Social Studies 201
Winter 2001
Problem Set No. 1

Due Friday, January 19, 2001

1. Attached are photocopies of two articles concerning crime rates. Write a paragraph or two commenting on any issues or problems you note concerning the data in the articles. Note any questions you might have concerning the meaning, source, or quality of these data. Attempt to use some of the issues raised in Chapter 2 of the text concerning production of data, but do not feel restricted to using only the issues in the text.

2. Use the questionnaire from the *Survey of Student Attitudes and Experiences Fall 1998* conducted by Social Studies 306 students in the Fall 1998 semester for this question. For each of questions 15, 26, 41, 44, and 49 in the Survey, (i) clearly identify the variable in each question. In each case (ii) explain what level of measurement the variable has (nominal, ordinal, interval or ratio). Also explain (iii) whether the variable is discrete or continuous.

Table 1: Number of Weekly Hours Worked at Jobs for for a Random Sample of 61 Respondents from the Survey of Student Attitudes and Experiences, Fall 1998

16	16	18	24	18	30
28	12	10	20	18	40
22	10	5	25	20	35
18	25	25	11	30	3
30	20	30	20	16	16
5	10	4	5	2	15
32	25	40	8	20	23
20	10	13	50	25	20
17	23	15	12	15	8
100	20	45	30	10	40
4					

3. Construct a stem and leaf display for the data in Table 1. These data come from a random sample of 61 undergraduate student respondents to the Fall 1998 Survey. Present the unordered and the ordered stem and leaf display. From these construct and present a table of the frequency distribution and a histogram. Describe in a sentence or two.

Table 2: Percentage Distributions of Annual Anticipated Earnings of Students in Two Types of Canadian Universities

Anticipated Annual Earnings in thousands of dollars	Per Cent in Universities with:	
	Undergrad Only	Undergrad and Grad
Less than 15	22	18
15 - 20	10	6
20 - 25	14	13
25 - 30	16	13
30 - 35	6	8
35 - 40	11	14
40 - 45	8	10
45 - 50	5	9
50 - 60	5	8
60 plus	3	1
Total	100	100
Sample Size	664	717

4. The Graduating Students Survey 2000, conducted by the Canadian Undergraduate Survey Consortium gives data concerning the anticipated annual earnings of students who attend Canadian universities. From this survey, the frequency distributions for anticipated annual earnings for students in primarily undergraduate universities and in universities with undergraduate and graduate programs are given in Table 2.

Use the data in Table 2 to construct a histogram for the anticipated earnings of students at each of the two types of universities. In words, briefly describe the differences in the two histograms.