# REINVENT YOURSELF: UNLEASH YOUR CREATIVITY

# COURSE SYLLABUS

## INSTRUCTOR:

Roberta Ness, MD, MPH

James W. Rockwell Professor in Public Health (Preventive Medicine and Epidemiology)

Find more information about Dr. Ness on our welcome page in week 1!

The course is self-paced and it is scheduled to begin on November 7th 2017. You will have the opportunity to work on a class project on diapers together or independently, and we'd love your input (more information on that later).

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## COURSE DESCRIPTION:

A renowned innovation expert shows how to spark your creativity for career development in 5 proven steps. Topics include: cognitive biases and normal frames of reasoning; observation to inform thinking; brainstorming; imagining the impossible as possible, and many other tools to your out-of-the-box thinking tool kit.

## PREREQUISITES:

None.

## TIME COMMITMENT:

2-4 hours per topic.

## LEARNING OUTCOMES AND OBJECTIVES:

After completing this course, we expect learners to:

- Learn to state a problem you are passionate about in such a way that it lends itself to innovative solutions.
- Identify normal linguistic frames – assumptions you almost surely bring to your problem but that limit your imagination
- Be able to break out of frames and find alternatives
- Know your own cognitive biases
- Learn to use and practice using a whole toolbox of techniques for looking at your problem through a new frame
- Use tools to solve your own and other real-life quandaries from business and medicine, such as analogy, keener observation, thinking backward, expanding the scope of a problem, breaking down a problem, reorganizing/rearranging existing ideas, getting the most from a group, and lateral thinking
- Integrate your new-found innovative solutions into common critical thinking
- Learn how to disseminate your original ideas to the world.

## LEARNING ACTIVITIES:

Learning activities include:

- Five multiple choice tests with unlimited attempts
- Participation in Stop & Think discussion forums around real-world problems
- Class or individual project taking a problem you are passionate about and crafting innovative solutions to it
- Weekly readings (recommended but not mandatory) from *Innovation Generation* by Roberta Ness, available for purchase [here](here)
- Optional homework exercises from *Creativity in the Sciences: A Workbook Companion to Innovation Generation* by Michael Goodman, Aisha Dickerson, and Roberta Ness, available for purchase [here](here)
- Voting up best projects to be featured in an email to the class

Please note, if you purchase any of Dr. Ness' books from Oxford University Press, use the discount code ASPROMP8 at checkout to receive 30% off your order.

# GRADING AND CERTIFICATES

This is a self-paced course. The course is graded on a pass/fail grading scheme. You will pass the course if you receive a grade of 75% or higher. You can check your progress through the course by selecting the "Progress" option located on the top navigation.

This course will be graded based on the following criteria:

| Assessment Type | # of Assessments | % of Final Grade |
|---|---|---|
| Tests | 5 (unlimited attempts) | 33 |
| Stop & Think Discussions | 40 (must participate in 30 to receive full credit) | 33 |
| Project Self-Assessment | 1 | 34 |

1. **Tests:** There are five tests offered, covering material from 1 to 2 topics. You will have unlimited attempts on the tests, and they are worth 33% of your grade.
2. **Stop & Think Discussions**: After almost every video, there is a stop & think question presented. You will respond to these questions on the discussion board. You must complete at least 30 out of the 40 stop & thinks to receive full credit. Discussions are worth 33% of your grade. In order to receive credit for your participation, you must mark the checkbox indicating your participation.
3. **Class or Individual Project:** You will either work on our class project on diapers or a project of your own choosing throughout the course. At the end of every module, we will propose one step for you to complete. By the end of the 8 modules, you will be able to complete a write up of your project. You must submit your project through a self-assessment within the Project section under the Course tab. The Project section also includes a list of companies that have proposed problems to the public, a template, and example projects submitted by past students. More information about the project is within the syllabus. The self-assessment of your project is worth 34% of your final grade.

We expect you to comply with the [edX Terms of Service and Honor Code](#) regarding all assignments.

