Course Syllabus for CIS 450 Information Resource Management Fall 2011

Basic Course Information:

| Instructor: | Sharon Tuttle | | |
|---|--|------------------|--------|
| Lecture time and location: | Tuesday, Thursday | 1:00 – 2:20 pm | TA 114 |
| Instructor's office: | BSS 322 | | |
| Instructor's e-mail: | st10@humboldt.edu or sharon.tuttle@humboldt.edu or smtuttle@humboldt.edu | | |
| Instructor's office phone: | (707) 826-3381 | | |
| Instructor's office hours: (tentative) | Monday, Wednesday | 1:00 - 2:00 pm | |
| | Tuesday, Thursday | 10:00 - 11:30 am | |
| | or by appointment | | |
| Course public web page: | follow link from: http://users.humboldt.edu/smtuttle/ or follow link from course Moodle site | | |

Course Description:

Knowledge may be the driving force of the information age, but what counts in competitive business is **accurate information** and having it **available** in the **right place** at the **right time**. As global competition along with the complexity of modern industry increases, even small firms need more institutional memory and information processing capacity than their senior management can usually muster. Whether you are a programming team manager, an engineer, a company information specialist, or government planner needing quick, reliable and focused information for policy purposes, your resources almost have to include one or more databases, and maybe even a data warehouse. Neither the boss's memory nor the filing systems of yesteryear can cope any longer, even where secretarial support is still affordable.

Information Resource Management (IRM) is a management function dealing with efficient management of information and data elements throughout their lifecycle. IRM encompasses the **planning**, **budgeting**, and **supervising** of facilities, systems and organizations. It covers both the information itself and related resources, such as personnel, hardware, software, funds, and technology.

CIS 450 is one of two capstone courses in the CIS program. Discussion of IRM and knowledge management will also include, by necessity, ties to material from throughout the CIS curriculum. The course also includes seminar aspects and frequent discussions, providing students with an opportunity to demonstrate their mastery of the curriculum.

Course Objectives:

In this course, you should:

- ...develop an understanding of current information technology (IT) in a business environment;
- ...explore some of the management issues associated with its utilization;
- ... be given an introduction to the basics of IRM, with a focus on Knowledge Management (KM).

In particular, we are going to consider:

- ...the evolution from information systems development to knowledge management;
- ...the Knowledge Management (KM) implementation life cycle;
- ...KM systems analysis and design;
- ...knowledge audits;
- ...creating KM blueprints;
- ...developing KM systems;
- ...issues of organization and of people in KM, and designing KM teams;
- ...KM deployment and evaluation.

After successfully completing this course, students should have:

- ...some understanding of the fields of IRM and KM;
- ...a reasonable understanding of the terminology involved;
- ...a reasonable grasp of the range of technologies involved;
- ...additional experience with:
 - technical/professional presentation,
 - technical/professional writing,
 - project management, and
 - information research.

Course Prerequisites:

You must have received grades of C or better in CIS 318 and CIS 372 to be able to take this course, or have instructor consent.

Required Course Materials:

- Either:
 - Turning Point RF Response Clicker, available at the campus bookstore,
 - or a Responseware license, available on-line (address to be provided).
- There is no required textbook for this class; however, required readings will be made available throughout the term.

Clickers:

We will be using Turning Technologies student response clickers (or, for those who prefer, Responseware on one's cell phone or laptop) in lecture. There is significant literature indicating that using clickers may increase

CIS 450 - Course Syllabus - Fall 2011

student engagement and success in learning.

Students purchase this clicker or buy a Responseware license; purchased clickers can be returned at the end of the semester for a partial refund of the purchase price. Students with clickers register them once, at the beginning of the semester, by entering the large number (consisting of 6 characters/digits) on the back of the clicker at a special address that I will provide, and then bring them to every class meeting. Students using Responseware purchase the license, and then sign into Responseware at the beginning of each lecture, using a special code that I will project at the beginning of each lecture.

