Course: ICT/IS 202-201
Title: Technologies for Information Services

Term: Spring 2022
Credit hours: 3
Meeting days/time/location: asynchronous online

Instructor Information
Name: Deloris J. Foxworth
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Office hours: Fridays 12-1 pm via Zoom or by appointment

Instructor will respond to student communication within 24-48 hours. Weekend responses may be delayed.

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.

Course Prerequisites
Not applicable.

Required Materials
CompTIA A+ Certification All-in-One Exam Guide, Tenth Edition,
Mike Meyers
(ISBN: 978-1260454031)
Raspberry Pi 400 Personal Computer Kit

Please make sure you are buying the full Raspberry Pi 400 kit, not just a Raspberry Pi 400! It is available from PiShop.us, Vilros, Adafruit, and other retailers. You will also need access to a monitor or TV with an HDMI input.

This Raspberry Pi 400 kit is the recommended purchase for ICT 202, and assignment instructions will always have this kit in mind. However, if you want more hands-on experience with computer hardware (and are confident in your ability to do some extra troubleshooting), you may want to consider a different Raspberry Pi product. Please see the last page of the syllabus for details. You should plan to keep your Raspberry Pi throughout your time in the ICT program. There will be opportunities in other ICT classes to use your Raspberry Pi to apply class activities.

Activities Outside of Regular Class Meetings

Not applicable.

Skill and Technology Requirements

For technical/account help, students can contact Information Technology Services by phone 859-218-HELP (4357) and via the ITS Customer Services page. (https://www.uky.edu/its/customer-support-student-it-enablement/customer-services)

Student Learning Outcomes

Although we will be covering lots of important information in this class, many of the specific details are less important than the general skills and abilities you acquire from this class. As you proceed through the class, you should be working toward these outcomes:
• Students will be able to evaluate and employ software and hardware.
• Students will be able to reflect on the history of information communication technologies, their importance in contemporary society, and their relationship with policy.
• Students will be able to retrieve, evaluate, and process information to complete software and hardware tasks.

Course Details

Tentative Course Schedule

Week (all items due each week by 11:59 pm Sunday)	Module	Readings and Quizzes (must complete 14 out of 15 quizzes)	Reflection Activities (complete 7 out of 15)	Application Activities (complete 13 out of 15)
January 10-14	Module 1: Introduction	- read course syllabus - read Ch.1: Safety and Professionalism - take Module 1 quiz	- reflect on your goals for the class (and introduce yourself!)	- describe your Raspberry Pi
January 17-21	Module 2: Computers	- read Ch.2: The Visible Computer - read Ch.26: Printers and Multifunction Devices - take Module 2 quiz	- reflect on the history of computers	- describe Raspberry Pi OS

January 24-28	Module 3: Mobile Devices	- read Ch.24: Understanding Mobile Devices - read Ch.25: Care and Feeding of Mobile Devices - take Module 3 quiz	- reflect on access to computers (of all sizes)	- enable remote mobile access for your Raspberry Pi
January 31- February 4	Module 4: Fundamental Hardware	- read Ch.3: CPUs - read Ch.4: RAM - take Module 4 quiz	- reflect on technical constraints and culture	- test Raspberry Pi CPU performance
February 7-11	Module 5: Fundamental Connections	- read Ch.5: Firmware - read Ch.6: Motherboards - take Module 5 quiz	- reflect on technology and power	- label your Raspberry Pi motherboard
February 14-18	Module 6: Mass Storage	- read Ch.8: Mass Storage Technologies - read Ch.9: Implementing Mass Storage - take Module 6 quiz	- reflect on data storage in fiction	- resize the Raspberry Pi boot partition
February 21-25	Module 7: Other Hardware	- read Ch.7: Power Supplies - read Ch.10: Essential Peripherals - take Module 7 quiz	- reflect on peripherals and accessibility	- list Raspberry Pi ports and associated peripherals
February 28- March 4	Module 8: Building Computers	- read Ch.11: Building a PC - read Ch.23: Portable Computing - take Module 8 quiz	- reflect on environmentalism and building and repairing computers	- design an "everyday" Raspberry Pi setup

March 7-11	Module 9: Windows	- read Ch.12: Windows Under the Hood - read Ch.13: Users, Groups, and Permissions - take Module 9 quiz	- reflect on the importance of account security and permissions	- manage user accounts, groups, and permissions in Raspberry Pi OS
March 14-18	Spring Break			
March 21-25	Module 10: Operating Systems	- read Ch.14: Maintaining and Optimizing Operating Systems - read Ch.16: Troubleshooting Operating Systems - take Module 10 quiz	- reflect on operating systems and control	- choose a Raspberry Pi-compatible operating system
March 28-April 1	Module 11: Command Lines and Displays	- read Ch.15: Working with the Command-Line Interface - read Ch.17: Display Technologies - take Module 11 quiz	- reflect on command line interfaces in fiction	- complete the "Pac-Man treasure hunt"
April 4-April 8	Module 12: Networks	- read Ch.18: Essentials of Networking - read Ch.19: Local Area Networking - take Module 12 quiz	- reflect on benefits and downsides of networks	- access the command line of your Raspberry Pi over a network
April 11-15	Module 13: The Internet	- read Ch.20: Wireless Networking - read Ch.21: The Internet	- reflect on the social importance of internet access	- create and host a web page on your Raspberry Pi

