Instructions for Empirical Exercises

Homework and Empirical Exercises count for 30% of the total course grade. They must be done seriously and carefully.

**Due Dates:** Empirical Exercises and other homework are assigned on the website. They must be submitted at the beginning of section. The first assignment is due at the first section in the first full week of class. There is one assignment due each week thereafter. Assignments must be submitted on time. TAs have been instructed not to accept them late. If you have to miss section, they must be submitted early to Professor Hoover’s mailbox in the Economics Department (231 Social Sciences and Humanities Building), but they will not be accepted after the end of section on the day they are due. (Note: there is no access to the mailboxes after 5:00 PM) Exercises can be revised in the light of what students learn in section. Revised exercises must be submitted no later than the next section after the original assignment was due. Revisions will be graded only if a serious attempt was made to do the original assignment and it was turned in on time. If you are ill or have a similar serious excuse that results in late submission, then you must submit the homework to Professor Hoover (and not the TA) with documentation of your excuse.

**Format:** Exercises must be presented in the correct format.

*First Page:* The first page of each exercise should be headed with your name, student number, the name of your TA and section number, and the exercise number.

*Assembly:* Assemble your exercise in the order: A. Written answers; B. Tables of Data (or Calculations); C. Charts or Figures.

A. Written Answers. These should be typed and answered in the order of the questions or parts of the exercise. Write in clear, complete sentences and logically arranged paragraphs. Provide complete answers, but do not waste space or time with material that is not germane to the issue at hand. Answers will often have to refer to calculations, data, or figures. Indicate clearly which figures are referred to in your answer. Frequently, a part will ask only that you construct a chart or perform a calculation. In that case, your answer may be limited, for example, to “See chart 3” or “See table 8.” However, if the question does not give you detailed instructions for making a calculation or gives you the opportunity to choose a method of calculation or the particular variables to use, be sure to indicate clearly which method or which variables you have used. Always show enough of your work that how you got your answers can be clearly understood. Charts and tables do not speak for themselves. They are evidence and are good evidence only if you use them to tell your story.
B. Tables of Data (or Calculations) Number these sequentially (1, 2, 3. . . or I, II, III, IV... or A, B,C . . . or a, b, c, ...) and collect them after the Written Answers. Do not use numbers that refer to the sections of the exercises as particular data or charts may be referenced by more than one part. Tables must be clearly labeled, so that the reader knows exactly what they present. Sometimes this takes only a few words in a descriptive title, sometimes it needs a detailed footnote. Use your commonsense; ask yourself whether the reader presented only with the chart will be able to understand it. Present only the data or calculations that you are asked to present - omit all extraneous data. Labels may be added by hand in ink, so long as they are clear and legible.

C. Charts or Figures. Number these sequentially (1, 2, 3. . . or I, II, III, IV... or A, B,C . . . or a, b, c, ...) and collect them after the Tables of Data. Do not use numbers that refer to the sections of the exercises as particular data or charts may be referenced by more than one part. Charts must be labeled clearly. Each chart should have a descriptive title; the axes must indicate what is being measured and what units of measurement are used. If a chart uses a special scale (e.g., a logarithmic scale), it must be noted. If a chart uses multiple lines, each line must be clearly labeled. Scaling is important in a good chart: what one needs to see is the variation in the data or relationships among the various data series. It is therefore important to choose scaling that reveals variation. If series X, for example, varies between 95 and 99, a chart with a vertical scale of 0 to 100 is likely to be pretty poor at demonstrating the variation. Similarly if series Y has a mean of 2 and varies between 0 and 4 and series Z has a mean of 10,000 and varies between 5,000 and 15,000, then a scale of, say, 0 to 20,000 will reduce series Y to uninterpretable straight line near zero. In such a case, you will either have to graph the two series on separate charts (if it is the variation not the relationship between Y and Z that is of interest) or (if it is the relationship that is most important) use a logarithmic scale or graph them on the same chart with two separate vertical scales (left and right). In all cases, use your common sense; ask yourself what you want to show, and whether your chart reveals it clearly. Labels may be added by hand in ink, so long as they are clear and legible.

Staple the assembled exercise. Number each page sequentially starting from 1 in the lower right-and corner of each page. TAs have been instructed not to accept exercises that are not stapled and clearly labeled with your name. Staplers will not be provided in section.

Revisions: A successful section requires that people come prepared. Students are, therefore, expected to do all exercises completely and on time. Nevertheless, we are studying to learn and you should benefit from the lessons of lecture and session. Therefore, if you have done your homework and turned it in on time, but would like to revise it in light of the discussion in section or lecture, you may do so and turn in the revised version at the next class. Revisions must be clearly marked as revisions on the first page; otherwise, their format is identical to initial submissions. Your original homework will not be returned to you until after the revision is due, so you must make up your own mind based on class discussion (or discussion with your peers, which I encourage) whether a revision of your exercise would be useful. Revisions must be complete - i.e.,
they must contain every part of the exercise, whether or not that part is revised. You should, therefore, keep electronic copies of all exercises submitted. Revision is to incorporate your increasing knowledge into your work, not to provide an opportunity for late submissions. If, for any reason, your initial submission was incomplete, you may not complete it at the revision stage. If you submit a revision, your grade will be based on the revision only.

It is a good idea to keep copies of all your exercises for reference.

**Marking and Grading:** Exercises will be graded on a 125 point scale (see the Syllabus). If there is a revision only the revision will be graded. Answer keys will be distributed after the revisions are due.