by individually, and the other parts will be done as a team.

4. MS Project Tutorial with Practice Assignment

A set of MS project tutorials and a practice assignment will be handed out.

5. Self-Assessment Quizzes

For each module, a short online quiz containing approximately 20-30 multiple choice questions has been designed as a self-assessment learning tool. The purpose of these quizzes is to provide students with a gauge to determine if they have understood key points from each module. Each quiz must be completed for each module content delivery. Feedback on your performance for each quiz will be given after the quiz deadline has passed for each module. Because the quizzes are an individually graded component, there should be no form of communication regarding the quizzes until the quiz submission deadline has passed. **The quizzes are not timed.** The solution to the quiz will be posted on the following Monday morning. Specific dates are provided for each quiz in the course schedule. NO extensions for the quiz deadlines.

6. Final Exam

This final exam will be a capstone learning experience. No make-up exams will be given. **Do NOT miss the exam!!!**

Assignment Return Policy

The solution methodology that you use should reflect the subjects covered in this course. If you cannot attend class on the day an assignment is due, submit the assignment earlier, ask a friend to submit it for you, or submit it through the course web site.

Each week's assignments will consist of a module, discussion board, team exercise and an individual quiz. Most weeks will also include reading one or more articles that provide additional detail on the subject matter. No late deliverables will be accepted after the submission deadlines. All assignments are posted on the course website. The assignments will be graded and grades will be posted within one week from the due date.

The solution methodology that you use should reflect the subjects covered in this course. Assignments are to be turned in through the course website (online submission) at the beginning of class on the scheduled date. E-mails will not be accepted. Unless the instructor has granted prior permission, any assignment submitted after the due date will be assessed a penalty of 10% per calendar day. For example, an assignment due on a Friday and submitted the following Monday would have a 30% penalty. No assignments accepted after last day of class.

All written work and class presentations should be of professional quality. Written work should be designed for ease of reading. Written communication is extremely important in today's business and academic world.

Guidelines for Assessing Class Contribution

Grade	Criteria
Excellent (100)	Demonstrates analysis of readings exceptionally well, relating it to other material (e.g., course material, discussions, and experiences). Offers analysis, synthesis, and evaluation of case material, e.g., puts together pieces of the discussion to develop new approaches that take the class forward. Keeps focus, responds thoughtfully to others' comments. Consistent involvement.
Very Good (90)	Shows thorough knowledge of case and readings, has thought through implications. Offers interpretations and analysis of case material. Integrates multiple observations cohesively. Responds to others' points, thinks through own points, questions others in a constructive way, offers suggestions. Ongoing involvement.
Good (80)	Shows knowledge of case and readings. Builds on others' contributions. Shows some evidence of trying to interpret or analyze facts. Uneven involvement.

Satisfactory (70)	Knows facts, issues from the case or readings. Helps move along the discussion in an incremental manner (e.g., facts embedded in the case or reading). Offers viewpoints based on beliefs and opinion more than on analysis. Not much new thought; rephrases, clarifies, underlines importance of earlier comments. Peripheral involvement.
Needs Improvement (60)	Does not demonstrate preparation. Present in class. Not disruptive. Does not offer to contribute to discussion. States straight facts from the case when called on or directly asked.
Poor (50)	If present, demonstrates no preparation. Shows lack of interest or respect for other's contributions.
NA (0)	Absent. If present, engages in disruptive behaviour.

EXPECTATIONS AND POLICIES

My top professional goal is for students to succeed in my courses! Accordingly I will do whatever I can to be available to answer questions, to explain concepts in alternative ways, and to revisit prior material. I will also try hard to make this class interesting. However, it is very possible for you to receive a poor (or failing) grade by ignoring the following suggestions:

1. It is vital that you be proactive about your learning experience in this course by planning for and completing readings, assignments and activities. Please read this syllabus and the assignment descriptions carefully to understand what is expected of you, and to manage your personal resources effectively. An outline of topics, readings and due dates for assignments are provided at the end of this syllabus.

