



# **Functional Specification for NMLS Approved Instructor-Led Online Courses**

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**Nationwide Mortgage Licensing System & Registry  
State Regulatory Registry, LLC**

**1155 Connecticut Ave NW  
Fifth Floor  
Washington, D.C. 20036-4307**

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### About this Document:

This document outlines the technical requirements associated with configuring and delivering an online instructor-led course. While this particular classroom format is typically used for delivery of pre-licensure education, a provider may choose to deliver continuing education courses using this format as well. Regardless of whether the instructor-led course is intended for PE or CE, the same technical requirements apply. Course Provider seeking to offer online self-paced courses for CE should refer to the functional specification for NMLS Approved Continuing Education (CE) Online Courses.

### What’s New in Version 2.0 of this Document:

This latest version of the document updates Sections 2.1 related to the use of a Learning Management System, and Section 2.2 on Course Syllabus. This latest version of the document (version 2.0) updates section 2.1 related to the use of a Learning Management System, and section 2.2 which discussed the course Syllabus. New requirements for course design have been included in Section 3. Specifically, there is a new requirement to lock modules and control course progression (Section 3.3.2), courses must demonstrate instruction-to-student interaction (Section 3.4), and, prior to final approval the course must go through a technical review process (Section 3.6).

NMLS welcomes constructive comments, questions, and recommendations regarding the requirements associated with delivering education in this classroom format. While NMLS has established specific criteria that must be met in order for a course to be approved, it is also our intent to provide the opportunity for course provider to be creative, and to develop and offer courses that are engaging and appeal to the various learning styles of adult learners.



## Executive Overview

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The following course design requirements and subsequent sections outlining special considerations for instructor-led courses are intended to inform course providers of the specifics necessary to design a course for NMLS for approval. The requirements detailed in this functional specification are for “instructor-led online courses” that are intended for either pre-licensure (PE) or continuing education (CE). An instructor-led online course is defined as one that has an instructor leading the course and uses a Learning Management System (LMS) as the delivery mechanism. Given the complexities associated with learning the mortgage industry, the NMLS Regulator Test and Education Committee, and its successor governing body, the Mortgage Testing and Education Board (MTEB), feel strongly that online self-paced learning is not an acceptable classroom format for pre-licensure education and that any course offered online be instructor-led. As such, this document and associated requirements differ from other industry education standards that employ technology as a means to deliver education. While many organizations emphasize the employment of technology as a means to deliver instructional content in a tightly structured manner the intent of NMLS mandated instructor-led format is to provide an educational experience analogous to a community college-level course where the online classroom has been designed to foster instructor-to-student and student-to-student interaction such that the student will gain from the expertise and experiences of an instructor and thus be more fully prepared to work within the residential mortgage industry.

This document is organized into three sections:

**Section 1, General Course Requirements** contains information detailing the SAFE Act’s education requirements and defines the types of course categories that a course provider can register a course for. This first section also provides the specifications that must be followed for naming courses as well as other information pertaining to course set-up, information on writing a syllabus, and requirements for course materials.

**Section 2, Special Considerations for Instructor-Led Courses** describes the need for course providers to employ a Learning Management System (LMS) and outlines the minimum capabilities that NMLS expects an LMS to support. This section also provides specific syllabus content requirements pertinent to the delivery of online instruction and discusses optimal class size, considerations for instructor qualifications, and instructions for how to determine and measure course time.

**Section 3, Functional Design (Course) Specification** details the specifics for how to format the online classroom. Contained within this section is information pertaining to course organization, course design, setting learning objectives, employing learning activities, and best practices associated with test design.

This document also contains two Appendices:

**Appendix A** – is a list of Learning Management Systems that a course provider may want to consider. The list is not all inclusive but it does include several options ranging from out-of-the-box commercial enterprise solutions to do-it-yourself open-source software.

**Appendix B** – provides a list of 30 instructor-facilitated learning activities that can be employed as part of online instruction and are intended to meet the needs of different types of learning.

Lastly, it is the intent of NMLS to ensure this document remains current and adaptive to the needs of the mortgage industry. Accordingly, as technology advances and/or based upon recommendations from the industry, and with the approval of the MTEB, this document will be updated.

## Section 1. General Course Requirements

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### 1.1 SAFE Act Education Requirements

The Secure and Fair Enforcement for Mortgage Licensing Act of 2008 (SAFE Act) requires that state-licensed mortgage loan originators (MLOs) complete pre-licensure and annual continuing education. In order to meet pre-licensure continuing education requirements, state-licensed MLOs must complete 20 hours of NMLS-approved education that includes the following topics:

- a. 3 hours of Federal law and regulations;
- b. 3 hours of ethics, this shall include instruction on fraud, consumer protection, and fair lending issues;
- c. 2 hours of training related to lending standards for the nontraditional mortgage product marketplace; and
- d. 12 hours of undefined instruction on mortgage origination.

For annual continuing education, the SAFE Act requires state-licensed MLOs to complete 8 hours of NMLS-approved education that includes the following topics:

- a. 3 hours of Federal law and regulations;
- b. 2 hours of ethics that shall include instruction on fraud, consumer protection, and fair lending issues;
- c. 2 hours of training related to lending standards for the nontraditional mortgage product market; and
- d. 1 hour of undefined instruction on mortgage origination.

It should be noted that the SAFE Act's requirement for state-licensed MLOs to complete 20 hours of pre-licensure education and 8 hours of annual continuing education is a minimum standard and that individual States, through the passage of their own SAFE legislation, may require MLOs to complete a greater number of hours of education as a condition to be licensed in that state. Additionally, for the 12 hours of undefined instruction (commonly referred to as electives), a State may also require that a certain number of those hours be state-required instruction. The same requirement may also apply for the 1 hour of undefined instruction required for annual continuing education. The following scenarios are examples for how pre-licensure education could potentially be configured:

- a. State A may require the minimum SAFE Act requirements of 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage lending and 12 hours of electives for a total of 20 hours.
- b. State B may require the minimum SAFE Act requirements of 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage lending, 4 hours of state-specific mortgage law (taken from the 12 hours of undefined electives), and 8 hours of electives for a total of 20 hours.
- c. State C may require the minimum SAFE Act requirements of 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage lending and 12 hours of undefined electives, plus an additional four hours of state-specific mortgage lending law for a total of 24 hours.
- d. State D may require the minimum SAFE Act requirements of 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage lending, and 3 hours of state-specific mortgage industry regulation (taken from the 12 hours of undefined

electives), 9 hours of electives, plus an additional four hours of state-specific mortgage lending law for a total of 24 hours of education.

## 1.2 NMLS Course Approval

In situations where States, through the passage of their SAFE Act legislation, have mandated that state-licensed MLO complete additional hours of pre-licensure and/or continuing education that exceed the Federal requirement, or in situations where States have mandated that a certain number of the 12 hours of electives associated with meeting the pre-licensure requirement or the 1 hour of elective associated with fulfilling the annual continuing education requirement, NMLS will, if the State so desires, approve these courses in cooperation with the respective State agency. For example:

- a. State B requires the minimum SAFE Act requirements of 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage lending, 4 hours of state-specific mortgage law (taken from the 12 hours of undefined electives), and 8 hours of electives for a total of 20 hours. ***NMLS will approve this course.***
- b. State C requires the minimum SAFE Act requirements of 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage lending, and 12 hours of undefined electives plus an additional four hours of state-specific mortgage lending law for a total of 24 hours. ***NMLS will approve the required 20 hours associated with meeting the Federal SAFE Act requirements, AND, if the State so desires, NMLS will coordinate with the appropriate State agency for the approval of the additional hours of state-specific content.***

