

# Syllabus ITM490 Senior Project Spring 2010

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**Course Web Site** <https://sites.google.com/a/boisestate.edu/itm490-2010/home>

## Course Overview

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### Perspective

ITM490 is not really a course; think of it like this.... You are working for a 30 person consulting company called 490Inc. We do systems development and related work for clients. Anson is the head of the company. He has a four people, with years of experience in the IS field, who serve as internal consultants for the 25 staff (you!) who make up the project teams.

Currently, 490Inc. has 6 contracts with clients: 2 small businesses, 2 non-profits, 1 government, and 1 education. The types of projects are equally diverse: 3 system development, 1 system prototype development, and 2 are to analyze and present recommendations, 1 for a new system, and 1 for a network infrastructure.

You and three or four other staff are working on a project for one of 490Inc's clients. As you work, you are very conscious that your company and your job depend on providing over the top customer satisfaction. You are also conscious that Anson is a diehard about managing the project—"Chaos!" he is known to mutter under his breath.

Now he is all excited about a new, agile, approach to project management called Scrum. In fact, Anson is betting the house on it—the 4 internal consultants are tasked with bringing up all 6 projects at once with Scrum. You've read enough to know that the methodology has a lot of potential to improve projects. But it does mean some extra juggling of new project management terms and practices at the same time you are trying to get product out the door.

### Logistics

490Inc. has a very flexible working policy with one exception—Monday nights. Work wherever your team decides except for Monday night when all the teams work together in room 216, in the Business Building, from 6:05 until 8:30 or 9:00.

It kind of makes sense though. The consultants are there so it is easier to talk with them, get advice, have them review things you are working on. And there are just-in-time trainings to learn how to do Scrum, and other brief professional development seminars. In addition, every other Monday is a Sprint Night. That is your team wraps up one sprint (iteration) and plans the next.

## Course Learning Objectives

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For an IT project, be able to ...

1. ... **plan an IT project**, and use the plan to manage/coordinate the team's work; create and present regular progress reports to stakeholders.
2. ... **collect and accurately represent information** regarding functional and technical client needs and system requirements from stakeholders; and effectively adjust to changes in requirements.
3. ... **create and evaluate IT strategies**, products, and business solutions for client needs.
4. ... **actively seek out and research** knowledge, skills and feedback from instructor, consultants, clients, and others, to effectively address project requirements
5. ... **communicate effectively** with team members, clients, and management (instructor and consultants)—one on one, in groups, in meetings.

6. ... **coordinate your work effectively** in a small team proactively coordinating your work with others and working with an appointed team leader (or as team leader).
7. ... **regularly review** your personal and team work processes, and apply your learning to change how you work, to continuously improve.

## **Roles and Responsibilities**

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### **Teams**

- **Your team is 100% responsible for its project delivery and client satisfaction.**
- **Your team will meet at least twice per week (Monday night plus at least one more time)**
- **Your team is “self-organizing”—there is not one person “in charge”.**

### **Team Members**

- **Each team member is expected to contribute in multiple ways to the project**
- **Each team member is expected to work on the project at least 10 hours +/- per week in order to earn their full pay (an ‘A’ grade)**

### **Team Leaders**

The Scrum Master is responsible for (1) facilitating team Scrum processes and (2) removing obstacles. This is different than a Project Manager. The Scrum Master does not make the final decisions or tell each person what to do—that is up to the team. But the Scrum Master does make sure that the team makes the decisions it needs to, and that everyone is encouraged to contribute and has the opportunity to do so.

In 490Inc. the Scrum Master will **run key Scrum meetings**--the Sprint Planning Meeting, Sprint Retrospective, and Daily Scrum. In addition, the Scrum Master makes sure the following take place:

- **project and sprint plans** are developed, updated and progress is tracked in Rally
- **task assignments** are recorded for all team members and involve constructive and appropriate work
- **work products and processes** are reviewed regularly to catch problems early and correct problems
- **communications among team members** are constructive, inclusive and respectful
- **communications with consultants (including instructor)** are frequent, ongoing and productive
- **communications with clients** are positive, open, and meet the client and team needs

### **Clients**

Your client has “hired” 490Inc to do a project for them that they need to have done, but do not have the staff to do. Your job is to involve the client in identifying, prioritizing and testing your work. You need to build a positive, ongoing relationship with your client based on trust, respect and shared understanding. This requires special attention to the relationship: get to know them individually and organizationally, communicate a LOT, set very clear and specific expectations for who, how, what and when. And....

### **No surprises!**

Build your client’s confidence in your team and involvement in your project by keeping them honestly informed of your progress and obstacles. Never intentionally or unintentionally surprise them!

### **Consultants (Including Anson and the 4 Consultants)**

**Make use of your consultant—their one goal is to help your team meet your client’s needs.**

Invite the consultants in to your discussions. Ask their opinion. Run ideas past them. Ask them to review your plan or design or whatever. You have nothing to lose and everything to gain. **Their advice is freely given.** But it is up to the team how—or whether—to use their advice. They bear no responsibility for work done or not done on your project.