   Detailed descriptions of the course assignments are available on Blackboard under "Assignments." Please read these descriptions carefully. If you have any questions, please let me know in a timely fashion. I have designed this course to minimize "busy work" and rote memorization of materials (there are no exams!) in order to allow you to devote your time and energy to these substantive assignments. Therefore, I urge you to think carefully about the assignments early in the quarter, and to begin working on them in a timely fashion.

2. Portions of class sessions will devoted to traditional "lectures" and discussions around concepts, frameworks, and models that may be applied to a real-life situation described in course content.

3. As a manager you will have to contribute to a project both as an individual contributor and as a member of a team. You will also have to think on your feet and participate in discussions where you have to be aware of group dynamics and how to best get an individual or a group to listen to you and accept and act on your recommendations. The ability to cultivate and present your ideas, convincingly and tactfully, to an audience is an important skill in management. To help cultivate these skills, all students are expected to be fully prepared for each class by completing assignments (reading and writing) and participate actively in class. For each class, you will be required to read one or more articles and/or a case study. As you read, think about the problems and opportunities offered. If the articles (including those from earlier class sessions) offer insights to the case, try to see how you can apply them. In order to get the most from this class, you need to identify the major issues brought forth in the cases and come ready to share your views, listen, build upon the discussion, offer alternatives and solutions, reason and justify your stand, and move the thinking forward. Class sessions devoted to cases will be very interactive and all students will be provided ample opportunity to participate. The specific questions guiding your case analysis can be broad, nevertheless, make sure that you address the issues raised in the questions. Remember, there are no right answers, but you can always take a stand after proper analysis. For preparing for a case study:
   - Read the case and the associated reading material, if any.
   - Read the discussion questions and analyze the case in their context.

- Meet with your study group (this is strongly suggested) and discuss the issues.
- Prepare your own notes with possible responses for each discussion question.

4. This course will be scenario based discussion-oriented (case studies, real life examples, etc.) and collaborative in nature, and meaningful class participation is very important. Most of the learning will occur while preparing, exchanging ideas with study groups, and participating in the class discussions. Thus, your class's learning experience depends on the level of responsibility you take for contributing to the discussion. You are judged not by what you know, but by what you contribute. You will not be penalized for comments that do not seem to be "right answers"; in fact, seldom, are there any right answers. Although, taking up an advocating or a challenging position can be discomforting for some; healthy disagreements, discussions, and problem-solving on a real-time basis are day-to-day duties of most managers. The skills needed to contribute to case discussions are the same as those needed to be responsible managers and effective leaders. Your obligation is not just to learn but also to assist in the learning of your classmates. Effective class contribution is characterized by:
   - Ability to listen. (Are you jumping to what "you want to say" without understanding earlier comments?)
   - Relevant contribution to discussion. (Do your comments relate to the comments of others…to the themes that the class is exploring together?)
   - Adding to understanding of the situation. (Are you incisive? Do you cut to the core?)
   - Willingness to challenge ideas respectfully, not contentiously.
   - Integration of material from past classes, readings, cases, etc.
   - Testing new ideas, not being "safe". (Are you analyzing/concluding and not just repeating facts, comments?)
5. Technology Discussions and Experimentation: A few class sessions will be devoted to hands-on computer use for exposure to technologies to further the understanding of concepts introduced in lectures.
6. Student Led Presentations/Discussions: Students teams will be asked to make a presentation in front of the class, debate with another group, etc., to provide a deeper understanding of a topic or to illustrate relevance of a topic to real-life situations.
7. In-class Work: Students will be asked to work individually or in groups on topics of the day, problem-solve, generate ideas, write short answers to questions, etc.
8. Hands on Exercises: Portions of a few class sessions will be devoted to technologies that underlie BI systems – data warehousing, business process management, performance management, dashboards, cloud computing, social media intelligence, mobile intelligence – including hands-on computer use to further the understanding of concepts introduced in the class.
9. Guest Presentations: Guest speakers may be invited to relate their experiences in the trenches. Please maximize these opportunities by engaging in a discussion with them during and after their presentations. At the same time, treat them with respect; they are volunteering their time and they are our guests.
10. The topics covered in this course are difficult to master without substantial amount of effort. You will need a great deal of time for reading, experimenting and practicing the material. Read the assigned material and complete the assignments. Don't get behind and don't miss class. New concepts build on earlier concepts. Attendance is strongly suggested. If a student must miss a class, he/she is responsible for getting a copy of the assignment from his/her classmates or the class website.
11. The due dates for assignments can be found in two places: (1) the "Course Outline and Schedule" at the end of this syllabus, and (2) at the top of each assignment description as posted on Blackboard. Assignments that are submitted late will be subject to penalty. Specific information regarding the submission of the final research paper and group critique reports will be discussed in class and on

