

# DEVELOPING AN ASYNCHRONOUS ONLINE COURSE

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## INTRODUCTION

Online courses offered by UC Irvine Extension are designed to come as close as possible to providing students with the same course content and opportunities for interaction with classmates and with the instructor as “on-ground” (classroom) courses. Naturally, the online medium itself presents certain limitations, but with good course design and effective use of the distance learning course platform, instructors can overcome many of these limitations.

A typical “traditional” course begins with the content or subject matter (the actual knowledge or skills to be passed on to students). The course instructor presents this content to students making use of teaching aids such as textbooks, videos, online media, etc., and generally guides students through the course by clarifying the material and answering questions. At appropriate times during the course, the instructor may encourage the students to discuss course topics with each other in order to increase understanding and may assign work to be done outside of class to allow the students to practice what they are learning. Finally, no course would be complete without a method to evaluate how well the students have learned the material or, in more formal parlance, achieved the course’s learning objectives.

So, the main components of a “traditional” course are:

- Content (knowledge or skills) to be learned by students
- An instructor to present content to students and guide their learning
- Supplemental material or media containing some (or all) of the content
- Opportunities to discuss the content (with other students and with the instructor)
- Out-of-class assignments that allow students to increase their knowledge or practice what they are learning
- A means of evaluating how well students achieved learning objectives

As it turns out, online courses offered in an asynchronous format also have these same components. The content is the same in both formats. The differences are how the instructor presents the content to students and, generally, how the instructor communicates with the students and how the students communicate with each other.

Table 1 compares on-ground and online course components. Most of the components of the two types of courses are essentially identical. In an online course, instructors must use written language instead of spoken language to impart the course contents to their students and, likewise, students must use written language in order to communicate with their instructor and with each other. The medium for transmitting these communications is, of course, the computer with Internet connectivity.

Component	On-Ground	Online
Content	Knowledge, skills (abstract concepts)	Knowledge, skills (abstract concepts)
Instruction	Conducted by speaking to students in a classroom	Conducted by writing (usually in advance) material for students to read on the computer, by sending email messages, or by sending instant messages
Supplemental material	Books, films, videos, library material, Web pages, etc.	Books, films, videos, library material, Web pages, etc.
Discussion	Conducted by students and instructor speaking to each other, may consist of small group discussions, team "projects," etc.	Conducted by sending emails or participating in an online discussion thread, may involve the formation of small groups or team projects.
Assignments	Reading, writing essays, solving homework problems, working with classmates on team projects, etc.	Reading, writing essays, solving homework problems, working with classmates on team projects, etc.
Evaluation	Completing examinations during class time, submitting take-home exams, submitting individual or group projects, etc.	Completing examinations online and submitting the results after a defined period of time, submitting take-home exams, submitting individual or group projects, etc.

Table 1: A comparison of on-ground and online course components.

## ASYNCHRONOUS COURSE COMPONENTS

An asynchronous online course at UC Irvine Extension consists of a series of lessons, which are divided into topics, each of which may have several pages of textual information. This textual information consists of the material that the instructor would be telling the students during a classroom lecture. Each lesson also may have a discussion prompt (a sentence that asks students to post written responses in a message board) and one or more assignments. A course is shown schematically in Figure 1. (Only three lessons are shown, but the course could have more lessons, as needed.)

Each lesson must have learning objectives, topics, and a discussion prompt. Special readings or homework assignments are not required for each lesson, but we do expect *some* of the lessons to have them. In addition, instructors may assign exams, quizzes, and exercises at any point in the course. These evaluative assignments may be

embedded within the topics or as separate documents. Instructors may also create more complex, long-term assignments, such as group projects, that may have special instructions requiring separate documentation.

