

**Convos/STAT 113 Service Learning Group Project Instructions**  
**Ellen Gundlach, Purdue University**

30 points total

Start by watching the Convos video (link will be in Blackboard) to learn what Convos needs for us to do to help them choose artists to bring to campus next semester. We will all be working as statistical consultants. You will be working in groups to collect data, and then as a class we will prepare a report for Convos.

Questions to answer with your group before collecting your data:

1. **(2 points)** What does Convos want you to find out for them? Include details.
  
2. **(2 points)** What restrictions does Convos have on which artists they can bring in? Elliott Hall of Music has 6,005 seats, but that's not the only consideration. Explain your answer.
  
3. **(3 points)** How will you select your sample? Explain your methods in detail. What type of sample is it? (For example, if you do convenience sampling, include location, time of day, how you will approach people, etc.) Keep in mind that everybody in your group will need to do some of the data collecting, and you all need to use the same method.
  
4. **(2 points)** What will be the exact wording of the questions you will ask?

Read over the questions on the next page (but wait to answer them), and then go collect your data.

**(8 points)** List your results below. Each student should get data from at least 20 people with at least 10 unique artists added to the list.

After collecting your data, answer the following questions:

5. **(2 points)** Did your actual sampling methods differ from your plan? If so, how and why?
  
6. **(2 points)** Our intended population was all of Purdue's students. What population does your sample actually come from? Do you think they are representative of Purdue's student body? Explain your answer.
  
7. **(3 points)** Are there any potential sources of bias in your methods? Explain in detail. Also discuss response bias and nonresponse issues.
  
8. **(2 points)** Convos will use the information we put together from STAT 113 to give a survey to as many Purdue students as possible. How should Convos let students know about the survey? Keep in mind that the university does not allow them to send out more than 2 e-mails to the student body over the year, so email is not a good option. What can Convos do to reduce nonresponse when they try to recruit students to fill out the survey? In the past they have tried giving away water bottles or bottle openers.
  
9. **(2 points)** Convos has had problems with students not actually buying tickets for the performers they said they wanted to see. How can Convos get better reliability and predictability from student responses?
  
10. **(2 points)** What did you learn by doing this project that you didn't learn through lecture or homework? If you did this again, what would you do differently? Give specifics.