Blackboard announcements. The schedule of the in-class group responses will be determined throughout the quarter.

12. I will do my best to create a constructive, productive learning environment. I only ask that you show respect for me and for your fellow students by being prompt, attending class regularly, listening to others without interruption, participating constructively in class discussions and activities, and avoiding unnecessary interruptions, such as leaving the classroom while class is in session. Please do NOT use the group break-out discussions as an opportunity to check e-mail and/or phone messages, or to engage in text messaging or phone conversations, or to take a break from class.

13. **How do we communicate?** I will do my best to be accessible to you and respond to your questions and concerns. The best way to reach me is through e-mail. I check e-mail regularly and try to respond in a timely fashion. The subject line in my emails will start with "TMCL 580". I will appreciate if you can start your subject with "TMCL 580" for your course related emails. On class days, you may also be able to reach me via my office phone. You should establish an e-mail account and check it regularly for course and program messages. You should also be enrolled for this course on Blackboard, which we will use to share information and discuss course issues and ideas. Please check Blackboard regularly for announcements and posting of course activities and materials. Also, if you wish to meet with me during my office hours, please contact me by e-mail at least a day in advance. If you need to meet with me outside of my office hours, please contact me to set up a day and time. The material on course web sites is intended for class use only. It is not to be copied, transmitted, or reproduced in any form without the written permission of the instructor.

14. **PLEASE NOTE: The Milgard School of Business "Policy on the Appropriate Use of Hand-held and Wireless Technologies"** is in effect for this class. Please read this policy carefully at http://www.tacoma.washington.edu/business/docs/general/policy_handheld_devices_wireless_technology.pdf To summarize this policy: (a) please silence or turn off cell phones during class, and do not use them for text messaging (etc) except during designated class breaks; (b) please do NOT open and/or use laptops during class lectures, discussions and videos. In class I will discuss what constitutes appropriate use of laptops, which includes note-taking during group break-out sessions (but NOT during class lectures, discussions or videos), opening and referring to course materials I have posted on Blackboard (in lieu of printing them), and submitting written responses to group break-out activities in the form of an e-mail attachment. Again, I will clarify any questions you may have about this in class, but please do read the policy carefully at the link provided above. Inappropriate use of electronic devices will be subject to penalty of the student's participation grade.

15. In the event of **inclement weather or emergency situations** that may lead to class cancellation or campus closure, the most efficient ways to receive information are to: (1) check Blackboard and e-mail for an announcement; (2) check the UWT home page. Please do NOT call the main School of Business number. Again, I strongly urge you to check Blackboard and e-mail prior to class for information that may affect our class session. Call (253) 383-INFO to determine whether campus operations have been suspended.

