PRINCE GEORGE'S
COMMUNITY COLLEGE

# PGCC Credit Hour Guide

June 23, 2011

# Contents

## Introduction

In May 2011, Prince George's Community College received communication from the United States Department of Education (USDE) dictating that colleges will have to account for student work per credit hour to maintain eligibility to award federal financial aid. In its letter (Gen-11-06) dated March 18, 2011, the USDE required a response from institutions and accrediting agencies by July 1, 2011, at least demonstrating a good-faith effort to comply. Therefore, the Academic Council at PGCC convened a Credit Hour Task Force to ensure that PGCC responds to the USDE's credit hour regulatory requirements. This task force is comprised of two academic department chairs, three faculty members, and other members of the College community.

The task force has considered the issue of credit hour requirements in terms of actual time spent by typical students working on core course assignments and the link with ongoing course assessment. As such, the task force has drafted this Credit Hour Guide as a suggested course of action for meeting the USDE's requirement to demonstrate a good-faith effort by the July 1, 2011 deadline and for implementing the credit hour regulatory requirements by fall 2013. This guide includes the USDE's definition of a credit hour, credit hour to clock hour calculations, a description of clock hour requirements based on class format (e.g., 15-week), how to calculate the time for student work by a typical student, and research regarding reading and writing speed.

# Prince George's Community College adheres to the U.S. Department of Education's definition of a credit hour.

## U.S. Department of Education Credit Hour Definition

An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonable approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester, or the equivalent amount of work over a different amount of time.
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

**Credit Hour to Clock Hour Calculation**

The amount of time required for credit hour is calculated using 50 minutes as the recognized length of a classroom "hour." For a typical lecture course this would mean

<u>One Hour of Classroom or Direct Faculty Instruction per Semester</u>
(50 minutes x 15 weeks) ÷ 60 minutes in an hour = 12.5 hours of classroom or direct faculty instruction.

<u>Two Hours of Student Work Out-of-Classroom or Direct Faculty Instruction per Semester</u>
(2 x 50 minutes x 15 weeks) ÷ 60 minutes in an hour = 25 hours of out-of-class student work

12.5 hours of classroom or direct faculty instruction plus 25 hours of out-of-class or direct faculty instruction per semester equals 37.5 hours.

**One Credit Hour equals 37.5 clock hours of instruction/student work per 15-week semester**

The U.S. Department of Education is flexible on how much of this time is used in the classroom or for direct faculty instruction. <u>Each course must account for 37.5 hours</u> of instruction and student work per credit hour.

## Clock Hour Requirements by Teaching Format

The following tables show the amount of time allocated between "instructional time" and "student work" to equal the total clock hours per academic credits, based on teaching format (e.g., in-class or online).

Table 1. Lecture Format*

| Academic Credits | "Instructional Time" (hrs. per week) | | | | "Student work" outside of instructional time (hrs. per week) | | | |
|---|---|---|---|---|---|---|---|---|
| | 15 week | 10 week | 8 week | 5 week | 15 weeks | 10 week | 8 week | 5 week |
| 1 | 50 min. | 1.25 | 1.5 | 2.5 | 1.75 | 2.5 | 3.25 | 5 |
| 2 | 1.5 | 2.5 | 3.25 | 5 | 3.5 | 5 | 6.5 | 6.75 |
| 3 | 2.5 | 3.75 | 4.75 | 7.5 | 5 | 7.5 | 9.5 | 15 |
| 4 | 3.25 | 5 | 6.5 | 10 | 6.75 | 10 | 12.75 | 20 |
| 5 | 4.25 | 6.25 | 8.0 | 12.5 | 8.5 | 12.5 | 16.0 | 25 |

* Based on a 50-minute instructional "hour" and two clock hours of student work per credit.

Table 2. Other Teaching Formats#

| Academic Credits | Total Time (hrs. per week) | | | |
|---|---|---|---|---|
| | 15 week | 10 week | 8 week | 5 week |
| 1 | 2.5 | 3.75 | 4.75 | 7.5 |
| 2 | 5 | 7.5 | 9.5 | 11.75 |
| 3 | 7.5 | 11.25 | 14.25 | 22.5 |
| 4 | 10 | 15 | 19 | 30 |
| 5 | 12.5 | 18.75 | 23.75 | 37.5 |

# The total time includes both instructional time and student work time.

The faculty member determines how much time will be allocated between instruction and student work. The difference between the total time and the time allocated to instruction is student work time, i.e. the amount of time that students spend working on assignments outside of instruction time.

