



Guide to Massive Open Online Courses (MOOCs) at Illinois

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About This Document

- This document does **not** currently cover matters of instructional design and pedagogy for “traditional” online courses. Rather, it currently highlights special considerations unique to MOOCs.
- There is more than one plausible way to successfully design and facilitate a MOOC. This document reflects the best practices based upon our experiences thus far. MOOCs are very new, and as such, each day of experience yields many new findings. Thus, expect this document to change frequently and significantly.
- This is considered a “living document” and our intentions are to update it as new information becomes available and our experience with Coursera and MOOCs continues to grow. Your input is highly desired!
- This document may contain data from research instruments not yet cleared by IRB. Thus, it should be considered a document internal only to Illinois and should not at this time be shared outside of the Illinois community.

Contact Information

- All communications directly with Coursera should be channeled through either [Deanna Raineri](#) or [Rob Rutenbar](#).
- For additional information about proposing courses to be offered through Coursera, please contact moocs-illinois@illinois.edu .
- For additional information about Illinois’ current research efforts, please contact [Jim Witte](#).
- For additional information about all other topics covered in this document, please contact [Jason Mock](#).



Executive Summary

There are many issues to keep in mind when considering offering a MOOC. In short:

- Submit a proposal to offer a course on Coursera as not all courses can be supported at this time.
- Anticipate having tens of thousands of participants, which brings both challenges and opportunities.
- Know that online courses (including MOOCs) require a very substantial amount of time to develop.
- Know that Coursera participants are not considered to be Illinois students.

As you develop a syllabus and consider how you might design a MOOC:

- Accommodate as many of the highly diverse goals participants may have as possible.
- Consider providing some remedial content to the participants so the course is more accessible to participants with a wider range of academic backgrounds.
- Use plain language and define any jargon or technical terms you use.
- Record lecture videos as individual topics of 6-12 minutes each, branded with an Illinois “bumper.”
- Pay careful attention to copyright issues. The criteria for using the fair use doctrine of copyright law are much more restrictive in the context of offering online education to the general public via a non-accredited, for-profit provider such as Coursera.
- Use free, online resources in lieu of a textbook.
- Ensure your course is accessible to individuals with disabilities, per Illinois law.
- Provide a highly detailed rubric for peer assessment activities.
- Remember that peer assessments are very flexible and afford a way to assign points for everything from papers to discussion forum participation and more.
- Exercise care with group projects whose membership may dramatically change.
- Consider using multiple attempt quizzes as a tool for participants to develop mastery.
- Leverage the tens of thousands of participants to benefit you, your course, and the University.
- Create and enhance the sense of community amongst participants.
- Ask participants to update their profile page including a profile picture.
- Keep the number of forums small and use sub-forums when possible.
- Set reasonable expectations about discussion forum usage, namely that not everything written by other participants need be read.
- Know that developing an online course takes more time than most instructors have anticipated.
- Keep your course highly organized.
- Consider using templates developed for other Illinois Coursera courses (available from Applied Technologies for Learning in the Arts & Sciences (ATLAS)).

When offering your course, remember to:

- Use announcements judiciously to communicate to your class to encourage participation.
- Ensure someone (yourself, a TA, a “Community TA”) monitors the discussion forums daily for issues and brings to your attention any significant issues.
- Invite participants to join your next offering of the same course, perhaps to finish an incomplete course or to serve in a “Community TA” role.



Introduction to MOOCs

About Coursera & MOOCs

Three typical properties of MOOCs are that they are massive (with tens of thousands of participants), open (in that most everyone can have access to them regardless of income, educational background, or, in most cases, geographic location), and online. Thus, in the news and scholarly literature, you may hear the term “MOOC” for “massive open online course.” While Coursera and MOOC are not synonymous, Coursera does offer MOOCs almost exclusively, though other organizations (such as University of Illinois at Springfield, edX, Udacity, University of Prince Edward Island, and others) also offer courses in the MOOC format. Many of the overarching principles of MOOCs covered in this document are not limited to Coursera, though some specifics regarding Coursera are also included.

