Scoring Evaluations

Dave Bridges

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Contents

Data Import

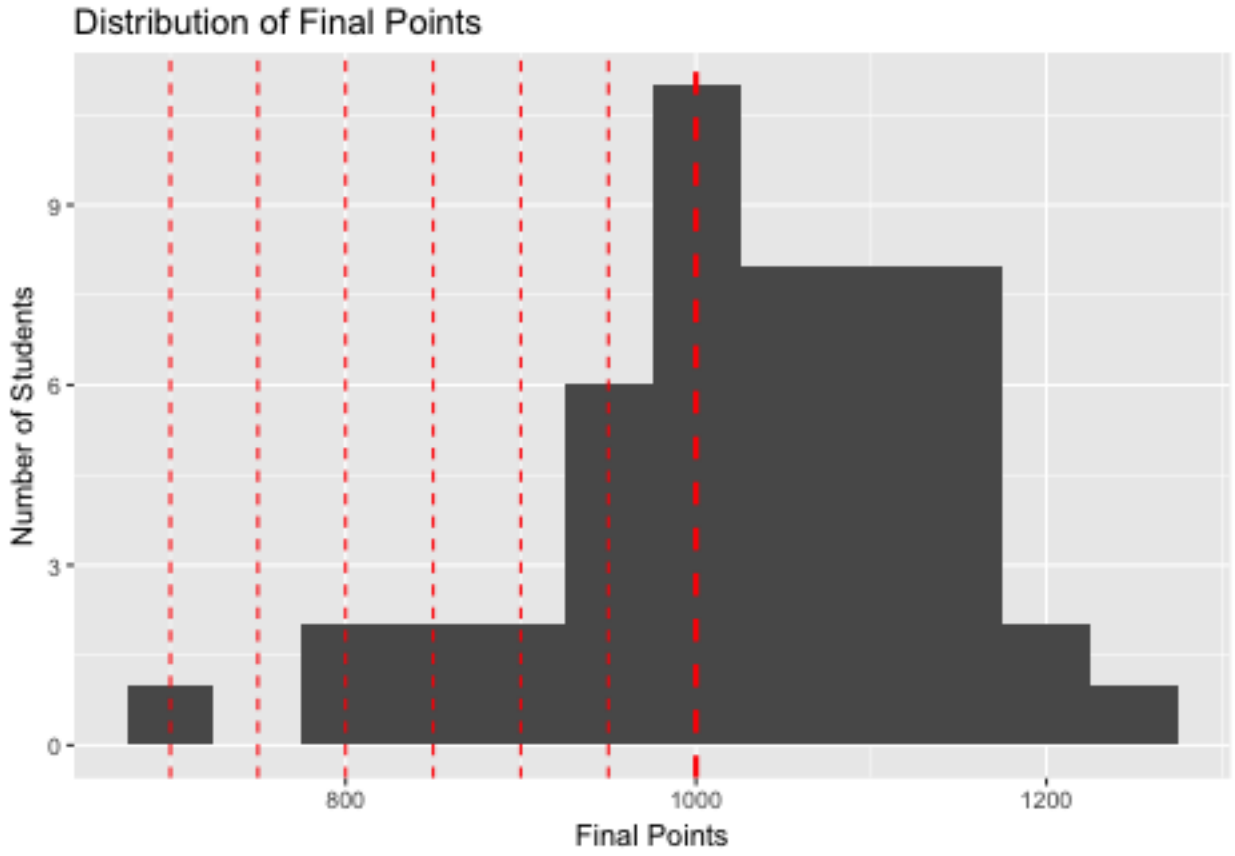
Exported **Assignment Type Summaries** from GradeCraft and imported.

```
library(readr)
library(dplyr)
library(tidyr)
datafile <- 'Principles of Nutritional Sciences Assignment Type Summary - 2018-02-01.csv'

library(readr)
dataset <- read_csv(datafile)

dropped.students <- c('dave.bridges','ajian','zhongyli')

assessment.dataset <-
  dataset %>%
  select(-`First Name`, -`Last Name`, -Email, -Team) %>%
  gather(Assignment, Points, -Username) %>%
  filter(!(Username %in% dropped.students)) %>%
  arrange(Points)

summary.dataset <-
  assessment.dataset %>%
  group_by(Username) %>%
  summarize(Total = sum(Points)) %>%
  arrange(-Total)
```

