[ICT 202]: Technologies for Information Services

Instructor: Spencer Greenhalgh, PhD

Contact Information:  
Office—341 Lucille Little Library Bldg.  
Phone—859.218.2294  
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Zoom—https://uky.zoom.us/my/greenhalgh

Response Time: During the week, I work to respond to all emails within 24 hours. I am slower to respond on weekends and may not get back to you until Monday. Please keep this in mind when preparing to submit assignments! I also ask that you check Canvas on a regular basis and that you respond to my messages within 48 hours.

Office Hours: I will hold office hours on Zoom (see above):  
Monday, 12pm to 2pm,  
Tuesday, 12pm to 2pm, or  
by appointment

Meeting Schedule: This course takes place asynchronously on Canvas.

(IsBN: 978-1260454031)

COVID-19 (and More) Statement [inspired by Dr. Andrew Heiss]

A college class can be stressful enough during normal times, but it's likely worse during a global pandemic. You may know (or be!) someone who has lost their job, tested positive for COVID-19, been hospitalized, or taken on new family responsibilities. Not only this, but there are other ongoing events that are constant reminders of inequalities and injustices you may be facing.

I am fully committed to making sure that you learn everything you were hoping to learn from this class! Although formal deadlines are an important part of giving structure to a class, my late policy and willingness to make accommodations are pretty generous even during normal times, and if this pandemic (or anything else) is turning your life upside down, I'm willing to be as flexible as you need me to be.

If you feel like you're behind, not understanding everything, or just plain stressed, do not suffer in silence! I'm pretty quick to respond to email and more than happy to meet with you.
Basic Needs Statement [inspired by Dr. Sara Goldrick-Rab]

Any student who has difficulty affording or accessing food to eat every day or who lacks a safe and stable place to live and believes this may affect their performance in the course is urged to contact the Dean of Students and to explore the resources listed at the bottom of this page. Furthermore, you can always notify me if you are comfortable in doing so.

Course Information

Course Description
This course is designed to teach the fundamental concepts of information technology in ways relevant to professional practice in informatics and the information professions. It explores applications of computers and networks to information problems. Included are features of hardware, types of software, commercial systems, and search engines.

Student Learning Outcomes

- Students will finish this course with a strong understanding of the operation of computers, networks, databases, and various other relevant technologies that are used to provide different types of services.
- Students will have a good knowledge of some of the basic components of computing, networking, and database technologies.
- Students will be able to apply their knowledge to develop solutions that can support the delivery of information services.

Course Objectives

1. Provide a comprehensive introduction to computing, networking, database (and other relevant) technologies in use today in various sectors of society.
2. Explain the fundamentals of computers and computer nomenclature, particularly with respect to personal computer hardware and software, network, database, the Web, and enterprise computing.
3. Present the most-up-to-date technologies and devices used to capture, process, store, and transfer information.
4. Provide students an understanding of why computers and various other technologies are essential components in society today.

Course Assessment
Your grade for this course will be based on 100 points:

- 90 points – 100 points = A
- 80 points – 99.9 points = B
- 70 points – 79.9 points = C
- 60 points – 69.9 points = D
- 0 points – 59.9 points = E
These 100 points come from the following assessment activities, which should all be completed honestly and individually on Canvas:

**Projects:** 20 points (two 10-point projects)

The hands-on projects will require students to apply their knowledge and skills to design solutions and answer questions of varying difficulty for realistic business scenarios. In addition, as part of the project, students will often need to develop their critical thinking skills for given realistic scenarios: they must be able to identify the problem, analyze the options available, and develop an appropriate solution to meet the requirements of the given project scenario.

**Discussion Board Responses:** 10 points (five 2-point responses)

We will be using Canvas’s Discussion Board to discuss topics related to the course throughout the semester. I will provide a prompt for a particular week, and then you will need to respond to the prompt on the discussion boards. Responses must be a minimum of 150 words, and I recommend that you carefully proofread your work.

**Quizzes:** 30 points (six 5-point quizzes)

Quizzes help ensure that students are keeping up with the readings. These quizzes will take place via the Canvas system. They will be timed and must be taken by a specific deadline.