16. **Counseling Center (Student Health and Wellness - SHAW)**: The Counseling Center offers short-term, problem-focused counseling to UW Tacoma students who may feel overwhelmed by the responsibilities of college, work, family, and relationships. Counselors are available to help students cope with stresses and personal issues that may interfere with their ability to perform in school. The service is provided confidentially and without additional charge to currently enrolled undergraduate and graduate students. To schedule an appointment, please call 692-4522 or stop by the Student Counseling Center (SCC), temporarily located in Cherry Parkes 206. Additional information can also be found by visiting http://www.tacoma.washington.edu/studentaffairs/SHW/scc_about.cfm/

17. **Disability Support Services (Student Health and Wellness - SHAW):** The University of Washington Tacoma is committed to making physical facilities and instructional programs accessible

to students with disabilities. Disability Support Services (DSS) functions as the focal point for coordination of services for students with disabilities. In compliance with Title II of the Americans with Disabilities Act, any enrolled student at UW Tacoma who has an appropriately documented physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," is eligible for services from DSS. If you are wondering if you may be eligible for accommodations on our campus, please contact the DSS reception desk at 692-4522, or visit
http://www.tacoma.washington.edu/studentaffairs/SHW/dss_about.cfm/

18. **Teaching and Learning Center (TLC):** The Teaching and Learning Center (TLC) offers free academic support for students at all levels. For writing, reading, learning strategies and public speaking needs, please make an appointment online at: http://rich65.com/uwttlc/ or drop by KEY 202 during drop-in hours: 10-11 and 3-4 (M-Th); 10-11 (F). Writing support is also available at our online writing center at: uwtwrite@u.washington.edu More information about our online writing center is available at: http://www.tacoma.washington.edu/tlc/writing/onlinewritingcenter.cfm

    For math, stats and quantitative needs, assistance is available on a drop-in basis in KEY 202. Please check our schedule at: http://www.tacoma.washington.edu/tlc/math/schedule.cfm For special needs, please contact Ingrid Horakova at: horaki@u.washington.edu

19. **Library:** The UWT Library provides resources and services to support students at all levels of expertise. We guide students through the research process, helping them learn how to develop effective research strategies and find and evaluate appropriate resources. For assistance or to schedule an appointment, visit us at the Reference Desk in the Library, email tacref@u.washington.edu or phone 253-692-4442. For more information about the Library and its services, see http://www.tacoma.washington.edu/library/.

20. **Campus Safety Information:** (a) Safety Escorts are available Monday - Thursday 5:00pm - 10:30pm. They can be reached either through the duty officer or by dialing #300 from a campus phone; (b) In case of a fire alarm, take your valuables and leave the building. Plan to return to class once the alarm has stopped. Do not return until you have received an all-clear from somebody "official," the web or email; (c) In case of an earthquake, DROP, COVER, and HOLD. Once the shaking stops, take your valuables and leave the building. Do not plan to return for the rest of the day. Do not return to the building until you have received an all-clear from somebody "official," the web or email.

    For more information, please refer to the Emergency and Safety Plan prepared by the UWT Safety Committee: http://www.tacoma.washington.edu/security/eop/

21. **PLEASE READ THIS CAREFULLY**. Each assignment you complete must be your own original work. This means that: (a) you alone have produced the work; i.e., it is your own unique contribution. Please note that “borrowing” the work of other students and treating their work as your own is a serious ethical violation that will be subject to penalty. This includes using the work of students from previous quarters as the basis for your own assignments; (b) the work has never been completed as an assignment in another course or for another purpose. If you are uncertain or unclear about fulfilling the letter or spirit of this code, please bring it to my attention. Each student is on his/her honor with respect to this matter. Failure to follow the honor code will result in a failing grade for the assignment.
    Please read the UWT plagiarism code below:
    “A major part of your experience in the class will be reading, synthesizing, and using the knowledge and ideas of others. It is the responsibility of the faculty to help you in this process and to be certain you learn to credit the work of others upon which you draw. To plagiarize is to appropriate, and to pass off as one’s own ideas, writing or works of another. Ignorance of proper documentation procedures is the usual cause of plagiarism. This ignorance does not excuse the act. Students are

responsible for learning how and when to document and attribute resources used in preparing a written or oral presentation."

Please also read the Milgard School of Business Student Code of Integrity:

"We, the students of the Milgard School of Business, believe that integrity, honesty and professionalism are integral to our educational experience and our lives. We aspire to hold ourselves and our fellow students to the highest ethical standards and will not engage in activities that are improper or have the appearance of impropriety in our academic lives. We intend to maintain these standards as graduates of UW Tacoma."