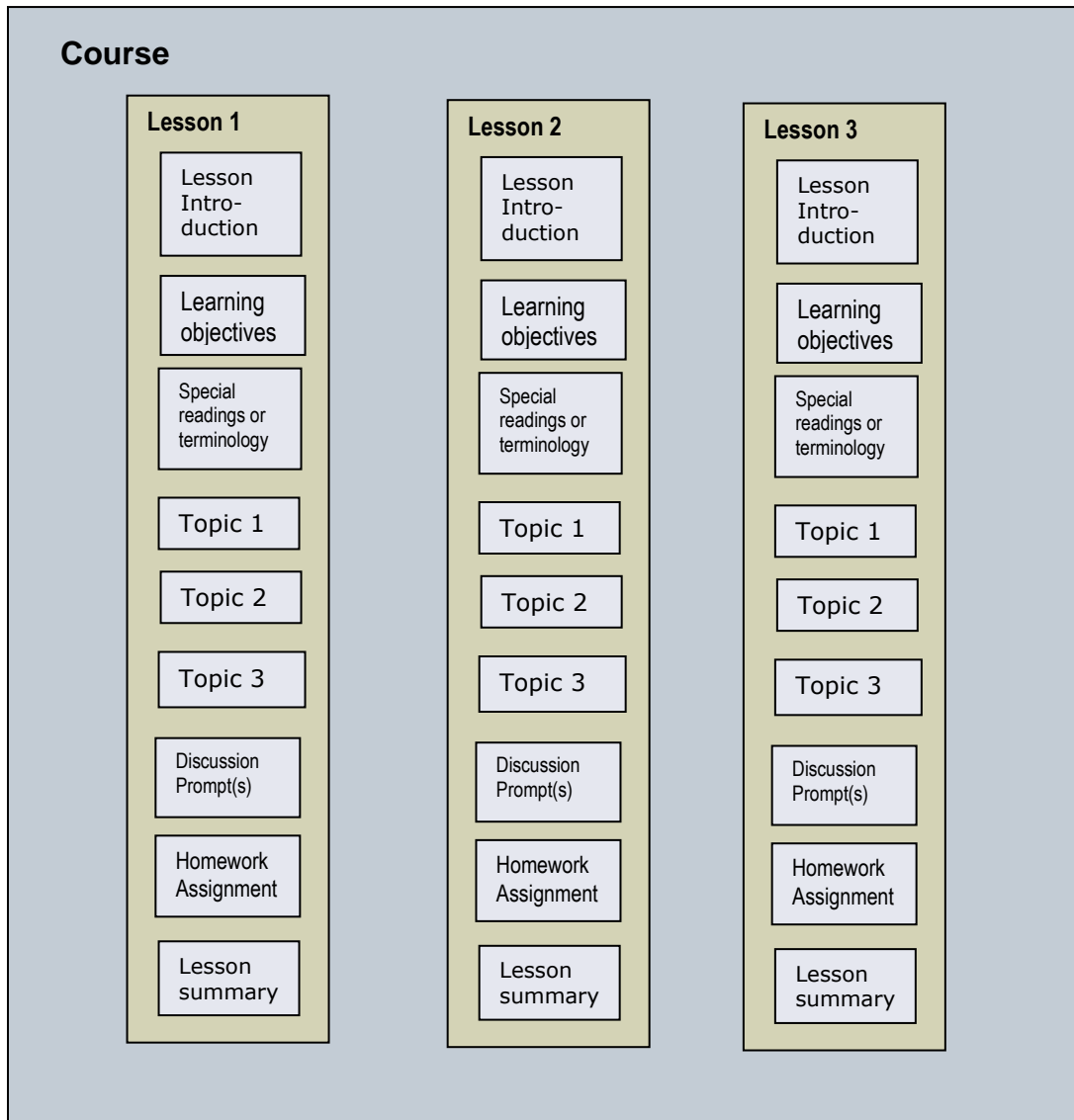


Figure 1: Schematic diagram of an online asynchronous course

The remainder of this guide provides detailed instructions for developing an online course and creating each course component. In addition, there are templates for each component so the course can have a consistent “look-and-feel.”

## DEVELOPING AN ASYNCHRONOUS ONLINE COURSE STEP BY STEP

Below are detailed instructions for taking existing course content and developing an asynchronous online course in UC Irvine Extension's preferred style and format.

There are nine sections:

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### A. Introduction to Asynchronous Online Courses and Materials

#### 1. Course and Lesson Organization

In theory, there should be no distinction between a course offered online and the same course offered in a traditional classroom format "on-ground." The amount of material covered should be the same in both formats. For example, a three-unit course called *Introduction to Project Management* offered online would have the same content as the equivalent three-unit course offered to a live audience on campus.<sup>1</sup>

An online lesson consists of seven parts:

1. An introduction to the content of the lesson
2. Learning objectives for the overall lesson
3. Readings or special terminology (if applicable)
4. Narrative text presenting the lesson's content, divided into several topics
5. Discussion prompts (designed to start student/instructor discussions)
6. Assignments/ quizzes, or tests

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<sup>1</sup> In UC Irvine Extension's quarter system, one academic unit corresponds to 10 hours of classroom time. Since the courses described in this document are asynchronous, there is no accurate way of measuring classroom time, so we speak in terms of the amount of material covered rather than the amount of time needed to cover it.