**Exams:** 40 points (two 20-point exams)

Exams help ensure longer-term retention of the information presented in the readings. The midterm exam will include questions from Quizzes 1-3 as well as new questions on the material from the first half of class. The final exam will include questions from Quizzes 4-6 as well as new questions on the material from the second half of class. These exams will take place via the Canvas system. They will be timed tests and must be taken by a specific deadline.

**Late Work Policy**

Officially, each assignment is due at 11:59pm on the Sunday night indicated in Canvas. Practically speaking, however, I will grade without penalty (for graded assessments) and provide feedback on (for all assessments) any assessment that is turned in by the time I begin looking over that assessment. However, I will not grade or provide feedback on any work that is completed after this time unless you have made other arrangements with me. Naturally, because my schedule varies from week to week and because I try to provide feedback as quickly as possible, your best bet is to turn in your work by the official deadline or—if life has thrown you a curveball—to get in touch with me ahead of time to make other arrangements.

**Considerations for Online Learning**

Because this course is held entirely online, it may be different than many of the courses you have taken in the past. Please consult this section for advice and resources that will help you successfully participate in an online class.
Technology Requirements
Minimum technical requirements for UK courses and suggested hardware, software, and internet connections are available at ITS Student Hardware & Software Guidelines.

Technical Support
For account help, contact UK’s Information Technology Customer Services online, by email, or by phone at 859-218-HELP (4357).

Online Learning Resources
The following resources may be helpful for you:

Zoom Teleconferencing Software
We will be using the Zoom software in this course for virtual office hours and other meetings.  
https://uky.zoom.us [log in using your linkblue account]

Information Technology Services (ITS) Customer Services
Students having trouble logging into the various linkblue sites (Account Manager, myUK, Canvas, Office365, etc.) can contact the ITS Service Desk for help.  
859-218-HELP or 859-218-4357  
https://www.uky.edu/its/customer-support-student-it-enablement/customer-services

Canvas Assistance
Students needing technical assistance within their Canvas course can find help through Canvas support.  
https://community.canvaslms.com/docs/DOC-10554-4212710328

UK Online
http://www.uky.edu/ukonline/

Distance Learning Library Services
Phone: (859) 218-1240  
Fax: (859) 257-0505  
E-mail: dllservice@lsv.uky.edu  
Librarian: Carla Cantagallo  
2-2, north wing, William T. Young Library 0456  
Website: http://libraries.uky.edu/dlls
Course Policies

The following policies are in effect for this course:

**Midterm Grades for Undergraduate Students (Senate Rules 6.1.3.A)**
Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar.

**Fall Academic Calendar and Reading Days**
Several modifications to the academic calendar have been made in response to the COVID-19 situation. The current calendar is available here.

The calendar features a Reading Day. The current Dead Week restrictions on certain instructional activities would continue to apply to Reading Days. An additional restriction would apply to Reading Days, namely no required class meetings or, more generally, no “required interactions.” Reading Days are not academic holidays.

**Academic Accommodations**
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 (DRC). The DRC coordinates campus disability services available to students with disabilities. Visit the DRC website, email the DRC, contact them by phone at (859) 257-2754, or visit their office on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407.

**Non-Discrimination Statement and Title IX Information**
UK is committed to providing a safe learning, living, and working environment for all members of the University community. The University maintains a comprehensive program which protects all members from discrimination, harassment, and sexual misconduct. For complete information about UK’s prohibition on discrimination and harassment on aspects such as race, color, ethnic origin, national origin, creed, religion, political belief, sex, and sexual orientation, please see the electronic version of UK’s Administrative Regulation 6:1 (“Policy on Discrimination and Harassment”). In accordance with Title IX of the Education Amendments of 1972, the University prohibits discrimination and harassment on the basis of sex in academics, employment, and all of its programs and activities. Sexual misconduct is a form of sexual harassment in which one act is severe enough to create a hostile environment based on sex and is prohibited between members of the University community and shall not be tolerated. For more details, please see the electronic version of Administrative Regulations 6:2 (“Policy and Procedures for Addressing and Resolving Allegations of Sexual Assault, Stalking, Dating Violence, Domestic Violence, and Sexual Exploitation”). Complaints regarding violations of University policies on discrimination, harassment, and sexual misconduct are handled by the Office of Institutional Equity and Equal Opportunity (IEEO), which is located in 13 Main Building and can be reached by phone at (859) 257-8927. You can also visit the IEEO’s website.
Faculty members are obligated to forward any report made by a student related to IEEO matters to the Office of Institutional Equity and Equal Opportunity. Students can confidentially report alleged incidences through the Violence Intervention and Prevention Center, Counseling Center, or University Health Services.

