1. Do you intend to apply for a Master’s degree in Statistics from UT? (Both semesters of this course are required for that degree, and they MUST be taken in order.)

2. Will you need to remain enrolled in the course this semester in order to satisfy requirements for a TA job, a fellowship, a visa, or any other reason except wanting to learn the material and earn credit for the course?

3. What probability courses have you taken as an undergraduate or graduate student? Give the name of the course, whether it was an undergraduate or graduate course, textbook, what school, and what grade did you make?

4. What applied statistics courses have you taken as an undergraduate or graduate student? Give the name of the course, whether it was an undergraduate or graduate course, textbook, what school, and what grade did you make?

5. What theoretical statistics courses have you taken as an undergraduate or graduate student? Give the name of the course, whether it was an undergraduate or graduate course, textbook, what school, and what grade did you make?

6. In which of those courses did you cover problems about transformations of bivariate distributions? (Example: If $X_1 \sim \text{Gamma}(\alpha,1)$ and these are independent, derive the distribution of $\frac{X_1}{X_1 + X_2}$.)
7. In which of these courses did you cover moment-generating functions? (Example: Derive the mgf of a Poisson(\( \lambda \)) distribution.)

8. In which of these courses did you learn to determine whether a family of distributions was an exponential family? A full exponential family?

9. In our first semester course, we learned about various properties of a random sample. Topics we covered include sampling distributions of statistics, derivation of the distributions of various statistics based on normal populations, such as \( t \) and \( F \) statistics, the Central Limit Theorem and the Delta Method for approximating the distribution of a function of a sequence of random variables, the distributions of order statistics, including the joint distribution of two order statistics, and some methods of generating random samples from various distributions. Circle the topics in the above list that you have studied in some of your courses.

10. In which of these courses did you learn about sufficient statistics? (Example: Find a minimal sufficient statistic for the uniform \((\theta, \theta + 1)\) distribution. Is it complete? What would you do to determine whether it is complete?)