



LGST/OPIM 240: Gamification for Business

Fall 2014, 1 cu

12:00-1:30pm, Jon M. Huntsman Hall, Room 345

Overview

Gamification is the application of digital game design techniques to business and other domains. Video games are the dominant entertainment form of our time because they are powerful tools for motivating behavior. Many companies today are incorporating gamification in areas as varied as marketing, human resources management, productivity enhancement, sustainability, training, health and wellness, innovation, and customer engagement. This course will examine the mechanisms of gamification and provide an understanding of their effective use. No particular technical skills, gaming experience, prior coursework, or knowledge about the games industry are required.

Learning Objectives

After taking this course, you should:

1. Understand what gamification is and why/how organizations are using it.
2. Be familiar with the fundamentals of game design and motivational psychology.
3. Have a deeper understanding of what makes some experiences seem fun or engaging.
4. Be able to develop a gamified solution to a business problem using a design process.
5. Recognize the limitations and risks of gamification.

Instructor

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TAs

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Texts and Other Materials

- KEVIN WERBACH AND DANIEL HUNTER, FOR THE WIN: HOW GAME THINKING CAN REVOLUTIONIZE YOUR BUSINESS (Wharton Digital Press, 2012)
- Additional readings and videos will be available on Canvas. There are no materials on Study.net.

Course Structure

This is a "flipped" course. Content that would normally be delivered in class through lectures will be provided through short video segments (typically 5-10 minutes each), originally developed for the Coursera massive open online version of this course. Throughout the syllabus are short online quizzes that will test your understanding of the material in the videos.

One major benefit of this approach is that it frees up class time from basic content delivery. You can get the lectures in my MOOC, but only here can we do interactive exercises, simulations, case

studies, discussions, and games which will greatly deepen your understanding of the topic. The best way to learn gamification is to do gamification.

In addition to the videos, you will also be assigned some readings, including chapters from my book, *For the Win*. There are some areas of overlap between the book and the videos, although the book is more detailed; depending on how you learn, you may find one or the other format more useful.

You can follow the syllabus using the Modules tab in Canvas. Video pages and many assignments are set as "Discussions," so you can comment on the materials and submissions by other students.

Schedule

UNIT 0: ONBOARDING

Weds 8/27 **Ready Player One**
Course goals and expectations.

Assignment: Complete the personal survey on Canvas. (Due September 3.)

Weds 9/3 **Getting into the Game**
Defining gamification. How games are relevant to business.

Assignment: Spend at least 30 minutes playing a casual online or mobile game, such as Candy Crush Saga, Clash of Clans, Plants vs. Zombies 2, or Words With Friends. It should be a game you haven't played before. With your newfound knowledge of gamification, answer the following questions on Canvas: Is the game fun? Why or why not? What could a business learn from this game? [5,000 points]

Watch: Videos 1.3, 1.4, 2.1

Read: For the Win, Chapter 1 (Getting Into the Game)

UNIT 1: GAMES

Mon 9/8 **What's a Game?**
Defining games. Distinguishing games from play, and from gamification.

Watch: Videos 2.2, 2.3

Weds 9/10 **Game Design 101**
The Easiest Game Design Exercise Ever (Really).

Watch: Videos 2.4, 2.5

Assignment: Unit 1a quiz [1,000 points]

Mon 9/15 **Anatomy of Fun**
What makes games engaging? Unpacking the concept of “fun.” The second-easiest game design exercise ever.

Watch: Videos 3.4, 3.5, 3.6

Read: Bai, Master of His Virtual Domain: <http://nyti.ms/193Rx0G>

Guild Task: Working together with your guild, create a video or screencast up to 5 minutes long, which explains the concept of gamification. Imagine you are describing to a friend or relative what this course is about, and why it’s an important topic. To the extent possible, anticipate and address possible misunderstandings. Humor and creativity are encouraged!
[4,000 points]

Assignment: Sign up for a free account on HabitRPG (<http://habitrpg.com>), and watch the tutorial video at <http://vimeo.com/57654086>. Use the service over the next two weeks, enough to form an opinion of how effective it is. *Note: graded assignment to be completed 10/1.*

Weds 9/17 **Game Thinking**
Analyzing problems like a game designer. Basic patterns in game design.