Following are two pages that provide samples of clock hour calculations to determine the number of student work hours required based on the number of course credits and different lengths and formats of the courses (i.e. 15 week, 5 weeks, weekend, online, and hybrid).

## Clock Hour Requirements for Student Work

In the following clock hour requirements, the term "instructional time" is synonymous with "in-class" and "direct faculty instruction." Instructional time applies to courses taught in all modalities (i.e., face-to-face, online, hybrid, etc.). The term "student work" means all assignments or other academic activities required to be completed outside of instructional time. Student work may include reading, studying, writing, completing worksheets, research, and so on.

### 15-week courses

Each 3-credit course requires a total of 112.5 hours (37.5 hours x 3 credits) of instructional time/ student work. These courses typically have 150 minutes per week of instructional time that accounts for 37.5 hours per semester [(50 minutes x 3 x 15 weeks) ÷ 60 minutes]. The remaining 75 hours (112.5 – 37.5) or the equivalent of 5 hours per week (75 ÷ 15) must be accounted for by student work outside of instructional time.

**3-credit, 15-week course requires 5 hours of student work per week outside of instructional time.**

Each 4-credit course requires 150 hours (37.5 x 4) of instructional time/student work. These courses typically have 200 minutes per week of instructional time that accounts for 50 hours per semester [(50 minutes x 4 credits x 15 weeks) ÷ 60 minutes]. The remaining 100 hours or the equivalent of 6 hours and 40 minutes per week must be accounted for by student work outside of instructional time.

**4-credit, 15-week course requires 6.67 hours of student work per week outside of instructional time.**

Each 4-credit laboratory science course requires a total of 150 hours (37.5 x 4) of instructional time/student work. These laboratory science courses typically meet for 300 minutes per week (50 minutes x 6), which accounts for 75 hours. The remaining 75 hours (5 hours per week) must be accounted for by student work outside of instructional time.

**4-credit, 15-week laboratory science course requires 5 hours of student work per week outside of instructional time.**

### 5-week courses

Each 3-credit, 5-week course requires 112.5 total hours of instructional time/student work. A course that meets four times per week for two hours has 40 hours of instruction time. The remaining 72.5 hours (14.5 hours per week) must be accounted for by student work outside of instructional time.

**3-credit, 5-week course requires 14.5 hours of student work per week outside of instructional time.**

Each 4-credit, 5-week course requires 150 hours of instruction time/student work. A course that meets four times per week for four hours has 80 hours of instruction time. The remaining 70 hours (14 hours per week) must be accounted for by student work outside of instructional time. **4-credit, 5-week requires 14 hours of student work per week outside of instructional time.**

### *Weekend courses*

A 3-credit, 15-week weekend course requires 112.5 total hours of instructional time/student work. If the class meets for 150 minutes instructional time every weekend, it essentially fits the same student work requirement as a 3-credit, 15-week course.
**3-credit, 15-week course requires 5 hours of student work per week outside of instructional time.**

Various weekend courses do not meet every weekend during a 15 week semester. For example, a weekend course may meet for 13.5 hours on each of three weekends (3 x 13.5 = 40.5 hours) or 10.75 hours on each of four weekends (4 x 10.75 = 43 hours). (In reality, the time is probably somewhat shorter, as long class periods on Saturdays surely involve time for breaks and lunch.) Either weekend scenario leaves approximately 80 hours of required student work time. Some weekend courses run less than five weeks (*e.g.,* March 4 through April 2, which is just four weeks). If the student work is being done in just four weeks, then that means 20 hours per week is required outside of instructional time unless instructors have students complete a portion of that work prior to the first class meeting or after the last class.
**3-credit, 3- or 4-week weekender course requires 20 hours of student work per week outside of instructional time.**

### *Online and Hybrid Courses*

Online and hybrid courses must meet the same credit hour requirement as face-to-face courses. Faculty teaching online and hybrid courses must account for 37.5 hours of instructional time and student work for each credit hour. A three-credit course requires 112.5 hours of instructional time and student work. Logging on constitutes neither active faculty teaching nor active student learning. Faculty must demonstrate active faculty engagement in online teaching/instructing students. Methods such as discussion boards, chats, and so on can serve as instructional time.

## Calculating Student Work Time

To assure that the U.S. Department of Education required clock hours are met for each credit earned, the amount of time for a "typical" student to complete assignments must be calculated. The combination of student work and instructional time must be equal to the total number of clock hours required for the course. This information must be related to each expected outcome and put in the master syllabi. See Master Syllabi on page 6.

The following time estimates for reading and writing should be used to determine the amount of time a "typical" student will need to complete each assignment.

