

Detailed Minimum Requirements: Courses

Course Structure and Learning Objectives

Add a "welcome" module or video

We recommend adding a short "Welcome" module at the beginning of each course. It should include at least one video that welcomes and introduces learners to the course. It's important that instructors introduce themselves and express their enthusiasm for offering the course.⁷

This is a great opportunity to identify who should take this course, as well as the value of taking the course. You should provide tips for success (e.g. purpose of assessments, use of forums, etc.)⁸,⁹ and motivate learners to move onto the next lesson.

Note: The video shouldn't exceed 5 minutes in length. Our analysis shows that volunteer learners are more likely to become discouraged or leave the course if the first module is too long.

Learn more about [creating introductory videos](#).

Include clear learning objectives on the Course Description Page

Course Description Pages (CDPs) help learners determine if the course is a good fit for them. It includes specific, measurable learning objectives, and outlines prerequisites. A CDP should also address common questions, highlight course value, and generate excitement.

Learn more about [Course Description Pages](#).

Include at least 15 hours of content, delivered in 4-6 weeks

Based on internal observations, we recommend that courses include an average of 15 hours of content, divided into 4-6 weeks. This structure helps learners balance a manageable workload, while still attaining subject-related depth. The combination of these two elements sets learners up for success.

Use the learning objective tool to create learning objectives for each module

Learning objectives are a critical component of successful online courses. A tool in our course editing platform makes it easier for you to add learning objectives to each module. Learning objectives should be clear and specific. They should state what learners will be able to do by the end of the module. This helps motivate learners and gives them a vision for their learning trajectory.

Learn more about [defining learning objectives](#), [creating effective learning objectives](#), and [how to add learning objectives to modules](#).

Lesson titles are informative, descriptive, and compelling

Specific, meaningful, and informative titles help learners understand what you'll cover in the course. Compelling titles also help pique the interest of the learner. Generic titles like, "Quiz 2" or "Introduction" aren't helpful for learners. They make it difficult for learners to navigate the course and find what they're looking for. Please ensure titles are informative and descriptive.

Each module has 1-3 hours of engagement with non-graded content

Unlike traditional university students, most Coursera learners are voluntary learners. They try to balance learning time with a full schedule of life, work, and family. They're likely to watch or read course materials in small windows of available time. Learners expect courses to be efficient and effective in helping them master new skills. During instructional design, consider what learners need to successfully complete assessments and demonstrate skills. Courses should include 1-3 hours of non-graded learning time per week, focusing on the core content.

Include at least one project in each course

Projects are authentic, hands-on assessments with real-world applications. Projects allow learners to apply and demonstrate the skills they've learned. By the end of a project, learners should be able to deliver an artifact. This artifact can be evaluated via peer review assessments, programming assessments, or well-designed quizzes. Some examples of projects include:

- conducting competitor analysis for product X
- developing an Android app to support online language learning
- creating a dashboard to show the impact of different marketing channels

Learn more about [Specialization projects](#).

Assessments

Include at least one summative assessment per module

Summative assessments formally evaluate and document learners' levels of mastery. Each module must include at least one summative assessment. These higher-stake quizzes and projects can serve as powerful teaching and learning tools. However, they must assess learners' expertise objectively and comprehensively to assign a final grade. ¹¹

Learn more about [creating summative assessments](#).

Summative assessments reflect expected learning objectives and require a higher-level of understanding

Summative assessments can be applied more widely than formative assessments. They allow learners to evaluate, synthesize, and apply their knowledge in more complex ways. Use Bloom's Taxonomy to develop higher order questions that are aligned with learning objectives.

Learn more about [optimizing assessments](#).

Include 10 formative questions per module

Formative assessments are informal quizzes or in-video questions (IVQs) throughout the course. They help learners determine which concepts they've retained, and which ones they should review. ^{12,13} Frequent tests help with retention and motivate learners to continue the course. Unlike live classrooms that have time constraints, online courses can easily accommodate frequent tests.

Formative assessments should provide option-level feedback, explaining the following:

- why an answer is correct or incorrect
- how learners might approach the problem
- where in the course learners can find more information about the topic

Learn more about [optimizing assessments](#).

Quizzes include option-level feedback

Assessments guide and support learning, and should provide option-level feedback. Research suggests that option-level feedback improves learning outcomes and increases learning efficiency.^{12, 13}

In formative quizzes, each answer choice should explain why it's correct or incorrect. Providing this rationale helps learners better understand the content and gain new knowledge. Additionally, feedback should explain:

- how learners might approach the problem
- where in the course learners can find more information about the topic.

