

Summary Graphs of NUTR630 Intake

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```
library(readr)
filename <- 'https://docs.google.com/spreadsheets/d/e/2PACX-1vQI-b1A4Zd-gx3FuY3lkKbWE0zKUfmAhpFovKOxow5AC1wWQpBsSvOKI0_gtZ4DJu5sj-YM1_1nsKUe/pub?gid=1032535237&single=true&output=csv'
data <- read_csv(filename)
```

These data can be found in /Users/davebrid/Documents/GitHub/TeachingLectures/Michigan/NUTR630/Evaluation/GradeCraft Summary/Student Feedback/Onboarding in a file named https://docs.google.com/spreadsheets/d/e/2PACX-1vQI-b1A4Zd-gx3FuY3lkKbWE0zKUfmAhpFovKOxow5AC1wWQpBsSvOKI0_gtZ4DJu5sj-YM1_1nsKUe/pub?gid=1032535237&single=true&output=csv. This script was most recently updated on Wed Jan 31 14:10:18 2018.

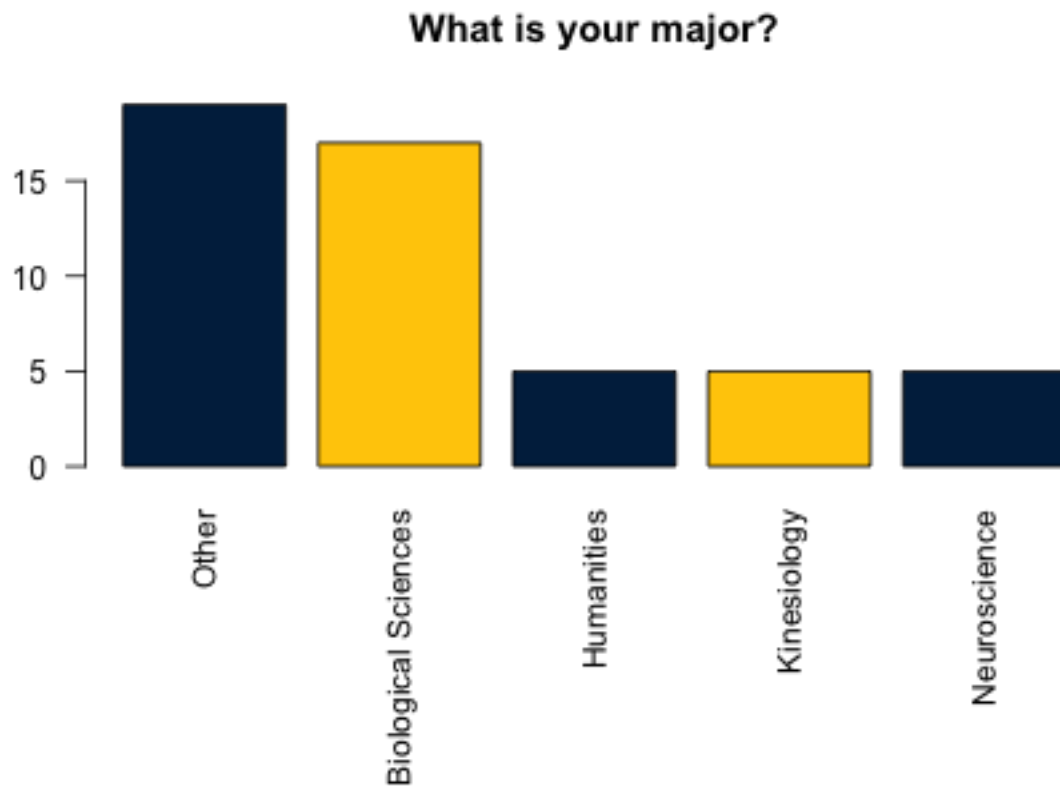
Analysis

What Majors

```
library(forcats)
#grouped with most common 4

count.majors <-
  data %>%
  mutate(`Which discipline most closely matches your undergraduate degree?` = fct_lump(as.factor(data$`Which discipline most closely matches your undergraduate degree?`), n = 4))
  group_by(`Which discipline most closely matches your undergraduate degree?`) %>%
  count() %>%
  arrange(desc(n)) %>%
  ungroup() %>%
  mutate(`Which discipline most closely matches your undergraduate degree?` = fct_recode(`Which discipline most closely matches your undergraduate degree?`,
    "Other" = "Other"))

par(mar=c(9,4,4,2))
with(count.majors, barplot(n,
  las=2,
  main="What is your major?",
  col=color.scheme,
  names.arg=`Which discipline most closely matches your undergraduate degree?`))
```



What Topics are Students Interested In?