These clickers will be used for in-lecture questions, which will be interspersed within the lecture. The response system will record the overall class response percentages as well as keep track of individual answers. Students will receive **2 points** for a correct answer, **1 point** for an incorrect answer, and **0 points** for no answer, but with a maximum semester clicker-questions grade of **120**. Thus you will be rewarded for regular attendance and participation. If you miss a class session, you miss that day's clicker questions and cannot make them up. However, there will be at least **65** questions asked over the course of the semester, so there is opportunity for extra credit (up to a maximum clicker grade of **120**) (or to make up for a day that you are out due to illness, although note that you are still responsible for finding out what you missed on such days).

If you forget your clicker for a class meeting, then **up to 5 times** you may still receive some clicker credit, **minus a 2-point penalty**, by e-mailing me your clicker answers for that day, **by midnight on that day**, using a Subject: line of: Subject: CIS 450 Clicker Answers for <date>. Later e-mails, or e-mails without the proper Subject: line, will not be accepted for credit.

The idea is that the clicker questions will help you to see if you are starting to understand concepts being discussed; sometimes they will also provide review of concepts discussed previously. Clicker questions are typically quite different from exam questions (since clicker questions are typically multiple-choice questions, while exam questions will rarely be multiple-choice). They still enable you to get some immediate feedback regarding whether you are grasping course concepts, whether you need to pay more attention to course discussions and/or readings, etc. They may even help me to know what concepts might need more explanation in-class.

I hope to run tests of the system during the first week of the semester, and hope to begin asking questions that "count" during the second week of the semester. Therefore, you must purchase your clicker and register it (or purchase a Responseware license) as soon as possible. If there is an issue with this (for example, if the bookstore runs out of clickers), contact me immediately.

Finally, please note that use of another CIS 450 student's clicker, or having someone else use your clicker in CIS 450 lecture -- that is, pretending that a student is in class who actually is not -- is considered to be cheating, with the same policies applying as would be the case if you turned in someone else's work as your own or permitted someone else to copy your work. Please ASK ME if you are not sure what I mean by this.

Grading Breakdown:

If you are a Computer Information Systems (CIS) major, it is important that you note that you must earn **at least a C** in **CIS 450** for this course to count towards your major and to be able to take CIS 492 - Systems Design and Implementation. If you are a Computer Science (CS) major, it is important that you note that you must earn **at least a C in CIS 450** for it to be able to count as a CS major elective.

Your semester grade will be determined by the percentage of points that you earn, **subject to some minimum requirements**. Here are the grade percentages, followed by those minimum requirements:

| Papers/Homeworks/"Other" Assignments: | 20.0% | at least 20 pages' writing during the semester |
|--|-------|--|
| Individual presentation: | 15.0% | 30-minute presentation |
| Clicker questions: | 12.5% | |

| Team project: | | 25.0% | includes team presentation of project |
|---------------|-------------------|--------|--|
| Exams: | Exam 1: | 7.5% | |
| | Exam 2: | 7.5% | |
| | Final Exam | :12.5% | Thursday, December 15, 12:40 - 2:30 pm, TA 114 |

Grade Requirements:

1. To earn a grade of C or better in this course, the following five requirements must all be met:

- your overall semester average must **equal or exceed 72.5%** this is to show a reasonable level of overall mastery of the course material. (Note that one probably cannot meet this requirement if one just meets the minimums below.)
- the average of your Exam 1, Exam 2, and Final Exam grades must equal or exceed 60% this is to show that you understand at least a minimal reasonable level of the most important course concepts.
- the **average** of the grades for your Papers assignments in particular must **equal or exceed 60%** this is because practicing technical writing is an important goal of this course, and so if you cannot meet this requirement, you have not met this course goal. (Note: this minimal requirement only involves Papers assignments in particular; Papers assignments, Homeworks, and "Other" assignments, all, together, make up 20% of the semester grade.)
- your Individual presentation grade must **equal or exceed 60%** because practicing technical presentations is another important goal of this course, and so if you cannot meet this requirement, you have not met this course goal.
- your Team Project grade must **equal or exceed 60%** because, in a lot of ways, the project is attempting to tie together many of the most important aspects of this course, including some that cannot be tested as effectively on exams. If you have not met this requirement, you have not truly shown minimal competence in this course's material.
- 2. If **all five** requirements above are **not** met, then your semester grade will be **either C-** or the letter grade computed according to the mapping given below, **whichever is lower**.