**Bias Incident Support Services**
Bias Incident Support Services (BISS) provides confidential support and advocacy for any student, staff, or faculty member impacted by bias, hatred, and/or an act of identity-based violence. BISS staff aid impacted parties in accessing campus and community resources, including the Bias Incident Response Team, the University’s official reporting system for acts that negatively impact a sense of belonging. Campus and community consultation and educational opportunities centered on inclusion, diversity, equity and belonging is a resource also provided by BISS. For more detailed information please visit the BISS website or contact them via email.

**Martin Luther King Center**
The Martin Luther King Center (MLKC) supports an inclusive learning environment where diversity and individual differences are understood, respected, and appreciated as a source of strength. The MLKC’s year-round programs and activities that focus on the importance of cultural awareness and cross-cultural understanding support its three primary goals: 1) sponsoring cultural and educational programming; 2) offering opportunities for student support and development; and 3) through programmatic linkages with a wide variety of civic and community agencies, promoting community outreach, engagement, and collaboration. Students can reach the MLKC via phone at 859–257–4130, by visiting them in Gatton Student Center Suite A230, via email, and by visiting the MLKC website.

**Office of LGBTQ* Resources**
UK is committed to supporting students and upholding the University’s efforts to promote inclusion among our community. UK faculty and staff employees support inclusion and diversity throughout the University, including the ways in which faculty structure classroom conversations and manage those dynamics. To assist in these efforts, students are welcome to provide the names and pronouns they prefer. One easy way to do this is by using the pronoun feature of UK’s Name Change Form. (More information about the form can be found on the Office of LGBTQ*’s website.) Otherwise, students can provide this information to faculty members directly.

Discrimination based on sexual orientation, gender expression, and gender identity is prohibited at UK. If you have questions about support, advocacy, and community-building services related to sexual orientation, gender expression, or gender identity, students are encouraged to visit the website of the Office of LGBTQ* Resources.

**Veteran's Resource Center**
Being both a member of the military community and a student can bring some complexities. If you are a member of the military or a military veteran or dependent, please let me know when these challenges arise.
Drill schedules, calls to active duty, mandatory training exercises, issues with GI Bill disbursement, etc. can complicate your academic life. Please let me know if you experience complications and I will do my best to work with you.

If you are a military student serving in the National Guard or Reserve it is in your best interest to let all of your professors know that immediately. You might also consider sharing a copy of your training schedule as well as any orders activating you. The Veterans Resource Center (VRC) can provide a letter for your professors validating your absence but be aware that there is no current UK policy protecting military students who miss class due to short term activations such as long weekend drills, annual training or emergency activations. See the instructor or the VRC for details.

The VRC is a great resource for members of our military family. If you have questions regarding your VA benefits or other related issues, the VRC has a full complement of staff to assist you. The VRC also provides study and lounge space, as well as free printing. Please visit the VRC website, email the DRC, visit them in the basement of Erikson Hall, or call the director, Tony Dotson, at 859–257–1148.

**Violence Intervention and Prevention (VIP) Center**

If you experience an incident of sex- or gender-based discrimination or interpersonal violence, we encourage you to report it. While you may talk to a faculty member or TA/RA/GA, understand that as a “Responsible Employee” of the University these individuals MUST report any acts of violence (including verbal bullying and sexual harassment) to the University’s Title IX Coordinator in the IEEO Office. If you would like to speak with someone who may be able to afford you confidentiality, you can visit the Violence Intervention and Prevention (VIP) Center’s website (offices located in Frazee Hall, lower level; email them; or call 859–257–3574), the Counseling Center’s (CC) website (106 Frazee Hall; 859–257–8701), and the University Health Services (UHS) website; the VIP Center, CC, and UHS are confidential resources on campus. The VIP Center accepts walk-in appointments.