## 7. Lesson summary

### 3. Language and Style

Please use a writing style that is professional in tone and appropriate for a business audience. Avoid slang and informal construction. You are responsible for the text you produce. Please make sure to spell check everything, but do not rely on the spell checker alone. It cannot tell the difference between “their” “they’re” and “there.” Please use complete sentences, avoiding fragments and run-ons.

Please review your use of capitalization and punctuation. It should conform to accurate, modern English at a university level.

If you need to use an acronym or abbreviation, please be sure to state the complete meaning first and then put the acronym or abbreviation in parentheses. An example is “Work Breakdown Structure (WBS).” If you use a large number of acronyms, we recommend that you list these in the Special Terminology section of each lesson.

If possible, try to avoid the passive voice. Active voice is usually more readable and more likely to keep readers engaged. For example, we can rewrite the sentence, “Years ago, computers were programmed in languages such as FORTRAN and COBOL” as “Years ago, programmers used languages such as FORTRAN and COBOL.”

### 4. Citations

Please cite quotations or obvious paraphrased passages from the work of others, including text, charts, or graphics “borrowed” from web pages. While University Extension accepts citation formats from most popular style guides, we recommend the Modern Languages Association parenthetical reference format. In this style, commonly called the “MLA style,” you note the author’s name and the date of publication right after the text quoted or paraphrased. At the end of the lesson, you can list the details of the citation alphabetically by author in a page called “Endnotes” or “Works Cited.”

If you have many citations from different sources, you might want to acquire the MLA Style Guide available from the Modern Language Association web site at <http://www.mla.org>.

A sample of this citation style appears below:

“Consistency is contrary to nature, contrary to life. The only completely consistent people are the dead (Huxley, 1929).”

ENDNOTES

Huxley, Aldous. Do What You Will. Plainview, N.Y. : Books for Libraries Press, 1975 (originally published in 1929)

Remember: You are responsible for the accuracy of the references in your text.

**5. File Naming Conventions**

Please save each lesson as a separate Microsoft Word document. In order to help us keep track of what you send us, please use the following convention when naming your documents:

**Course number\_course title\_lessonNumber\_author**

Example:

*MGMT X123.1\_How to Win Friends and Influence People\_Lesson2\_Smith*

**Questions?** Please contact Jia Frydenberg at [jia.frydenberg@uci.edu](mailto:jia.frydenberg@uci.edu) or 949-824-4381

## B. Parts of a Lesson

Each lesson is comprised of six components, each of which is mandatory. Below are descriptions of each of these components

### 1. Lesson Overview

The first page of your lesson is the Lesson Overview, which serves the same purpose as the introductory remarks you would make before beginning an on-ground class session. You can review the previous lesson's topics, introduce special concepts or important points for the current lesson, and provide a smooth transition into the current lesson's topics. It is a good idea to also show how the current lesson's topics are related to the overall objectives of the entire course.

You should conclude your lesson introduction with a reference to the forum discussions that will be a part of the lesson.

### 2. Lesson Learning Objectives

Lesson learning objectives describe what students should be able to *do* after completing a lesson. (Go ahead and assume that they may need to spend some time studying the material before they can achieve the learning objectives.) The word "do" implies action – simply *knowing* something or *understanding* something is insufficient; they must be able to demonstrate their knowledge or understanding in some way, such as by explaining, describing, analyzing, presenting, and so forth.

Your assignments, exams, and other class activities (including the forum discussions) should reinforce this concept of actively practicing or demonstrating what the students have learned.

The format for listing lesson objectives is:

*After completing this lesson, you should be able to:*

- *Objective one*
- *Objective two*
- *Objective three*

Make sure your lesson objectives are clearly related to (or a subset of) the overall course objectives.<sup>2</sup>

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<sup>2</sup> Recall that your course has overall course objectives, which are similar to lesson objectives except that they are usually broader and more general in scope.

### 3. Readings or Special Terminology

This section is optional. Some lessons may have special reading assignments or may refer to unusual terminology that your students need to learn. You can list these items in this section.

### 4. Organizing your Lesson Topics

The content of each lesson is divided into separate topics, each of which should have its own title. This approach to subdividing your content makes it easier for you to organize it and helps students see the relationships between individual topics and the entire course.

The narrative you write for each topic corresponds to what you would tell students during a face-to-face lecture. However, do not try to make it a word-for-word transcription of what you would say to a live audience. As you know, verbal communication often involves asides, false starts, interjections, and other extraneous elements that are not part of your message and should not appear in written form. The amount of material that you would cover in a one-hour lecture should take *less* than one hour for students to read.