FERPA, IRB, IP, and Ethical Implications

- At present, the University considers participants in a University of Illinois course offered through Coursera to not be students of Illinois. As a result, FERPA protections do not apply to these individuals. You will also see them referred to as “participants” for this reason.
- IRB approval for any research into or stemming from courses offered via Coursera must still be obtained before any publication of findings can be made.
- In some ways, running a course via Coursera is more akin to running a community-driven website like Facebook. The barrier-to-entry for a Coursera course is essentially zero—participants merely need to enter an email address (which Coursera does not validate) and a password. Therefore, it may be wise to consider anything posted within Coursera by yourself or any participants of the course to be fully public and viewable by anyone in the world. Thus, while FERPA may not apply to participants within this course, we should still take reasonable steps to protect participant privacy, even if no IRB-covered research is being done within the course. For example, it would not be appropriate to ask participants to post their email address in a discussion forum so that they can communicate directly with one another.
- The criteria for using the fair use doctrine of copyright law are much more restrictive in the context of offering online education to the general public via a non-accredited, for-profit provider such as Coursera. The University and Coursera are working with textbook publishers and other rights holders to use third party copyrighted works in a MOOC.
- Coursera claims no Intellectual Property rights to the content of courses offered via the Coursera platform.
- It should be clear that all efforts applied toward building a MOOC should have applicability toward enhancing face-to-face and traditional online courses. The content in our MOOCs is governed by the same rules of ownership as apply to our on campus or traditional online courses, i.e., unless otherwise agreed to by the instructor, intellectual property rights to any course content created by the instructor independently and at the instructor’s initiative, rest with the instructor. Where the course support provided by the University is over and above the University resources usually and customarily provided, as will likely be the case with most MOOCs, course content created by the instructor shall



be owned by the instructor and licensed to the University. See “The General Rules Concerning University Organization and Procedure,” Article III, particularly Section 4(b) at <http://www.bot.uillinois.edu/general-rules>.

Requesting a Coursera Course

Currently, a campus-level committee must approve a course before it is formally inserted into the MOOC pipeline. Illinois has developed an evaluation process by which proposals for MOOC courses are considered.



Course Design Considerations

This section covers issues that should be considered within the scope of a given course’s “big picture.” We recommend that you familiarize yourself with these issues before composing a detailed syllabus for your course.

It is important to recognize that there are people on campus who will assist you with the development of your MOOC, primarily staff in the Office of Online & Continuing Education (OCE), but staff in your own college or unit may also be able to assist. Much of the information provided in this documentation may be more relevant or useful for an instructional designer assisting you with your course. Reading through this information, however, will help you when thinking about your content and the best ways to deliver that content through a MOOC platform.

Participant Background & Motivations

Here are a few things to keep in mind about MOOC participants, regarding their backgrounds (educational and otherwise) and motivations for taking your course. Typically, these may be vastly different than the backgrounds and motivations of students in your current classes. Therefore, in order for your course to be successful in the eyes of the participants, you may need to alter the design of your course.

Participants may come **without the same educational background** as traditional students. While we do not need to tailor to the lowest common denominator, some of the participants in your course may **greatly benefit from you providing some remedial content** to help bring them up to the level necessary for your course. This may include linking to third-party content, providing participants an opportunity to develop their own content (e.g. video tutorials) to share with others in the class, or developing your own content.

Participants may come with **weaker skills in English** than your students. Whereas students on campus must demonstrate a certain level of English proficiency via a TOEFL score, MOOC participants do not. We have found a surprisingly large number of English as a Second Language (ESL) participants in our Coursera courses thus far. In fact, several non-native English speakers have reported that they take courses via Coursera for the purpose of developing and practicing their English skills, often within the content area covered in your course. On the other hand, some have reported that they lack educational materials in their native language for the topic of the course, so they take the course with the intention of learning the material in English and teaching it to others in the local language. So, there is great opportunity to put your material into the hands of many who have never had anything like it before. Therefore, it is important to **use plain language** whenever possible in both your writing and in any video lectures you may develop. If your content contains a lot of jargon or technical terms, **be sure to define your terms**, perhaps even in a separate glossary. Additionally, you may wish to embrace the variety of languages represented by participants in your course by **encouraging and allowing language-specific versions of peer-graded assessments**. In the Introduction to Sustainability course, for example, projects written in Spanish were evaluated by other participants who also elected to submit their project in Spanish.



Specifically in Coursera...

Coursera is particularly sensitive about costs that might be incurred by a participant, recognizing that many may come from impoverished backgrounds or from countries with limited economic resources. Thus, **Coursera highly encourages the use of free, online resources in place of a textbook.** If you have a textbook you typically use, it can be offered as an **optional but not required** resource. In fact, some publishers may be open to discount pricing for your textbook given the large number of people to whom the course may expose their product.

Participants may **not be motivated by a letter grade or course credit** the same way traditional students may be. While Coursera does offer participants a “Statement of Accomplishment,” the value of such is currently limited by comparison to the value of a college credit or degree. Therefore, keep in mind that **how you would define “success” on the part of participants very likely is not how they might define it.** Some will complete all of the activities you ask them to without question. Others will find some activities uninteresting or not relevant to their learning goals. It may be worth **polling participants to learn their goals** for the course. Additionally, you can design your course to **accommodate as many goals as possible.** If you do, be very explicit about the various requirements necessary to pass the class. For the Introduction to Sustainability and Microeconomics Principles courses, participants are provided with multiple pathways to successful completion of the course (e.g. a quiz-based method for those who preferred a traditional course experience, a discussion-based method for those who wanted to wrestle with the content with others or make connections with other like-minded individuals, and a project-based method for those who wanted to directly apply what they learned to their lives).