Watch: Videos 3.2, 3.3

Read: For the Win, Chapter 2 (Game Thinking)

Assignment: Unit 1b quiz [1,000 points]

Mon 9/22 **OK, Let’s Make a Real Game!**
Sports card game design exercise.

Read: The Design of Paint the Line (<http://bit.ly/1ddfBQc>)

Watch: Penny Arcade’s Paint the Line ECG: Red Tide intro video, how to play, and rules at <http://kck.st/IPJxtQ>

Weds 9/24 **Now Let’s Make a Better Game**
Sports card game playtesting.

Guild Task: Working with your guild, refine your sports card game until it is far enough along to playtest. You should bring in a diagram of the game board (as appropriate), as well as a list of rules, with sufficient information for another guild to understand and play your game.

Mon 9/29

Sports Card Game Gallery*Presentations of final games. Wrap-up discussion on games.*

Guild Task: Finalize your sports card game. Bring in the final materials and rules to submit. [8,000 points]

UNIT 2: GAME ELEMENTS

Weds 10/1

Making Things “Game-Like”*From games to gamification. HabitRPG discussion.*

Assignment: Write a post on Canvas analyzing your experience with HabitRPG. Did the site motivate you to develop better habits? Why or why not? How would you suggest improving the service? [5,000 points]

Mon 10/6

Deconstructing Games*The concept of game elements. How elements relate to games. Playgen cards exercise.*

Watch: Videos 4.1, 4.2

Assignment: Play a causal game, in the same category as you played for the first assignment. However, this time pick a different game. Identify three game elements it uses. For each, find an example of something that is not a game, but uses the same element. Write a post on Canvas comparing how the elements are used by each. [5,000 points]

Reading: For the Win, Chapter 4 (Gamification Toolkit)

Weds 10/8

PBLs*Points, badges, and leaderboards. Foursquare case and debate.*

Watch: Videos 4.3, 4.4

Read: Foursquare case (on Canvas). Be prepared to discuss your answers to the discussion questions. (You do not need to submit them to Canvas.)

Assignment: Unit 2 quiz [1,000 points]

Mon 10/13

Beyond Elements*Crowdsourcing, prizes, and virtual goods.*

Watch: Videos 12.2, 12.3, 12.4
Introduction to FoldIt: <https://www.youtube.com/watch?v=bo99JjnfdA8>

Assignment: Review the Final Project overview (on Canvas). Individually, come up with an idea of a real-world service or organization to gamify for your guild's final project. Submit a description on Canvas. [4,000 points]

UNIT 3: MOTIVATION

Weds 10/15 **Behaviorism**

The nature of motivation. Gamification as a practice of applied motivational psychology. Operant conditioning.

Watch: Videos 5.1, 5.2, 5.3

Reading: For the Win, Chapter 3 (The Rules of Motivation)

Assignment: Unit 3a quiz – covers videos for 10/13 and 10/15 [1,000 points]

Mon 10/20 **Self-Determination Theory**

Intrinsic and extrinsic motivation. Crowding-out effects.

Assignment: Play a casual online game. It should not be Candy Crush, or a game you played for a prior assignment. Write a post on Canvas analyzing the techniques the game uses to motivate players to participate and keep playing. Draw on the psychological research discussed in this unit. [5,000 points]

Watch: Videos 6.2, 6.3, 6.4, 6.5

Weds 10/22 **Behavior Change and Social Impact**

Using gamification as a form of persuasive design, and for social benefits.

