

# **Course Syllabus**

## **University of Wisconsin – Milwaukee (UWM)**

### **School of Information Studies (SOIS)**

#### **Course Title**

Senior Capstone

#### **Semester**

Spring 2020

#### **Course and Section Number**

INFOST 490 – 001

#### **Meeting Times and Location**

Mondays and Wednesdays, 11:00 AM till 12:15 PM, NWQB-6590

#### **Instructor**

Kevin Trainor

Office: NWQB-3472

#### **Teaching Assistant**

Brian Hartling

#### **Contacting Instructor or Teaching Assistant**

The preferred method for contacting either Brian or me is by entering a request using the [Request Center portal for this course](#). PLEASE, DO NOT send requests to our regular email addresses.

The Request Center portal for this course has been implemented using the [iCourse – JIRA Service Desk](#). If you are new to using the service desk, please visit the [introduction page](#) for instructions and tips.

On an emergency basis, you may contact me using my mobile phone number: 847-650-9706.

#### **Individual Meetings**

While I will not be holding scheduled office hours, you can arrange an individual meeting with me by submitting an *Individual Meeting Request* using the Request Center portal (see *Contacting the Instructor or Teaching Assistant* above).

#### **Catalog Description**

Analysis, creation, development and presentation of an information retrieval system project for an information organization. 3 credits. Core course.

## **General Description**

The Senior Capstone course provides the student with two important opportunities. The first of these opportunities is to work with a small team of classmates to project manage, gather requirements for, design, build, test, and install a small information retrieval system for an actual client. The second opportunity is to learn the language, tools, and techniques of agile project management.

## **Required Texts**

Agile Project Management for Dummies, 2<sup>nd</sup> Edition  
by Mark C. Layton & Steven J. Ostermiller  
Copyright 2017, John Wiley & Sons  
ISBN 978-1-119-40569-6 (pbk)  
ISBN 978-1-119-40574-0 (ebk)  
ISBN 978-1-119-40573-3 (ebk)

## **Software**

You are likely to use a variety of software tools while conducting your team project. Exactly which tools will depend upon the choices made by your team. Brian and I will do my best to help your team get access to those tools that you will need.

We will arrange for each group to be assigned a SOIS Web Space. This space will have the same features as a SOIS Student Web Space (<http://www4.uwm.edu/sois/resources/it/webpace/>). The only difference is that the space will be accessible by all students within a team.

As part of our class, each group will be conducting a project using the principles of agile project management. We will be using the JIRA Software product to help us organize and track our project work. This product has been made available to us by Atlassian Software. Links to JIRA Software tutorial material will be provided in the appropriate part of our Weekly Schedule.

### **Course Objectives**

- Demonstrate skills acquired during the BIST program in systems analysis, programming, database development, Web design, and Web development as part of a small project team that creates a computer application for a real-world client.
- Explain the benefits of agile project management.
- Demonstrate agile project management techniques in a small team project.
- Write a summary project report for a small team project.
- Create a video presentation of a small team project.

### **BSIST Learning Outcomes**

1. Analyze complex information and technology needs, and to apply principles of information science and other relevant disciplines to identify and implement solutions.
2. Design, implement, evaluate, and administer information systems to meet a given set of requirements – including user and organizational needs -- in diverse environments.
3. Communicate effectively in a variety of professional contexts.
4. Function effectively as a member or leader of a team engaged in the design, implementation, and evaluation information technology solutions.
5. Recognize organizational and social responsibilities as information professionals and make informed judgments based on legal and ethical principles.

### **Instructional Methods**

- Reading
- Lecture
- Canvas Forum Posting
- Midterm Exam
- Team project, report, and video presentation

### **Prerequisites**

Senior status, INFOST 340(P) and INFOST 410(P)

### **Course Schedule**

The schedule for this course will be available via our Weekly Schedule at:

[https://courseinfo.ligent.net/2020sp/\\_uwm/infost490\\_001/index.html](https://courseinfo.ligent.net/2020sp/_uwm/infost490_001/index.html)

The course schedule is always subject to reasonable change to account for changes in circumstance and to correct errors. When I make changes to the schedule, I will announce them via Canvas Announcements.

## Work Required of Students

### Estimated Workload

This class meets twice weekly for 1.25 hours per meeting. Total class meeting time for the semester will be 35 hours. Readings for this course are estimated to take 10 hours. There are 2 Skills Practice assignments during the semester. Each Skills Practice assignment is estimated to take 5 hours, for a total of 10 hours. Preparing for and taking the midterm exam for this course is estimated to take 5 hours. During this course, you will join a team that finds, plans and executes an information system development project for a real-world client. The work required of you in a particular week will vary depending on the activities taking place in the project during that week. Overall, you should expect to spend about 100 hours doing project-related work during the semester. If the project-related work were spread evenly over the 16-week semester, it would require an average commitment of 6.25 hours per week.