## 1.3 Course Categories

When submitting a course for NMLS approval, course providers will be required to identify which course category of the SAFE Act requirement the course is intended to satisfy. This is an important decision as this information will carry over to the MLO Course Completion Record and will determine whether or not the MLO has completed the necessary education required for licensure. As such, and to provide course providers with as much flexibility as possible to construct courses to suite individual business models while at the same time attempting to work within specific technical parameters associated with the management of the NMLS system, the following course categories and associated course hours are as follows:

### 1.3.1 Pre-licensure Education:

- a. Individual Core Courses
  1. Federal Law: course must be a minimum of 3 hours;
  2. Ethics: course must be a minimum of 3 hours; and
  3. Lending standards for the nontraditional mortgage product marketplace: course must be a minimum 2 hours.
- b. Core Course: intended to fulfill the three core requirements. The course must contain 3 hours of federal law, 3 hours of ethics and 2 hours of nontraditional mortgage for a minimum total of 8 hours.
- c. Electives: course designed to fulfill any number of hours of the 12 hours of undefined instruction. The course must be a minimum 1 hour.
- d. Comprehensive PE: course intended to fulfill all of the pre-licensure requirements of the SAFE Act and does not contain any

State-specific content. The course must contain 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage and 12 hours of elective content for a total of 20 hours.

- e. State Comprehensive PE: course intended to fulfill all of the pre-licensure requirements of the SAFE Act as well as meet the State requirement for a specific number of hours taken from the 12 hours of electives. The course must contain 3 hours of federal law, 3 hours of ethics, 2 hours of nontraditional mortgage, a specific number of hours for State required education (taken from the 12 hours of electives), and the remaining number of elective hours for a total of 20 hours.

### **1.3.2 Continuing Education:**

- a. Individual Core Courses
  - 1. Federal Law: course must be a minimum 3 hours;
  - 2. Ethics: course must be a minimum of 2 hours; and
  - 3. Lending standards for the nontraditional mortgage product marketplace: course must be a minimum of 2 hours
- b. Core Course: intended to fulfill the three core requirements. The course must contain 3 hours of federal law, 2 hours of ethics and 2 hours of nontraditional mortgage for a minimum total of 7 hours.
- c. Electives: course designed to fulfill the 1 hour of undefined education. The course must be a minimum 1 hour.
- d. Comprehensive CE: course intended to fulfill all of the continuing education requirements of the SAFE Act and does not contain any State-specific content. The course must contain 3 hours of federal law, 2 hours of ethics, 2 hours of nontraditional mortgage and 1 hour of elective content for a total of 8 hours.
- e. State Comprehensive CE: course intended to fulfill all of the continuing education requirements of the SAFE Act as well as meet a State requirement for a specific number of hours taken from the 1 hour elective. The course must contain 3 hours of federal law, 2 hours of ethics, 2 hours of nontraditional mortgage, and a specific number of hours for State required education (using the 1 elective hour) for a total of 8 or more hours.

## **1.4 Minimum Course Length**

Courses will only be accepted and approved if the course meets the minimum number of hours associated with the SAFE Act requirement it is intending to satisfy. Accordingly, a course can only be registered under one category and may not count for less than the number of required credit hours as required by the SAFE Act. For example, there cannot be a 2 hour individual core Federal law course since the minimum number of hours required to satisfy the SAFE Act requirement for Federal law for both pre-licensure and continuing education is 3 hours.

## **1.5 Course Naming**

To ensure course names properly reflect the intended need to meet SAFE Act education requirements and to ensure MLOs are properly informed, the following course naming

convention has been developed. As a general rule, each course name begins with the number of hours, followed by the course category, and then the course title containing specific key words and/or a state identifier. The naming convention is as follows:

#### **1.5.1 Pre-licensure Courses:**

- a. Individual core course Federal law: courses intending to satisfy the Federal law portion of the SAFE Act requirements. The number of hours is 3 and the title must contain the words *Federal Law*. Example: 3 Hours Federal Mortgage Law.
- b. Individual core course Ethics: courses intending to satisfy the ethics portion of the SAFE Act requirements. The number of hours is 3 and the title must contain the words *Ethics* as well as *Fraud*, or *Consumer Protection*, or *Fair Lending*. Example: 3 Hours Ethics and Consumer Protection: What the Loan Originator Needs to Know.
- c. Individual core course Nontraditional Mortgage: courses intending to satisfy the nontraditional mortgage portion of the SAFE Act requirements. The number of hours is 2 and the title must contain the words Nontraditional Mortgage or Lending Standards. Example: 2 Hours Nontraditional Mortgage: Emergent Standards
- d. Core course: courses intending to satisfy each of the three SAFE Act course requirements (federal law, ethics, and nontraditional mortgage). The number of hours is 8 and the title must contain the words SAFE Core. Example: 8 Hours Loan Originators Basics SAFE Core.
- e. Comprehensive Course: courses intending to satisfy all of the pre-licensure requirements of the SAFE Act. The number of hours is 20 and the title must contain the words SAFE Comprehensive. Example: 20 Hours Mortgage Loan Originator SAFE Comprehensive.
- f. State Comprehensive Course: courses intending to satisfy all of the pre-licensure requirements of the SAFE Act and contains state-specific content. The number of hours is 20 and the title must contain the State's two letter abbreviation code and the words SAFE Comprehensive. Example: 20 Hours MLO Fundamentals: CA SAFE Comprehensive.

#### **1.5.2 Continuing Education courses:**

- a. Individual core course Federal law: courses intending to satisfy the Federal law portion of the SAFE Act requirements. The number of hours is 3 and the title must contain the words *Federal Law*. Example: 3 Hours Federal Mortgage Law.
- b. Individual core course Ethics: courses intending to satisfy the ethics portion of the SAFE Act requirements. The number of hours is 2 and the title must contain the words *Ethics* as well as *Fraud*, or *Consumer Protection*, or *Fair Lending*. Example: 2 Hours Ethics and Consumer Protection: What the Loan Originator Needs to

Know.

- c. Individual core course Nontraditional Mortgage: courses intending to satisfy the nontraditional mortgage portion of the SAFE Act requirements. The number of hours is 2 and the title must contain the words Nontraditional Mortgage or Lending Standards. Example: 2 Hours Nontraditional Mortgage: Emergent Standards
- d. Core course: courses intending to satisfy each of the three SAFE Act course requirements (federal law, ethics, and nontraditional mortgage). The number of hours is 7 and the title must contain the words SAFE Core. Example: 7 Hours Loan Originators Basics SAFE Core.
- e. Comprehensive Course: courses intending to satisfy all of the pre-licensure requirements of the SAFE Act. The number of hours is 8 and the title must contain the words SAFE Comprehensive. Example: 8 Hours Mortgage Loan Originator SAFE Comprehensive.
- f. State Comprehensive Course: courses intending to satisfy all of the pre-licensure requirements of the SAFE Act and contains state-specific content. The number of hours is 8 and the title must contain the State's two letter abbreviation code and the words SAFE Comprehensive. Example: 8 Hours Annual MLO Fundamentals: CA SAFE Comprehensive.

## **1.6 Start and End Times**

Since pre-licensure online courses are required to be instructor-led just like face-to-face and classroom equivalent courses are, the course must have a fixed start date. The course will then run over a period of several days or weeks and then will have a fixed end date. Course providers need to pay close attention to the course end date since some state-licensed MLOs have a requirement to complete their pre-licensure education by December 31, 2010. Additionally, if this course format is being used for continuing education, a course should not extend beyond December 31 of any year or the student will be unable to complete the course within the required calendar year as required by each state's law. Course providers must also take into consideration the administrative time required to process course completions and to upload the information both into their own internal systems as well as NMLS.