(That is, if a student had an overall semester average of 74% but a Team Project average of 55%, that student would receive a C- for his/her semester grade; if a student had all component averages all above 60%, but an overall semester average of 65%. then that student would receive a D for his/her semester grade. You are expected to ASK ME if this aspect of the grading policy is not clear to you.)

3. Including the three requirements noted above, your semester grade will be computed according to the mapping given below:

| Overall Percentage (based on the given weights) | Exams average | Papers average | Individual Presentation grade | Team Project grade | Letter grade |
|--|------------------|-------------------|-------------------------------------|--------------------------|-----------------|
| >= 93 | >= 60 | >= 60 | >= 60 | >= 60 | А |
| >= 90 and < 93 | >= 60 | >= 60 | >= 60 | >= 60 | A- |
| >= 87 and < 90 | >= 60 | >= 60 | >= 60 | >= 60 | B+ |
| >= 83 and < 87 | >= 60 | >= 60 | >= 60 | >= 60 | В |
| >= 80 and < 83 | >= 60 | >= 60 | >= 60 | >= 60 | B- |
| >= 77 and < 80 | >= 60 | >= 60 | >= 60 | >= 60 | C+ |

| Overall Percentage (based on the given weights) | Exams average | Papers average | Individual Presentation grade | Team Project grade | Letter grade |
|--|------------------|-------------------|-------------------------------------|--------------------------|-----------------|
| >= 73 and < 77 | >= 60 | >= 60 | >= 60 | >= 60 | С |
| >= 73 | < 60 | any | any | any | C- |
| >= 73 | any | < 60 | any | any | C- |
| >= 73 | any | any | < 60 | any | C- |
| >= 73 | any | any | any | < 60 | C- |
| >= 70 and < 73 | any | any | any | any | C- |
| >= 67 and < 70 | any | any | any | any | D+ |
| >= 60 and < 67 | any | any | any | any | D |
| < 60 | any | any | any | any | F |

Final Exam:

Again, the Final Exam for this course is scheduled for **Thursday**, **December 15**, **12:40** – **2:30** pm, in **TA 114** (unless I announce otherwise). Note this time and date BEFORE making your end-of-semester travel plans.

Students with Disabilities:

Persons who wish to request disability-related accommodations should contact the **Student Disability Resource Center** in the Learning Commons of the Lower Library, **826-4678 (voice)** or **826-5392 (TDD)**. You can reach the Student Disability Resource Center's web site at:

http://www.humboldt.edu/disability/

Please note that some accommodations may take up to several weeks to arrange. If you are eligible for such accommodations, please contact me as soon as possible to discuss them.

Add/Drop Policy:

Students are responsible for knowing the University policy, procedures, and schedule for dropping or adding classes. You can find these on the web at:

http://www.humboldt.edu/registrar/students/regulations/schedadjust.html

You can find the University policies for repeating classes at:

http://www.humboldt.edu/registrar/students/regulations/repeat.html

Note that the CSU (and thus HSU) policies on withdrawing from and repeating courses changed as of Fall 2009:

- Students may withdraw from no more than 18 semester-units after the first four weeks of instruction; that is, students may withdraw from no more than 18 semester-units between census and the final 20% of instruction, and only then with a serious and compelling reason. (Note that: "Withdrawal from courses for reasons that are catastrophic, such as accident or serious illness do not count toward the 18-unit limit." [from the Registrar's web site])
- Students may repeat courses for grade forgiveness only if they earned grades lower than a C.
- Students may repeat up to 16 semester-units with grade forgiveness.
- Students may only repeat a course for grade forgiveness two times and each of these attempts counts toward

the 16-unit maximum for repeats.