Watch: Video 10.4

Read: Fogg, A Behavior Model for Persuasive Design (<http://bit.ly/18Lrgde>)
HIP Program Interim Report Summary (<http://1.usa.gov/1pJ0VQ8>)

Assignment: Unit 3b quiz [1,000 points]

Mon 10/27 **Motivation or Manipulation?**

Ethical concerns about gamification.

Watch: Video 11.2

Read: Werbach, More Than Just a Game: Ethics of Gamification

Weds 10/29 **Guild PvP**

An in-class competition among guilds, based on what we have covered so far. Be sure to bring your notes to class!

Guild Task: Submit an overview on your final project, following the instructions under the assignment on Canvas. [3,000 points]

UNIT 4: DESIGNMon 11/3 **Design Thinking**

Gamification as a design practice. Design thinking exercise.

Watch: Video 7.1

Weds 11/5 **Player Types**

Bartle's MMOG model. Other frameworks. Player modeling.

Assignment: Complete the Bartle Test (<http://bit.ly/1bNU4lQ>). Note: this site may be slow to load or require multiple attempts. Keep trying. Post on Canvas, discussing whether your results are an accurate reflection of your personality, and giving examples that are consistent or inconsistent with the results. [5,000 points]

Watch: Video 7.3

Mon 11/10 **Gamification Design Framework**

6D design exercise.

Watch: Videos 7.2, 7.4, 7.5

Read: For the Win, Chapter 5 (Game Changer: 6 Steps to Gamification)

Assignment: Unit 4a quiz [1,000 points]

Weds 11/12 **Design Choices**

Digging deeper into gamification examples.

Watch: Videos 8.2, 8.3, 8.4

Read: Atwood, The Gamification (<http://bit.ly/1onys62>)
Welcome to Stack Overflow (<http://stackoverflow.com/tour>)

Mon 11/17 **Avoiding Epic Fails**
Designing around common mistakes and limitations. Legal and regulatory considerations.

Watch: Video 11.1, 11.3, 11.4, 11.5

Read: For the Win, Chapter 6 (Epic Fails)

Review the article about the Disney hotels “electronic whip” (<http://lat.ms/1onyURP>). Think about how Disney might have avoided the problems with this system.

Assignment: Unit 4b quiz [1,000 points]

UNIT 5: BOSS FIGHT

Note: in order to receive full credit for the final project, students must attend the two feedback session classes and the two pitch days, unless they have an excused absence.

Weds 11/19 **Final Project Development**
Initial feedback sessions.

Guild Task: Submit an update on your final project. [1,000 points]

Mon 11/24 **Project Iteration and Feedback**
Create a model player. Define and prototype activity cycles. Feedback session 2.

Assignment: Post on Canvas a description of one prototypical player for your system. (To be done individually, but based on your guild’s project.) [5,000 points]

Mon 12/1 **Pitch Day 1**
Half the guilds will present their final projects.

Guild Task: Submit your final project materials. (Note that all guilds must submit on Monday, even if you have until Wednesday to do your presentation.)
Prerequisite: submission of Final Project Overview and Final Project Update assignments. [16,000 points]

Weds 12/3 **Pitch Day 2**
Half the groups will present their final projects.

Mon 12/8 Post-Mortem

A “post-mortem” review session is a standard element of the game design process. We will discuss what worked well in the course, and what could be improved.

Assignment: Submit an individual self-evaluation of your guild’s project. Do you think this system would be effective in the real world? What were the best and worst aspects of the design? How well did your guild work together, and were there any problems in the group? What were your most significant personal contributions to the effort? *Note: this assignment is not set up as a Discussion, so your comments are private. [7,000 points]*

Grading

Most graded assignments (with the exception of the Quizzes, Final Project, Choose Your Own Adventure, and Class Participation) will use the following evaluation system:

Satisfactory

Meets the requirements for the assignment and reflects an appropriate level of effort. Receives full credit.

Satisfactory but late

Would be satisfactory, but was submitted up to one week after the deadline (without a prior extension). Receives half credit.