This script imports the data from **Principles of Nutritional Sciences Assignment Type Summary - 2018-02-01.csv**. This script is located at /Users/davebrid/Documents/GitHub/TeachingLectures/Michigan/NUTR630/Evalua Summary/GradeCraft Metrics and was most recently run on Wed Jan 31 21:50:10 2018

```
library(ggplot2)

p <- ggplot(data=summary.dataset, aes(x=Total))
p + geom_histogram(binwidth=50) +
  labs(x="Final Points",y="Number of Students", title="Distribution of Final Points") +
  geom_vline(aes(xintercept=1000), color="red", linetype="dashed", size=1) +
  geom_vline(aes(xintercept=950), color="red", linetype="dashed", size=0.5) +
  geom_vline(aes(xintercept=900), color="red", linetype="dashed", size=0.5) +
  geom_vline(aes(xintercept=850), color="red", linetype="dashed", size=0.5) +
  geom_vline(aes(xintercept=800), color="red", linetype="dashed", size=0.5) +
```

```
  geom_vline(aes(xintercept=750), color="red", linetype="dashed", size=0.5) +
  geom_vline(aes(xintercept=700), color="red", linetype="dashed", size=0.5)
```



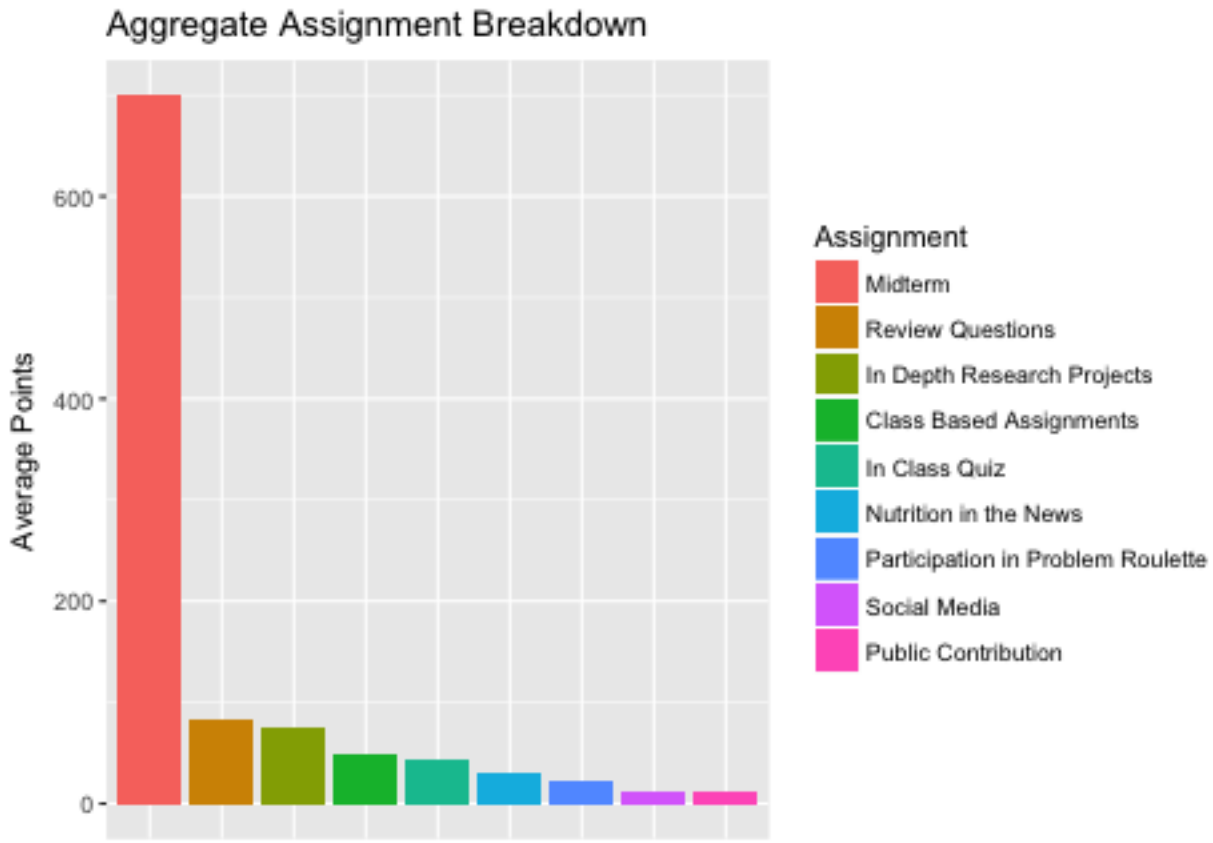
There were 31 students who earned an A. Among those who earned an A, their average points were 1096.419. This means that the A students averaged **96.419** points too many than they needed. This is relative to the overall mean of 1028.255