There also is **no financial commitment keeping participants in the course,** nor any “W,” “I,” “F,” or similar mark on a transcript. As such, do not be surprised to discover that a large number of participants in your course who signed up, and potentially even participated at the beginning, fall off after a couple of weeks. Given the lack of extrinsic motivators, comparing traditional course “retention rates” with a similar metric in a MOOC is a bit like comparing apples to oranges. A high attrition rate in a MOOC is not nearly as dangerous an indicator as it would be in a traditional course. “Success” for some participants may be simply watching the lecture videos or making a few connections with others in the forums. Conversely, MOOCs can also have a larger number of “late enrollments” than a traditional course. Keep this in mind, especially if designing a course where groups may be called upon to collaborate as **membership in a group may change rapidly over the duration of the course.** Always **make clear to any late enrollments if and how they can catch up with the rest of the class.**

These participants are often busy adults who are involved in many other activities beyond your course. Thus, consider helping make it easier for participants to get engaged and stay engaged with your course by **using a predictable, repeatable pattern for each week of the course.** Structure your content and lectures around unit/modules that are each one week in duration and have roughly the same format each week. If your course has multiple pathways to success, clearly define what milestones must be met each week for each pathway you make available.



Grading Approaches

Given the number of participants in your course, it is not feasible for the instructor or even an army of TAs to manually grade anything. As such, you are limited to computer-gradable assessments (e.g. multiple-choice, numeric-based, or similar quizzes and programming assignments) and peer-gradable assessments where fellow participants are responsible for the grade given. These are explored elsewhere in this document.

Quiz Options

With quizzes, it is important to realize that there is currently **no means of preventing participants from copying quiz questions** (and their answers, if/when they become available) and sharing them with others. While Coursera does support creating multiple “variations” of a given question, with tens of thousands of participants, it is conceivable that enough of them could collaborate to develop a complete list of your question sets. Thus, you may **not want to rely upon quizzes alone** if cheating is a concern to you, or **limit the value of quizzes relative to the overall course score**. Even though one might assume the motivations to cheat in this context might be low (since the Statement of Achievement a participant might earn is of limited value), it does still happen.

Quizzes can be configured to allow a **single attempt or multiple attempts**. Configuring a quiz for multiple attempts allows a participant to use the **quiz as a tool to develop mastery** of the content. In this context, it is important to provide multiple similar variations of a given question so that the participant does not merely copy down the right answer. Microeconomics Principles does this, allowing virtually unlimited attempts as each question has a large number of variations (five or more). Multiple attempts can be set such that the final course grade is based upon **the latest quiz score, highest raw quiz score, or the highest quiz score after instructor-supplied penalties are applied** to subsequent attempts. In the latter case, you can configure a quiz to a 10% penalty per submission to incentivize the participant to try as hard as possible on the first attempt, but still make a reasonably good score attainable on subsequent attempts.

Peer Assessment

Specifically in Coursera...

This section is specific to Coursera and may not apply to other MOOC platforms.

In short, a participant submits a work (perhaps an essay, collection of photos, website URL they developed, etc.) for review, and then the Coursera platform **randomly assigns that work to be evaluated by a number of peers**. The instructor provides a rubric for grading to the peers, sets the number of peers who should do the evaluation, but otherwise is not involved in assigning peers, calculating grades, etc. Peers use the rubric to score multiple aspects of the submitted work. Experience has shown that **the more specific the rubric, the better the peer assessment scores match** what an instructor score would be. Providing detailed instructions also helps. Coursera optionally allows you to send participants through a “training” step whereby they evaluate a work that you provide and are tasked with grading it within a certain tolerance of the grade you would give the same work.



Peer assessments also allow for a self-reflection step, which challenges participants to critically review their own work using the same instructor-supplied rubric.

Large Enrollment Opportunities

The very large number of participants in your course, coupled with their diverse locations across the globe, presents some opportunities. Consider how you might “**leverage the tens of thousands**” of these people to benefit one another, your course, and the University. For example:

- The Planet Earth course asks participants to report their approximate (for privacy purposes) location on the map, together with an indication of how strong the most intense earthquake they have ever experienced there has been. This **data is then visualized via Google Maps** and should show a correlation to the tectonic plate boundaries in Earth’s crust.
- The Microeconomics Principles course gives participants a chance to **produce video tutorials** on a topic listed by the instructor. These topics are usually remedial topics the instructor didn’t wish to produce himself. The activity will ask participants if they grant permission for the University to use those videos not only for Coursera, but also in traditional face-to-face and online courses.
- The Introduction to Sustainability course gives participants a chance to **write their own quiz questions** that, upon instructor review, may be used in future iterations of the course.
- The Microeconomics Principles course lets participants **collaboratively write lecture notes** in a wiki corresponding to each video, which the instructor might make available to on-campus students in the near future.
- The Introduction to Sustainability course and the Microeconomics Principles course also give participants a chance to submit a final project. Given participant permission, Illinois can **use portions of any of those projects in future courses** or within the free online textbook for Introduction to Sustainability.