## **1.7 Course Syllabus**

Every course is required to have a course syllabus that is easily accessible to every student. While it is beyond the scope of this document to provide instruction on how to write a course syllabus, some general information and guidelines are provided below. Additionally, NMLS has produced a model course syllabus which is available in the NMLS Resource Center.

According to O'Brien, Millis, and Cohen (2008), a course syllabus communicates the course provider's attitudes towards students and learning. As such, they suggest drafting a course syllabus with the end in mind and looking at three stages with each stage answering the following questions:

Stage 1: What is worthy and requiring of understanding? Define the key objectives of the course and identify specific points or concepts that you want the students to focus on and understand.

Stage 2: What is evidence of understanding? Answer how understanding is going to be measured both formally and informally.

Stage 3: What learning experiences and teaching promote understanding, interests, and excellence? In other words, now that you have the student, define how you're going to engage them in the learning process, retain them, and help ensure they are successful.

In addition to answering the questions associated with the three stages above, a course syllabus should contain the following information:

- a. Instructor background and contact information and introduction;
- b. Purpose for the course;
- c. Course description;
- d. Course objectives;
- e. Requirement for text or other course materials;
- f. Policies and course completion expectations and specify actions that will cause disqualification for a completion certificate ;
- g. Policies regarding attendance and behavior (including use of cell phones and other electronic devices);
- h. Grading or pass/fail criteria;
- i. End-of-course completion requirements (including end-of-course evaluation/survey); and
- j. Specifics pertaining to each module of instruction including information on activities, materials required, group participation requirements, and estimated time required for completion.
- k. Any technology requirements to include need for software, camera, continuous interaction, Internet access, etc.

## 1.8 Course Materials

Course materials need be provided as part of the course. If there is a separate requirement for materials that are not included as part of the course (i.e. a text book), these should be identified as part of the course description so that students are made aware of the requirement (and any costs) early enough so that they can acquire the materials prior to the course start date.

## 1.9 Instructor Skills and Qualifications

**1.9.1 Skills:** Instructor's should possess the following skills:

**1.9.1.1 Interpersonal Skills:** excellent interpersonal skills that foster relationship and team building. Instructors should also be able to work appropriately with diverse groups of people.

**1.9.1.2 Communication Skills:** instructors should be able to use language, including industry terminology, confidently and appropriately.

**1.9.1.3 Teaching Skills:** Possess the ability to share information one-on-one or one-to-many. Additionally, the instructor should be able to master information, plan and lead classes, and collect and use information from a diverse set of resources. Instructors should also be able to distill

complex information and/or concepts in such a manner that students can learn the information.

**1.9.1.4 Organizational Skills:** The instructor needs to be able to set goals (generally in the form of learning objectives), plan activities, establish priorities, and manage time.

**1.9.2 Professional Requirements: Instructors should possess the following qualifications:**

Be able to demonstrate through experience, credentials, or other means that he/she is a subject matter expert in one or more areas of mortgage loan origination laws and practices including but not limited to:

- Federal law and regulations
- State laws and regulations (for one or more state and/or agencies)
- General mortgage origination knowledge and practices.

It is expected that instructors will have a least five (3) years of professional experience in the industry in a position (or positions) that bears directly on mortgage loan origination practices including but not limited to origination, underwriting, secondary marketing, operations compliance, quality control, or other comparable positions; OR,

It is expected that regulatory instructors (state or federal) must have at least (3) years of responsible experience in a regulatory position (or positions) including the conduct or supervision of mortgage company examinations (brokers and/or lenders), consumer complaint investigation and resolution, or mortgage legal affairs.

It is expected that instructors formerly or currently associated with Mortgage GSE's must have a minimum of three (3) years of responsible experience in a position that's comparable to either the industry professional or regulator position described above.

It is preferred but not required that the instructor have a BA/BS degree from a regionally accredited institution or equivalent experience and credentials.

Instructors must meet the minimum requirements for a criminal background check that are included in the SAFE Act (See section 1505(b)(1-3).

**1.10 Measure Student Satisfaction**

Course providers must have a means by which to measure student satisfaction. Course providers need to be prepared to demonstrate that end-of-course evaluations/surveys are being completed and that substantive feedback is being incorporated in the course material.

**1.11 Evidence of Satisfactory Course Completion**

Course providers must have a means to measure/verify that a student has attended the course and have a means to measure that a student has completed the course (typically this is the form of a final course exam that requires a passing score as determined by the course provider). Means to verify that a student has completed a course **may** include any of the following:

- Requiring a final exam
- Participating in any number of activities to include polls, quizzes, online discussions, etc.
- Interaction with the instructor or facilitator
- Any other means to verify course completion

## Section 2. Special Considerations for Instructor-Led Online Courses

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### 2.1 Use of a Learning Management System

A Learning Management System (LMS) (also referred to as a Course Management System (CMS)) is an online learning environment where students participate in their courses, interact with their instructors, and collaborate with their classmates. It is analogous to a virtual campus (Shelton & Saltsman, 2005). To conduct effective online instructor-led learning, NMLS **requires** course providers to employ a LMS. Typically, an LMS will provide a suite to tools which will enable the course provider to create and manage content, facilitate communications between the instructor and students, provide for testing and instruction assessment, and will contain a number of administrative features.

According to Shelton & Saltsman (2005) content management allows for the creation of content, editing of existing content, and the organization of Web pages and other files. Collaboration and communication tools provide synchronous communication capabilities such as chat and virtual whiteboards along with asynchronous communication capabilities such as course announcements, threaded discussions, and email. Testing and assessment features provide online testing mechanisms, tools for online test creation, and a grading system. Finally, administrative utilities facilitate the creation of course sections, the copying of course content, and LMS user management functions.

There are many LMS options available. Appendix A of this document provides a list of well known LMS providers. The list is not all inclusive and lists only a small number of well know, commercial providers. Appendix A also includes organizations that provide open-source software that can be used and modified to meet the needs of a course provider. Because implementing a LMS solution requires that the organization make an investment in time and money as well as requiring regular support to maintain, organizations should consider carefully which suite of features are needed in order to deliver quality education. To assist course providers in making the right decision, the Western Cooperative for Educational Telecommunications (WCET) has developed an online tool that compares LMS/CMS products. The tool is available at <http://www.edutools.org>.

Regardless of which LMS a course provider chooses, NMLS expects that it will support the following minimum capabilities (note: \* denotes the LMS must support this functionality):

- 2.1.1 Authentication\*:** Requires students and instructors to log in to the system with a user ID and a password.
- 2.1.2 Course Content Authorization\*:** The ability to assign or authorize access to specific course content based upon user roles, i.e. instructors may have access to certain instructional features while students will have more limited access.
- 2.1.3 Course Registration Capability:** The capability for either the student or the course provider (on behalf of the student) to enroll in the course online or through an internally-managed process. Regardless of process, the student must be able to log into the system on the course start date and be able to begin participating in the course.
- 2.1.4 Multiple Test Format Capability:** The capability to administer a test in multiple formats, e.g. multiple choice, and/or fill-in-the-blank.

- 2.1.5 Automated Testing Management:** Provides the capability for the instructor to set-up and automate when a test may be taken and under what conditions.
- 2.1.6 Online Grade Posting:** Enables the instructor to post grades online and for students to track their progress.
- 2.1.7 Course Progression Management\*:** Provides the capability for the instructor to set-up the course and to control the progression of the course based upon either time or work completed.
- 2.1.8 Student Tracking\*:** Enables the instructor to track a student's usage of the course material or progression through the various modules and/or assignment/activities.
- 2.1.9 Instruction Design Tools:** System-enabled suite of tools that can be used by the instructor to create the course.
- 2.1.10 Discussion Board/Forum\*:** Provides the capability to facilitate threaded text conversations between the instructor and students in the course.
- 2.1.11 File Uploads:** Capability for instructor and students to upload files from their computers to share with each other.
- 2.1.12 Real-time Chat:** Provides for the capability for the instructor and student to synchronously converse back and forth.
- 2.1.13 Student Profiles/Portfolio:** Provides the capability for students to list demographic information, upload a photo and to showcase their work. Such features assist to build a sense of community.
- 2.1.14 Web Browser Compatibility\*:** The LMS must be able to be accessed using common Web browsers like Internet Explorer, Firefox, and Safari.

