Office of Water Programs Course Time Assignment

This course time assignment outlines the components of a distance learning (correspondence) training course offered by OWP for continuing education units (CEUs) or contact hours.

Title of course and training manual: Operation of Wastewater Treatment Plants, Volume 2, Eighth Edition, Part A, "Treatment Plants and Tertiary Treatment" **Number of text pages:** 310

Average word count: 525 words per page

Average reading speed: 130 words per minute; 4 minutes per page

The training manual used for this course contains text, tables, graphs, illustrations, math example problems, section questions, and chapter review questions to enhance the presentation of information and the student learning experience. The course is designed for students to spend the same amount of time reading the tables, graphs, and illustrations as they spend reading the equivalent amount of related chapter text.

Number of math example problems: The course contains 28 math example problems. The math examples support and expand the concepts presented in the chapter text. **Average math example problem solution speed:** 3 minutes per example problem

Number of section questions: The course contains 184 section questions, located in the "Check Your Understanding" sections integrated throughout the chapter text. These questions enable students to self-assess their understanding of a section of material before proceeding to the next section. **Average section question/answer speed:** 2 minutes per question

Number of chapter review questions: The course contains 110 review questions, located in the "Chapter Review" at the end of each chapter. Question types include fill-in, multiple choice, and matching. **Average chapter review question/answer speed:** 2 minutes per question

Objective test questions: The course contains 110 test questions. There is one objective test per chapter. **Average objective test question/answer speed:** 2 minutes per question

The table summarizes the course components outlined above and shows the calculations for the total time assignment values in minutes and hours.

Course component	Number of		Minutes required to		Total time assignment
	component units		complete component unit		for component
Text pages	310	×	4	=	1,240
Math example problems	28	×	3	=	84
Section questions	184	×	2	=	368
Chapter review questions	110	×	2	=	220
Objective test questions	110	×	2	=	220
					2,132 minutes
					35.5 hours