## Evaluation

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Ultimately I'm looking at 3 things at the team and individual level.

### ❑ Product

- Do your team products meet the client's real needs?
- Do your individual products meet the team's real needs?

### ❑ Process

- Does your team make steady, intentional progress toward completing the project? Is your process (plan, schedule) documented, published, shared with the client and consultants, etc.?  
Does your team maintain effective communications with the client and consultants?
- Do you contribute to the team's process, decisions, planning, and communications?

### ❑ Improvement

- Does your team regularly and intentionally review its products and processes to find ways to improve? Does it make changes to improve?
- Does your team regularly and intentionally seek input from consultants and client?
- Do you actively seek input on your own work and work processes in order to improve?

## Grades

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There are no points; instead you are paid with a grade at the end. **Everyone earns a regular salary of a 'B'.** You can **earn bonuses** to bump that up as far as an 'A+' by providing exceptional contributions in one or more areas. You can **earn reductions** by doing things that get in the way of the team's productivity, or by not contributing.

<b>Some ways to reduce your pay</b>	<b>Some ways to earn a bonus</b>
<ul style="list-style-type: none"><li>• Skipping Monday nights or other team meetings</li><li>• Working regularly less than 10 hours per week</li><li>• Often contributing less than other team members</li><li>• Often arriving late, not completing the work you agreed to on-time, producing low quality</li><li>• Not participating in team discussions, decisions, plans, products</li><li>• Not contributing feedback, reviews, input to other team members</li><li>• Being unwilling to consider feedback, reviews, input from other team members</li></ul>	<ul style="list-style-type: none"><li>• Taking a leadership role in an area of the project</li><li>• Taking initiative to do extra research or learning</li><li>• Volunteering to take on unpopular assignments and getting them done well and on time</li><li>• Stepping out of your comfort zone to contribute</li><li>• Coming to meetings well prepared, on-time, positive and ready to roll—repeatedly</li><li>• Helping others when they need help</li><li>• Doing work of exceptional quality</li><li>• Working to make the team more productive</li></ul>

**Your personal and team evaluation will be based on regular observations and impressions from:**

- Your team members
- Your client
- Your consultant
- Your instructor

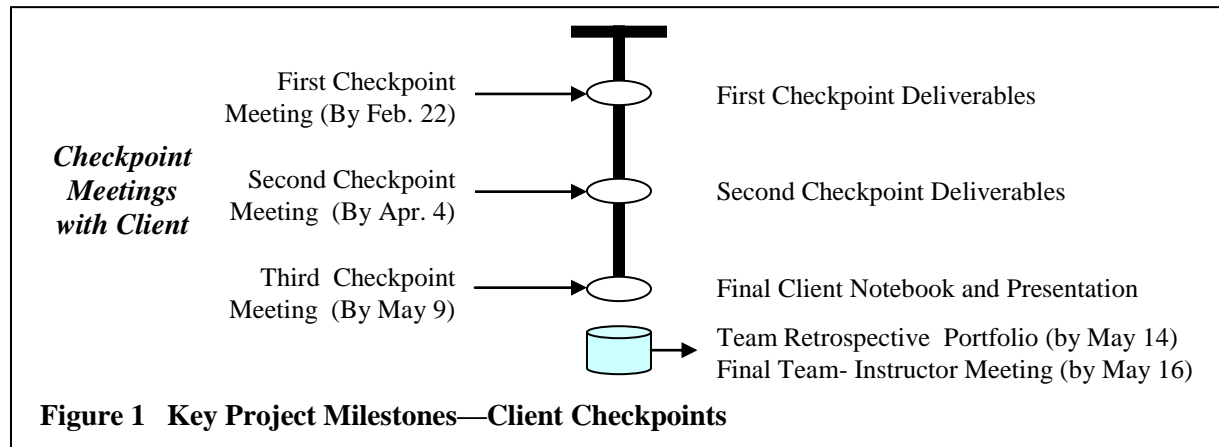
**What you need to know about your grades!**

- ⇒ **Your grade will not suffer if you make a mistake. It will suffer, if you keep making the same mistake.**
- ⇒ **Your grade will not suffer if you are showing initiative, regularly contributing, and keeping involved.**
- ⇒ **At any time you are concerned, ask your team members and ask me for feedback.**
- ⇒ **Unless you ask, or I become concerned about your performance, I will not be talking about grades.**

## Client Checkpoint Expectations

The **three Client Checkpoints** are major milestones (see Figure 1). Each is an opportunity to present—to your client and instructor—key deliverables, discuss client feedback, decide on changes of direction.

