In this course you will learn about basic issues in information science and information studies, including the nature of information, information services, information professions, information policy, information ethics, and the complex relationships between information technologies and society.

**Competencies**

Upon successful completion of the course, you will be able to:

1. Identify and be able to relate concepts of information science and information studies;
2. Describe various institutions and technologies for the organization, storage, and retrieval of information, and identify these structures in information systems.
3. Connect current information-based institutions and technologies to their historical roots and with their cultural, political, and economic settings.
4. Apply general knowledge of current issues in information technologies, the information professions, information policy, and information ethics.
5. Illustrate the impact of the development of technology on access to and use of information and the changes that this development causes in the structure and operation of society.
6. Synthesize varied case information for a deeper analysis of particular examples of information systems.
7. Collaborate in evaluating information systems in terms of their data acquisition, information organization, computing and display, as well as their social impacts.

**Course Details**

**Required Textbook:** None, readings will be provided in Canvas. There is one $3.99 required online film rental.

**Required Technology:** You will need access to an appropriate computer with a broadband Internet connection. Note that it is your responsibility to ensure you have a reliable computer for use during the course. Ongoing “computer problems” will not be considered a legitimate excuse for missing course activities. But please do let me know about any technical problems you are having; I will try to help. Since all UWM students are granted free access to Microsoft 365, all of the assignments for this course can be completed using this software suite, except the final presentation, which will require the use of a screen-capture program (some are available freely online). D2L technology assistance can be sought at https://uwm.edu/cetl/services/get-help/ or SOIS’s Tech department may be able to help you: http://uwm.edu/informationstudies/resources/it/

**Prerequisites:** None

**Workload:** Study leading to 1 semester credit represents an investment of time by the average student of not fewer than 48 hours for class contact in lectures, for laboratories, examinations, tutorials and recitations, and for preparation and study; or a demonstration by the student of learning equivalent to that established as the expected product of such a period of study. Thus, this 3-credit class (during a 15-16-week semester) will involve up to approximately 144 hours of work, or 9 hours per week. The actual amount of time required will vary according to the experience and expertise of the student.
Course Structure
This class involves experiential learning, lecture and discussion-based class work, complemented by film & media screenings, as well as readings and responses to those readings. It involves small group and individual assignments. This course is set up with four main components:
1. Identifying what information science and information actually are.
2. Evaluating Augmented Data, Information & Knowledge (ADIK) systems, and how they function.
3. Applying ADIK concepts in analyzing information systems in particular cases.
4. Assessing a particular ADIK in light of the acquisition, processing, organization and display of information, as well as social impacts of the system, in a group project.

Lectures
Lectures will focus on the assigned topic, highlighting particular items and connecting content in the readings to other “real-world” examples. They will NOT simply reiterate the course readings. Students are expected to view each lecture, having already prepared for them by doing the assigned readings or viewings. Frequently, videos will be shown to complement the course material.

Reading Responses Are Discussions
We will teach each other in this course; discussion is how we do that. Each student is expected to actively and constructively participate in class forums. You are expected to engage with both the readings and the other students in these responses. The reading responses are due by SUNDAY of each week, at 11:59 pm. Your responses to other students are not required by a deadline, but you ARE expected to engage with the other students’ responses regularly.

In-Class Activities
Most course sessions will include brief activities and collaborative work. These will generally occur in the discussion forums. These activities are key to your success in this course, so please follow the directions for each activity carefully. These activities will be due SUNDAYS at 11:59 pm.

Assignments
Students must submit weekly brief assignments during the semester, and one slightly longer assignment. These are in essence a portfolio of works based on a chosen information system and will lead directly into the final project.

Tips for Success in Online Courses
1. READ THE SYLLABUS AND REFER BACK TO IT REGULARLY. This is your road map to this course.
2. Fully commit to the slightly impersonal (unfortunately, despite our best efforts) yet rigorous nature of online courses. These courses take work!
3. Have a dedicated study space and time.
4. Work with others effectively by communicating well. Keep in contact every week at least once with your team members.
5. Be self-disciplined. Ensure you meet deadlines throughout each week and that you have mapped out your time well.
6. PLAN AHEAD for intensive tasks.
7. Make sure that you have reliable internet access. Be, or be willing to become, tech-savvy.
8. Ask for help. I am always happy to assist.