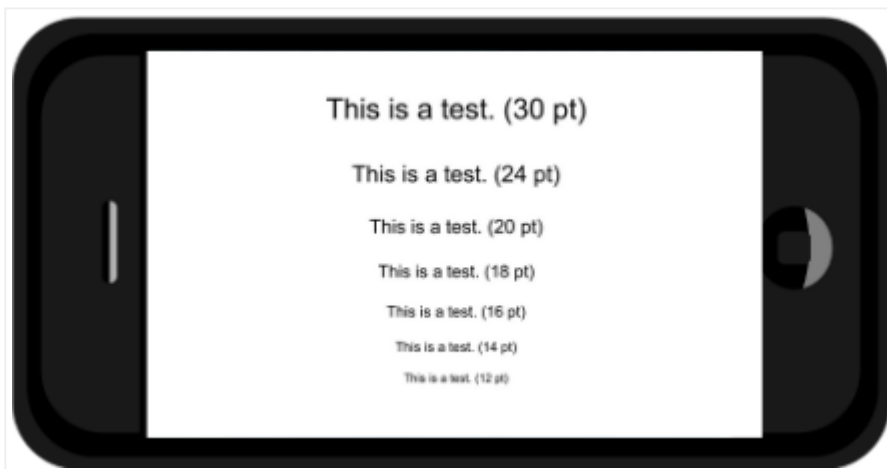
In summative quizzes, the basic principles of feedback are the same, but it's important to avoid disclosing the correct answer in the feedback. On Coursera, learners can re-attempt quizzes multiple times. If an answer is provided in the feedback, learners won't be able to learn from their mistake. The goal of a summative quiz is to assess the learner's level of mastery. To do that, learners need to be able to solve problems with the tools and skills they developed in the course.

Learn more about [creating formative assessments](#).

Videos and Slides

Video slides have >20pt font and large, engaging images

Please ensure all text in video slides is at least 20-25 size font, so mobile learners can read it easily. This image exemplifies the learner experience:¹⁵



The smallest screen that's still popular with our learners is that of the iPhone 4. As seen in the image, 20 point font is the smallest readable font size. Of course, the bigger the better.

Learn more about [producing engaging video lectures](#).

Slides are available for download

Please ensure all slide are available for download. Learners appreciate this because it makes content more accessible. They don't need to depend on a reliable internet connection, which isn't always available.

Course Community

Create an inclusive course climate

The emotional and intellectual climate of the course affects learner development and performance.¹⁶ “When we don’t feel safe, complex information is often blocked from passage to higher cortical functioning and memory storage, which slows learning and increases our frustration, aggression, or withdrawal.”¹⁷ It's crucial to create an inclusive online learning environment in your course. This helps learners feel confident to make mistakes and take risks, which is integral to learning. Some recommended strategies include:

- establishing ground rules for forum use
- designing inclusive content and modeling inclusive language
- modeling positive behavior and attitudes in video lessons and communications
- representing diverse cultures, genders, ages, ethnicities, and perspectives
- highlighting the relevance of the course to real world situations learners face

Learn more about [creating an inclusive course climate](#).

At least one discussion prompt per course

Discussion prompts are questions formatted as individual items within a course. Include at least one discussion prompt per course. Learners can respond to these questions as they work through the course content. Responses are posted directly in the discussion forum, allowing peers to interact. These discussions promote active reflection and course community. Research shows that prompts significantly increase engagement in discussion forums. The "One minute paper" approach to discussion prompts promotes learning by asking two questions:

- "What is your key takeaway from this lesson?"
- "What is the one question that is still on your mind after this lesson?"

Learn more about [discussion prompts](#).

References

1. Diamond, R. (1998). "Clarifying Instructional Goals and Objectives." In [Designing and Assessing Courses and Curricula: A Practical Guide](#) (Revised ed.). San Francisco: Jossey-Bass.

Summary: Learning objectives are precise statements that begin with an action verb. They characterize observable and measurable behaviors that you want learners to accomplish by the end of the course/rotation/lecture/small group session. Learning objectives guide and must be aligned with assessment strategies.

2. Barroso, K., & Pon, S. (2005). *Effective lesson planning, A facilitator's guide*. Sacramento, CA: California Adult Literacy Professional Development Project, American Institutes for Research.

Summary: Objectives are the concepts and ideas that learners are expected to develop and the knowledge and skills that learners are expected to acquire. They are critical to effective instruction. Learner assessment follows from the objectives.

3. Huitt, W. (2011). Bloom et al.'s taxonomy of the cognitive domain. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved August 25, 2016, from <http://www.edpsycinteractive.org/topics/cognition/bloom.html> [pdf]

4. Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., Wittrock, M.C. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives*. New York: Pearson, Allyn & Bacon.