**Each Client Checkpoint is an important, formal meeting. You need to prepare: a planned agenda, a professional presentation, handouts. Get input from consultant on your meeting agenda & materials.**



### 1) First Checkpoint Deliverables (See ITM490 SOW powerpoint)

Formally present the SOW (Statement of Work). Get client feedback and approval to validate your understanding of the project and your approach to it. Your goal is to forge a shared understanding and expectations on the products and the process for completing them.

- ❑ Proposed Statement of Work
- ❑ Product Backlog
- ❑ *Other project-specific deliverables*

### 2) Second Checkpoint Deliverables

Formally conduct a mid-way review of progress made and of work processes. This is a time to regroup if necessary, re-scope what can be accomplished, re-examine processes for working and communicating with client, review overall progress made on product. Also, outcome is to gain client feedback and buy-in to project.

- ❑ Overall Sprint Plan and Product Backlog showing progress and current state
- ❑ Key points from Statement of Work to review
- ❑ *Other project-specific deliverables*

### 3) Third Checkpoint Deliverables (See ITM490 Final Project Deliverables document)

Formally hand-off the final project report and deliverables to the client. Review the entire work completed against agreed requirements in SOW. Discuss next steps for the client to take. Get closure on the project.

- ❑ Final Client Project Notebook
- ❑ Final Client Presentation
- ❑ *Required project-specific deliverables*

## **Team Project Retrospective** (See ITM490 Final Project Deliverables document)

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### **Hand in the final Team Retrospective Portfolio to the instructor**

This portfolio is due mid-way through Finals Week. The intent is to document your learning on the project.

### **Project Management Expectations**

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You have a lot of flexibility to run the project as you wish, as long as you apply the following practices. In addition to the customer, the head of 490Inc. wants to make sure you are really managing the project.

- ⇒ maintain a team web site in Google Apps—Sites as your documents repository with final and in process files
  - ⇒ maintain an Rally site on the web that is kept up-to-date with your Product Backlog, each current and past Sprint backlogs and tasks, estimates and priorities, actual time worked per task.
  - ⇒ conduct a Scrum Standup Meeting **at least twice a week**, and **post record of each Scrum Standup on your team site**
  - ⇒ input individual peer assessments a Team Process Improvement Plan when asked to do so
  - ⇒ develop a client communications plan with the client and make sure to fulfill expectations you set with the client. (Remember, the client does not see you every day or every week, so they have no idea what you are doing, or if. Keep the client informed!)
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## Spring 2010 Course Schedule

(See Course Site for updated schedule)

Sprint	Week	Date	Class Meetings	Due Dates
0	1	Jan 18	<i>Martin Luther King Day</i> Course and SOW Overview SCRUM training part 1—Principles, Stories; Team mtg	
0	2	Jan 25	SCRUM training part 2—Rally & Product Backlog	
0	3	Feb 1	SCRUM training part 3—Sprint Planning	
0/1	4	Feb 8	Sprint Night Prepare for Client Checkpoint	#0 Sprint Night <b>Checkpoint 1—Between 2/9 &amp; 2/12</b>
1	X-5-X	Feb 15	<i>President Day—No Class</i>	
1/2	6	Feb 22	Sprint Night	#1 Sprint Night
2	7	Mar 1	Team Work Night	
2/3	8	Mar 8	Sprint Night	#2 Sprint Night
3	9	Mar 15	Team Work Night	
3/4	10	Mar 22	Sprint Night Prepare for Client Checkpoint	#3 Sprint Night <b>Checkpoint 2— Between 3/23 &amp; 3/26</b>
4	X-11-X	Mar 29	<i>Spring Break—No Class</i>	
4/5	12	Apr 5	Sprint Night	#4 Sprint Night
5	13	Apr 12	Team Work Night	
5/6	14	Apr 19	Sprint Night	#5 Sprint Night
6	15	Apr 26	Team Work Night	
6//	16	May 3	Sprint Night Prepare for Client Checkpoint	#6 Sprint Night <b>Checkpoint 3—Between 5/4 &amp; 5/8</b>
	X	May 12 Wed	<i>Finals Week—No Class</i>	<b>*Due Team Project Retrospective</b> <b>*Due Team Review Meeting w/ Instructor</b>
		May 15	<i>Commencement</i>	

**Schedule Client Checkpoint Meetings with client and instructor at least 2 weeks in advance. These will take place outside of class times unless approved by instructor.**

### Sprint Night Agenda

1. (30 min) Demonstrate/review sprint deliverables with consultant → Post Sprint Deliverables
2. (15 min) Retrospective discussion → Post Sprint Retrospective
3. (60 min) Plan next Sprint → Post Upcoming Sprint Plan
4. (15 min) Scrum of Scrums → Present Team Scrum information

### Team Work Night Agenda

1. Just-In-Time Stuff (announcements, reminders, JIT training tips for everyone, Q&A, etc.)
2. Team Stand-Up Meeting with consultant
3. Team working meetings, collaborative work, individual work and consultation