Atmosphere for Learning
Students are encouraged to participate in open and frank discussions of the course material, but are also expected to respect the other students and to engage in discussion and debates in a sensitive manner. When in doubt, please err on the side of respect in your dealings with all the participants in this course. Please be open to exploring and critically assessing your own biases, and the philosophies embedded within the technologies.

A Week in This Class Might Look Like:
Monday. Check for any class news. Take in the content for the first module of the week. Contact your group members to tell them your schedule for the week.
Tuesday. Do your reading responses and the activity for the first module.
Wednesday. Take in the content for the second module of the week. Prepare for any assignments.
Thursday. Do your reading responses and the activity for the second module.
Friday. Ensure you’ve finished all your readings, responses & activities. Work on your group project if you’re at that point.
Saturday. Make sure you take some time to spend with family and friends, and take care of yourself too! Mental health time is of PRIMARY importance.
Sunday. Be sure to upload all activities by 11:59 pm CST. Expect to spend about 9 hours a week, on average, doing work for this course. You will spend more time on final projects, less on some weeks. This course depends on the experience and expertise of the student.
Attendance Policy
Life happens. While attendance in this class is required, you may skip one week in terms of viewing course content and doing reading responses or activities, without penalty. Attendance is measured by your engagement with course materials and your participation in discussions. Not engaging with course materials will negatively impact your grade. Not viewing the course lectures or other content will result in up to 1 point being deducted from your overall grade per week, after the one week of “grace.”

Excused Absences
Excused absences must receive instructor approval. Student should apply for an excused absence if the absence (1) was for a family or personal emergency, (2) occurred at such a time as to prevent the student from reasonably attending class, and (3) can be appropriately documented. Documentation examples: statement of military/jury service, documentation by a professional service worker, medical documentation. Requests are due 2 weeks from the student’s return and prior to the last day of class.

If you have a scenario in which: Your dog is lost and you’re looking for he; you are traveling; your child is feeling unwell but didn’t go to the doctor... and other similar situations, you have my deepest sympathy, but you do NOT have an excused absence. HOWEVER, reach out to me—I may be able to work with you to help you through even unexcused absences.

Special Considerations
Please don’t ask for extensions, make-up assignments, or special extra credit. Here is UWM’s policy on “special consideration,” which I strive to follow closely:

Special Consideration. The principle of equal treatment of all students shall be a fundamental guide in responding to requests for special consideration. No student should be given an opportunity to improve a grade that is not made available to all members of the class. This policy is not intended to exclude reasonable accommodation of verified student disability, or the completion of work missed as the result of religious observance, verified illness, or justified absence due to circumstances beyond the student’s control.

http://www4.uwm.edu/secu/policies/saap/upload/S29.htm

Accommodations for Disabilities
If you need accommodations for disabilities, please let me know immediately. This is your responsibility, and I will need certification from Accessibility Resource Center. I want to be able to accommodate your needs and make this course as accessible as possible for you, and an ARC plan allows me the power to do so. However, it is the student’s responsibility to have this plan in place, in writing, from the ARC center BEFORE requesting any accommodations. I cannot accommodate disabilities without the ARC documentation.

What is an Information System?
Consider Google Home. It is an information system that senses your intent from your voice by using its natural language processing, driven by its machine learning project, then acquires information from the internet using Google’s ginormous data servers, organizes it usefully using Google’s algorithm until the keywords you speak trigger recall of some specific information, then it displays the information to you in the form of an answer. In this class we’ll call this an ADIK: an Augmented Data, Information & Knowledge system.

You Contacting Me & Me Contacting You
Keep in contact with me! Email is the best way to do so. I will respond to class-related emails during normal work hours, (not during weekends or after 8 pm) and will generally reply with 24 hours. Please be sure to use your UWM e-mail account, identify yourself and the course.