## 2.2 Course Syllabus

In addition to what information is already provided as part of the general course overview, particular attention should be paid to providing the following information in the syllabus:

- 2.2.1 Instructor Contact Information and Response Times:** Be sure to include a valid e-mail address that students can use to contact the instructor. Ideally, this should be an e-mail address internal to the LMS to prevent e-mail from being blocked by external spam filters. However, if this is not feasible, then both the instructor and students should be made aware that they may need to configure their e-mail to recognize each other's e-mail address. Additionally, instructors should inform students about how quickly they can expect to receive a reply to any e-mail (i.e. all e-mail will be answered within 24 hours of receipt).
- 2.2.2 Synchronous Activity Times:** If there is a requirement for students to be logged into the LMS at a specific time for a live chat discussion or other synchronous activities, then these times should be noted in the syllabus as well as be posted on the welcome page of the LMS. When scheduling synchronous activities, instructors need to be sensitive to time zones and be aware that some students may be participating in the course from multiple geographic regions. Accordingly, instructors should

be careful to avoid scheduling an activity that will begin at 8am EST that would require a student in California to participate in the activity at 5am PST.

- 2.2.3 Identify Specific Technology Requirements:** While most LMS are compatible with common browsers, if there is a unique technology or software requirements necessary to complete the course, these should be identified.
- 2.2.4 Technical Support:** Identify what technical support is available and how students can access it. This may include technical support for the LMS or how to access information relevant to the course. Course providers should also note the hours when technical support is available keeping in mind that some students may be participating in the course during the evening hours or on the weekend.
- 2.2.5 Information Relevant to Netiquette:** Students should be directed to remain respectful of other students and their opinions and be discouraged from sending flame mail or posting derogatory comments or using inappropriate language in chat rooms or when posting replies to threaded discussions.

## **2.3 Optimal Class Size**

Critical to the success of an online course is promotion of interactivity, not only between the instructor and student, but among students as well. Over the years a tremendous amount of research has been conducted regarding faculty to student ratios and the optimal online class size. According to the literature, average class varies from between 12-15 to 20-25 students (Shelton & Saltsman, 2005). Shelton and Saltsman also state that for educational outcomes, the smaller the class the better and that class size should be limited in order to encourage interaction and facilitate the development of a learning community. ( Note: Course providers should not interpret this discussion regarding optimal class size to mean that NMLS is advocating a “cap” on the number of students it instructs. Rather, NMLS is suggesting that providers find a way to maintain an optimal instructor-to-student ratio while at the same time responding to consumer demand. One way to do this is to offer multiple sessions of the same course. As a result, it is quite likely that an instructor will instruct multiple courses or multiple sessions of the same course at the same time.)

## **2.4 Instructor Qualifications**

Contrary to popular belief, online instructors do not have to be the organization’s most technologically savvy individual. When hiring an instructor to teach an online course the first criteria should be their academic and/or professional qualification followed by their desire and ability to engage students and present the material in such a way that the learning objectives are achieved. With that said consideration needs to be given to the unique challenges associated with instructing online. These challenges include:

- 2.4.1 Interpersonal Skills:** Shelton and Saltman (2005) advise that just because an instructor may possess a high level of technical proficiency does not mean they will enjoy teaching online. Teaching online requires certain interpersonal communication skills and a style that enables and challenges online students. This teaching style can be described as a coach or personal trainer and is someone who can challenge each student individually and the group as a whole.

**2.4.2 Time Requirements:** Along with the right mix of interpersonal skills, online instructors need to be prepared to accept the unique time requirements associated with instructing online. There is a common misperception that teaching online requires more time than traditional face-to-face instruction. However, there is research to suggest that this is more perception than reality. Contributing to this perception is the fact that online instruction requires more frequent interaction with the online classroom and students than does more traditional instruction where the interaction may only be one or two days a week. So while an instructor teaching a conventional classroom course may interact with students for a few hours at a time once or twice a week, an online instructor will typically interact with students for shorter periods of time but do it more frequently through the length of the course.

**2.4.3 Work Load:** Instructors need to be prepared to make the initial investment of time and effort required to write the course, upload content, and configure the features of the LMS prior to the course being made available to students. This initial investment of time and effort can lead to the perception that delivering online courses increases the instructor's workload. However, it should be noted that once the course is initially configured, many of the course materials can be easily reused in the delivery of subsequent courses and the automated tools and features currently available in most learning management systems helps to reduce the number of administrative and mundane tasks typically associated with teaching, thus enabling the instructor to focus on doing what they do best – teaching.

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## Section 3. Functional Design (Course) Specifications

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### 3.1 General Course Set-up

Over the past ten years a great deal of research and a number of best practices have emerged for the delivery of online education. The following outlines best practices, supported by empirical research, for how online courses should be configured within the LMS.

**3.1.1 Post a Course Introduction:** Should contain much of the same material found in the course syllabus, but with core components posted and noted so that when the student logs into the classroom this information is readily accessible. Critical information that students should see include:

- a. Course description;
- b. Course objectives;
- c. Instructor contact information;
- d. Requirement for Textbook or other materials;
- e. Policies and course completion expectations;
- f. Grading or pass/fail criteria;
- g. Technical support information;
- h. Information relevant to netiquette; and
- i. Date and times for synchronous activities (being mindful of potential time zone differences).

**3.1.2 Provide an Instructor Welcome:** Instructor should post a welcome statement that thanks the student for being a part of the class and invites them to fully participate in the activities and to engage in the instruction. The welcome statement should also contain background information about the instructor, including the credentials and qualifications for teaching the course.

**3.1.3 Facilitate Student Introductions:** Students should be invited to introduce themselves. This can be done as part of an initial activity, i.e. a newsgroup or blog posting where students can view other student's introductions and respond accordingly. This is an ideal way to begin building a sense of community in the course and helps the instructor and students gain background perspective about course participants.

**3.1.4 Familiarize the Students with the Learning Management System (LMS):** Introduce the students to the features of the LMS by asking them to complete simple activities. For example:

- a. Require that students introduce themselves using the bulletin board, newsgroup or blog features of the system.
- b. Send the students an e-mail using the internal e-mail system and request that they reply with their contact information, their NMLS number, and/or availability for a synchronous discussion.
- c. Request that the students watch an initial introductory video to the course which in effect, validates that students can see the video and hear the audio.

- d. Complete a short quiz to test their initial knowledge of the material. This will familiarize the students with how the testing features of the LMS work.
- e. Hold a brief introductory chat session which will introduce the students to the features of the chat tool and will make them aware of issues related to Netiquette.

**3.1.5 Communicate Success Measures:** Post and clearly communicate what the student needs to accomplish in order to succeed in the course.

## 3.2 Course Organization

**3.2.1 Course Organization:** Organize the course materials and content in such a way that navigating through the course is intuitive and easy. Content should be structured in well defined units or modules, with each unit or module clearly identified. Contained within the module should be the specific tasks or activities relevant to the instruction. Here is an example of an ethics course displaying course modules. Note: Module 3 has been expanded to show the details and tasks associated with it.

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**Module 1** – Introduction to Ethics in Mortgage Lending

**Module 2** – Ethics in Real Estate Financing

**Module 3** – Applicable Laws and Regulations

*Overview:* During this lesson we'll examine the applicable laws and regulations associated with ethics in mortgage lending. Particular emphasis will be paid to recent changes in Federal and State law which have been enacted in response to the recent financial crisis.

