

**MATHEMATICS DEPARTMENT
PENNSYLVANIA COLLEGE OF TECHNOLOGY**

Mathematics Study Skills

In the spring of 2006 a group of secondary and postsecondary mathematics instructors assembled to discuss how to assist students in their transition from high school to college so that mathematics skills could be improved. College mathematics faculty reported that in general mathematics skills of entering freshmen were getting better all the time. The problem was not so much mathematics skills that were hampering freshmen as it was the lack of study skills.

This problem was so prevalent at the postsecondary level that some of the mathematics faculty had taken it upon themselves to assist students in their classes to develop better study skills. As a base they used a workbook entitled *Math Study Skills* authored by Paul D. Nolting and supplemented activities in this workbook with key points and strategies that they had found successful during their teaching careers.

The group decided that these key points and strategies for teaching study skills should be shared with secondary teachers and other postsecondary faculty for use in their classrooms. In the Fall of 2006 a project was initiated, using Tech Prep funding, to develop lesson planning guides, documents used to develop lesson plans, to assist other instructors in reproducing these successful key points and strategies in their own classrooms.

The eleven study skills identified by the faculty participants of this project are listed below in a suggested, **not mandatory**, teachable order. Faculty developed one lesson planning guide for each study skill. A free copy of each guide can be downloaded or viewed by selecting them individually.

NOTE FOR USERS: The format for these guides is standard and straight forward except for the “Key Points and Learning Strategies” section. Most of the writers felt that the skill, for which they wrote their guide, could best be taught using a day-by-day (not necessarily consecutive days) format and their planning guide reflects this organization. Other writers felt that their skill could better be taught using specific key points and strategies for each performance standard within the study skill. Regardless of the organization of key points and strategies, either can be used in any format that the user feels would best match their own students and teaching style.

Eleven Mathematics Study Skills

1. [Describe the differences between high school and college math courses.](#)
2. [Identify your personal math-learning strengths and challenges.](#)
3. [Organize information and manage your time.](#)
4. [Use memory techniques.](#)

5. [Effectively read a mathematics textbook.](#)
6. [Effectively take notes.](#)
7. [Effectively complete homework.](#)
8. [Communicate effectively with the instructor.](#)
9. [Participate in class.](#)
10. [Engage in small-group learning.](#)
11. [Utilize effective test-taking skills.](#)