If your course involves a well-written textbook and/or other supplementary material, let those materials do much of the teaching. Your narrative should help guide students in their learning and point out special features, ideas, concepts, etc. that are important or that you wish to emphasize. You don't need to duplicate what already is covered in your supplementary materials. Your objectives are to summarize, highlight, and supplement (with your own original material) what appears in the supplementary materials. Of course, the degree to which you can rely on external sources varies by topic. In some cases, there may not be any good textbooks or articles available and you will need to do more writing.

Bear in mind that if the materials you are using change, you will need to update your online course materials accordingly. As textbook editions evolve, page numbers, table and chart numbers, chapter titles, and other content are likely to change. **It is your responsibility to keep your online materials up to date at all times.**

From our experience with teacher-created courses, a good lesson may have anywhere from eight to 20 pages, depending on the topic. It is an excellent idea to use photographs, drawings, charts, tables, or other graphics to help illustrate concepts and break up the continuity (and monotony, perhaps) of your narrative.

## 5. Discussion Starters (“Prompts”)

In a face-to-face class, students engage the instructor and their peers in discussions, debates, group presentations, and so forth as a means of exploring the course material more deeply. In an online course, this interactivity is achieved through online forums.

A “forum” is a threaded discussion where the instructor posts a “discussion prompt” that elicits written responses from the students. Everyone reads all the postings and then can comment upon each others’ comments. It’s not as fast a live discussion, but potentially the same kind of interactive exchanges can ensue. Your job as the instructor is, of course, to post a prompt that generates interest and responses, and then to guide the discussion in much the same way as you would guide a live, classroom discussion.

The forums are ASYNCHRONOUS, which means that they are available anytime, anywhere to the students in your class. In addition, all UC Irvine Extension course administrators can view forum contents. Because forum comments are written and become permanent (at least for the duration of the course), the choice of words that one uses is very important. Once somebody submits a forum comment, they cannot retract it! Even if they were able to go back and modify a previously posted remark, the instructor and other students (or UCI administrators) may have already seen it by that time. In order to avoid misunderstandings, it is wise to consider carefully anything you write for the forums. The UCI Online Instructor Training course, which is available to you at no charge, provides further discussion of this topic. Please plan to participate in this course.

You would prepare most of your forum prompts in advance of teaching the class; however, you can easily add more prompts (or modify existing ones) while the class is in session.

A good forum prompt generates an informed discussion among your students. This is not always easy to do, especially in courses where the content is mostly informational or technical. In these courses, you may try presenting problems for students to solve or controversial issues on which you ask them to comment. The students can then post suggestions for solving the problem or expressions of their viewpoints on the controversial issues. In a computer science course, for example, the instructor might post a set of user requirements for a software application and ask students to suggest alternative architectures to satisfy those specifications. In a leadership course, the instructor might ask students to read an article and then post comments. In most courses that address business or work-related topics, the instructor may invite students to post comments on how they plan to apply what they are learning

to their own personal or professional lives. Here's an example forum prompt that might appear in a course on leadership:

*"Can a person who is not an effective manager be a good leader? Is an exceptional manager necessarily an effective leader, as well? Take a position on this topic and be sure to explain why you took the position you chose. Also, please read other students' posts and respond in a substantive manner to at least two of them."*

## 6. Assignments, Quizzes, and Tests

Each graded course should contain several different methods of assessing student performance. This is important because different students have different working styles: some perform more effectively in "real-life" situations than on "contrived" written examinations while others feel more comfortable researching and writing about a topic independently than working in a group setting.

The most commonly used assessment methods include the following:

1. Participation in online discussions (prompted by the instructor)
2. Creation of original text (i.e. researching a topic and writing a paper about it)
3. Creation of other products (such as developing software applications, databases, or multimedia presentations)
4. Responding to quizzes and examinations (tests)

It is important to match assessment methods with specific course contents and desired outcomes. In fact, there should be a direct relationship between stated outcome objectives and performance evaluation methods. For example, if a desired outcome for a course is that students will be able to describe the differences between Greek and Roman architecture, there should be an assignment or exam question that asks students to write a descriptive passage outlining those differences. If appropriate, the instructor may encourage students to use means other than writing to express the differences. Instructors should use their experience and knowledge of their topics to develop appropriate assignments.

Please use your experience and expertise to develop appropriate assignments and other evaluation methods for your course. We expect you to use at least three different methods; the directions below are intended as a guide to help you get started. In general, there are three broad categories of educational outcome objectives:

*Upon completing the course, students:*

1. Will have gained information and / or knowledge

2. Can apply knowledge they have learned (such as by following a procedure)
3. Can analyze or evaluate knowledge (including knowledge not necessarily learned in the course)

Here are several evaluation methods to consider:

**a. Students should show you what they know**

In courses where students must learn factual matter, learning objectives usually begin with verbs such as “list,” “describe,” “discuss,” or “identify,” among many others. Achieving this objective often requires students to simply recall the information in some fashion.