Unsatisfactory

Doesn’t fully meet the requirements of the assignment, or does not reflect sufficient effort. Receives half credit. (I reserve the right to award zero credit if the submission is completely incoherent, non-responsive, or shows no effort.)

Bonus!

For work that is extraordinarily good or creative. Receives additional points beyond the number specified. I expect this grade will be awarded rarely... although I would be thrilled if you surprise me with your dedication and brilliance!

The Course is Gamified

In a typical course, you are marked down for every point you miss. You have no choice in what activities you complete. You receive feedback a few times (midterm, paper, final), and then get a grade telling you how you did. Games work differently. You start with zero points, work your way up to mastery based on your choices, and get constant feedback. When you think about it, this makes sense. Learning is about developing competencies based on your skills and interests.

In this course, you will “level up” to your final grade. Each assignment is worth a certain number of points. Some are tied to specific classes on the syllabus; others are not. Although you are expected to complete the syllabus assignments, nothing is absolutely required, in the sense that you will fail the course if you do not submit it. You have choices about how much effort to put in, and which activities to complete.

The grading system looks like this:

Level	Grade	Points Required
12	L33t	1,337,000
11	A+	120,000
10	A	100,000
9	A-	85,000
8	B+	70,000
7	B	60,000
6	B-	50,000
5	C	40,000
4	D	20,000
3	Leeroy Jenkins	10,000
2	N00b	1,111
1	Wipe	0

(And sorry, the terms at the top and bottom aren't real – you can't try to get "Leeroy Jenkins" on your transcript.)

Course Activities and Assessments

Note: I reserve the right to adjust activities or point values during the course of the semester if necessary, but doing so will never reduce a student's grade.

Unless otherwise specified, assignments are due at 9:00am on the day listed in the syllabus.

The number of points should give you a general indication of expected length. A written assignment for 5,000 points should typically be at least 500 words long, or roughly a full page (single-spaced).

On the Syllabus

9/3	Casual game: What could a business learn [5,000 points]
9/10	Unit 1a quiz [1,000 points]
9/15	Guild: Gamification description video [4,000 points]
9/17	Unit 1b quiz [1,000 points]
9/29	Guild: Sports card game description and rules [8,000 points]
10/1	HabitRPG [5,000 points]
10/6	Elements in casual games and elsewhere [5,000 points]
10/8	Unit 2 quiz [1,000 points]
10/13	Initial project ideas [4,000 points]

10/15	Unit 3a quiz [1,000 points]
10/20	Casual game: motivation techniques [5,000 points]
10/22	Unit 3b quiz [1,000 points]
10/29	Guild: Project overview [3,000 points]
11/5	Bartle Test [5,000 points]
11/10	Unit 4a quiz [1,000 points]
11/17	Unit 4b quiz [1,000 points]
11/19	Guild: Project update [1,000 points]
11/24	One prototypical player for your system [5,000 points]
12/1	Guild: Final project [16,000 points]
12/8	Self-evaluation of your guild's project [7,000 points]

Attendance and Class participation

There are two components to the class participation score. Students will receive 200 points for each class they attend (not counting the first two, and the final post-mortem day). In addition, students will receive up to 5,000 points (assigned by the professor), based on the quality of their individual contributions to the course. Submissions for the final project self-evaluation will be considered in awarding these participation points.

I recognize there may be understandable reasons, which do not rise to the level of an excused absence, why students may occasionally miss a class. My goal is to maximize learning, not time in the classroom. On the other hand, the in-class activities are important to deepen your understanding of the material presented in the videos, and it's unfair to students who do attend if most of their guild is missing for a group exercise. Under the grading system, an absence will cost you some points, but this is not intended to be punitive. The points for each class are small, and you can earn points back through optional assignments.

Bonus Points

There are two opportunities to earn bonus points: the Guild PvP competition on October 29, and (rarely) for outstanding submissions to assignments, which earn the Bonus! grade.