Your email & Canvas: You should check your UWM email and Canvas accounts regularly since I use them to keep you informed about any changes to the course. You are responsible for receiving, reading, and responding to any and all email messages and Canvas announcements.

Your Instructor
Shannon Crawford Barniskis; Please call me Shannon.
Email: crawfo55@uwm.edu
Office: NWQ-B room 2588
Office hours: Appointments may be arranged via email. I can Skype.

Grading Policy
My policy is to return things as swiftly as possible, usually within a week. Any appeals to grades must be done in person (no email) within a week of an assignment being returned, and the instructor’s word is final, unless the student chooses to appeal under UWM policy [see p. 8]. Please see the Academic Misconduct policy on p. 7.
<table>
<thead>
<tr>
<th>WEEK OF THE COURSE</th>
<th>MODULES</th>
<th>READINGS AND OTHER CONTENT, ASSIGNMENTS</th>
</tr>
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</table>
| Week 1 9/4-9/8     | 1.1 Introduction to the Course  
1.2 What is Information? | 1.1: Review Syllabus // Pick 1 of 2 readings // Introductions  
1.2: Information machine // Barlow // Debons, Ch.1 |
| Week 2 9/9-9/15    | 2.1 The Information Society  
2.2 Information Science History | 2.1: Moore // Links // Pardes  
2.2: Davis & Shaw, Ch. 2 |
| Week 3 9/16-9/22   | 3.1 Info Professions & Work  
3.2 Info Access & Digital Divides | 3.1: There’s an app for that // Benson // Links // Selected Positions // SLA Competencies  
3.2: Mathiesen // Making the Internet Affordable video // Malcolm |
| Week 4 9/23-9/29   | 4.1 Info Systems: ADIK overview  
4.2 Data Acquisition | 4.1: Debons, Ch. 4 // APA video  
4.2: Debons Ch. 5 (81-91) |
| Week 5 9/30-10/6   | 5.1 Info Organization  
5.2 Data Transmission  
ASSIGNMENT | 5.1: Linked Open Data // Bawden & Robinson Ch. 6  
5.2: Faircloth, Ch. 2 // Videos  
ASSIGNMENT due 10/6 11:59 PM CST |
| Week 6 10/7-10/13  | 6.1 Computing  
6.2 Databases | 6.1: After Moore’s Law // Video links  
6.2: Faircloth Ch. 4 |
| Week 7 10/14-10/20 | 7.1 Algorithms  
7.2 Platforms | 7.1: Lewis // O’Neil TED // ProPublica videos  
7.2 Fisher // Gillespie |
| Week 8 10/21-10/27 | 8.1 AI & Machine Learning  
8.2 Human/NonHuman  
ASSIGNMENT | 8.1: Lewis-Kraus // Do You Trust This Computer?  
8.2: Hardy // Stinson  
INITIAL PROJECT PLAN due 10/27 11:59 PM CST |
**COURSE SCHEDULE AT A GLANCE (continued)**

<table>
<thead>
<tr>
<th>WEEK OF THE COURSE</th>
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<tbody>
<tr>
<td>Week 13 11/25-12/1</td>
<td>THANKSGIVING BREAK</td>
<td>Enjoy your break! EXTRA CREDIT due 12/1, 11:59 PM CST</td>
</tr>
<tr>
<td>Week 15 12/9-12/12</td>
<td>Group Projects &amp; Presentations ASSIGNMENT</td>
<td>15: Presenting Projects, view all presentations PROJECT REVIEW due 12/15, 11:59 CST (no final exam)</td>
</tr>
</tbody>
</table>

**Films may include:**
- Do You Trust This Computer?
- We’re Building a Dystopia Just to Make People Click on Ads
- The Era of Blind Faith in Algorithms Must End
- Why Privacy Matters
- It’s Getting Harder to Spot a Deep Fake Video
Reading List


Hardy, M. (2018). Meet the transhumanists turning themselves into cyborgs. WIRED. Retrieved from https://tinyurl.com/yb3xgrbt


Waltz, E. (2016). Software helps CRISPR live up to its hype. IEEE Spectrum,
Learning Activities & Assessment

Reading Response Competencies 1-7, 30 pts
You are required to respond to class materials online, in the Canvas forums. These social responses help you learn from the readings & from each other. You will be expected to read at least three other students’ responses as well. These are always due SUNDAYS, by 11:59 pm CST. Time estimate: 30 minutes each module.