Creating Community

In all likelihood, several thousand participants in your course will **share a common passion** about the topic. Who knows what all can be accomplished by fostering collaboration with and amongst them. We can also stand to learn from the participants in the course. The participants learn a lot from one another, as well. Thus, **establishing a sense of community, such as via the discussion forums**, can help participants get the most out of this opportunity. Additionally, participants find it easier to relate to others and tie together conversations with specific people when they have a profile picture established within the MOOC platform. Thus, consider asking participants to **update their profile page including a profile picture**. You can also **create a Google Map asking participants to pin their approximate location on the globe**. This creates a powerful visualization of where your participants are located.



Course Development Practices

Once you begin developing your course, you will naturally begin to think about your course in terms of more specific details. This section builds upon what was mentioned in the Course Design section and the thought you put into building a detailed syllabus and introduces some finer points, technical work-arounds, and suggestions for working within the Coursera platform.

University Image

For many participants in your course, this may be their first exposure to the University of Illinois. Of course, we hope it leaves a positive and lasting impression on them. As such, it is important that your course is **as free from errors as possible**. Please be sure to have your text copyedited and your MOOC thoroughly tested before the launch of your course.

Additionally, delays in posting content and assessments to the MOOC site reflect poorly upon you, your course, and the University. Please make every effort to **have all of your course's resources available** to participants when they are scheduled to access them. Many instructors are surprised to learn that developing an online course (as a MOOC or otherwise) **requires substantially more time than they anticipate**. Thus, be sure to plan ahead and allow several months to develop your online course fully before it even begins. When a course is still being developed at the same time it is being taught, it causes undue burdens on you, your support staff, and the participants. When instructors who have developed online courses were asked at the end of their development "what is the one piece of advice you would give other instructors considering developing an online course," nearly everyone has advised that every effort be made to complete development before the course goes live, which often means starting the project earlier than anticipated and spending more hours per week than expected.

Copyright

Simply put, MOOCs by their very nature provide a high degree of exposure to the contents of the course. Thus, it is critically important that **every work not produced by you or by Illinois that is included in the course have copyright clearance**. Educational fair use does apply to MOOCs but the criteria for using the fair use doctrine of copyright law are much more restrictive in the context of offering online education to the general public via a non-accredited, for-profit provider such as Coursera. The University and Coursera are working with textbook publishers and other rights holders to use third party copyrighted works in a MOOC. Staff in the Office of Online & Continuing Education (OCE) can provide assistance in clearing copyrights if necessary.

Accessibility

All information technology, including MOOCs, is required to be accessible to individuals with disabilities. The Office of Online & Continuing Education (OCE) and Coursera will assist you in ensuring your materials are accessible.



Accessibility is a complex area. However, for most courses offered via Coursera that rely upon a largely video-based lecture model and avoid any customized interactions (such as those programmed within Flash or JavaScript), there are three main considerations:

1. making accessible the video content you develop,
2. making accessible any other files you might wish to upload,
3. and making accessible any third-party content you use.

For the videos you develop, providing a caption will generally suffice for the sake of any persons with deafness. Verbally describing any visual you include in the video (such as a table or figure) will usually suffice for the sake of any persons with blindness.

If you include any images, PDFs, or other documents within the course, the process largely depends on the type of file and would require specific training or assistance.

Linking to third-party content can save significant amounts of development time. However, it, too, must be deemed accessible before we can use it. OCE will work together with Disability Resources & Educational Services (DRES) to determine the accessibility of third-party content.

Textbooks

As mentioned elsewhere, we are strongly discouraged from requiring a textbook that would incur a cost to the participant, though we can link to one that is optional. This link could take the form of a link to the product page on amazon.com. Using free, online resources or textbooks is encouraged.

Specifically in Coursera...

Coursera automatically tracks links to amazon.com product pages within Coursera and a share of the referral fee Coursera earns from purchases made via these links will be shared with the University. No special linking needs to be made—just use a regular link to the amazon.com product page.

Suggested Templates

Templates can expedite the development process (saving you time), provide consistency amongst Illinois courses (bolstering the brand and reducing the learning curve for participants who join multiple Illinois courses), and employ our current best practices (so you don't have to be intimately familiar with all of them).

Specifically in Coursera...

The rest of this section is specific to Coursera and may not apply to other MOOC platforms.



