**Tips for Teaching Problem-Solving Classes**

- Focus on ways to approach the problems rather than the final solutions.
- When you prepare for questions to be discussed in sections, ask yourself what the students are supposed to learn from this exercise.
- In the beginning of each section, give students a brief introduction of what you will cover for the day and explain to them why you choose to cover those particular problems.
- Do not always work through the problems for the students.
- It’s okay to let students know that you have also struggled through the material in the beginning.

Appropriate questioning techniques are extremely useful in helping the students realize when they do not understand something. For example:

- Frequently ask students to answer questions such as “Why is this step followed by that step?” Unfortunately it is easy to fall into the pattern of assuming that everybody is following what you are saying.
- When a student asks a question, respond with a question such as “What he/she has tried to do or would do to solve that problem.”
- Ask assessment questions on a regular basis to make sure that students really understand the material.
- After going through one particular step of a problem, use “what if” questions and come up with alternative scenarios to which the same principle applies. These questions allow you to determine if students have actually mastered how to use that particular principle.

Adapted from *A Handbook for UCR Teaching Assistants*, pp. 65-66