*Lesson Objectives:*

- Be capable of discussing key issues associated with fraud and consumer protection.
- Be capable of identifying critical issues associated with RESPA
- Become familiar with best practices related to fair lending and consumer fraud protection.

*Activities:*

- Read pages 38 through 58 in course user manual.
- Watch online video “*Ethics Business Case #3*”.
- Participate in online discussion May 14<sup>th</sup> 4pm EST.
- Answer the two questions in the online newsgroup.
- Complete 25-question end-of-module quiz. If you miss any of the questions, take the time to go over the information again in order to prepare for the final exam.

**Module 4** – California Ethics Laws and Regulations

**Module 5** – Course Final

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### 3.3 Course Design

**3.3.1 Course Introduction:** Provide a one or two paragraph introduction to the course. Ideally this should match the introduction contained in the course syllabus. The following is an example of a course introduction:

**Introduction:** This course will provide in-depth instruction of the Federal laws which have been enacted and are intended to protect the rights of individuals who take out a mortgage loan. Your understanding of these Federal laws is important since violating these laws could result in legal action.

During this course will be covering many aspects of RESPA, HOEPA, Reg. Z, and other laws and regulations like the Fair Credit and Equal Credit Opportunity Act. We will also spend some time discussing the Good Faith Estimate and other disclosures which are intended to inform and protect consumers who are engaging in a mortgage transaction.

To assist you to manage your time, this course is organized by modules. You'll need to allocate approximately 2 hours for each module of instruction (some modules may take an individual a little more or a little less time to complete). Your instructor will also be providing you feedback throughout the course. If you have questions on any aspect of the course, please feel free to contact your instructor. Your instructor possesses a wealth of experience and their sole purpose during the course is to assist you in learning the course material.

**3.3.2 Locking of Modules and Facilitating Student Course Progression:** The LMS is to be configured so that a student cannot "blow through" the course. Modules are to be locked such that a student cannot advance to the next module without completing the previous module. Since these are instructor-led courses which require instructor-to-student/student-to-student interaction, students are to progress through the course in a linear fashion as outlined in the course syllabus and are required to complete the course no earlier than the course offering end date.

**3.3.3 Provide Course Objectives:** In addition to the primary course objectives that were provided in the course syllabus and are associated with overall course goals, each module of the course should also have its own set of objectives. Each module is to have between two to five learning objectives that detail the specific knowledge the student should have acquired by the end of the module. Here is an example of course learning objectives:

#### **Module 1 Objectives**

By the end of this module you should be able to:

- Discuss the importance of the Good Faith Estimate and its role in assisting to protect consumers.
- Define the role the Real Estate Settlement and Procedures Act (RESPA) plays in assisting consumers to understand closing costs.
- Articulate the reasons why various Federal and state laws related to mortgage lending laws have been enacted.

### 3.3.4 Design Learning Activities to Support Achieving Learning

**Objectives:** Using the example of the learning objectives listed above where each objective begins with a verb; ensure that learning activities support the objective. For example, for the first learning objective which is to describe the importance of the Good Faith Estimate, an online activity to support this objective may be a synchronous chat discussion where the instructor facilitates a discussion about the role the Good Faith Estimate plays during the loan process. The discussion may begin with some of the reasons for why the Good Faith Estimate came about and some time is spent reviewing the various components that make up the estimate. For the second objective which has to do with defining the role of RESPA in assisting consumers to understand closing costs, the student can be required to write one or two paragraphs synthesizing their understanding of RESPA and its importance to the loan origination process. Appendix B contains a comprehensive listing of various activities instructors may want to consider as a way to support achieving learning outcomes. Here is an example of how objectives and activities may be displayed together:

#### **Module 1 Objectives**

By the end of this module you should be able to:

- Discuss the importance of the Good Faith Estimate and its role in assisting to protect consumers,
- Define the role of the Real Estate Settlement and Procedures Act (RESPA) plays in assisting consumers to understand closing costs.
- Articulate the reasons why various Federal and state laws related to mortgage lending have been enacted.

#### **Module 1 Activities**

- 1 Participate in the online discuss schedule for May 3 from 4-5 pm EST.
- 2 Write one or two paragraphs defining RESPA and role to assist consumers to understand closing costs. Do you think RESPA does enough to protect consumers? Why or why not? Post your response to the classroom bulletin board.
- 3 Send an e-mail to your instructor providing three significant reasons why Federal and state related to mortgage lending have enacted over the past 20 years.

### 3.3.5 Design Activities to Facilitate Instructor-Student, Students-to-Students, and Student-to-Content Interaction:

Design activities to facilitate as much interaction as possible. Students want and demand attention from their instructors. As such, activities should be incorporated at various points throughout the course which are intended to provide touch points by which the instructor and the student engage with each other. This can be facilitated through e-mail, synchronous chat discussions, threaded conversations carried out via newsgroup posting, or through a dialogue maintained on a blog. Student-to-student interaction helps to foster a sense of community in the course and promotes a sharing of ideas and experiences. Asking students to respond to each other through the use of online discussion boards or by establishing a requirement to complete a team exercise are just two

examples of activities than be employed to promote student-to-student interaction. Lastly, online exercises can be created which will encourage the student to engage with the content. Examples of content engagement include embedding a poll or survey into the module that will ask students to identify how they would respond to a particular case or scenario. Such activities help to reinforce the learning and will help to keep the student engaged in the learning process.

- 3.3.6 Inclusion of Case Studies, Cite References and Ensure Course Rigor:** Course providers are required to include within the course content case studies that reinforce learning by providing context for how federal and/or state law(s) apply in real world situations. The case studies, along with the rest of the course content and other course activities are to be of sufficient rigor to ensure students are engaging with the material and will complete the course prepared to work within the industry. Additionally, all references to federal and/or state laws are to be cited.
- 3.3.7 Articulate Pass/Fail Criteria:** Define what the student will have to accomplish in order to pass the course, keeping in mind that online courses associated with completing the pre-licensure or continuing education requirements of the SAFE Act must be the same length as other classroom formats. Accordingly, students should not be allowed to pass a course if they have not completed the requisite number of activities identified as part of the course design and subsequently approved by NMLS as meeting SAFE Act requirements. Consideration should also be given regarding the ability to make up any activity like a scheduled synchronous chat or other scheduled activity.
- 3.3.8 “Chunk” Information:** Pages that are text heavy and require excessive scrolling are extremely difficult to read and can overwhelm a student. Instead of presenting text-heavy pages, content should be segmented into “chunks” of information that are easier to read and contribute to greater learning (Clark & Mayer, 2008). Content should be presented in chunks that are linked together either through a navigation paradigm similar to a content outline whereby each segment of information is accessed by clicking on a topic link or through a “continue” button found at the end of the segment. Chunking also applies to audio-video presentations. For example, an audio-video presentation discussing RESPA should be streamed for 3-8 minutes and then stopped. The 3 to 8 minute audio-video segment should then be followed by an activity; for example, a poll, quiz or survey that the student is required to take before advancing to the next segment of the presentation.
- 3.3.9 Test and Quizzes:** Attention should be paid to the designing and administering of test and quizzes. Some students are nervous about taking a test or quiz and others appreciate them, particularly pre-tests, since they find them to be a valuable tool assisting them to determine how well they know the course material. The following are best practices associated with designing and administering test and quizzes:
- a. Inform the student how many questions are on the test or the quiz. Informing the students how many questions are on the test or quiz enables them to know where they are in the test taking process.