• Students may repeat up to an additional 12 semester-units with grades averaged.

Be careful – as of Fall 2009, HSU is being much more strict about what constitutes a "serious and compelling reason".

The census date for Fall 2011 (before which you can drop without a W, and without it counting toward your 18 semester-units drop limit) is: **Monday, September 19th**.

The last date for Fall 2011 to drop with a W on your transcript, with a serious and compelling reason, and subject to the 18 semester-unit drop limit, is: **Monday, October 31st**.

If you do drop the course, note that it is your responsibility to complete and submit the appropriate paperwork.

Incompletes:

Incompletes are rarely given and only in the case of a true emergency. They certainly are not appropriate for students who find they have fallen behind on assignments, missed a test, or taken on too much academic, work, or family responsibilities. For these situations, dropping the course would be appropriate (**if** that is still possible according to the University policies for dropping courses).

Time Expectations:

Remember the general rule of thumb for college-level courses --- to be successful in a course, you should plan to spend at least 3 hours outside of class for each 1 hour of college course credit. That implies an estimate of at least 9 hours a week spent outside of class for this 3-credit course.

However, you should be warned that:

- This is a senior-level CIS major course; it has an accordingly-rigorous workload.
- Technical reading and writing are significant aspects of this course.
- Your best defense is to start coursework and project milestones early, so that you have time to ask questions and get answers before each deadline.
- Course deadlines will not be extended because you waited too late to start or because you did not allocate enough time before the deadline to work on them; likewise, they will not be extended because of hardware or network failures. You need to keep backups of your files at all times, and need to plan your schedule to be able to work on on-campus computers as necessary. You should submit whatever you have managed to do by the deadline.

Academic Honesty:

Students are responsible for knowing policy regarding academic honesty. For more information, visit:

http://www.humboldt.edu/studentrights/academic_honesty.php

Observe that among the actions that are unacceptable are submitting another's program, code, or file as your own and failing to quote material taken from another person's written work.

All **individual** coursework is to be the work of each student, **individually**; work that is specified as being done in teams should be the work of everyone in that team. When group work is expected, the names of all students involved must be included on the work submitted.

For individual work (that is not specified as team or group or pair work), students may discuss general approaches **as long as no one involved in the discussion is writing anything down or typing anything during such discussions**. Students may also help one another in determining causes of program bugs, or in determining the meaning of compiler error messages. However, in general, students may not work together to complete homework assignments, one student should not instruct another in how to write the code for a homework

assignment, and **any type of copying or modifying of another person's computer files, OR of providing computer files to another, related to homework assignments is definitely over the line, and never justified**. This applies to copying of documentation and comments as well as to copying of program code.

Note that it is **your** responsibility to ensure that individual coursework files are read-protected. If you are careless about this, and someone else copies your work, you will share the penalty. (In particular, be very careful about leaving work on shared network drives in campus labs, or in UNIX/Linux directories that are not read-protected.)

Learning takes hard work; when students turn in others' work as their own, it is a slap in the face to those seriously interested in learning. Not turning in an assignment results in no credit for that assignment, of course, but that is an honest grade. Work that violates the course honesty policy deserves a lower grade than that, and therefore the course policy is that work violating this policy will receive **negative** credit. A person providing a file for copying receives the same **negative** credit as the copier. Repeat offenses will be handled according to University policies.