Assessment Choices

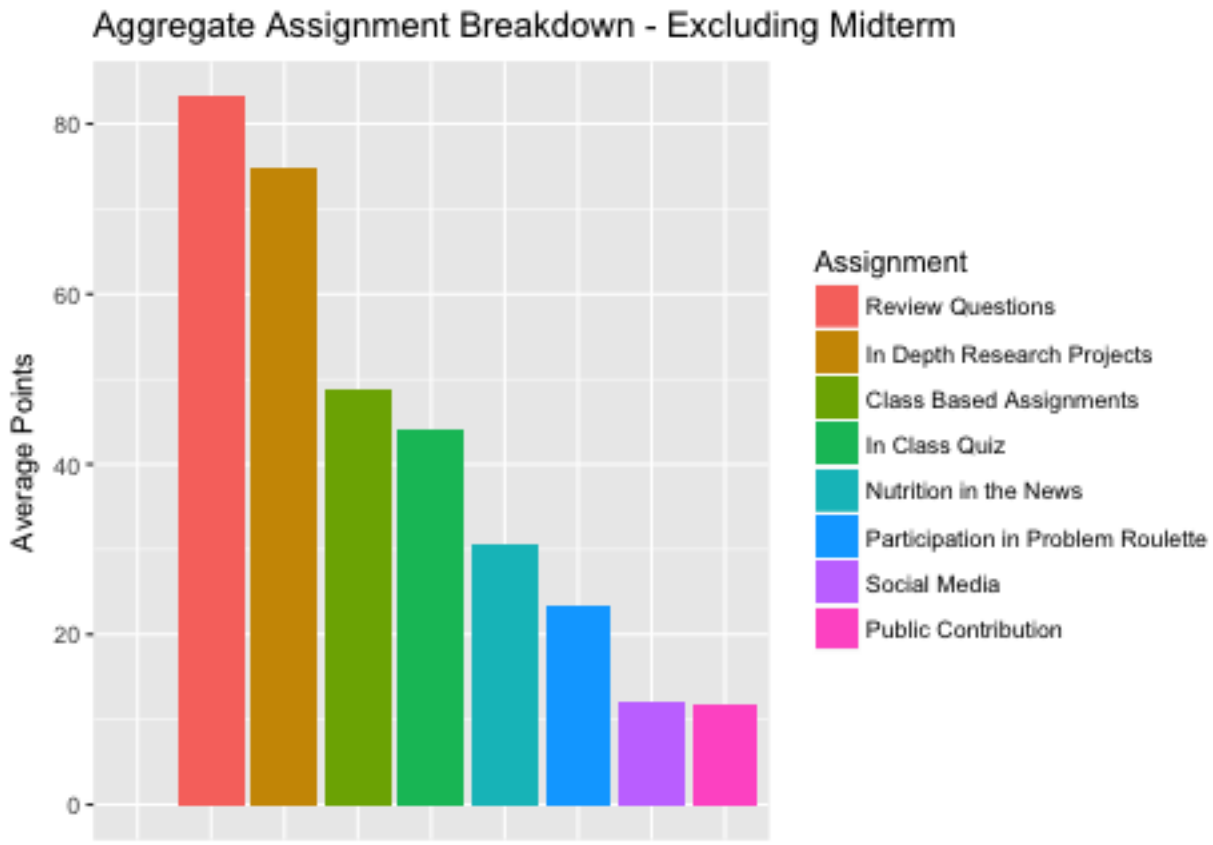
Aggregated

```
assignment.summary.data <-
  assessment.dataset %>%
  group_by(Assignment) %>%
  summarize(Mean.Points = mean(Points)) %>%
  arrange(-Mean.Points)

positions <- as.character(assignment.summary.data$Assignment)

library(forcats)

assignment.summary.data$Assignment <- fct_relevel(assignment.summary.data$Assignment, positions)

p <- ggplot(assignment.summary.data, aes(y=Mean.Points, x=Assignment))
p + geom_bar(stat='identity', aes(fill=Assignment)) + scale_x_discrete(limits = positions) +
```

```
  labs(title="Aggregate Assignment Breakdown",  y = "Average Points") +
  theme(axis.title.x=element_blank(),
        axis.text.x=element_blank(),
        axis.ticks.x=element_blank())
```

