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KENTUCKY

New Course Report

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OFFICE OF THE
SENATE COUNCIL

1. General Information

1a. Submitted by the College of: COMMUNICATION AND INFORMATION

Date Submitted: 1/11/2013

1b. Department/Division: Library & Information Science

1c. Contact Person

Name: Will Buntin

Email: will.buntin@uky.edu

Phone: 859-257-3317

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Specific Term/Year¹ Fall 2013

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: ICT 351

2c. Full Title: Technology Security

2d. Transcript Title:

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: x

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 3

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

2j. Course Description for Bulletin: An introduction to the various technical and administrative aspects of information security and assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features.

2k. Prerequisites, if any:

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No

If YES, enter the off campus address:

4. Frequency of Course Offering: Summer,

Will the course be offered every year?: Yes

If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: Yes

If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?: 35

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: Yes

Will it be of interest to a significant number of students outside the degree pgm?: No

If Yes, explain: [var7InterestExplain]

8. Check the category most applicable to this course: Relatively New – Now Being Widely Established,

If No, explain:

9. Course Relationship to Program(s).

a. Is this course part of a proposed new program?: Yes

If YES, name the proposed new program: Information Communication Technology (ICT)

b. Will this course be a new requirement for ANY program?: No

If YES, list affected programs:

10. Information to be Placed on Syllabus.

a. Is the course 400G or 500?: No

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: Yes

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

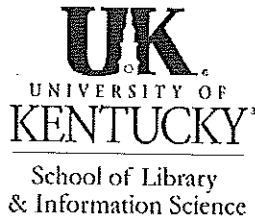
11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|JTHU222|Jeffrey T Huber|Dept approval for ZCOURSE_NEW ICT 351|20121127

SIGNATURE|CEMONA2|E C Monaghan|College approval for ZCOURSE_NEW ICT 351|20121127

SIGNATURE|JMETT2|Joanie Eit-Mims|Undergrad Council approval for ZCOURSE_NEW ICT 351|20121217



ICT 351: Technology Security

Instructor

TBD
320 Lucille Little Fine Arts Library
Lexington, KY 40506-0224
Phone: 859.257.8876 (administration)
Fax: 859.257.4205
Preferred method of contact: email

Office Hours

TBD and by appointment. Contact me via e-mail to schedule an appointment to meet: I will frequently respond as soon as possible, usually within 24 hours.

CLASS INFORMATION

This is a face-to-face course. You are required to attend scheduled classroom sessions. The Blackboard course management system will be used to facilitate the class. You will need access to an appropriate computer with a broadband Internet connection. Please visit <http://www.uky.edu/Blackboard/> to learn about this system and the login requirements.

COURSE INFORMATION

Course Description

An introduction to the various technical and administrative aspects of Information Security and Assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system, with appropriate intrusion detection and reporting features.

Course Objectives

Students successfully completing the course will be able to:

- Identify and prioritize information assets and threats to information assets;
- Articulate an information security strategy;
- Plan for and respond to intruders in an information system;
- Describe legal, ethical, and public relations implications relating to security issues;
- Present a disaster recovery plan for recovery of information assets after an incident.

Course Overview

The purpose of the course is to provide the student with an overview of the field of Information Security and Assurance. Students will be exposed to the spectrum of security activities, methods, methodologies, and procedures. Coverage will include inspection and protection of information assets, detection of and reaction to threats to information assets, examination of pre- and post-incident procedures, and technical and managerial responses to security incidents.

Required Text

M. Whitman and H. Mattord, *Security+ Guide to Network Security Fundamentals*, Course Technology, 4th Edition (2011) ISBN: 1111640122.

STUDENT EVALUATION**Grading Parameters**

Final Exam:	20%
Midterm Exam:	20%
Quizzes:	20%
Position Paper:	20%
Class Participation:	20%

Exams

There will be a midterm and a final exam, each representing 20% of your final grade (40% total). These may include multiple choice, true/false, matching, short answer, essay questions, and demonstration of coding skill. The final exam is not comprehensive and will only include material covered since the midterm exam.

Quizzes

A minimum of eight quizzes will be administered representing 20% of your overall course grade. These may include multiple choice, true/false, matching, short answer, and essay. Quizzes will cover material discussed in class and assigned reading and research.

Position Paper

You will be required to write a position paper of 10-12 double-spaced pages on a topic related to technology security. A list of possible topics will be provided. The purpose of a position paper is to generate support on an issue. It describes a position on an issue and the rationale for that position. The position paper is based on facts that provide a solid foundation for your argument.

In the position paper you should:

- Use evidence to support your position, such as statistical evidence or dates and events.
- Validate your position with authoritative references or primary source quotations.
- Examine the strengths and weaknesses of your position.
- Evaluate possible solutions and suggest courses of action.

The position paper will account for 20% of the overall course grade.

Class Participation

Students are expected to participate in the discussion board topics, which will be posted no later than Sunday at midnight at the start of each week. The topics will relate to the course readings and supplementary material assigned. Students will be evaluated based on the substance, facts, ideas, opinions, tone, and style of their responses. Responses will be monitored for inappropriate comments.

Grading Policy

Class assignments are due on or by the due date noted on the individual assignments. Late assignments will only be accepted with prior approval from the instructor.

Grading Scale

- [90% – 100%] = A (Exceptional Achievement)
- [80% – 89%] = B (High Achievement)
- [70% – 79%] = C (Average Achievement)
- [60% – 69%] = D (Below Average Achievement)
- [0% – 59%] = E (Fail)

GENERAL COURSE POLICIES

Midterm Grade Policy

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/Registrar/AcademicCalendar.htm>)

Attendance Policy

You are expected to attend every class session. Each student will be allowed to miss no more than two class sessions without a grade penalty. Every missed class after that will result in a 5 point penalty for the student's attendance grade. If a student misses 20% or more of the class, the student will fail the course and will be expected to withdraw from the course (SR 5.2.4.1-2).