## COURSE SCHEDULE

Please view the Detailed Course Schedule in the Course Handouts section for detailed information on each topic

| TOPIC | ASSIGNMENT |
|---|---|
| Welcome! Before you begin… | Optional: DemoX course |
| Topic 1 - Introduction | 4 stop & thinks |
| Topic 2 - Problem: Defining and Phrasing | Test 1<br>7 stop & thinks |
| Topic 3 - Identify: Frames and Metaphors | 4 stop & thinks |
| Topic 4 - Generate: Groups | Test 2<br>4 stop & thinks |
| Topic 5 - Generate: Observation and Analogy | Test 3<br>5 stop & thinks |
| Topic 6 - Generate: Reorganization and rearrangement | 5 stop & thinks |
| Topic 7 - Generate: Lateral Thinking | Test 4<br>6 stop & thinks |
| Topic 8 - Meld & Disseminate | Test 5<br>5 stop & thinks |

## DISCUSSION FORUM GUIDELINES

IMAGINE99x will be a collaborative course. We want you to share your ideas and provide feedback to others. The discussion forum is an essential part of this course as each stop & think requires you to post your ideas. Any online community starts with some ground rules:

- **Be respectful**, encouraging a positive community and supporting your fellow students. Debate ideas in a healthy way; do not be insulting, condescending, or abusive in any way. Posts that are inappropriate will be reported and removed.
- **Post appropriately**. Observe the Honor Code and do not violate the Terms of Service. You may not post copyrighted content, advertise or promote outside products, or spam the forums with repeat content.
- **Write clearly**, using correct spelling and grammar. Avoid using all caps, abbreviating words, and excessive punctuation. Make your post easy to read with short post titles. Be sure to stay on topic and to post only in one forum.
- **Report comments** that you think are mean, insulting, or otherwise inappropriate.
- **Technical issues** may arise. Post any in the "Bugs!" thread in the Discussion forum.

- **Questions** about the course should be posted in the "General Course Questions" thread in the Discussion forum.
- **Read before posting.** When responding to a post, search for similar posts and respond to the most pertinent thread. Please try to avoid redundant threads.

For information on how to post, read the documentation edX has provided, found here.

Check out Harvard's post on getting the most out of the discussion board for one of their courses, found here.

## PROJECT DETAILS

The project is meant to encourage you to use the innovative tools on our class problem or a problem of your own choosing. The class problem is focused on finding ways to reduce environmental waste caused by diapers. You can find more information about it throughout the course. You can interact with your peers on finding a solution.

Alternatively, you will identify a problem to tackle on your own (or you can work with others) and then use the techniques learned in class to develop an innovative solution.

We have also listed the names of some companies that are looking for creative answers to questions they pose. Some of these companies offer rewards for solutions while others ask for solutions for the social good. You are invited to find a question of your choice and then work directly through the website if you would like to submit your project answers. You can come up with your own question, as well. This list can be found within the Project section under "Course." A template and example projects are also available under this section. Projects completed during the summer 2015 INOV101x edX course, "Innovation Generation: How to Be Creative," and projects from Dr. Ness' past students at UTHealth are available to peruse.

**All students will need to submit their project and complete a self-assessment to receive credit for the project.** We will check your project and assessment. If we disagree with your assessment, we will change your grade accordingly.

You can choose to present your project on the discussion forum. Other students will have the ability to vote on the projects. Projects with the most votes will be displayed at the top of the discussion forum, where businesses will be invited to come and explore your ideas – and possibly reach out to you. However, you are not required to post your solutions. If you do not wish to do so for confidentiality reasons, then you are opting out of the up-vote process.

## TEMPLATE

Projects must include an Abstract that states your problem/question and covers the main idea(s) in your solution. The Abstract must be no more than 300 words.

The main paper must be 5-7 pages double spaced using a font size that is easily readable.

You can use any format you want to present your Problem and innovative Solution. However, your write-up should include the following information:

- State your Problem or Question given what you have learned about a good problem statement
- Consider the Frame(s) we use when typically considering your Problem
- State the pluses and minuses of the traditional Frame(s)
- Use as many of the Innovation Tools as possible in finding Alternative Frames
- State the Alternative Frames you generated
- Converge on one or two Alternative Frame(s)
- State the pluses and minuses of the Alternative Frame(s)
- Conclude with a brief set of ideas about how you might disseminate your innovation

When you complete the self-assessment, you can post either the link to your project or the entire text of your project. The assessment asks you to evaluate the content of your project as poor, fair, good, or excellent.

If you wish to post your project on the Discussion Board, please upload your projects to Google Docs (or a similar application) ensuring it is viewable (not editable) by those with the link. Then, create a post and paste your link so others can access it. Be sure to have an interesting title on your post!

We look forward to reading about your projects! We know that you, like so many other students we have taught, will find joy in learning to think more innovatively.