Depending on your field of study, some possible assignments include:

- Summarize one or more articles in the field
- Write a descriptive paper
- Take a multiple-choice or a true/false test

**b. Students should demonstrate how they can apply what they have learned**

In courses where students must apply or DO something with what they have learned, learning objectives usually begin with verbs such as “apply,” “interpret,” “discuss,” or “explain,” among many others.

Some possible assignment types include:

- Discuss the issue of <xxxx> in the online forum for week Y. Post a minimum of Z words of original contribution and respond thoughtfully to at least two other participants’ postings.
- Explain why the textbook author concludes that...
- Develop a C# application that does the following: <insert description>

**c. Students should show that they can evaluate what they have learned**

In courses where students must evaluate what they have learned, learning objectives usually begin with verbs such as “compare and contrast,” “critique,” “evaluate,” “appraise,” and “propose,” among many others. In other words, students who achieve this type of learning objective can take what they have learned and draw logical conclusions that are not readily apparent.

Some possible assignments for these objectives are:

- Given the stated customer/client requirements, develop a project scope.
- Based on what you have learned in this course about <xyz>, evaluate and explain the main underlying causes of <zyx>.
- Analyze the assigned case study and explain why or why not the outcome was <xyz>. Support your arguments.
- Given your client's business needs, propose a complete technology solution to help her meet those needs. Justify your choices of approaches and strategies.

If you want to use quizzes and tests (multiple-choice, T/F, and short answer) in your class, please contact the UCI Distance Learning Center at [bmryoo@uci.edu](mailto:bmryoo@uci.edu) or 949-824-7613 for assistance. We'll be happy to help you set up your tests!

## 7. Lesson Summary

The last page of your lesson should summarize the main learning points of the lesson and should not introduce any new topics. A good summary reiterates the lesson's learning objectives and briefly states how the lesson achieved those objectives.

## C. Using the Lesson Template

The accompanying Lesson Template will help you organize your content as well as give it a consistent appearance. While the template is generally self-explanatory, a few comments are in order to help you begin using it. The template is a Microsoft Word document with 1) a header for course catalog information and lesson titles and 2) headers and sub-headers already in place to help ensure that you provide all the content needed for a complete course. Following are specific instructions for using the template.

First of all, you need to fill out the **header block** by specifying the course catalog number and title, the lesson number, and the lesson title. Double-click on the header area (top of the page) and overwrite the fields in the appropriate cells of the grid. The existing text will disappear as you begin typing; all the areas marked "overwrite" in this document work this way. This header block will appear on each page of your lesson document.

Next, please write your **Overview**. You can use as much space as you need. For the **Lesson Outcome Objectives**, please do not delete the sentence, "By the end of this lesson, you should be able to..." Type your list of objectives below this sentence by overwriting the bulleted text.

In the section marked “**Readings/Special Terminology**,” please list the current lesson’s reading assignments, which may consist of pages from the course text book, documents posted on the course site, or any other reading material. If there is no reading, please write something like, “There is no reading assignment for this lesson.”

Next, please make a list of **special terminology** for the current lesson. This should be a straightforward glossary of terms with short, precise definitions. If there are no terms, you can proceed directly to the next section, where the course content begins.

For the first **topic**, please write a topic title and then begin writing the lesson content. You can write as much as you need (using as many pages as you need) and include graphics, charts, etc. within the body of your text. After you have finished the first topic, please copy the header and paste it below the text you just completed; change the topic number to “2,” and type in the appropriate title for this topic. You can begin adding the content for topic no. 2 at this point. Continue in this manner until you have reached the end of the last topic. Note that you can use sub-topic sub-headers, if you wish. Please ensure that topic and subtopic numberings are consistent and sequential.

At the end of each lesson, please begin a forum discussion using the **Discussion Starter/Forum Prompt** page. The Distance Learning Center will add this discussion prompt to a list of prompts for the entire course that will appear separately on MOODLE. Students can view the prompts and respond to them without having to search for them in individual lessons.

Next we have an assignment page where you can provide instructions for homework **assignments** and class projects. If a particular lesson does not have any assignments, please write “There is no assignment for this lesson.”

Finally, the last page in the lesson contains a **Lesson Summary**. This is very important because it helps students review and focus their attention on the key points of the lesson. This should be a true summary that is closely tied to the learning outcome objectives stated at the beginning of the lesson.

*“Tell what you’re going to tell, tell it,  
and then tell what you told!”*