Asking Questions/Getting Help:

- You are encouraged to ask me questions in class, in office hours, and by e-mail. The most successful students are those who are not afraid to ask questions early and often (I will gently let you know if you are overdoing it), who do the assigned reading, who attend lecture regularly, who start coursework promptly and work on long-term assignments consistently, and who practice and think about course concepts as much as possible.
 - It is better to ask a question sooner than later -- for example, it is better to send an e-mail with a specific question as soon as you think of it than it is to wait a day or two until the next class meeting or office hour. If you wait to ask such questions, you may not have time to complete the assignment.
 - It is perfectly reasonable if you send me a question and then end up finding out the answer yourself before you receive my answer; likewise, it is not a problem if you end up sending me several questions in separate e-mails (as you work on different parts of a homework while awaiting earlier answers).
- That said, I am expecting that you will ask **specific** questions overly vague or broad questions are problematic. (For example, an example of a specific question is, "When I try to run query: (paste in the query), I receive the following error message: (paste in the error message) Can you point me in the right direction about what is wrong?" An example of an overly vague or broad question is: "Here's my paper on this week's reading. Is it right?")
- I try to check my e-mail (st10@humboldt.edu or sharon.tuttle@humboldt.edu or smtuttle@humboldt.edu) about once a day on weekdays, and about once over each weekend. This is another reason to start assignments early, so that you have time to receive a reply to any questions that might arise. Include CIS 450 and a general description of your topic in the Subject: line, both because including this makes it less likely that I'll overlook your question, and because it will make your message stand out if it the spam filter gets confused and puts it in the university spam quarantine.
 - If I have not replied to your e-mail within 24 hours, please re-send it, just in case it did get overlooked somehow.
 - Also, DON'T INCLUDE the word "password" in your e-mails to me -- pwd is a handy abbreviation to use instead -- because, due to phishing scams, HSU's spam filtering definitely does not like e-mails with that word in it! (Odd, but this was definitely the case in Spring 2010...)

Additional Coursework-Related Policies:

- All coursework must be submitted as is specified on its handout to be accepted for credit. This may vary for different coursework. Often, parts of coursework will be submitted using a special tool on nrs-labs.
- Coursework handouts will be clearly marked with one or more due dates (a single coursework instance could

have multiple parts with multiple due dates).

- No coursework will be accepted late. If you wish to receive any credit for coursework, then you must turn in whatever you have done, even if it is incomplete, by the deadline. Partial credit is usually preferable to no credit. Note that "the computer/network/etc. going down" is no excuse --- if you leave coursework for the last minute and there are technical problems, you still must turn in whatever you have by the deadline. As with any work done on computer, make frequent back-ups of your files!
- You may submit multiple versions of coursework files before the deadline; I will grade the latest predeadline submission unless you inform me otherwise. This is to encourage you to turn coursework parts in early (since you will know that you can always turn in an improved version if further inspiration strikes). You also don't have to worry about forgetting to submit something that has already been submitted.
- The tool that you will be using to submit some coursework parts results in a file that serves as your "receipt" for having submitted items. You are expected to retain these "receipt" files at least until a grade has been posted to the course Moodle site for that assignment. If there is a system glitch or other hardware/software/network problem, you may be asked to make me a copy of one or more receipt files; if you do not have them, then you will not receive credit for the files involved. These receipt files are for your protection!
- It is nearly impossible to write unambiguous specifications. If you have questions about "what she means", get them resolved very early in the development cycle by **asking**.
- There is more to computer code than simply whether it runs or not...
 - Part of your grade will be determined by how well your work meets the written requirements. Work that
 you turn in is expected to meet handout specifications precisely; when one eventually works within a team
 on large projects, following the specifications precisely is vital, and can mean the difference between a
 working product and one that just sits there.
 - Note that work may be graded on style as well as on whether it runs properly and whether it precisely
 meets the homework specifications and requirements. Discussions on style will be ongoing throughout the
 semester.
- Some coursework may be graded simply based on whether it has been attempted (the instructor's decision is final as to whether this is the case) -- other coursework may be graded for correctness, style, and whether it meets specifications. You will not know in advance which will be the case.

