

Calculation of Contact Hours and Credit Hours

Premises:

1. Activities equivalent to classroom instruction have some direct oversight or supervision of the course instructor. This is also referred to as “instructor contact time”¹
 - a. These activities may occur in either a traditional classroom or an online/virtual learning environment.
 - b. These activities are directly related to the objectives of the course/program.
 - c. Course grading measures accomplishment of the learning.
 - d. If online/virtual, the activity is equivalent to what is conducted in the traditional classroom.
2. For each 1 hour of “instructor contact time,” the learner spends at least 2 hours of “outside class time.” Outside class time allows for review and reinforcement of content that is learned via instructor contact time.

Activity	Criteria for Determining Contact Hours	Comments
Individual/Self-Study		
Lectures (video-recorded lectures or attendance at live lectures)	Use actual length of the lecture video. Knowledge attainment is documented via a quiz, exam or other graded evaluation method.	Additional time spent in re-watching the videos or stopping and re-starting the videos is considered “outside study time.” (See below)
College-level textbook reading (These are Readings/resources that present new content not learned via a lecture or in the classroom.)	Average reading rate to memorize for recall and recitation = 12 pages per hour	Klatt et al (2011) cites 1992 study by Carver: Reading to memorize for recall and recitation is at an average rate of 150 Words Per Minute. The average college-level textbook has 500 words per page. This equates to 12 pages per hour.
Book reading (books other than textbooks) for comprehension of whole sentences in context. (These are Readings/resources that	Average reading rate for comprehension of whole sentences 300 words per minute.	Klatt et al (2011)) cites 1992 study by Carver: Reading for comprehension of whole sentences is at an average rate of 300 Words Per Minute. Amazon stats report the average book has 64,000 words. This equates to 3.5 hours to read a typical book. (Reference:

<p>present new content not learned via a lecture or in the classroom.)</p>	<p>Calculate contact hours based on number of words in the book. Alternatively, the typical book requires 3.5 hours to read.</p> <p>Book serves as the focus for graded assignments and discussions with the instructor.</p>	<p>http://www.huffingtonpost.com/2012/03/09/book-length-n-1334636.html)</p>
<p>Journal Article The article presents new content not learned via a lecture or in the classroom</p>	<p>Calculate contact hours based on number of words and at an average rate of 150 words per minute.</p>	<p>Example: Pharmacotherapy Journal Original Research Articles = Text is 3500 words and abstract is 500 words (4000 total) [26.6 minutes for a practitioner; 1 hr for a student]</p> <p>Review article = Text is 6000 words and abstract is 300 words (6300 total) [42 minutes for a practitioner; 1.5 hr for a student]</p>
<p>Web-based materials (eg, web-pages) that are not document-based.</p> <p>Readings/resources that present new content not learned via a lecture or in the classroom</p>	<p>Total minutes = number of screens X 4</p>	<p>ABHES Guidelines indicated the average time on a screen is generally calculated as 3-5 minutes/screen.</p>
<p>Simulations or instructional game</p>	<p>Contact time is determined based on experience in using the simulation/game with learners and/or the instructional design.</p> <p>There is an embedded assessment or other grading method that documents the activity was completed.</p>	

Quiz (completed in a face-to-face or proctored online setting)	Amount of time scheduled for the quiz.	<p>Definition: A quiz is an assessment that is short in duration (eg, 5 minutes to 30 minutes). These typically consist of multiple choice questions or short-answer questions.</p> <p>In Team-Based Learning, these are called individual readiness tests (iRATs) and team readiness tests (tRATs)</p>
Exam	Amount of time scheduled for the exam.	<p>Definition: An exam is an assessment that is long in duration (more than 30 minutes)</p> <p>Exams may occur in the classroom setting or in a proctored online environment.</p>
Assignments	Amount of time that is projected for a student to complete the assignment. (This should be confirmed in future semesters through student feedback about time required.)	<p>Definition: Assignments are learning activities that are graded by the instructor and require the student to construct “new knowledge” that was not covered in lectures or assigned readings.</p> <p>Assignments include projects, postings to group discussion sites, class social media contributions or other similar participation. These activities include student:instructor interaction.</p> <p>Assignments may be individual or involve group/team work.</p>
Graded Discussion board posts (a form of an assignment)		<p>Definition: A graded discussion board post is an assignment/learning activity that requires the student to construct a response to a discussion board topic. The faculty member evaluates the student’s discussion board activities using a rubric or other organized approach.</p>
Laboratory-based learning: Student attends a laboratory session or a very brief practical experience that is supervised by an instructor	2-3 hours of laboratory activity = 1 traditional classroom learning hour.	
Experiential Learning activities (practice-related activities that occur in the community/practice and	40 hours of experiential learning = 15 contact hours or 1 credit hour.	

are supervised by an instructor)		
Email Communications with a faculty member (asking questions)		
Self-directed learning activities	Amount of time the instructor determines is likely needed to complete the learning activities.	Definition: Self-directed learning activities are planned in collaboration with the instructor and approved by the instructor. Instructor also monitors and evaluates the student's completion of the planned learning activities.
Outside Learning/Preparation (2 hrs for each 1 hr spent in instructor-directed activities)		
Self-assessments developed by the instructor (quizzes with immediate feedback)	Amount of time the self-assessment is projected to take for the typical student. (eg, 10 multiple choice questions requires 20-30 minutes)	Definition: A self-assessment is an assessment strategy that is available to learners and intended to help them determine their understanding of coursework. The instructor does not monitor whether the student completes the assessment and therefore, it is not a graded activity.
Practice Problems	Amount of time the self-assessment is projected to take for the typical student.	Definition: Practice problems are a form of self-assessment if the instructor provides the answers and the student uses the problems/answers to self-assess their understanding of concepts. The instructor does not monitor whether the student completes the assessment and therefore, it is not a graded activity.
Discussion board review/reading:	Amount of time the instructor determines is likely needed to read the discussion board posts	Definition: The student is not required to make a post. There is no assessment as to whether students read the discussion board or make posts.
Homework	Amount of time the instructor determines is likely needed to complete the activity.	Definition: Homework involves learning activities that provides students with reinforcement of concepts/principles learned via "direct instructor contact time" activities. Homework does not require the student to construct new knowledge using new learning

		resources. Homework is graded by the instructor but it involves minimal feedback.
Individual study to prepare for quizzes/exams.	Amount of time the instructor determines is likely needed to complete the activity.	
Individual study to review notes and materials following a class session.	Amount of time the instructor determines is likely needed to complete the activity.	

References:

1. Cedar Crest College
[http://www.cedarcrest.edu/ca/pdf/Online and Hybrid Course Development Guidelines 2-10-11.pdf](http://www.cedarcrest.edu/ca/pdf/Online_and_Hybrid_Course_Development_Guidelines_2-10-11.pdf)