22. **E-mail Policy:** Please review the email policy set for student use of email using UW computers and technology. http://www.tacoma.washington.edu/policies_procedures/E-mail_Policy.pdf

23. **Withdrawal:** Students dropping from class have the responsibility of officially withdrawing from the course or face a possible failure grade.

24. **Updates:** Please be aware that the syllabus is tentative. The instructor can make changes on the schedule and the order of subjects covered. If there is any change, the instructor will inform the class through the course website. Therefore, please visit the course website frequently.

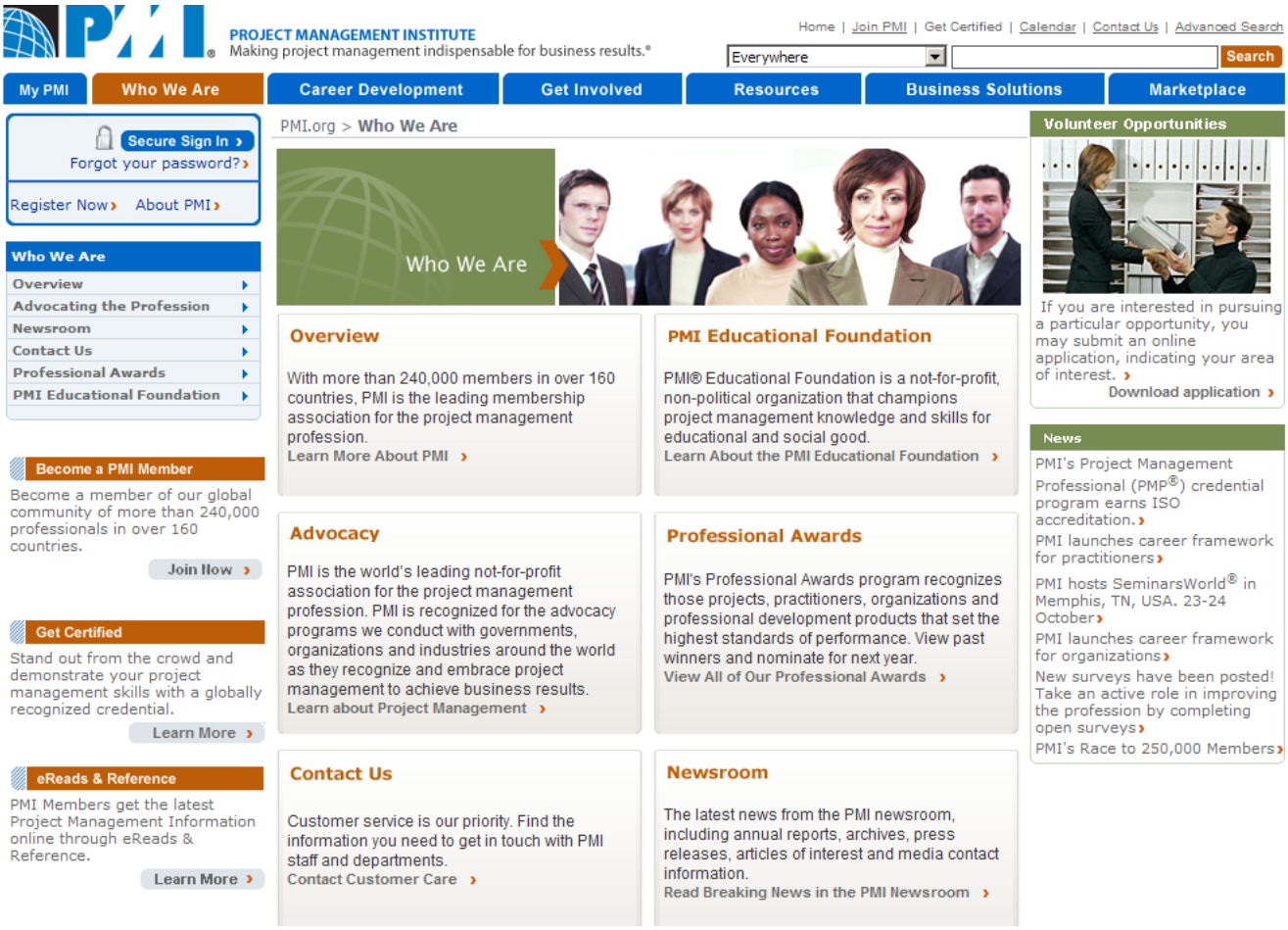
25. **Grade disputes on specific assignments, exams etc. are** handled in writing. If you want more information on your grade, or would like to request a regrade of an assignment, please send a brief email message or letter that explains your concerns. The purpose of a written appeal is to allow the instructor to find the student's grade (from among those of numerous current students) and to then consider the appeal on its merits without distraction. Student grade appeals will be reviewed quickly and fairly. Appeals concerning validity of exam/quiz questions or posted answers must be made within 24 hours of exam/quiz administration. Other types of grade appeals must be made within one week of the time your grade is posted. In this memo describe the disputed item, and information explaining your concerns, position, or recommendations.