- b. Inform the student how much time they have. By knowing how many questions are on the test and how much time they have to complete the test, it enables the student to manage their time effectively.
- c. Inform the student what type of test or quiz it will be. Let the student know if the quiz or exam is a true/false, multiple choice, essay question and/or some combination thereof.
- d. Inform the student of the score required to pass.
- e. Avoid displaying too many of the questions on a single form. The reason for this is some learning management systems or log in sessions may expire if the student takes too long to answer all of the questions.
- f. Except in the case of a final test, require students to retake a test or quiz as a means to help reinforce the learning.
- g. Randomly sequence questions each time the test or exam is administered. Randomly sequencing the questions forces the student to read each question and it prevents a student from attempting to pass the text or quiz based upon knowing the sequence of the correct answers. For example, a test with ten questions may be presented with questions one through ten in the following order: 1, 3, 8, 5, 9, 2, 7, 4, 10, and 6. The next student (or the same student taking the test a subsequent time) might see the questions presented in a different order such as: 7, 4, 8, 9, 2, 5, 1, 6, 10, and 3.
- h. Set passing scores high enough so that the test or quiz has legitimacy.
- i. For multiple choice test or quizzes, ensure the answers are randomly placed. Students should not be able to discern any pattern in the display of answers.

### 3.4 Requirement for Instructor-to-Student Interaction

For an online instructor-led course to achieve course approval, the course must be designed such that instructor-to-student interaction and student-to-student interaction is ***persistent and obvious*** throughout the entire course. The intent of the online instructor-led format is for an instructor to be leading students through the course material and as such, the instructor is to be facilitating interaction, engaging in meaningful dialogue with students, and providing substantive feedback to newsgroup posting and/or other assignment/activities.

### 3.5 Measuring and Verifying Course Time Requirements

Courses offered online must meet the same time requirement as classroom or classroom- equivalent courses. For instructor-led courses, time is determined based on the median amount of time it takes several representative students to complete the course. To measure and determine time, the course provider needs to record and document the amount of time it takes a sampling of the intended audience to complete the course. Time determination will be the median of the sampling.

The number of students required for the sampling is between six and eight students. Recognizing that it may be difficult for a course provider to recruit the requisite number of students necessary to validate the time requirement, a provider is to submit the course for approval, and after the content and initial technical evaluation has been completed, and any deficiencies have been addressed, the course will be granted a 30-day conditional approval so that it may be offered for the purposes of completing and validating the time survey. During the 30-day conditional approval period, the course provider may not offer the course for credit to any more than 10 students.

Course providers are required to maintain the course session(s) that were used for the sampling for a period of one year and upon request, provide access to NMLS for auditing purposes.

### **3.6 Technical Evaluation Required for Final Course Approval**

In order for the online course to receive final course approval it must go through a technical evaluation process. During the technical evaluation, course evaluators will review the course to ensure it is being delivered in accordance with this functional specification document. The course evaluator(s) will also review the course to ensure instruction is being delivered in accordance with the course syllabus, and will verify that the LMS is configured correctly. They will also verify that instructor-to-student and student-to-student interaction is occurring, and that the course has sufficient rigor.

The technical evaluation will occur only after the course has received conditional approval. The technical evaluation will be performed at the same time the course is undergoing the time study verification (see Section 3.5). To facilitate a comprehensive view of the course, the course provider is required to provide NMLS with both a student and an instructor (or administrative) login for the course. The student login is to enable the course evaluator(s) to view the course from the student's perspective and to verify that an instructor is leading it, and activities are occurring in accordance with the course syllabus. The instructor login will enable the evaluator to login into the course to verify information/activities have occurred (and at what level) without having to wait for modules to unlock,

After the time study and the technical evaluation have been completed, and after any issues have been addressed, the course will receive final NMLS approval.

## Appendix A. List of Learning Management Systems

The following is a list of Learning Management Systems (LMS) that a course provider may want to consider in order to meet many of the conditions associated with offering instructor-led pre-licensure courses. This list is not intended to be all inclusive and NMLS does not endorse one product over another. The intent of this list is to simply provide a list of LMS providers that provide a range of services and pricing options to meet a course provider's needs.

LMS Company Name	Snapshot	Website	Address	Phone Number
<b>ANGEL Learning</b>	Provides teaching and learning tools that enable efficient and effective development, delivery and management of courses, course content, and learning outcomes. Was recently acquired by Blackboard.	<a href="http://angellearning.com">http://angellearning.com</a>	6510 Telecom Drive Suite 400 Indianapolis, IN 46278	317-333-7300
<b>Blackboard</b>	Provides learning management solutions and other services designed to the educational needs of K-12, Higher Ed, Associations, Corporations and Government.	<a href="http://www.blackboard.com">http://www.blackboard.com</a>	650 Massachusetts Ave., NW 6 <sup>th</sup> Floor Washington DC, 20001-3796  Additional offices in: Phoenix, San Francisco, Lynnfield, MA, Sherman Oaks, CA	800-528-0465
<b>Desire2Learn</b>	Offers a number of products and services to academic and other organizations. Offerings include Enterprise eLearning Suite which is comprised of a web-based learning environment, ePortfolio, Learning Repository, and Live Room.	<a href="http://www.desire2learn.com">http://www.desire2learn.com</a>	305 King St West Suite 200 Kitchener, Ontario, Canada, N2G 1B9	888-772-0325
<b>eClassroom</b>	Offers hosted on-demand course management system for both the Higher Education and K-12. Online education systems are bundled with a program	<a href="http://www.ecollege.com">http://www.ecollege.com</a>	4900 S. Monaco St Suite 200 Denver, CO 80237	800-884-7325

	administration system and offers a number of additional tools and services. Owned by Pearson.			
<b>eFront</b>	Open-source and free software that is designed to meet a number of training needs. Software is SCORM compliant and meets ADL standards. Company also provides hosting and professional services.	<a href="http://www.efrontlearning.net">http://www.efrontlearning.net</a>	Based in Athens, Greece	
<b>JoomlaLMS</b>	Describes itself as an aggregate of powerful e-learning tools, provides a fully functional e-learning system with innovative training and testing options and advanced conferencing applications.	<a href="http://www.joomlalms.com">http://www.joomlalms.com</a>		
<b>Moodle</b>	An open source LMS that is free and runs on Unix, Linus, Windows, and Mac OS X. Documentation and books/manuals are available on the web site or through book stores like Amazon.com.	<a href="http://moodle.org">http://moodle.org</a>	1/160 Edward St Perth 6000 Western Australia	
<b>Sakai Project</b>	A free and open source courseware management system. Features a set of tools designed to assist instructors, researchers, and student collaborate online. Currently being used by over 160 educational institutions.	<a href="http://www.sakaiproject.org">http://www.sakaiproject.org</a>	Sakai Foundation PO Box 130256 Ann Arbor, MI 48113-0256	

## Appendix B. List of Online Learning Activities

The following is a fairly comprehensive list of online learning activities that course providers may want to consider as part of building interactivity and instructor facilitation into their online courses. The activities described were taken from a text written by Curtis J. Bonk and Ke Zhang titled *Empowering Online Learning: 100+ Activities for Reading, Reflecting, Displaying, & Doing (2008)* and are used with permission from the authors.