### Reading Rate

In general, we can expect students at Prince George's Community College (PGCC) to be reading at a rate of approximately 3 minutes per page. This does not include taking notes, pre-reading, or other engagement with the written material; this is strictly the time a student will take to read a typical textbook. Some variation will occur based on the type of material being read, the number of words per page, and the reader's ability level. However, given Accuplacer scores and publisher industry standards of words per page, 3 minutes per page is a guideline to provide some consistency in calculating reading duration. For more detailed information, see the Reading Research on page 8.

### Writing Rate

Limited research on college writing indicates that typical students take 10-15 minutes to write a single page with 12 pt. font, double spaced, 1" margins. This is only the time to put words on a page and does not include research, outlines, or significant processing (thinking) time. A further suggested guideline is that a typical research paper 4-7 pages in length will take a student 10-11 hours to complete. For more detailed information, see the Writing Research on page 9.

## Master Syllabi

To document that credit hour requirements are being met in all courses, each master course syllabi must include the following statement:

> **At Prince George's Community College, for all credit courses, students are expected to spend a minimum of 37.5 hours of combined instructional time and related coursework time per credit hour. This course is a _X_ credit course. This course achieves the minimum required hours by. . .**

To complete the statement, Departments will describe how the hour requirement is fulfilled. Use of the word "minimum" is essential when discussing related student work performed outside of instructional time. For example:

> *This course is a _3_ credit course. This course achieves the minimum required hours by meeting for 15 weeks for 3 hours a week and requiring a minimum of 6 hours of student work per week.*

> *This course is a _4_ credit course. This course achieves the minimum required hours by meeting for 15 weeks for 6 hours a week and requiring a minimum of 4 hours of student work per week.*

Master Syllabi already include information about typical assessments used to address the learning outcomes for the course. To document that credit hour requirements are being met, the master syllabi will need to estimate the amount of time it takes a "typical student" to complete each assignment.

Table 3. Master Syllabi Outcomes with Estimated Assignment Completion Time

| | Course Outcome | Program Outcome # | CLO # | Planned Assessment | Rate | Est. Total Time to Complete |
|---|---|---|---|---|---|---|
| 1 | Explain the effect of inflation on the U.S. economy | 2 | 1 | Read one 20- page textbook chapter | 3 min. per page | 1 hour |
| | | | | Write a 10 page paper | Research (4 hours) Draft (2 hours) Final Draft at 13 min. per page ( 2 hours) | ~8 hours |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |

## Reading Research

Table 4 summarizes the reading rate of students in terms of words per minute (WPM), mean minutes per page, and mean time to read 25 pages, depending on the type of content.

Table 4. Reading Rate Summary

|  | Words Per Minute | Mean Min. Per Page* | Mean Time to Read 25 pages |
|---|---|---|---|
| History | 139-165 | 3.2 | 80 min. |
| Science | 130-180 | 3.2 | 80 min. |
| Fiction | 145-219 | 2.7 | 68 min. |

*based on 500 words per page*

The overall average of the data from multiple studies is 157 WPM (range 130-219). The consistency of the numbers across studies clearly suggests that the average college freshman is reading at closer to 180-200 WPM; however, given the number of students requiring remediation at PGCC, it is likely that our "typical" student's reading rate is closer to this 157 WPM.

## Literature

Bell and Perfetti (1994) investigated three tiers of readers with different cognitive abilities, including students with low reading ability and students with low reading and quantitative abilities. The results, **as seen in Table 5**, showed that the higher-level readers showed greater range of reading speeds across different materials while the students with some degree of ability differences showed a slower overall rate.

Table 5. Reading Rate by Genre

| Reading Genre | Words Per Minute | | |
|---|---|---|---|
| | Typical Readers | Readers with low reading skills | Readers with low reading and quantitative skills |
| History | 159 | 165 | 139 |
| Science | 180 | 140 | 130 |
| Fiction | 219 | 169 | 145 |

Carver (1990) looking at a population of college freshmen from four-year institutions found an average reading speed of 263 words per minute.

Some research indicates that poor readers are able to tackle only 133 to 156 words per minute, lagging the average college freshman's rate by 100 words per minute (Elkind, Black, & Murray, 1996; Sabatini, 2002).

## Words per Page

Number of words per page range widely, but some industry estimates suggest that an academic book typically has about 500 words per page (WritersServices, 2010). A quick review of one

random page from five textbooks in the areas of psychology, statistics, and education were within 100 words of this average.

## Quantity Data

The quantity of assigned reading for college students varies widely; however, some "ball-park" estimates are available in the literature. A part-time student can expect 80 pages of reading per week for one course (Warde, 2005), while full-time students are assigned an average of 250 pages of textbook and outside reading per week (Nist & Diehl, 1994).