We have developed a set of Coursera templates for your use. These templates can be used freely as-is, can be adapted to suit your needs, or can be used selectively or mixed-and-matched with other templates as desired. There are multiple “scopes” to which a template might apply. There are course-level templates that address the overall organization and layout of the course. There are page-level templates that are specific to the type of information or activity you wish to include in the course. We welcome suggestions for improvement in these templates as improving them will improve the experience for other instructors and Coursera participants.

When a course is created for you, upon your request, we can ask Coursera to clone the [University of Illinois Template Course](#) into your course before you begin work. If you do not have access to this course, please contact [Jason Mock](#). This template includes many page and activity templates---possibly more than you would need. However, we have found that it is easier to remove unnecessary pages from a course than to seek and copy desired pages into a course. These include:

- A [Course Syllabus](#). It is important to clearly and thoroughly spell out any details that participants may need to know about how the course operates, the content covered, the nature of the activities, etc. in the syllabus.
- A page on [How to Pass the Class](#). Since this is perhaps the mostly commonly asked question of participants, having a page dedicated to this topic will be helpful to them, especially if you present multiple pathways to passing the class, as recommended elsewhere in this documentation.
- A [Course Orientation](#) module, which includes an Orientation Quiz, to ensure participants have read the syllabus but is typically not included for credit, and a Getting to Know Your Classmates icebreaker, to help establish a sense of community.
- A [Weekly Overview](#) to orient students on what topics will be covered in a given week, what the objectives are, and a clear listing of any activities to be completed and by when.
- A [default Announcement](#). This should appear at the top of the course homepage for at least the first day or two of the course and be set to go out as an email as well. It helps direct students on how to get started with the course. You are encouraged to tailor this announcement to reflect your own style and course content.

Lectures

The primary means of content delivery in many MOOCs is via video-based lectures. These can take the form of you simply appearing on camera, but the medium provides so much more opportunity that is worthy of leveraging. For example, you can interview other experts in the field. You can also record on remote locations around the community or the country that best demonstrate or reflect the material you are covering. You can include video of your computer desktop and any programs you might typically run there or any websites you might visit related to your content. You can also deliver PowerPoint-based presentations in this manner, but care must be taken to not put too much text on the screen as it may be difficult to read.

Lectures should also be chunked into individual topics of 6-12 minutes each. This, together with good titles, makes it easier for participants to go back and review specific materials. It also helps keep participants engaged by breaking-up a longer lecture into manageable pieces. Additionally, it helps prompt you to be as clear and concise with your materials as possible.

On the more technical side of things, Illinois Public Affairs asks that all videos in MOOCs produced by Illinois include an [Illinois “bumper”](#) at the start of the video.



Discussions in General

Oftentimes, participants are surprised and overwhelmed by the number of posts found within a MOOC. Thus it is important to **set reasonable expectations** that participants **need not read everything within the discussion forum**. Participants potentially come to your course with expectations that it will be similar to traditional courses they have taken in which every communication might be important to them. So, let them off the hook by making it clear they do not have to read everything.

Additionally, it may be valuable to provide participants with **a video tutorial of how best to use the discussion forums**. We hope to provide a generic video tutorial to meet this need soon.

Discussion forums are also the participant's primary means of getting help---both for technical issues but also regarding content. **Issues are most often resolved by other participants**, not the University or MOOC provider staff. Take advantage of this fact. While it may be tempting to create multiple discussion forums for each type of issue participants may face, we have found that they do not post their issue in the designated forum. Thus, **keep the number of forums small and use sub-forums when possible**.

Discussions for Assessment

Discussions can be a vital part of your MOOC and are fairly commonly used in traditional online courses for credit. When the MOOC provider has no built-in tools for evaluating discussion forum contributions (such as Coursera), forum contributions can be evaluated via a peer assessment tool. The following solution has worked with the Introduction to Sustainability course. Participants engage in the discussion forums as usual in response to assigned discussion prompts or topics. Then, at certain key points (we suggest at the end of Weeks 2, 4, 6, and 7 in an 8-week course), students compile what they view to be their “best” contributions (perhaps their 1 best initial post and 2 best response posts, based upon criteria clearly spelled out in your discussion rubric) into a Microsoft Word or plain text document. This document would then be posted to a peer assessment assignment as described elsewhere.

We suggest that you ask participants to copy-paste the URL to their post, along with the subject line into the Word document. This aids in finding the post should a reviewer wish to see the post in context. Asking participants to also copy-paste the text indicating when the post was submitted lets you include an item in your rubric penalizing late submissions.

Specifically in Coursera...

We suggest that participants “sign” each of their discussion posts because, at present, Coursera does not offer a way to search for all posts by an individual. This functionality was recently added for instructors and administrators, but participants cannot yet search for their own posts by username. However, by putting their name directly within the post, participants can search for it using the built-in search tools.