Based upon the estimates above, the total number of hours estimated to complete the work required for this course is 160 hours. As mentioned above, time requirements may be higher or lower in any particular week depending on the work assigned for that week. Time requirements may also vary depending upon your own abilities and your system development experience. Grades will be based on work output produced and submitted rather than by the time expended.

### Reading

Readings in this course are concentrated in the early weeks of the semester. Readings will be assigned in the Layton text and in other supplementary resources identified in the Weekly Schedule. I recommend that you do any reading assignments for a particular week before attending the class for which these readings have been assigned.

### Viewing Tutorials

Tutorials will be available for your viewing as video recordings. You will find a list of assigned videos for each week in the Weekly Schedule.

### Participation

This course is designed to be highly interactive. You are expected to interact frequently with me and with your fellow students. Accordingly, **participation accounts for 15% of the final grade** for this course. The following elements are all part of the participation component of this course.

1. In-Class Participation

There will be many opportunities for you to speak, ask questions, or present your work in class. All of these will earn participation credit:

*In-Class Introductions*

During our first class session, you will be asked to introduce yourself to the class.

*In-Class Open Discussion*

I expect all students to actively participate in class sessions. This participation includes answering questions that I pose during lectures, asking questions yourself, and making comments.

*Acting as the Spokesperson for Your Group or Team*

Many class sessions will include group or team activities. At the conclusion of the activity, we will usually debrief the exercise. At that point, one person from the group or team will give a report. Participation credit will be earned by the person making the report. The expectation is that this responsibility will be rotated amongst the group or team members to allow everyone an equal opportunity to play this role.

2. Peer Reviews

At end of the semester, each student is required to submit a set of Peer Reviews that rate the contribution of each team member to the project. **You will be asked to rate your own contribution as well as the contribution of your teammates.** Participation credit will be awarded to each student based upon their contribution as reported by their teammates.

In addition to the Peer Review component, participation grades are based upon the number of participation points earned during the semester. These are the activities through which you can earn participation points:

<b>Activity</b>	<b>Points Earned</b>
Attending a class	2
Introducing yourself during the first class	5
1 speaking contribution during class	1
1 participation as a panel member in a group presentation or walkthrough	5
1 presentation as group or team spokesperson	5

## Exam

There will be one exam, a midterm, based upon the Layton text. The exam will consist of 40 to 50 multiple-choice questions and will be administered via the Canvas quiz feature. The quiz will be available for 7 days and there will not be a limit on the number of attempts that you may make. Feel free to consult the text, your notes, the Internet or any other sources. Nevertheless, you must take the exam by yourself (and not with a partner or partners).

Students needing special accommodations must visit the Student Accessibility Center for evaluation and provide the instructor the necessary paperwork at least one week in advance of the test date.

## Team Project

During the first one-third of the semester, you will be learning about agile project management. You will also be forming project teams. Project teams of 3 to 6 students each will be formed at the end of this first third of the semester. The final two-thirds of the semester will be devoted to working as a project team to deliver a computer-based systems solution and to manage this effort using agile project management practices.

Project teams will be formed around project opportunities. A project opportunity happens when a student identifies a willing client organization with a problem or opportunity that can be addressed by a computer-based system solution. Typical client organizations from past classes have included small to medium-sized businesses operated by a student's friends or family, larger businesses in which one or more of the students are currently employed, not-for-profit organizations, and departments within UWM. Some students already know of project prospects at the beginning of the semester. Others identify project prospects after some brainstorming sessions that we conduct as a class. Since project teams consist of approximately four members, it is not necessary that every student develop their own project opportunity. It is only required that we collectively develop enough opportunities to find a project for each group.

When identifying a project, it is important to find one where the solution will allow the team to demonstrate the full scope of skills covered by the BSIST program. **While a static Web site might meet the immediate needs of a client business organization, it is an insufficient demonstration of system developer skills to meet the project requirements of this course. Qualifying projects typically involve a responsive Web interface to a server-side application that provides for Create, Read, Update, and Delete (CRUD) processing of business records stored in a relational database.** When appropriate, your solutions must also provide for basic system security including user authorization and login functions. Since most SOIS BIST students have been trained on the developer tools that make up the LAMP stack (Linux, Apache HTTP Server, MySQL, and PHP), teams often choose the LAMP stack as the platform for their system solutions. Nevertheless, teams are free to choose other platforms for their solutions provided that those platforms have similar capabilities.