26. Classroom Conduct At the University of Washington, an instructor has the authority to exclude a student from any class session in which the student is disorderly or disruptive. Please avoid any behavior that distracts you or other students, or interferes with my ability to teach. Activities not related to the course such as texting, Internet or E-mail use, and side conversations are disruptive and are not permitted during class.

Please show respect for the learning environment by:

- Silencing or turning off your cell phone.
- Using your laptop only for class-related activities such as taking notes, reviewing readings, etc.
- Focusing your attention on the class discussion and contributing appropriately. Whispering, interrupting others, and holding side conversations are disruptive to the entire class.

http://www.pmi.org



Project Management Certification and Credentials

With three credentials currently available — and market research being conducted to learn of the profession's need for more — PMI offers a comprehensive certification program for professionals with varying levels of experience that supports a career framework.

- ***Program Management Professional (PgMP) Credential***

PMI's newest credential has been developed to demonstrate the skills of professionals who manage multiple related projects that are aligned with an organization's strategy. Those with the PgMP credential have successfully completed a rigorous multi-stage knowledge, skills and experience assessment process.

- ***Project Management Professional (PMP) Credential***

One of the most valued credentials in project management, the PMP credential assures employers that you are committed to project management. Earning and maintaining this credential demonstrates a solid foundation of experience in effectively managing projects.

- ***Certified Associate in Project Management (CAPM) Credential***

Considered an essential step for project team members, the CAPM credential can benefit a wide range of individuals who want to demonstrate a comprehensive and consistent understanding of the application of their work. By gaining knowledge of project management processes and terminology, project team members can enhance their contributions to the team's success.

MILGARD
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Tentative Course Outline:

This is a very tentative schedule. More accurate schedules will be shown in class in week segments. You should read the assigned materials before the class we will be discussing the material. The instructors reserve the right, when necessary, to alter the grading policy, change examination dates, and modify the syllabus and course content. Modifications will be announced in class. Students are responsible for the announced changes.