You'll note that Coursera provides a very small area into which you can specify any instructions about the discussion assignment. Therefore, we recommend that you put such instructions into a post within the discussion forum. Clearly label this post something like “Instructions; READ



THIS FIRST!” and make it easy to find by choosing from the gear menu the options of “Pin” and “Approve.” In the small area describing the discussion forum, we recommend using text such as “*Please read the "Instructions; READ THIS FIRST!" post found below before you begin.*”

Peer Assessments

Peer assessments are flexible ways of having participants grade one another’s works. Research has shown that peer assessments, given sufficiently detailed instructions and a thorough rubric, can yield scores very close to what an expert reviewer (such as an instructor) might give. Peer assessments are a common assessment tool used in MOOCs where manual grading is necessary. Participants can submit essays, homework files with clear answers, presentations, videos, or anything else, though do keep potential technology limitations of participants in mind.

Specifically in Coursera...

The rest of this section is specific to Coursera and may not apply to other MOOC platforms.

Participants process through multiple phases for each peer assessment exercise you assign:

1. The first phase is the required submission phase. You can choose any guidelines for what participants in your course can submit. The simplest submission is a Word document. However, you also have the option for them to upload images, a PDF, or text in a textbox (for such information as a URL to a YouTube video they published or a website they authored). Participants must then check a box indicating that they are adhering to the Honor Code before they can submit. Since peers will be assessing these submissions against a rubric you provide, you may wish to consider asking students to include a “cover sheet” in addition to their actual work which explains to the peer reviewer how they feel their work adheres to the requirements of the rubric. It can also be a useful way to collect information that is necessary but not always evident within the work. For example, Introduction to Sustainability had a project with a requirement that it have real-life applicability to the participant. Some chose to explain how that requirement was met within the cover sheet rather than include it within the work itself, where doing so may have affected how it could be used.
2. The next (optional) phase is the training phase. Illinois has not yet used this step but will soon. In principle, it is your chance to have participants calibrate their grading to yours by evaluating a work that you have also evaluated. Details on implementation are forthcoming, though [Coursera’s documentation on the training phase](#) will help (link is accessible only when logged into Coursera as an instructor).
3. Once a work has been submitted and the evaluation phase start date you specify has passed, participants can then return to the same page to view and evaluate works submitted by their peers. They then use a series of drop-down menus to input a score for each rubric item you specify. We recommend you also ask Coursera to include textboxes for raters to provide feedback to the submitter, explaining why they gave the score they did. This will help the submitter learn how to improve the work, such as after a rough draft and before a final submission. Additionally, we recommend asking reviewers to view several works from various students before returning to the first



work and issuing scores. This helps reviewers grapple with your rubric as it applies to various situations that may arise in submitted works before issuing a score, thus helping the reviewer be more consistent in the scores he or she assigns.

Note that any reviewer may opt to skip reviewing a given work (which is useful in situations where a work is clearly unfinished or spam, for example). Coursera's system keeps track of this to ensure each work has approximately the same number of reviews.

4. Once reviews have been finished, there is an optional self-reflection step. This tasks submitters to evaluate their own work, based upon the same rubric, given that they have now reviewed other works for both inspiration and comparison.
5. Finally, by a deadline for submitting peer evaluations you specify, participants will gain access to their scores. Coursera uses the **median score** of all the reviewers. This helps to reduce the influence of outlier scores.

Optionally, you can enable an automatic discussion forum posting associated with each peer evaluation. This supplements the traditional peer evaluation process outlined here with a discussion thread specific to each work. As a peer evaluation is submitted for a given work, the work along with the evaluation comments are copied to that discussion thread. This allows participants to see works in addition to the ones they reviewed. This also allows submitters to collect more feedback, via the forum thread, on their work than they might receive via the peer evaluation system alone. Posts made in these special discussion forums do not affect the submitter's score in any way.

Instructors are not required to but have the option of reviewing any submitted work. Note, however, that doing so automatically flags that work as a "[ground truth](#)" (link is accessible only when logged into Coursera as an instructor). This means the work is put into a special pool and every reviewer will be required to review at least one work from this pool of ground truth works, though reviewers are not told which work comes from this pool or even that such a pool exists. This is useful for validating how accurately reviewers were in relation to the instructor's rating. Note that should an instructor rate a work, all peer review scores are ignored for purposes of establishing a score for the participant who submitted the work and only the instructor's score is used. Also note that should you wish to use the automatic discussion forum posting option, an instructor can NOT rate any works, lest it would interfere with the way this option was designed to work.

Finally, another option that can be enabled is [sharing mode](#) (link is accessible only when logged into Coursera as an instructor), which gives participants a unique URL they can share with others enrolled in the course, such as via a discussion forum.

Site Organization

For most courses we strongly recommend a chronologically-organized course ("Week 1," "Week 2," etc.) rather than a functionally-organized one ("Lectures," "Discussions," etc.). This helps students quickly find just the content and activities that apply to them right now, rather than hunting around for them.