Other Activities

As you may notice, successful completion of all the syllabus assignments, plus full points on the final project and a perfect class participation score, totals 90,000 points, which is in the A- range. Higher grades generally require that you complete at least some of the optional additional assignments listed below.

Please note that these assignments all have deadlines, which are often well before the end of the course. However, keep in mind that these activities are optional; if you see a deadline show up in Canvas, it doesn't mean you are required to do anything. Some have prerequisites to "unlock" them. Please plan accordingly.

Game Master Trouble Ticket [2,500 points]

Submit a private reflection on a course assignment or structural element to the professor. Describe how it could be improved. Assignment can be done multiple times, but will only receive points once.

Sports Card Game Review [2,500 points]

Describe what you learned from the sports card game exercise. Then, explain how you could apply those lessons in a business context, to solve a concrete problem. *Prerequisite:* Guild submission of a sports card game.

Bogost Response [2,500 points]

Read either of Ian Bogost's critical posts on gamification:

Persuasive Games: Exploitationware (<http://bit.ly/18LschT>) or Gamification is Bullshit (<http://bit.ly/18Lsg0Y>). Write a response that either agrees with and expands on his criticism, or disagrees and rebuts it.

PuG Presentation [5,000 points in class; 2,500 points via recording]

Form a pickup group (PuG) of 2-3 people, at least one of whom is in a different guild. Pick a topic to do a 5-10 minute presentation to the class. It must be a subject that isn't already on the syllabus. For example, it could be a case study of a service that we aren't covering, analysis of a technique or concept, or application of gamification to a specific sector. Sign up for a presentation slot on Canvas. *Please note that space for in-class PuG presentations is limited. If you are unable to do a presentation in class, you may submit a 10-minute video or screencast instead, although you will receive fewer points. The last date for PuG presentations is 11/17, and the last date for proposing them is 11/12.*

Guild Comparison [2,500 points]

For any of the group design activities we did in class (other than the Final Project), pick one guild's project was better than yours, and one that you thought was worse. Explain why you picked them. Be sure to describe your own project, and give specific reasons for your comparisons. This assignment must be submitted within one week of the in-class activity.

USAID Proposal [4,000 points]

Develop a response to the Request for Information issued by the US Agency for International Development (USAID) Kenya Transition Initiative. (This is a real program.) Your response should explain how you would create a gamified solution for this, what it would look like, and

how it would address the mission of the initiative. (You don't need to answer the specific questions in the RFI about capabilities and so forth.) *Prerequisite:* Complete a PuG presentation.

Self-Improvement Gamification Comparison [4,000 points]

Spend some time using the following free gamified services: Chore Wars (<http://www.chorewars.com/>), Mindbloom (<http://www.mindbloom.com/>), and SuperBetter (<http://www.superbetter.com/>). Do a comparative analysis that explains which system you think is most effective, and why. Give specific examples of design aspects that you find effective or ineffective, and tie them back to concepts we discussed in the course. You may also want to consider how they compare to HabitRPG.

Answer to Guild Question [2,500 points]

Go back to the questions that your guild posed at the beginning of the course. Individually, discuss how you would answer that question now, based on what you have learned in the course. Give specific illustrations. Feel free to discuss other areas you would need to study in order to address the question more effectively.

Guild: Client Feedback [2,500 points]

As part of your final project, get substantive feedback from one of your "clients." Do your final presentation for someone at the organization your system is designed to gamify. Submit a written summary or a video (up to 10 minutes) with their comments and suggestions, plus your thoughts about how you might address them. This is a group assignment, so points will be awarded to the whole guild.

Choose Your Own Adventure [2,500-10,000 points]

Want to do an assignment that isn't listed here? Make one up! You can propose and submit your own graded activity, subject to review and approval by the professor. For example, The number of points will be determined based on the difficulty and length of your submission, but typically will be between 2,500 and 10,000.

Achievements

In addition to the assignments that contribute to your grade, I'm also working on implementing a system of virtual badges for non-graded achievements. I'll update you on this in class.