Week	Date	Topics will be covered	Readings & Assignments – Due Dates	Module	Module Objectives
Week 1	June 22 - June 28	• Introduction & review of the course • The Strategy Context with projects & services • Introduction to projects & project management	Individual Assignments: • Read: Introduction to Case Method (Slide) • Review Module: The Project Context	1	The Strategy Context with Projects & Services • Describe the link between organizations' strategies and IT. • Identify how IT-enabled strategies help organizations. • Realizing how strategic projects and services add value to customers, they're not easily imitated and they open up new possibilities in the future. • Learn IT as a portfolio of services and projects. • Understand the project environment complexities and entities. • Introduce IT product development, project management, and service innovation & delivery processes. The Project Context • Define the terms "project" and "project management," and describe the dimensions of a project. • Describe the role of project management capabilities in developing an organization's competitive advantage. • Distinguish between different types of projects and each type's challenges. • Identify the factors that are critical to project success. • Learn about the IS/IT product and service lifecycles. • Identify the phases of the project management process and knowledge areas. • Describe the role of the Project Management Office in building an organization's project management capabilities. • Explain the relationship between project management process maturity and project performance. • Identify the different organizational structures and team compositions that best align with different types of projects.
		• Project team case selection • Product & project lifecycles	Individual Assignments: • Review Module: The Project Context		
		• Identify the factors that are critical to project success • Identify the phases of the project management process & knowledge areas.	Individual Assignments: • Review Module: The Project Context • Practice: MS Project Tutorial 1: Introduction to MS Project (1_Intro)		
		• Describe the role of the project management office in building an organization's project management capabilities. • Organizational structures	Individual Assignments: • Review Module: The Project Context • Read case 1: Volkswagen of America: Managing IT Priorities R. D. Austin, R. Warren, G. Garrett • Individual Quiz Team Assignments: • Team Case Exercise 1 (all teams including presenting team) • Team case/reading - Project Team Case Discussion/Presentation (presenting team only)		

Week	Date	Topics will be covered	Readings & Assignments – Due Dates	Module	Module Objectives
Week 2	June 29 - July 5	• Project, program & portfolio selection • Project initiation	Individual Assignments: • Review Module: Defining the Project	2	Project Selection and Defining the Project • Learn about project selection processes. • Learn project initiation phase. • Recognize the important steps and critical decisions in launching and initiating a project. • Deploy structured tools for effectively moving a project through the initiation and planning phases. • Describe the importance of the value proposition in selecting, supporting, and enabling a project's success. • Learn the components of a project charter and the methods to skillfully compose each component. • Determine the work that must be accomplished in a project using standard project management methodologies. • Examine alternative approaches for defining the Work Breakdown Structure (WBS). • Identify types of project risks and methods of risk identification. • Learn tools and methods for engaging project stakeholders in initiating and defining the project.
		• Value propositions • Project charter	Individual Assignments: • Review Module: Defining the Project		
		• Work breakdown structure	Individual Assignments: • Review Module: Defining the Project • Practice: MS Project Tutorial: Overview of MS Project and Preparing the WBS (2_1_ConfigureSettings; 2_2_InputWBS)		
		• Project risk management • Communications management	Individual Assignments: • Review Module: Defining the Project • Read case 2: Providian Trust: Tradition and Technology (A) F. Warren McFarlan, Melissa Dailey • Individual Quiz Team Assignments: • Team Case Exercise 2 (all teams including presenting team) • Team case/reading - Project Team Case Discussion/Presentation (presenting team only)		

Week	Date	Topics will be covered	Readings & Assignments – Due Dates	Module	Module Objectives
Week 3	July 6 - July 12	• Learn project planning phase • Planning Projects: Integration, scope, time, cost management, quality, human resource, communications, risk, procurement	Individual Assignments: • Review Module: Estimating Realistic Schedules and Costs	3	Planning the Project • Learn project planning phase. • Discuss the significance and role of project scheduling in the project planning and execution process. • Describe the various types of project networks and their relative benefits. • Apply widely-used methods for eliciting project activity relationships. • Understand the calculations used to develop an early and late start project schedule and their use in project software tools. • Identify the critical path in a project, and calculate total and free slack for non-critical project activities. • Determine the probability of completing the project by a given date using Project Evaluation and Review Technique (PERT). • Explain the weaknesses in the PERT method and the benefits of project simulation in overcoming those weaknesses. • Describe approaches for estimating project costs and developing the project budget. • Calculate a project budget based on project resource estimates and the project schedule. • Learn the importance of establishing a budget contingency reserve for those "unknown unknowns" on a project. • Understand the integration between an organization's financial planning processes and the project budget.
		• Critical path methodology	Individual Assignments: • Review Module: Estimating Realistic Schedules and Costs		
		• Project estimation & budgeting • Pert methodology	Individual Assignments: • Review Module: Estimating Realistic Schedules and Costs • Practice: MS Project Tutorial: Creating the Project Network and a Critical Path Method Schedule (3_NetworkCPM)		
		• Planning Projects: Integration, scope, time, cost management, quality, human resource, communications, risk, procurement	Individual Assignments: • Review Module: Estimating Realistic Schedules and Costs • Read case 3: Dragonfly: Developing a Proposal for an Uninhabited Aerial Vehicle (UAV) Kavadias, Stylianos; Loch, Christoph; De Meyer, Arnoud • Individual Quiz Team Assignments: • Team Case Exercise 3 (all teams including presenting team) • Team case/reading - Project Team Case Discussion/Presentation (presenting team only)		