Activities Relevant to the Acquisition of Knowledge: Emphasis on Words and Text		
Activity	Description	Skills and Objectives
<b>Online Scavenger Hunt</b>	Activity designed to help student become familiar with course content and to foster discovery learning by exploring the vast amount of Web resources available on a topic. In a scavenger hunt, individuals or groups of students might be asked to find a set of items in a list or accomplish a set of tasks.	Includes exploratory learning, concept review, search skills, and reflection on what is found and what is learned. It can also be an early course activity to determine if learners have the proper passwords and access to necessary technology tools and resources.
<b>Web Tours</b>	Given that Web resources can overwhelm students, some instructors decide to start a session with a Web tour of the course agenda, course modules, and task options. Other instructors might take students on a Web tour of online resources that might prove valuable in completing the course. Web tours are common in corporate training when using synchronous conferencing tools, though they can find use in nearly any online educational setting.	Includes basic or factual knowledge, exploration skills, search strategies, self-directed learning, reflection on new knowledge, and inquiry learning. A key goal is of this activity is exposure to learning resources that be used later in the course.
<b>WebQuest</b>	In a WebQuest, online resources are arranged for learners to explore and review and then debate ideas, events, and concepts. In effect, the instructor finds a set of materials and provides access to them online in a set of activities. The steps are laid out for the students; the ways in which they can be assessed are posted.	Includes basic or factual knowledge, exploration skills, search strategies, reflection on new knowledge, inquiry learning, and problem solving.
<b>Guided Readings</b>	Content explorations are guided when students read from a selection of articles prescreened by the instructor. Prescreened or pre-assigned readings might be employed when the students need more guidance because of their maturity level, content familiarity, or experience with e-learning. A set of questions or issues might be embedded or posted in the LMS to guide their reading.	Includes basic content information, awareness and comprehension of key concepts and principles, reflection on concepts learned, and time to discuss and debate issues.
<b>Discovery Readings</b>	Similar in concept to Guided Readings, Discovery Readings are	Includes online searching and browsing skills, article and information

	<p>more open-ended where students select articles based on their own course-related interests. In such a situation, a student might be assigned online reading materials or be asked to find articles that relate to the activities of a particular week or module.</p>	<p>filtering, and selection of relevant and personally meaningful materials. Such an activity equips students with twenty-first century skills related to information search and critical analysis, while simultaneously empowering them with self-directed learning activities. The goal here is motivating and retaining students through choice, goals and personal relevance.</p>
<p><b>Question and Answer Sessions with Instructor</b></p>	<p>For effective online learning, students should be able to discuss course concerns, issues, and questions with the instructor using e-mail, text chat, and online discussion forums. Such questions and responses can later be posted within the LMS for future reference.</p>	<p>Includes feedback, sense of instructor social presence and instructional immediacy, interactivity, and prompt feedback. A primary objective is to focus student work and answer pressing questions.</p>
<p><b>Online Expert Chats</b></p>	<p>Students will most likely enjoy online chats with experts, especially when audio is enabled. Expert chats are highly effective and engaging across learning settings.</p>	<p>Includes course interactivity, feedback, and sense of instructor presence or instructional immediacy. This activity forces students to interpret ideas of an expert and ferret out themes or issues in them. Among the key goals is to connect course materials to real-world activities.</p>
<p><b>Online Synchronous Testing</b></p>	<p>Chat tools can be used for online quizzing of select student to test their understanding of the course content. Some instructors use dynamic assessment, in which each additional testing item is based on previous testing results. In effect, such test are not related to typical online quizzed that might be stored in a course LMS, but, instead, they require instructor's real-time interaction with students and grading of synchronous interactions and postings. In effect, the instructor posts questions, problems, or issues in a synchronous chat for students to answer, react to, and solve. While these types of activities are in line with social constructivist viewpoints, related to teaching and learning, such real-time testing and grading is dynamic, complex, highly flexible, open-ended or semi-structured, and intellectually demanding.</p>	<p>Includes comprehension, quick decision making, dynamic feedback, and application of terms and concepts.</p>
<p><b>Synchronous or virtual Classroom Instructor Presentations</b></p>	<p>Live or synchronous online instruction has been successfully used in corporate training for a number of years. Key advantages of synchronous instruction include having social interaction and support from peers as well as the instructor; interactive learning with polls, chats, and surveys; and the ability to archive the session when finished for those who have missed it.</p>	<p>Includes a sense of instructor social presence and instructional immediacy, feedback, interactivity, and focus on critical content. Also helps form a course community.</p>

<b>Expert Lectures and Commentary</b>	This activity is a spoken expert commentary or narration layered over online resources such as PowerPoint slides, Web site tours, or other visual representations. Such lectures and commentaries are different from synchronous chat sessions, since they are not question-and-answer sessions. In effect, expert lectures might be synchronous or real-time presentations for a class or repurposed content used asynchronously.	Includes reflection, analysis, appreciation of multiple perspectives, and learning content with different delivery mechanisms. Skills fostered include reflection, analysis, and synthesis.
<b>Posting Weblographies or Web Resources</b>	This activity requires students to post or exchange important Web resources or Weblographies that they have found. A Weblography is a compendium or list of Web links which allow the user to access information in an expedient fashion. Students should not only be assigned to create a Weblography but also be asked to respond to those that their peers have built. In addition, one might have students evaluate their resources on some scale or continuum, thereby adding an evaluative component to this highly generative activity.	Includes online exploration, self-directed learning, decision making, and digital literacy skills in browsing, filtering, and compiling information. Another focus or goal is to share and reflect on information.

<b>Activities Relevant to Reflecting on Content: Emphasis on Problem Clarification and Knowledge Construction</b>		
<b>Activity</b>	<b>Description</b>	<b>Skills and Objectives</b>
<b>Reuse Chat Transcripts</b>	This activity involves the reuse and repurposing of synchronous chat transcripts. The chat transcript might be used for students to reflect on the differences in perspectives from two or more experts, the themes appearing within various chat sessions, or the content that was covered during units or weeks after a particular chat session. It might also be used to reflect on how student views changed after chatting with or speaking to one or more experts.	Includes synthesis skills, feedback, sense of social presence and instructional immediacy, comparison and contrast, appreciation of multiple perspectives, and analysis, evaluation, and other critical thinking skills.
<b>Workplace or Job Reflections</b>	Ask the student to reflect on their current job or workplace situation and to post their thoughts online. Additionally, the instructor can ask the student to conduct personal reflections on how they are applying key course content in their workplace. Ask student to read each other's posts and ask them to summarize their reflections and compare them to the posts of their peers, highlighting the commonalities and differences in their observations.	Includes critical analysis skills, reflective writing and connecting content knowledge from books and lectures to real-world experiences.

<p><b>Self-Check Quizzes and Exams</b></p>	<p>Students like to determine whether they know the content well enough to pass required examinations or course requirements as well as identify areas where they have deficiencies or misconceptions. This is especially true for modules and courses with extensive factual content. In effect, students want to know if they know something. An instructor might develop a set of quiz or test questions for students each week. Students can self-test or self-determine whether they are grasping the concepts or not.</p>	<p>Includes key course concepts and facts, feedback, self-directed learning, self-monitoring, and reflection.</p>
<p><b>Online Discussion Forums and Group Discussions</b></p>	<p>Online discussion forums are now highly familiar events in higher education. Online discussion forums can be pre-designed by the instructor, be student generated, or entail some combination of instructor and student design. Instructors can make salient certain key concepts or concerns for students to focus on in the content or topic.</p>	<p>Includes student reflection and expansion on course concepts and ideas, exploration of topics or ideas of personal interests, critical analysis, interaction, and synthesis. Another key goal is comparison to the interpretations or perspectives of other in the learning experience.</p>
<p><b>Personal Blogs</b></p>	<p>Students can be asked to create and maintain blogs or online diaries of their learning during a course. Instructors might ask students to post personal reflections on one or more of their routine readings. They can also post Web links, personal profiles, and pictures to their blogs. Each student in the course could be assigned a critical friend or Web buddy who provides feedback on those reflections.</p>	<p>Includes concept analysis, interpretation and integration skills, reflection skills, summary writing, writing as thinking, motivation and engagement, self-directed learning, and personal exploration on items or areas of interest.</p>
<p><b>Collaborative or Team Blogs</b></p>	<p>Blogs might also involve collaboration or virtual teaming. Students can be assigned partners to jointly summarize their progress on a project, joint reading assignment selections, and other experiences in their team blogs. The blog becomes a place for other teams to offer comments as well as for the instructor to provide feedback.</p>	<p>Includes concept analysis, interpretation, and integration skills, reflection skills, and personal exploration o items or areas of interest.</p>
<p><b>Synchronous and Asynchronous Discussion Combinations</b></p>	<p>One of the most interesting and engaging online instructional activities involves combining synchronous and asynchronous activities related to the work of one or more experts. Student will often strongly disagree with a viewpoint of an expert after reading one or more of their publications or interviews. However, when offering an opportunity to meet them personally in a synchronous chat or online videoconference, these same students will often find themselves agreeing with all or most of the views of the individual. In effect, they find that one article or publication does not</p>	<p>This task entails a heavy dosage of perspective taking while offering the potential for cognitive dissonance and debate. It also fosters critical analysis, reflection, communication, insight, student interaction, and comparison and contrast.</p>