**Academic Integrity**

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the [Code of Student Rights and Responsibilities](#). Complete information can be found on the [Academic Ombud](#) page. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

*Senate Rule 6.3.1* (see current [Senate Rules](#)) states that 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.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

**Academic Integrity—Prohibition on Cheating (SR 6.3.2)**

Cheating is defined by its general usage. It includes, but is not limited to, the wrongfully giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade. The fact that a student could not have benefited from an action is not by itself proof that the action does not constitute cheating. Any question of definition shall be referred to the University Appeals Board.

**Academic Integrity—Prohibition on Falsification/Misuse of Academic Records (SR 6.3.3)**

Maintaining the integrity, accuracy, and appropriate privacy of student academic records is an essential administrative function of the University and a basic protection of all students. Accordingly, the actual or attempted falsification, theft, misrepresentation or other alteration or misuse of any official academic record of the University, specifically including knowingly having unauthorized access to such records or the unauthorized disclosure of information contained in such records, is a serious academic offense. As used in this context, "academic record" includes all paper and electronic versions of the partial or complete permanent academic record, all official and unofficial academic transcripts, application documents and admission credentials, and all academic record transaction documents. The minimum sanction for falsification, including the omission of information, or attempted falsification or other misuse of academic records as described in this section is suspension for one semester.

Faculty members are obligated to forward any report made by a student related to IEEO matters to the Office of Institutional Equity and Equal Opportunity. Students can confidentially report
alleged incidences through the Violence Intervention and Prevention Center, Counseling Center, or University Health Services.

**Summary Course Schedule**

This table provides an overview of the schedule for this course.

<table>
<thead>
<tr>
<th>Module</th>
<th>Topic</th>
<th>Participation Activities</th>
<th>Assessment Activities</th>
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</table>
| Module 1 | Introduction | - complete Canvas readings  
- introduce yourself to the class | |
| (31 Jan) | | | |
| Module 2 | Becoming an ICT Professional | - read pp. 1-11 in book  
- complete Canvas readings | - complete Discussion Post 1 |
| (7 Feb) | | | |
| Module 3 | Representing Information | - complete Canvas readings | - complete Quiz 1 |
| (14 Feb) | | | |
| Module 4 | A Brief History of Computing | - complete Canvas readings | - complete Discussion Post 2 |
| (21 Feb) | | | |
| Module 5 | Motherboards, CPUs, and Memory | - read pp. 29-41 in book  
- read pp. 79-128 in book  
- read pp. 133-164 in book  
- read pp. 205-244  
- complete Canvas readings | - complete Quiz 2 |
| (28 Feb) | | | |
| Module 6 | Storage, Input, and Output | - read pp. 289-319 in book  
- read pp. 391-429 in book  
- read pp. 441-454 in book  
- complete Canvas readings | - complete Quiz 3 |
| (7 Mar) | | | |
| Module 7 | Laptops and Mobile Devices | - read pp. 1035-1075 in book  
- read pp. 1085-1129 in book  
- read pp. 1139-1172 in book  
- complete Canvas readings | - submit Project 1 |
| (14 Mar) | | | |
| Module 8 | Operating Systems | - read pp. 455-482 in book  
- read pp. 575-623 in book  
- complete Canvas readings | - complete midterm exam  
- if willing, submit mid-semester feedback |
| (21 Mar) | | | |
| Module 9 | Software | - complete Canvas readings | - complete Discussion Post 3 |
| (28 Mar) | | | |
| Module 10 | Conceptualizing the Internet | - read pp. 935-994 in book  
- complete Canvas readings | - complete Quiz 4 |
| --- | --- | --- | --- |
| (4 Apr) | Networking | - read pp. 799-830  
- read pp. 833-892  
- read pp. 895-932  
- complete Canvas readings | - complete Quiz 5 |
| Module 11 | Virtualization and Cloud Computing | - read pp. 999-1032  
- complete Canvas readings | - complete Discussion Post 4 |
| (11 Apr) | Information Management—Security | - read pp. 1239-1298  
- complete Canvas readings | - complete Quiz 6 |
| Module 12 | Information Management—Database and Project Management | - complete Canvas readings | - complete Discussion Post 5 |
| (18 Apr) | Information Management—Databases and Project Management | - complete Canvas readings | - submit Project 2 |
| Module 13 | Program Development and Enterprise Systems | - complete Canvas readings | - complete final exam |
| (25 Apr) | Final Exam | - complete final exam | |