		- take Module 13 quiz		
April 18-22	Module 14: Virtualization	- read Ch. 22 - take Module 14 quiz	- reflect on the social power of cloud computing companies	- virtualize an OS on your Raspberry Pi
April 25-29	Module 15: Working with Computers	- read Ch.27: Securing Computers - read Ch.28: Operational Procedures - take Module 15 quiz	- reflect on dangers and social engineering	- back up your Raspberry Pi
May 2-5	Module 16: Final Exam	- take final exam		

Course Activities and Exams

These 100 points come from the following assessment activities, which should all be completed honestly and individually on Canvas:

Practice Quizzes: 14 points (14 of 15 possible one-point practice quizzes)
One of the goals for this class is to prepare you for the CompTIA A+ certification exam. While taking the exam is not a part of the course, it may be a helpful qualification for you to pursue after ICT 202 (depending on the ICT career you have in mind). Our course readings and these practice quizzes are meant to help you learn the material that you will need to know for the certification exam.
Every module, you will have the opportunity to take a multiple-choice practice quiz made up of questions taken from your readings for that module. You will need to take fourteen of the fifteen quizzes over the course of the semester. In other words, you can skip one quiz.
For each quiz, your score will not be based on your answers, and you will not be timed. Instead, you will get one point just for completing the quiz. However, the course exams (and A+ certification exam) are based on similar material, so you should use these practice quizzes as opportunities to assess your understanding of the course material and study accordingly.

Reflection Activities: 14 points (7 of 15 possible two-point reflection activities)
Information communication technologies are not just technical—they are also closely connected to society, culture, diversity, equity, politics, and even pop culture. Whatever ICT career you have in mind, it's important (as a professional and a citizen) to understand the ways that technology connects with the world that we live in. These activities are meant to help you reflect on how the concepts we're studying this semester have importance beyond technology itself.
Every module, you will have the opportunity to complete a reflection activity that connects the material in your readings for that module to the real world (or to pop culture). You will need to complete seven of the fifteen reflection activities over the course of the semester. In other words,

you should complete a reflection activity roughly every other module.

For each reflection you will watch, read, or listen to a video, article, or podcast and then respond to two prompts. Your score will be based on how completely and thoughtfully you respond to the two prompts (one point per prompt). Because these reflection prompts are as connected to social and cultural issues as they are to technology, it is critical that you be respectful and considerate in your responses.

Application Activities: 52 points (13 of 15 possible four-point application activities)

Knowing about information communication technologies is important, but being able to work with them is even more so. Many ICT careers require you to work directly with hardware and software, and even those that don't usually benefit from the ability to tinker with tech. These activities are meant to give you experience with applying the concepts we're studying to actual tech situations.

Every module, you will have the opportunity to complete an application activity that shows you how the material in your readings for that module applies to a Raspberry Pi computer. You will need to complete thirteen of the fifteen reflection activities over the course of the semester. In other words, you can skip two application activities.

For each activity, you will follow prompts to carry out an activity involving your Raspberry Pi and then submit a written, video, or other report to answer specific questions about your experience. Your score will be based on how well you follow the prompts and answer the questions.

Exams: 20 points (one 5-point midterm exam and one 15-point final exam)

As important as reflection and application are, both are dependent on your long-term recollection of knowledge about ICTs. The exams in this course are meant to promote retention of the material from our readings and quizzes.

In Module 8, you will take a 5-point midterm exam that draws from the quizzes and activities from Modules 1-7. In Module 16, you will take a 15-point final exam that draws from the quizzes and activities from Modules 1-15.

Unlike the practice quizzes, both exams will be timed, and your score will depend on your correct answers to the questions.

Grading Scale
Your grade for this course will be based on 100 points:

90 points – 100.0 points = A
80 points – 89.9 points = B
70 points – 79.9 points = C
60 points – 69.9 points = D
 0 points – 59.9 points = E

Midterm Grades
For undergraduates, midterm grades will be posted in myUK by the deadline established by the University Senate and published in the [Academic Calendar](http://www.uky.edu/registrar/content/academic-calendar). (http://www.uky.edu/registrar/content/academic-calendar)

Attendance Policy/Acceptable Documentation
This class is a community whose success depends on *everyone's* participation. It is vital, particularly for an online class, for you to participate in order to be successful. In the event that you are unable to

submit an assignment due to an emergency, you will be asked to provide official written documentation for excused absences in order for your absence to be excused and receive a makeup assignment. **Students have 48-hours to notify the professor of an emergency.** Extensions will not be given beyond this deadline. For any emergency situation that arises, email your instructor as soon as you know about the situation when possible. Students are generally given one week to complete makeup assignments due to an excused absence upon their return without penalty.