Specifically in Coursera...

The rest of this section is specific to Coursera and may not apply to other MOOC platforms.



However, because Coursera does not make a simplified grade book available to participants in your course, **they will want easy access to all of the quizzes in one place** to see their scores more easily. The best way to do this is to use Coursera’s default quiz link in the navigation bar. However, if you would like to encourage participants to use a weekly view of the course as we recommend, consider labeling the link as “Quiz Results” and listing it after the links to the weekly overview pages.

Therefore, we recommend a navigation menu which can be configured under **Admin > Navigation Bar Settings** such as this:

	Link Type	Link Data	Notes
Home	Module	class:index	which links to the course homepage
Syllabus	Wiki Page	Syllabus	
How to Pass the Class	Wiki Page	HowToPassTheClass	if your course needs one
Course Orientation (Mandatory; Start Here)	Wiki Page	CourseOrientation	
Week 1	Wiki Page	Week1Overview	
Week 2	Wiki Page	Week2Overview	
Week 3	Wiki Page	Week3Overview	
Week 4	Wiki Page	Week4Overview	
Week 5	Wiki Page	Week5Overview	
Week 6	Wiki Page	Week6Overview	
Week 7	Wiki Page	Week7Overview	
Week 8	Wiki Page	Week8Overview	
All Forums	Module	forum:index	
Quiz Results	Module	quiz:index	
Help With Subtitles	URL Link (New Tab/Window)		Which links to your course’s project page on Amara’s site

Administrative Details

Several settings need to be made within the Course Administration section, available via the **Admin** menu link at the top of your course site.

GENERAL > ADMINISTRATION

This requires no input, but does provide a useful report on the activity within your course.

GENERAL > COURSE SETTINGS

This page contains several fields to update. Under the new (as of January 2013) Coursera branding, the **Date/Time Tagline** field is ignored. Previously (and perhaps in the future) this field, in spite of its name, held



the value **University of Illinois at Urbana-Champaign**. The **Name of Instructor(s)** field should include the formal name and title of all instructors on one line.

By placing a **1** in the **Hide “Course Wiki” Link on Navbar** field, you can remove a link to a student-editable course wiki. If your course’s design does not rely upon this tool, it is best to hide it for simplicity sake.

All other values are either self-explanatory (**Name of TAs**, **Name of Course Support Staff**) or should generally be left as-is.

GRADING POLICY

There are several important settings here, which are adequately described in Coursera’s [How to Implement a Grading Policy](#) page (link is accessible only when logged into Coursera as an instructor).

UPCOMING ITEMS DISPLAY

This page determines what information appears at the top of the course homepage, just to the right of the announcements. We recommend leaving all of these boxes checked in most circumstances and setting the number of days’ worth of videos to display to **7**

SET GRADING CRITERIA

Once you have finished creating all of the assignments within the course, you are ready to set the grading criteria on this page. More details to come.

ASSET ADMINISTRATION

This is where you upload your files. Files uploaded to the source_videos folder will automatically be encoded by Coursera and made available to you and to participants.

FORUM ADMINISTRATION

Here you can create the forums for your course. We recommend using the [forums provided in the Illinois Template Course](#) as a starting point for both organization and instructions to the participant.



Course Delivery Tips

Once you have designed and developed your MOOC, you are ready to for participants to take the course. During the design and development phase, your "teaching" of the subject is captured in the lectures and assessments you create. It is these created elements that will do most of the teaching during the delivery of the course and your role switches to that of facilitator. There is still plenty of work to be done during this phase, but it make take on a different feel than in a face-to-face classroom.

Announcements

Announcements are a very important tool for instructors to communicate to the class. This is useful for routine information such as announcing the start of a new module of content, but also for more pressing matters such as the unavailability of a server or the extension of a deadline. They also **remind participants that the course is still going on**, as some may have become busy with other matters and not visited the class site in several days. You can also **include "shout-outs" to participants who have contributed significantly** within the course, rewarding and encouraging exemplary behavior. You might also consider **recording announcements as a video** to make them more engaging for participants. We believe an optimal frequency of announcements is between 1 and 4 per week.

Your first announcement should welcome participants to the course and instruct them on how to get started. Weekly announcements can signify the beginning of a new module and highlight any important developments that occurred during the previous week. A final announcement can thank participants for their involvement and encourage any who might not have finished to course to take it when it is offered again.