Excused Absences (S.R. 5.2.4.2)

Summarized from Senate Regulation 5.2.4.2: A student shall not be penalized for an excused absence. The following are defined as excused absences:

- Significant illness of the student or serious illness of a member of the student's household (permanent or campus) or immediate family.
- The death of a member of the student's household (permanent or campus) or immediate family.
- Trips for members of student organizations sponsored by an educational unit, trips for University classes, and trips for participation in intercollegiate athletic events, including club sports registered with the university as well as varsity sports. Prior notification is required.
- Major religious holidays. Prior notification is required.
- Any other circumstances which the Instructor of Record finds reasonable cause for absence.

Students missing any graded work due to an excused absence bear the responsibility of informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required), and of making up the missed work. The Instructor of Record shall give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

Excused absences' effect on grading: Summarized from Senate Regulation 5.2.4.2: If attendance is required by the class policies elaborated in the syllabus or serves as a criterion for a grade in a course, and if a student has excused absences in excess of one-fifth of the class contact hours for that course, a student shall have the right to petition for a "W", and the Instructor of Record may require the student to petition for a "W" or take an "I" in the course. If a student has an excused absence on a day when a quiz is given, the instructor may not deny permission for a makeup exam and simply calculate the student's grade on the basis of the remaining requirements.

Verification of Absences

Faculty have the right to request appropriate verification when students miss class due to illness or death in the family. Any absence for University related travel should be provided prior to the absence.

Submission of Assignments

Assignments are due on the day listed or set in consultation with the instructor. Email or computer failures will not be accepted as valid excuses for late work. If you have a situation arise that will impact your ability to turn in your work on a timely basis, make the instructor aware of it as soon as possible.

Academic Integrity, Cheating & Plagiarism

According to Senate Regulation 6.3.1: "All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission." For specific information regarding the University's code and regulations on plagiarism and cheating, visit:

<http://www.uky.edu/StudentAffairs/Code/>

<http://www.uky.edu/StudentAffairs/Code/part2.html>

<http://www.uky.edu/Ombud/Plagiarism.pdf>: "Plagiarism: What is it?"

Group Work & Student Collaboration

Unless otherwise noted, all assignments are expected to be done by the individual student. Students are only allowed to collaborate on assignments when explicitly allowed by the instructor or syllabus.

Incompletes

Student requests for an Incomplete (an I grade) will be considered within University guidelines and only in extreme circumstances. See section 5.1.3.2 <http://www.uky.edu/StudentAffairs/Code/part2.html>.

Classroom Behavior

Students are expected to full participate in class. This means having completed all assigned readings prior to class and arriving prepared to discuss the topics for that class period. Participation also includes activity on our Blackboard shell used to facility in-class activities. All students participating in class room discussions are expected to provide relevant discussion, be respectful of other class mates and their opinions and share any relevant personal experience that may add to the topic at hand.

Academic accommodations due to disability

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

TECHNOLOGY INFORMATION & RESOURCES

Distance Learning Students are expected to have a minimum level of technological acumen and the availability of technological resources. Students must have regular access a computer with a reliable Internet connection and audio capabilities. Internet Explorer 7 (IE) or Firefox 2.x are the recommended browsers for those using a Windows-based PC. Those using Firefox 3.x may encounter problems with assignment uploads. Those using an Apple computer with MAC OS X (10.5.x) may use Firefox 3.x or Safari 3.x.

Please be certain that your computer and/or browser allow you to view Adobe Reader documents (.pdf). Microsoft Office and other software products are available free for students:

<https://iweb.uky.edu/MSDownload/>

Where to get Help

As your instructor, I am your first go-to person for technology problems. If you need more immediate assistance, please contact:

- Teaching and Learning Services Center (TASC)
<http://www.uky.edu/TASC/>
859-257-8272
- Information Technology Customer Service Center (UKIT)
<http://www.uky.edu/UKIT/>
859-257-1300

Library Services

- Distance Learning Services
<http://www.uky.edu/Libraries/DLLS>
Carla Cantagallo, DL Librarian
Local phone number: 859 257-0500, ext. 2171
Long distance phone number: (800) 828-0439 (option #6)
Email: dllservice@email.uky.edu
- DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&lilib_id=16
- Course Reserves
http://www.uky.edu/Libraries/page.php?lweb_id=23<ab_rank=3

COURSE SCHEDULE

Week 1	What is Information Security? (Ch. 1, pp. 1-27)
Week 2	Malware and Social Engineering Attacks. (Ch. 2, pp. 41-68)
Week 3	Application and Network Attacks. (Ch. 3, pp. 81-106)
Week 4	Vulnerability Assessment. (Ch. 4, pp. 123-145)
Week 5	Application and Network Security. (Ch. 5, pp. 161-188; Ch. 6, pp. 205-233)
Week 6	Administering a Secure Network. (Ch. 7, pp. 249-276)
Week 7	Wireless Network Security. (Ch. 8, pp. 291-315)
Week 8	Midterm exam.
Week 9	Access Control. (Ch. 9, pp. 331-353)
Week 10	Account Management. (Ch. 10, pp. 365-389)
Week 11	Basic Cryptology. (Ch. 11, pp. 405-433)
Week 12	Business Continuity and Disaster Recovery. (Ch. 13, pp. 487-516)
Week 13	Risk Mitigation. (Ch. 14, pp. 533-556)
Week 14	Legal, Ethical, and Professional Issues in Information Security.
Week 15	Position paper due. Final exam. Please see the "Final Exam Schedule" on the Registrar's web page for the date and time of the final exam.