Activities Competencies 1-7, 35 pts
Most modules will include very brief writing assignments, worksheets, discussions, and other in-class activities. These are always due SUNDAYS, by 11:59 pm CST. Time estimate: 30 minutes each module.

Diving In Competencies 1 & 3, 10 pts
What is your system all about? History, development, audience. You will also create an annotated bibliography about your system with at least 4 scholarly articles, and 3 non-scholarly ones, focused on the issues that interest you. Due 10/6 11:59 PM CST in Canvas. Time estimate: 6 hours.

Final Project Plan Competencies 5, 6, & 7, 7 pts
Your group project requires a comprehensive project plan. You will be submitting these to me as a form of schedule and guidelines for your team, and as a rubric for grading. Initial plan due 10/27 11:59 PM CST in Canvas. Final plan due 11/10 11:59 PM CST in Canvas. Time estimate: 1 hour each.

Credit Breakdown
- Activities: 35%
- Diving In Assignment: 10%
- Reading Responses: 30%
- Final Project: 25%

Grading Scale
- A: 94-100
- A-: 91-93
- B+: 88-90
- B: 84-87
- B-: 81-83
- C+: 78-80
- C: 74-77
- C-: 71-73
- D+: 68-70
- D: 64-67
- D-: 60-63
- F: 0-59

Final Project 18 pts
Competencies 5, 6, & 7
This is a group/partner project. Your group will presenting a powerpoint or other visual aid with voiceovers, turned into short films. These will be recorded and uploaded to YouTube, Vimeo or some other platform. It will be your team’s responsibility to ensure these are uploaded. You will be selecting the topics of interest to you at the beginning of the course, and your assignments will relate to that system. You will focus on whatever interests you about the system you’ve been studying, such as the social impacts and issues surrounding your system.

Sample topics include: Twitter, Netflix, Internet-connected light bulbs, and so on.

You will be creating a presentation that assesses some information system, and sharing that with the class and/or other groups. You MUST view all of the presentations. You will be reviewing some.


https://skcd.com/1215/
UWM and SOIS Academic Policies

The following links contain university policies affecting all SOIS students. Many of the links below may be accessed through a PDF-document maintained by the Secretary of the University.

http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf

Undergraduates may also find the Panther Planner and Undergraduate Student Handbook useful.
http://www4.uwm.edu/dos/student-handbook.cfm

Students with Disabilities

If you will need accommodations in order to meet any of the requirements of a course, please contact the instructor as soon as possible. Students with disabilities are responsible to communicate directly with the instructor to ensure special accommodation in a timely manner. There is comprehensive coverage of issues related to disabilities at the Student Accessibility Center.
http://www4.uwm.edu/arc

Academic misconduct

Cheating and plagiarism are violations of the academic honor code and carry severe sanctions, ranging from a failing grade for a course or assignment to expulsion from the University. See the following link or contact the SOIS Investigating Officer Laretta Henderson for more information.

I HAVE A ZERO-TOLERANCE POLICY FOR PLAGIARISM. Any papers containing plagiarized content will receive 0 points and are not able to be made up. Subsequent violations will be treated as described here:

https://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/

Complaints

Students may direct complaints to the head of the academic unit or department in which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy.

https://www4.uwm.edu/secu/docs/other/S_47_Discrimina_duct_Policy.pdf

Religious Observances

Students’ sincerely held religious beliefs must be reasonably accommodated with respect to all examinations and other academic requirements, according to the following policy:

http://www4.uwm.edu/secu/docs/other/S1.5.htm

Please notify your instructor within the first three weeks of the Fall or Spring Term (first week of shorter-term or Summer courses) of any specific days or dates on which you request relief from an examination or academic requirement for religious observances.