Team formation takes place around project opportunities that have been identified by students in the early weeks of the semester. Obviously, the student or students who identify an opportunity will be assigned to work on that project. Other students should be invited to join the team based upon the remaining skills needed by the team. Early in the semester, I ask each student to present a summary of her/his development skills and project interest. These are shared with the whole class so that every student can see potential opportunities for team membership. The final step is choosing teams. In most classes, students have expressed a desire to form teams themselves. In that case, I typically allow students to tell me which group

they have joined. In the event that students have difficulty in finding a team, I am available to help students find their way to a team.

The deliverables expected of each team include the system itself, a video presentation of the system (capabilities, documentation, code, training, security, etc.), and a project report that summarizes the agile project management process used on the project. More detailed instructions and grading rubrics for each of these deliverables will be published separately.

## **Grading**

### **Late Submission of Assignments**

Each assignment has a specific submission deadline (date and time). Grading rubrics for assignments indicate points to be deducted for late submission. Assignments that are submitted more than 7 days late will be considered too late and given a grade of zero.

### **Deadline Extension Requests**

Extensions to assignment deadlines will be made in a very limited number of cases where students have encountered emergency circumstances. Decisions about whether particular circumstances qualify for an extension will be made on a case-by-case basis. If you wish to be considered for an extension, please submit a Deadline Extension Request using the Request Center portal for this course (see URL above).

### **Assignment Re-Grading Requests**

Under certain unusual circumstances, grades for your submitted assignments may be missing or incorrect in the Canvas grade book. This may happen if you have submitted the assignment late or if you have submitted the assignment under a deadline extension. On rare occasions, even assignments that are submitted on time can be missed in the grading workflow. If you have any assignment that you believe needs further grading attention, please submit an Assignment Re-Grading Request using the Request Center portal for this course (see URL above).

### **Basis for Determining Grade**

The various components of individual and team work will contribute to the final grade based upon the following percentages:

- Participation (individual & team): 15%
- Midterm Exam (individual): 35%
- \*Project Deliverables (team): 50%
  - Delivered System (30%)
  - Presentation Video (10%)
  - Project Report (10%)

*\*Please Note: Provided that all team members have engaged with the team and the project in good faith, all students will earn the project deliverables grades that are earned by their team. In the event that an individual student does not effectively engage with either the team or the project, I reserve the right to reduce the project deliverables grade for that student to reflect their level of contribution. This reduction may be substantial. If a team member has had no engagement, their project deliverables grade will be reduced to zero. Since this portion of the grade counts for 50% of the overall grade, the result of such non-engagement will be catastrophic.*

Letter grades will be determined as follows:

- A 93 - 100%;
- A- 90 - 92%;
- B+ 87 - 89%;
- B 83 - 86%;
- B- 80 - 82%;
- C+ 77 - 79%;
- C 73 - 76%;
- C- 70 - 72%;
- D+ 67 - 69%;
- D 63 - 66%;
- D- 60 - 62%;
- F 0 - 59%;



## 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://uwm.edu/studenthandbook/student-handbook/>).

### 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/sac/> ), important components of which are expressed here: <http://www.uwm.edu/Dept/DSAD/SAC/SACltr.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.

### 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 (see <http://www4.uwm.edu/academics/military.cfm>), including provisions for refunds, readmission, grading, and other situations.

### 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 substantial cause beyond the student's control, has been unable to take or complete the final examination or some limited amount of other term work. An incomplete is not given unless the student proves to the instructor that s/he was prevented from completing course requirements for just cause as indicated above (<http://www4.uwm.edu/secu/docs/other/S31.pdf>).

### Discriminatory Conduct (such as sexual harassment)

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 (<http://www4.uwm.edu/secu/docs/other/S47.pdf>) summarizes and defines situations that constitute discriminatory conduct. If you have questions, please contact an appropriate SOIS administrator.

**Academic Misconduct**

Cheating on exams 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 document

(<http://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/>) or contact the SOIS Investigating Officer (currently the Associate Dean) for more information.

**Complaints**

Students may direct complaints to the SOIS Dean or Associate Dean. If the complaint allegedly violates a specific university policy, it may be directed to the appropriate university office responsible for enforcing the policy.

**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 SOIS appeal procedures for undergraduates as seen here:

(<http://www4.uwm.edu/sois/programs/graduate/mlis/policies/appeals.cfm> ) In the case of a graduate student, the Graduate School, ([http://www4.uwm.edu/sois/programs/undergraduate/ug\\_appeals.cfm](http://www4.uwm.edu/sois/programs/undergraduate/ug_appeals.cfm) ).

**Last Revised**

2020-01-14