Week	Date	Topics will be covered	Readings & Assignments – Due Dates	Module	Module Objectives
Week 4	July 13 - July 19	• Advanced project planning, and project execution phase	Individual Assignments: • Review Module: Resource Management	4	Resource Management • Learn advanced project planning, and project execution phase. • Define the various terms, trade-offs and parameters associated with the acceleration of a project through the acquisition and utilization of additional resources. • Describe the costs and benefits of accelerating a project through the process of "crashing" the project. • Describe a step-by-step process for capturing the data required to accelerate a project, and then describe an effective and efficient process for deriving a cost-effective solution. • Provide a numerical example of the process of project "crashing." • Explain the structure of resource-constrained project scheduling and the effect of resource constraints on the project schedule. • Schedule a project subject to resource constraints using the least slack heuristic method. • Explain the difference between the critical path and critical sequence. • Understand the role of software tools in resource-constrained scheduling.
		• Project plan acceleration processes	Individual Assignments: • Review Module: Resource Management		
		• Project crashing	Individual Assignments: • Review Module: Resource Management • Practice: MS Project Tutorial: Scheduling Project Resources (4_1_ProjectResources; 4_2_InputResources; 4_3_ResourceGraphs; 4_4_ResourceConstraints; 4_5_RecurringTasks		
		• Resource constraint scheduling	Individual Assignments: • Review Module: Resource Management • Read Case 4: A&D High Tech (A): Managing Projects for Success, Mark Jeffery, Derek Yung, Alex Gershbeyn • Individual Quiz • MS Project Tutorial with Practice Assignment Team Assignments: • Team Case Exercise 4 (optional assignment) (all teams including presenting team) • Team case/reading - Project Team Case Discussion/Presentation (presenting team only)		

Week	Date	Topics will be covered	Readings & Assignments – Due Dates	Module	Module Objectives
Week 5	July 20 - July 22	• Project monitor & control, & closing phases • Project success & failure factors • Earned value management	Individual Assignments: • Review Module: Project Implementation and Phase-out Individual Assignments: • Review Module: Project Implementation and Phaseout • Read case 5: Siemens AG: Global Development Strategy (A) Thomke, Stefan, Nimgade, Ashok • Individual Quiz Team Assignments: • Team Case Exercise 5 (optional assignment) (all teams including presenting team) • Team case/reading - Project Team Case Discussion/Presentation (presenting team only)	**5**	Project Implementation and Phaseout • Learn project monitor & control, and closing phases. • Explore concepts and tools for managing a project's implementation through to its successful conclusion. • Examine approaches to closing and learning from a project's successes and failures. • Explain how to monitor a project's progress against its plan, and when to take appropriate actions. • Identify the appropriate circumstances for changing the direction of a project and creating a new project baseline plan. • Describe the fundamentals of the Earned Value Management System and how to apply this state-of-the-art project control system to challenging projects. • Investigate when and how to change a project's scope without degrading the project's performance. • Discuss the dynamics of project escalation and de-escalation approaches. • Identify the impact of different communication modes on project effectiveness and how to incorporate these modes into a project communication plan. • Explain how project teams should effectively interface with other groups. • Recognize the importance of project documentation and after-project reviews on future project performance.
	July 22		**Final Exam**		
			Grades available on MyUW		