If you know ahead of time that you will be unable to participate in the weekly requirements, please discuss this with your instructor and arrange to turn in any assignments or approved alternative assignments ahead of time. Excuses for university-sponsored activities must be made prior to such absences.

Students need to notify the professor of absences prior to class when possible. *Senate Rules 5.2.4.2* defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737, http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php.

Students are strongly encouraged to withdraw from the class if more than 20% of the scheduled classes for the semester are missed per university policy. Please reference the definition of excused absences in the current edition of *Student Rights and Responsibilities* or on the web at http://www.uky.edu/Faculty/Senate/rules_regulations/Rules%20Versions/MASTER%20RULES%20from%20February%202012_clean.pdf

Assignment Policies
Assignment Submissions
All assignments should be submitted through Canvas unless otherwise noted.

Returning Assignments to Students
All feedback on submissions will be shared with students through Canvas. Students can expect feedback within 7-10 days of the final due date.

Students who have grade or exam concerns must request an appointment with the instructor.

Questions related to individual grades should not be posed through Canvas.
Students who wish to discuss grades or scores earned have one week from the date grades are posted to do so. Grades will not be addressed after this time period has expired. Students need to contact the professor for an appointment to discuss the issue. Students must provide a written explanation of their dispute when requesting the appointment. If the matter is unresolved after meeting with the instructor, students need to contact the director of School of Information Science. Students that do not fulfill these requirements will not be addressed and the original grades will be final.

Late Assignments

Assignments are to be submitted online on Canvas. If you submit a piece of coursework after the deadline but within 24 hours of the deadline, your grade will be reduced by 5 percent. If you submit a piece of course work more than 24 hours after the deadline, but less than 48 hours, your grade will be reduced by 10 percent. **Assignments will not be accepted after 48 hours of the deadline without proper documentation and communication with the instructor.**
 (Per the University Senate Rules, within some guidelines late assignments must always be accepted for excused absences. (https://www.uky.edu/universitysenate/rules-regulations).

Assignments Due during Prep Week

There will be able time prior to the designated reading days to complete any coursework due during that week.

Academic Policy Statements

Here is a link to the University Senate-approved Academic Policy Statements.
(https://www.uky.edu/universitysenate/acadpolicy).

Academic Offenses (Cheating, Plagiarism, and Falsification or Misuse of Academic Records)

Here is a link to the University Senate-approved Rules Regarding Academic Offenses.
(https://www.uky.edu/universitysenate/ao).

Resources

Distance Learning Library Services
Tutoring and Coaching Resources
Resources Available to Students

Diversity, Equity, and Inclusion

Here is a link to the University Senate-approved Syllabus Statement on Diversity, Equity, and Inclusion (DEI). (https://www.uky.edu/universitysenate/syllabus-dei).

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Student Resources

The University offers a variety of resources to students. Visit the University Senate's Resources Available to Students to access that list (https://www.uky.edu/universitysenate/student-resources).

Classroom Behavior Policies

To help facilitate a positive and productive learning atmosphere for everyone in class, I encourage you to participate in classroom discussions. There may be situations in the class where you disagree about the kinds of policies that should exist. Constructive discussion about the merits of different approaches

is an important part of the policy making process. Remember, however, to ensure you are respectful of your peers at all times as you contribute.

Course Recordings

The University of Kentucky Code of Student Conduct defines Invasion of Privacy as using electronic or other devices to make a photographic, audio, or video record of any person without their prior knowledge or consent when such a recording is likely to cause injury or distress.

Meetings of this course may be recorded. All video and audio recordings of lecturers and class meetings, provided by the instructors, are for educational use by students in this class only. They are available only through the Canvas shell for this course and are not to be copied, shared, or redistributed.

As addressed in the Code of Student Conduct, students are expected to follow appropriate university policies and maintain the security of linkblue accounts used to access recorded class materials. Recordings may not be reproduced, shared with those not enrolled in the class, or uploaded to other online environments.

If the instructor or a University of Kentucky office plans any other uses for the recordings, beyond this class, students identifiable in the recordings will be notified to request consent prior to such use. In anticipation of such cases, students may be asked to complete an "authorization of use" form by a faculty member.

Video and audio recordings by students are not permitted during the class unless the student has received prior permission from the instructor. Any sharing, distribution, and or uploading of these recordings outside of the parameters of the class is prohibited. Students with specific recording accommodations approved by the Disability Resource Center should present their official documentation to the instructor.

Course Copyright

All original instructor-provided content for this course, which may include handouts, assignments, and lectures, is the intellectual property of the instructors of this course. Students enrolled in the course this academic term may use the original instructor-provided content for their learning and completion of course requirements this term, but such content must not be reproduced or sold. Students enrolled in the course this academic term are hereby granted permission to use original instructor-provided content for reasonable educational and professional purposes extending beyond this course and term, such as studying for a comprehensive or qualifying examination in a degree program, preparing for a professional or certification examination, or to assist in fulfilling responsibilities at a job or internship; other uses of original instructor-provided content require written permission from the instructor(s) in advance.