Forum Moderation

A large part of the "activity" within a MOOC will take place within the forums. As such, some degree of moderation helps ensure the course is running smoothly and helps participants feel cared for by the instructor and the institution. These tasks can be handled by the instructor, some undergraduate students taking an independent study course, or "Community TAs" who are recruited from previous offerings of the MOOC. A few main tasks include:

- Monitoring for significant misunderstandings of course content. The vast majority of the time if there is a misunderstanding expressed the other participants of the MOOC will jump in and correct it. However, on occasion, there may be a misunderstanding that would benefit from correction.
- Monitoring for "fires." Sometimes a quiz question will be configured improperly with the wrong answer marked as correct or a video won't play or a link will be broken, etc. Participants will often resort to the discussion forums as a place to report these issues. Some technical problems that are on the participant's end are resolved with the help of other participants. Other issues may need to be addressed within the course.
- Monitoring for "stories." Great stories from participants about their motivations for taking the class, their hopes and ambitions after taking the class, and how the class has changed them are very encouraging and worth sharing with your colleagues and others.



- Monitoring for illegal activity. If your course has an optional textbook, you may find that participants will seek to find a free, electronic copy of the book rather than paying for it. Sharing such links is illegal and can negatively influence your relationship with the textbook publisher, especially if they are providing the textbook at a discount for you. It is wise to delete any posts that contain such links.

Specifically in Coursera...

The [Coursera Terms of Use](#) stipulate that any activity, such as the posting of links to copyrighted materials, is grounds for dismissal from the course.

Participant Support

With tens of thousands of participants, it is unreasonable to assume that you or your team can fully support all issues that arise. Rather, it is best to create one or more "Help" forums for participants to use to report problems and, ideally, provide assistance to one another. That said, monitoring these forums can provide important insights into pervasive problems participants may be encountering.

Additionally, if you link to any third-party content on the Web, you run the risk that their servers may become unavailable when your participants need it. In the case of Introduction to Sustainability, we believe that traffic generated by the course on one of the nasa.gov servers may have caused it to crash. Therefore, we recommend you **download a copy of each third-party item to make available to participants should the third-party site ever go down. Of course, you can only do this if you have copyright clearance, meet all applicable license requirements (if any), and/or have any needed export control approval.**

Creating Community Beyond the MOOC

Social networking is also commonly used alongside of MOOCs, either by the intention of the institution or through participants' own will. So, consider **providing a common Twitter hash tag** for all participants to use. Also, consider **establishing a Facebook group and Google+ group** that participants can optionally join. This also gives your course's community a way to keep in contact after your course has ended. If you do not create a Facebook group or Google+ group, then consider monitoring the discussion forums to find where participants may create their own and **point other participants to those participant-created communities.**

Grading

Specifically in Coursera...

There is no formal grade book within Coursera. Furthermore, there are no formal grades, either. Rather, Coursera supports a "pass/fail" grading model. You must specify both a formula (e.g. the sum of all quiz scores) and a cutoff threshold, above which any given participant may pass the class. Coursera does go further by providing an option to award a Statement of



Accomplishment “with distinction,” however this campus has decided that this option shall not be used for Illinois courses. The normal “pass/fail” criteria is set under **Admin > Grading & Certification > Set Grading Criteria**.

Issuing Statements of Accomplishment

Specifically in Coursera...

Once you have established grading criteria and the course has ended, you must tell the Coursera platform to calculate the grades for all participants. You can do this via **Admin > Grading & Certification > Calculate Grades for Students**. Once you have done that, you can then trigger Coursera to create Statements of Accomplishment via **Admin > Grading & Certification > Create & Grant Certificates**. Any participant receiving a Statement of Accomplishment will be able to see it by viewing their [Course Records](#) page.

Reoffering a Course

Obviously, the initial development of an online course involves the largest investment of time and resources. However, once developed, it can be offered again at a fraction of the effort. A few items to note when reoffering a course:

- Consider posting another announcement in the previous section(s) you have offered, letting prior participants know that you are offering the course again. Especially for those who perhaps could not finish the course the first time, they may appreciate an opportunity to participate again.
- Consider adopting the “Community TA” model. In this model, prior course participants are recruited to help moderate the discussion forums. They can resolve most issues that participants may have and can be asked to escalate only the most critical of issues to your attention. Naturally, you may put out a call for Community TAs via an announcement in your previous section.
- Consider closing your previous section. This will both force the conversations to happen in the current section and will reduce confusion for those participants who may have enrolled in multiple sections. If you choose to do this, be sure to make an announcement within the previous section some time in advance so that any conversations that might still be taking place can be wrapped-up or moved without being abruptly and unexpectedly ended.

Forthcoming Information on Export Control and Third Party Licensing

Additional information is being developed to provide guidance with respect to meeting requirements in the event that there are any export control requirements or third party license requirements relating to a given Coursera course. For example, some of the content of a course may be export controlled. Or the teaching of a course may require a license from a third party to use a third party product as part of the course, such as use



of third party software or a third party web service in the course, and the software or web service has its own licensing terms.

As soon as additional information is available, this guide will be revised accordingly.