	represent all the ideas of an individual and that interests, findings, and perspectives of experts change over time.	
<b>Online Cases, Situations, and Vignettes</b>	Posting of online case studies or situations to the LMS can foster student analysis and evaluations skills. Online cases have wide applicability and acceptability, especially with adult learners who have the experience base to relate to them and perhaps provide personal stories or situations that extend beyond them.	Includes critical thinking and analysis, inferencing skills, comparison and contrast, evaluation, and internalization of concepts and principles. A key goal is to understand how and where course principles can be applied.
<b>Small Group Exam Question Challenges</b>	Allowing students to design exam questions is one way to motivate them to study the material. In addition, such an activity is a prime example of a learner-centered approach that empowers students to control some aspect of the course activities or content while working collaboratively and discussing key concepts and principles within the content. When successfully implemented, such an approach builds ownership and pride for learning. And the work generated during one unit or course experience could be used in later iterations of the course. In effect, the course builds with student-generated content.	Includes collaboration, feedback, interaction, critical analysis, insight, concept review and attainment, and critical analysis and reflection.

<b>Activities Relevant to Visual Learning: Emphasis on Display of Information</b>		
<b>Activity</b>	<b>Description</b>	<b>Skills and Objectives</b>
<b>Anchored Instruction with Online Video</b>	In anchored instruction, there typically is a short “anchoring” event in the form of a video that instructors and students watch and then can later revisit and reevaluate. The intent is to create a problem-solving contents or environment using short video snippets. Such anchoring situations spur student interest in the topic being taught while allowing them to better define problems and more flexibly use their knowledge. Increasing, there are online tools and services for fining video-related content, such as Google videos, Google Images, YouTube, TeacherTube, MSNBC Video are a few.	Includes reflection, critical analysis and evaluation, observational skills, and grasping the application of concepts, rules, and procedures in action.
<b>Concept Mapping Key Information</b>	Student might be required to create concept maps or visual representations of key information or knowledge gained from the course. To guide their effort, they might use a tool like Inspiration, MindMapper,	Includes knowledge integrations and synthesis, concept review, visualization of learning, reflection, critical analysis skills, insight, and logical thinking,

	<p>Visual Understanding Environment (VEU), FreeMind or Cmap. As part of this activity, student place key information or macro-propositions near the top of their maps and micro-propositions or secondary information below them. Linkages between terms as well as descriptions of such linkages are essential for understanding what the student has internalized. In addition, depicting casual relationships is crucial in certain disciplines or topics.</p>	
<p><b>Videostreamed Lectures and Presentations</b></p>	<p>Learning is enhanced when the students can see their instructor's facial expressions and nonverbal cues during the delivery of course content. For this reason, asking your media department or instructional support personnel to videostream your presentation or lectures would be advantageous. This may involve lecturing in a designated room or equipping a computer with a Webcam and appropriate software such as Camtasia or Captivate to record and produce streamed videos. When done, instructors might assign students to watch these videostreamed lectures and summarize what they have learned.</p>	<p>Includes grasping visual cues, course content and declarative knowledge, and appreciation of instructor or expert viewpoints.</p>
<p><b>Videostreamed Conferences and Events</b></p>	<p>As conferences, seminars, and institutes are increasingly streaming session presentations and activities, instructors might use such content in their courses as a means to apprentice students into a field of study. Professional conferences in business, education, law, or most any field provide opportunities for students to reflect on the content they are learning and how others are currently using such knowledge, or perhaps how they might someday employ it as a practitioner in the field. Assignments might be structured around either archived conferences or live ones or both.</p>	<p>Includes grasping visual cues, course content, and declarative knowledge, and appreciation of expert viewpoints. Another key goal is extending student content learning beyond the course instructor or text.</p>

<p><b>Video Modeling and Professional Development</b></p>	<p>Professional schools and corporate training organizations are increasingly employing online videos to demonstrate how skills are used in the real world or on the job. The Department of Psychiatry at Trinity College in Dublin, Ireland, for instance, has a virtual interview project through which students have opportunities to conduct interviews with virtual patients. When using these resources, the student decided what questions to ask and can then watch student responses to them. Such practice activities provide confidence for students and are a safe harbor for practicing newly acquired skills before interacting with individuals in real-life situations.</p>	<p>Includes comparison and contrast, observational skills, enhanced reflection, inferencing, and evaluation. A key goal is to witness concepts in action and begin to internalize them.</p>
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**Activities Relevant to Hands-on Learning: Emphasis on Doing**

<b>Activity</b>	<b>Description</b>	<b>Skills and Objectives</b>
<p><b>Video Scenario Learning</b></p>	<p>Scenario learning typically transports learners to a specific place and time. The scenario activity provides a series of challenges for learners to address in which they must make choices and decisions. Scenario activities can be brief or long and might entail many practice exercises.</p>	<p>Includes concept recognition and application, visual discrimination skills, inferencing, perceptual cues, coaching, feedback, and evaluation.</p>
<p><b>Online Review and Practice Exercises</b></p>	<p>A common activity for testing recently learned knowledge and information is the review or practice exercise. Such online tests can entail much more than simple multiple choice, true-false, or matching questions. Indeed, there may be a scenario or vignette that a student must watch and then respond to. Or perhaps a concept is displayed visually and the student must then make a series of decisions. In some cases, a situation is presented, with a set of questions or activities following it to determine whether the student understand the concept.</p>	<p>Includes trying out concepts, gaining skills in practice, reviewing concepts, and principles learned, reflection on knowledge acquired, knowledge recognition and application, and skills internalization.</p>
<p><b>Real-Time Case Studies</b></p>	<p>In real-time cases, students address real-world problems and issues as they occur. To facilitate this process, in agreement with company officials, a student is planted in a company or government setting and writes up the case situation. Correspondence with the class or institution happens in a variety of formats, including synchronous chats, blogs, asynchronous discussion,</p>	<p>Includes application of knowledge and skills in real-world context, flexible application of knowledge, appreciation of multiple perspectives, problem-based learning, and critical thinking.</p>

	videoconferencing, Webcams, and so on.	
<b>Course Resource Wiki Site</b>	Wiki tools allow members of a community to record events, activities, news, and other information. In an online class, a wiki can serve similar purposes. In a course wiki site, an instructor might post key course advice and assignment reminder information or provide feedback on student projects in individual student wiki pages, and student might add to such notes and reminders.	Includes collaboration, interactivity, student participatory learning, problem- and project-based learning, and assignment feedback.
<b>Online Glossary and Resource Links Project</b>	Some courses include options through which students create extensive yet practical final projects that benefit both current students as well as those taking the course later. An online glossary is one such project. Here, a student or a group of students designs an interactive online glossary that summarizes key concepts and ideas for the course. Web links might be generated that connect terms and definitions to articles.	Includes concept review and extension, application of concepts, concept discrimination, insight, exploration, and evaluation.

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