**A&R Research Analyst Technical Exercise**

**Scenario**: The state has launched the ‘Smart Start’ Program and the university is being asked to review entry level courses. Physics, Biology(Human Anatomy), and Spanish have always had a bad reputation for being ‘weed out’ courses amongst the faculty. The Department Chairs from these three departments are asking for some analysis on student success in these classes. They want to know:

What are our overall success rates (C or better)?

What student information helps predict success in their courses?

Are success rates improving or getting worse?

Are some of their instructors better than others?

Does teaching frequently the course improve instructor performance over time?

How do their students, in their academic plans, perform compared to students from other departments/colleges?

Any other ideas?

**About The Exercise**

The data are simulated from real Ohio University data sets. There is not necessarily a single or obvious answer to each question. The goal of the exercise is to provide candidates an opportunity to demonstrate competency in data management, analysis, inferential modeling, and visualization. Any tools/software you wish to use are welcome. We will spend 30-45 minutes reviewing your work. Please be prepared to present your findings and all methodology.

If you have any definitional questions about the data, or questions about this process you may reach out to the hiring manager any number of times.