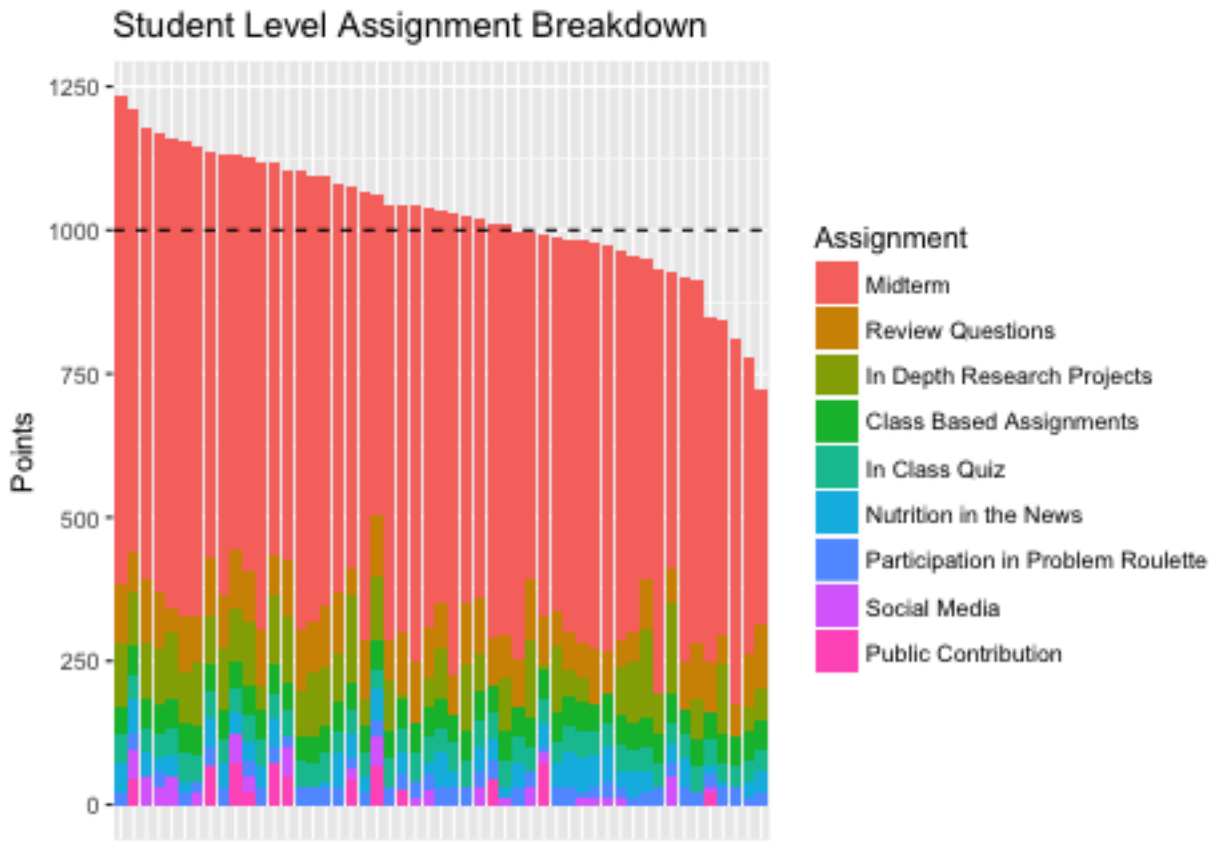



```
p <- ggplot(filter(assignment.summary.data, Assignment != 'Midterm'), aes(y=Mean.Points, x=Assignment))
p + geom_bar(stat='identity', aes(fill=Assignment)) + scale_x_discrete(limits = positions) +
  labs(title="Aggregate Assignment Breakdown - Excluding Midterm", y = "Average Points") +
  theme(axis.title.x=element_blank(),
        axis.text.x=element_blank(),
        axis.ticks.x=element_blank())
```



Student Level

```
assessment.dataset$Username <- fct_relevel(assessment.dataset$Username, summary.dataset$Username)
assessment.dataset$Assignment <- fct_relevel(assessment.dataset$Assignment, positions)

p <- ggplot(assessment.dataset, aes(y=Points,x=Username))

p + geom_bar(stat='identity', aes(fill=Assignment)) +
  labs(title="Student Level Assignment Breakdown") +
  theme(axis.title.x=element_blank(),
        axis.text.x=element_blank(),
        axis.ticks.x=element_blank()) +
    geom_hline(aes(yintercept=1000), color="black", linetype="dashed", size=0.5)
```


Student Level Assignment Breakdown
Points
1250
1000
750
500
250
0
Assignment
Midterm
Review Questions
In Depth Research Projects
Class Based Assignments
In Class Quiz
Nutrition in the News
Participation in Problem Roulette
Social Media
Public Contribution