## **Table of Contents**

	Page
Introduction	1
Chapter 1. TA Duties and Responsibilities	
I. Description of Specific Duties	5
II. Using Your Mentor TA	11
Chapter 2. Cooperative Group Problem Solving	
I. How do I coach students during problem solving?	13
II. How do I form cooperative groups?	27
III. What criteria do I use to assign students to groups?	31
IV. How can I structure CPS to maintain well-functioning groups?	37
Chapter 3. Teaching a Laboratory Section	
I. Cooperative Problem-Solving Labs in Operation	57
II. Grading The Labs	75
III. Overview of Teaching a Lab Session	79
IV. Outline for Teaching a Lab Section	81
V. Detailed Advice About Teaching a Lab	83
VI. Preparation for Teaching a Lab Session	89
Chapter 4. Teaching a Discussion Section	
I. Overview of Teaching a Discussion Session	97
II. Outline for Teaching a Discussion Section	99
III. Detailed Advice for Teaching a Discussion Section	101
IV. Preparation for Teaching a Discussion Session	105
V. Some Other Teaching Tools	107
VI. Characteristics of Good Group Problems	115
VII.Levels of Difficulty of a Group Problem	119
VIII. Changing a Textbook Problem to Make it a Good Group Problem	123
5. Other Teaching Resources	
I. Top 20 TA Traps	129
II. Team Meeting Guidelines	131
III. TA Office Hour	135
IV. Proctoring and Record Keeping	136
V. Grading Procedure	138
VI. Electronic Submission of Grades	141
VII. Downloading Class Lists	143
VIII. Reference Guide for Ultra VNC version 1.0.0	145
IX. Installing a New Camera	149
<ul><li>X. Checking Students' Pre-lab Quiz Scores</li><li>XI. Useful Information for TAs</li></ul>	151 152

This work was supported, in part, by the U.S. Department of Education, Fund for the Improvement of Postsecondary Education (FIPSE), and by the University of Minnesota
By: Patricia Heller, Kenneth Heller, Tom Foster, Jennifer Blue, Andrew Ferstl, Andrew Kunz, Vince Kuo, Laura McCullough, Kevin Parendo, Masaya Nishioka, Alexander Scott, Kimia Ghanbeigi, Jennifer Docktor, Emir Gumrukcuoglu, and Yuichi Kubota.
© University of Minnesota, Department of Physics, 2006