## Grade Level Expectations

A student whose Accuplacer score is 0-53 is required to take DVR 0051. A score of 53 is equivalent to $9^{th}$ grade reading level, a 260 SAT Verbal Score, and a 14 ACT reading score (Ellis, *nd*). Keep in mind that a score of 26 on Accuplacer is $4^{th}$-grade reading level.

Data collected from 7/1/2008 until 9/17/2010 show that 19,565 assessments were given in reading at PGCC. The students' scores are broken down on table 6.

Table 6. Accuplacer Reading Scores

| Accuplacer Score | Count | % | Grade Level | Grade Level WPM | Dev. Course |
|---|---|---|---|---|---|
| <26 | 11 | 0.06% | 4th | 130-140* | DVR-051 |
| 27-31 | 885 | 4.5% | 6th | 160-170* | DVR-051 |
| 32-40 | 1,437 | 7.3% | 8th | | DVR-051 |
| 41-53 | 2,780 | 14.2% | 9th | | DVR-051 |
| 54-64 | 2,944 | 15.1% | 10th | | DVR-061 |
| 65-78 | 4,689 | 24.0% | mid-12th | | DVR-061 |
| >78 | 6,245 | 31.9% | | 180-200 | College Ready |

*based on compilation of Rasinski, Manzo, and Harris & Sipay (http://www.readinga-z.com/fluency/standard.html )

## Writing Research

The extant research on college-level writing is small. One available source is a student-centered guide that provides a 10-11 hour strategy to complete a research paper in a single night. This includes researching, outlining, brainstorming time, and so on. Twenty-one students commented on the usefulness of this strategy.

### Literature

StudentHacks.Org provides suggests that a "great term paper" can be written in one evening following a 10-11 hour strategy (StudentHacks.Org, 2007). The article divides the process into nine steps, suggesting times for each step. For example, Step 2: Develop a Great Thesis, takes 45 minutes, and Step 3: Write a Killer Introduction, takes 15 minutes.

Nineteen people commented on the effectiveness of this resource in describing a technique to write an "A" paper, whether followed in a single night or over multiple nights. (Two comments are copies.) While many of the comments were positive, the article stated, "It's not the ideal way to write." Also, one responder stated, "I disagree with this method. Directing our research to try to fit a pre-formed thesis, chosen before you did significant research, is the wrong way to write a paper." In view of the various responses, this article does provide anecdotal evidence about how students approach writing a college paper.

Lovett, Lewandowski, Berger, and Gathje (2010) examined writing under 10 and 15 minute-conditions using either pen-and-paper or word processing. Their results show that the mean words per minute under the word processing condition were 365 words in 15 minutes (24 WPM) and 261 in 10 Minutes (26WPM). The mean words per minute under the pen-and-paper condition were 216 in 15 minutes (14 WPM) and 215 words in 10 minutes (21 WPM). Students are slightly more prolific using a word processor (25 WPM). A paper with 1" margins, 12-point Times New Roman font, double-spaced will result in approximately 285 words per page. Using 285 words per page and students writing at 25 words per minute with a word processor, the average student will take approximately 11.5 minutes per page to produce a written document. However, this is only writing time, and does not include research, outline, brainstorming, and so on.

Table 7. Writing Rate Determined by Writing Tool

| Writing Tool | Words Per Minute | Mean Words per Page* | Mean Time to Write 5 pages |
|---|---|---|---|
| Word Processor | 25 | 285 | 57.5 |
| Pen or Pencil | 18 | | |

*A paper with 1" margins, 12pt Times New Roman font, double-spaced will result in approximately 285 typed words per page

## Proposed Implementation Plan

Fall 2011
    a. The "credit hour" regulation will be discussed with the Chairs Council in August 2011.
    b. Department chairs will inform faculty about the regulation.
    c. Master Syllabus
        1. Using the same high occupancy course identified for spring 2012 assessment, each department will review and update the outcomes as necessary.
        2. Each department will identify typical assignments that relate to the outcomes and estimate the student time required to complete each of the assignments and record its findings on Table 3.
        3 . The completed Table 3 will be given to the division dean for review. The deans will submit the tables to Dr. Dunnington.

Spring 2012
        1. The Chairs Council will propose to the Academic Council a timeline to complete items c.1-3 by fall 2013* for the master syllabi of all active courses taught within the past three years (2008-2011).
        * The fall 2013 is necessary to conform to the Middle States Self-Study that will be underway.

        2. The complete tables will be submitted to the deans for review and submission to Dr. Dunnington.

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