Additional Course Policies:

- If you would like me to e-mail certain course grades to you during the semester, then you must give me permission in writing on the course information form.
- You are expected to read this syllabus and be prepared to sign a statement that says you have received it, have read it, and understand its contents.
- Exam dates are given in the course schedule below. Make-up exams are only possible by special prior arrangement or because of a valid medical excuse.
- You should monitor your e-mail for course-related messages. The University provides a means for you to specify your preferred e-mail address, so if you wish to receive e-mail into an account other than the one HSU provides, change your preferred e-mail address in both Account Center and Moodle accordingly. Course-related messages from me will include CIS 450 in the Subject: line.
- You are expected to check the public course web page and the course Moodle site regularly --- course handouts, examples from lectures, and possibly more will be posted to the public course web page, and grades will be posted to the course Moodle site. You are expected to monitor your posted grades and let me know about any discrepancies.

CIS 450 - Course Syllabus - Fall 2011

- When reading assignments are given, you are expected to prepare (read and study) assigned readings before class and to participate in class discussions. You should understand that there may be material in the reading that will not be discussed in lecture, and material in the lectures that may not be found in the reading. You are responsible for both.
- Attendance and disruptive behavior: Students are responsible for knowing policy regarding attendance and disruptive behavior:

http://www.humboldt.edu/studentrights/attendance_behavior.php

- Regular attendance at lecture sessions is expected. If you should happen to miss a lecture, then you are responsible for finding out what you missed. "I wasn't there that time" is never an acceptable excuse. Lecture notes are not guaranteed to be posted, although some lecture material may be made available on the public course web site. Clicker questions missed **cannot** be made up later.
- Late arrival to class: Please attempt to come to class on time, with your headphones put away and your cell phones turned off. If you must arrive late or leave early, please do so with the least possible distraction to other students. If your late/early habits become disruptive, you may be asked to leave the class permanently.
- Class disruption: University policy requires that instructors eliminate disruptions to the educational process. Distractions such as excess talking, ringing cell phones, working on assignments for other classes, inappropriate or distracting laptop/tablet/smartphone/gadget use, demonstrations of affection, packing of books early, loud music leaking from headphones, chronic late arrivals or early departures, excessive comings and goings or other behaviors that disrupt the class are not acceptable. Students indulging in such behaviors will first be warned before being required to leave the class permanently.
- Emergency Evacuation: Please review the evacuation plan for the classroom (posted on the orange signs), and review the campus Emergency Preparedness web site at: http://www.humboldt.edu/emergencymgmtprogram/campus_emergency_preparedness.php for information on campus Emergency Procedures. During an emergency, information regarding campus conditions can be found at **826-INFO** or: http://www.humboldt.edu/emergency procedures. During an emergency, information regarding campus conditions can be found at **826-INFO** or: http://www.humboldt.edu/emergency procedures. During an emergency information regarding campus conditions can be found at **826-INFO** or: http://www.humboldt.edu/emergency

Very Tentative Course Schedule: (very subject to change!)

- Exam 1 Thursday, September 29
- Exam 2 Thursday, November 3

Note that the order of the topics below is also likely to vary from that shown.

- Intro to course
- Overview of Business Information Systems
- Intro to the Unified Modeling Language (UML)
- Knowledge Management Infrastructure
- Infrastructure Evaluation and Knowledge Maps
- Knowledge Management Architecture
- Knowledge Audits
- Knowledge Management Teams
- Knowledge Management System Blueprint
- Knowledge Management System Development
- Process Mapping

CIS 450 - Course Syllabus - Fall 2011

- Metadata Management
- Decision Support Systems
- OLAP
- Business Process Reengineering
- Workflow Management
- Security Policies in a KMS
- Ethical Issues in KMS's

Final Exam:

THURSDAY, December 15, 12:40 - 2:30 pm, in TA 114 (unless I announce otherwise)