Summary: Objectives tell us what learners will be able to do by the end of the lesson. A good learning objective is specific, measurable, and clearly stated.

5. Drennan, J., Denedy, J., & Pisarski, A. (2005). Factors affecting student attitudes toward flexible online learning in management education. *The Journal of Educational Research*, 98(6), 331-338. <http://www.learning-theories.com/kellers-arcs-model-of-motivational-design.html>

Summary: To motivate learners, communicate how the course will benefit them.

6. Keller, J. M. (2009). *Motivational design for learning and performance: The ARCS model approach*. Springer Science & Business Media.

Summary: Presenting performance requirements and evaluation criteria helps learners estimate their probability for success.

7. Jaggars, S., Edgecombe, N., & Stacey, G.W. (2013). "[Creating an Effective Online Instructor Presence](#)," Community College Research Center, Teachers College, Columbia University.

Summary: Learners do better when they feel instructors have an active presence and when they provide explicit instructions.

8. Fidishun, D. (2000). "[Andragogy and Technology: Integrating Adult Learning Theory as We Teach with Technology](#)"

Summary: Adults need to know why they should learn something. Learners will be motivated if they see how the learning will apply to their lives.

9. Greenstein, L. (2010). What Teachers Really Need to Know About Formative Assessment. Retrieved on August 25, 2016 from <http://www.ascd.org/publications/books/110017/chapters/The-Fundamentals-of-Formative-Assessment.aspx>

Summary: Help learners understand how what they will learn will be of use to them in the future and prompt them to reflect on what they expect to learn, how they might use it in the future or how it will help them to meet their goals.

10. Scott, P.A. (2003). Attributes of high-quality intensive courses. *New Directions for Adult and Continuing Education*, 97, 29-38.

Summary: Compressed courses are not inferior to semester-length courses and in certain situations can be superior.

11. Roediger, HL, Karpicke JD. (2006). Test-enhanced learning: taking memory tests improves long-term retention. *Psycholo Sci*, 249-44. Retrieved on August 25, 2016 from <http://www.ncbi.nlm.nih.gov/pubmed/16507066>

Summary: Testing is a powerful way to improve and assess learning. Taking tests enhances retention.

12. J.W. Gikandi et al. (2011). Online formative assessment in higher education: A review of literature. *Computers & Education*, 57 (2011). Retrieved on August 25, 2016 from <http://uncw.edu/assessment/documents/gikandietal2011.pdf>

Summary: Formative assessments are important and valuable for learning by documenting, monitoring, and assessing learners' progress and by motivating learners to stay engaged. They have the potential to engage both teachers and learners in meaningful ways. It offers opportunities for interactivity and formative feedback which leads to meaningful learning. Formative assessments should be frequent and authentic.

13. Greenstein, L. (2010). What Teachers Really Need to Know About Formative Assessment. Retrieved on August 25, 2016 from <http://www.ascd.org/publications/books/110017/chapters/The-Fundamentals-of-Formative-Assessment.aspx>

14. J.W. Gikandi et al. (2011). Online formative assessment in higher education: A review of literature. *Computers & Education*, 57 (2011). Retrieved on August 25, 2016 from <http://uncw.edu/assessment/documents/gikandietal2011.pdf>

Summary: Effective formative feedback is critical to the effectiveness of formative assessments. Effective feedback should relate back to learning objectives, provide cues or reinforcement to learners, clarify what good performance is, facilitates the development of self-assessment and reflection, delivers high quality information to students about their learning, and provides opportunities to close the gap between current and desired performance.

15. Hibbert, M. (2014). What Makes an Online Instructional Video Compelling? EDUCAUSE Review. Retrieved on August 25, 2016 from <http://er.educause.edu/articles/2014/4/what-makes-an-online-instructional-video-compelling>

Summary: Video should convey material in a way that is accessible to the learner.

16. Ambrose, Bridges and Lovett. (2010). *How Learning Works*, Jossey-Bass, p. 173.

17. Wiodkowski, R.J. (2008) *Enhancing Adult Motivation to Learn*, Jossey-Bass, p. 126.

18. Mastering Online Discussion Board Facilitation (2009). TeacherStream, LLC. Retrieved on August 25, 2016 from <https://www.edutopia.org/pdfs/stw/edutopia-onlinelearning-mastering-online-discussion-board-facilitation.pdf>

Summary: Discussions prompts should be used to meet course objectives and should be aligned with course content. This document describes the purposes of discussion boards and best practices.