Examinations, Finals

The Secretary of the University is authorized to prepare the final examination schedule. The time of the final examination for an individual or a class may be changed only with the prior approval of the dean or director of the respective college/school. The change will involve a postponement to a later date. For individuals with exam conflicts, a separate week at the very end of the exam week will be reserved to take one of the conflicting exams.

http://www4.uwm.edu/secu/docs/other/S22.htm

Students called to active military duty

UWM has several policies that accommodate students who must temporarily lay aside their educational pursuits when called to active duty in the military, including provisions for refunds, readmission, grading, and other situations.

https://uwm.edu/active-duty-military/

Canvas & Student Privacy

This course utilizes CANVAS to facilitate online learning. CANVAS provides instructors the ability to view both individual data points and aggregate course statistics, including the dates and times individual students access the system, the pages a student has viewed, duration of visits, and the IP address of the computer used to access the course. This information is kept confidential in accordance with the Family Educational Rights and Privacy Act (FERPA), but may be used by the instructor for student evaluation within the constraints of this particular course.

http://www4.uwm.edu/secu/docs/other/S22.htm
Incompletes

A notation of “incomplete” may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student’s control, has been unable to take or complete the final examination or to complete some limited amount of term work.

https://www4.uwm.edu/secu/docs/other/S_31_INCOMPLETE_GRADES.pdf

Grade appeal procedures

A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School.

http://www4.uwm.edu/secu/docs/other/S28.htm

Discriminatory conduct, Title IX/Sexual Violence, GSM/LGBTQ+ resources

UWM and SOIS are committed to building and maintaining a campus environment that recognizes the inherent worth and dignity of every person, fosters tolerance, sensitivity, understanding, and mutual respect, and encourages the members of its community to strive to reach their full potential. The UWM policy statement summarizes and defines situations that constitute discriminatory conduct. If you have questions, please contact an appropriate SOIS administrator.

https://www4.uwm.edu/secu/docs/other/S_47_Discrimina_duct_Policy.pdf

UWM policy prohibits discriminatory conduct, including sexual violence, which may include sexual harassment, sexual assault, relationship violence, and/or stalking in all educational programs and education-related areas. UWM strongly encourages its students to report any instance of sex discrimination to UWM’s Title IX Coordinator (titleix@uwm.edu). Whether or not a student wishes to report an incident of sexual violence, the Title IX Coordinator can connect students to resources at UWM and/or in the community including, but not limited to, victim advocacy, medical and counseling services, and/or law enforcement.

http://www4.uwm.edu/secu/docs/other/S22.htm

There are many resources available for GSM/LGBTQ+ communities and individuals, please look into them here:

https://www4.uwm.edu/secu/docs/other/S_47_Discrimina_duct_Policy.pdf

Need Other Help?

Check out The Writing Center
The Writing Center is open to all UW-Milwaukee writers, current freshmen through graduate students, staff and faculty. Whether face to face or online in real time, you can meet one on one and confidentially with a qualified tutor to discuss any kind of writing project. All subjects and skill levels are welcome. Schedule help EARLY in the semester. Really. My advice is: for all your courses, make appointments early on, so you don’t have a problem at the end of the semester when everyone else is also seeking help. Locations: Curtin Hall 127; Library East Wing http://www4.uwm.edu/writingcenter

CANVAS Help
For help in working with Canvas, go to: https://kb.uwm.edu/cetl/internal/page.php?id=82928

PASS
Panther Academic Support Services can make a huge difference. If you feel like you’re just not doing as well as you’d hoped, they provide all kinds of support groups, tutoring, software, and other help.
http://www4.uwm.edu/pass/
Send PASS a Text: Send your question or request via SMS to (414) 97-EXCEL or (414) 973-9235

Ask a Librarian
Many students think they never need enter the library, and that they can accomplish all the research they need online. But often the library has resources and help you have no idea even exists. Just speaking to a research librarian can make projects go far more simply, because they can often think of other search terms or resources that you don’t know about. Visit the Ask a Librarian Desk, (located on the first floor, west wing) for help using the library, and/or get in-depth assistance with a research consultation:
http://uwm.edu/libraries/user-services/consultation/

https://xkcd.com/1289/