

ISyE 2028 – Basic Statistical Methods - Fall 2015  
Bonus Project: “Big” Data Analytics  
Proposal

---

“Freshman 15” is a term commonly used in the United States to describe the amount of weight gained during a student’s first year in college. The “Freshman 15” can be caused by multiple factors introduced to a student’s first year in college: the consumption of fat and carbohydrate rich foods offered in an all-you-can-eat style in university dining halls, an increase in alcohol intake, an increase in stress levels, and a decrease in hours of sleep. During my first year at Georgia Tech, I always joked about getting the “freshman 15,” but I never actually gained any significant weight. I talked to some of my other classmates, who all had similar stories. I decided to look more into this matter and see whether the “freshman 15” is a common occurrence among Georgia Tech students.

I plan to create a general survey using Google docs as my way to collect data. I will share my survey around using social media in order to gather my information. On my survey, I will ask questions regarding gender, freshmen meal plan, and the amount of weight either gained or lost during a student’s freshman year. The data will be separated into categories based on gender, since the human body reacts differently depending on gender. The responses from the survey will allow me to determine if there’s any strong correlation between the type of meal plan and the student’s change in weight among males and females.

I will use a five number summary and box plot and analyze the mean, median, and mode to better understand my data. From there, I will perform some hypothesis tests to prove whether or not a college student gains 15 pounds within their first year.