```
library(sjPlot)

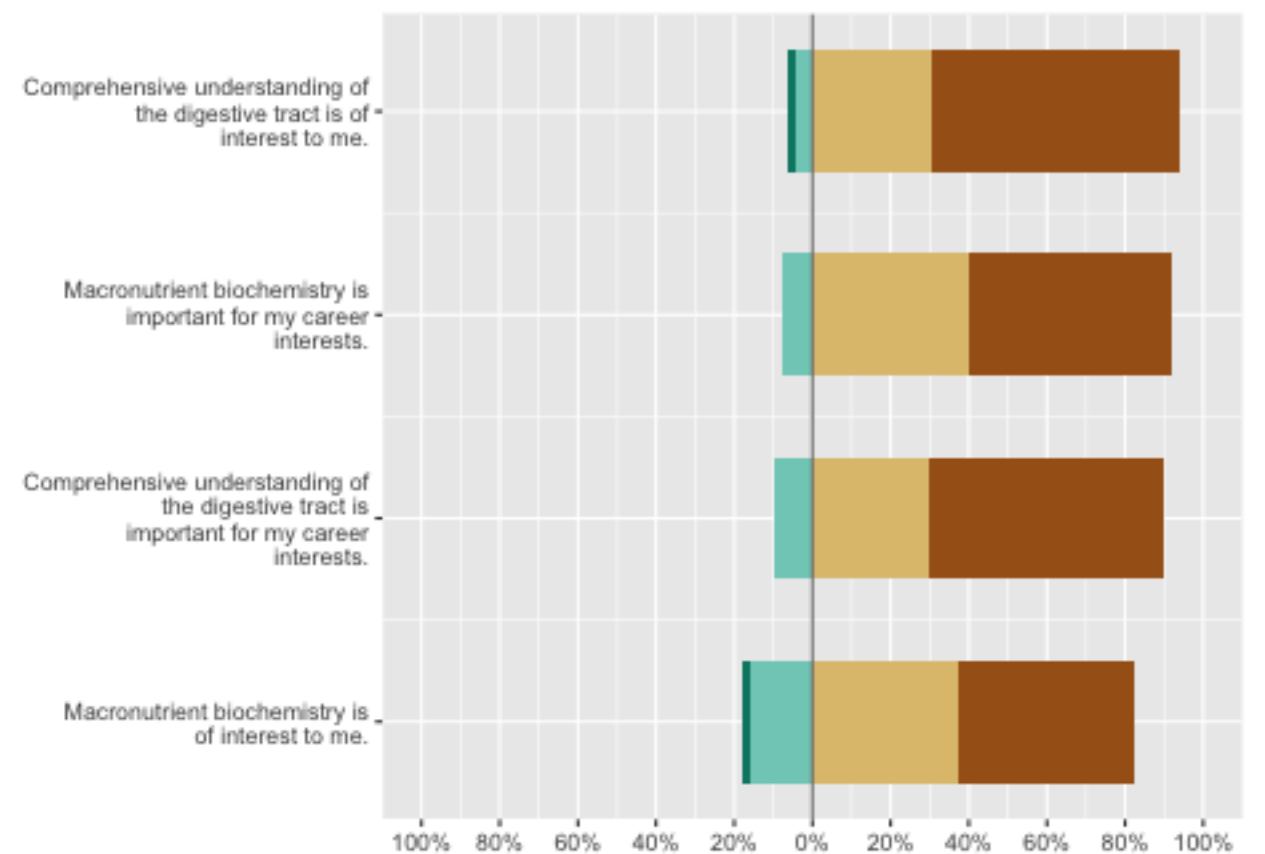
student.interest.data <-
  data %>%
    select(starts_with('Macronutrient'), starts_with("Comprehensive"))

#manually ensured all columns have same levels
mylevels <- c('1', '2', '3', '4', '5')
student.interest.data.levels <-
  student.interest.data

student.interest.data.levels$`Macronutrient biochemistry is of interest to me.` <- factor(student.interest.data.levels$`Macronutrient biochemistry is of interest to me.`, levels = mylevels)
student.interest.data.levels$`Macronutrient biochemistry is important for my career interests.` <- factor(student.interest.data.levels$`Macronutrient biochemistry is important for my career interests.`, levels = mylevels)
student.interest.data.levels$`Comprehensive understanding of the digestive tract is of interest to me.` <- factor(student.interest.data.levels$`Comprehensive understanding of the digestive tract is of interest to me.`, levels = mylevels)
student.interest.data.levels$`Comprehensive understanding of the digestive tract is important for my career interests.` <- factor(student.interest.data.levels$`Comprehensive understanding of the digestive tract is important for my career interests.`, levels = mylevels)

sjp.likert(student.interest.data.levels,
  sort.frq='neg.asc',
```

```
values='hide',  
show.legend=FALSE,  
show.n=FALSE)
```



Learning Assessment

```
student.assessment.data <-  
  data %>%  
    select(starts_with("What is your level of agreement on the following statements?"))  
  
library(stringr)  
colnames(student.assessment.data) <- str_sub(colnames(student.assessment.data), 63, -2)  
  
#manually ensured all columns have same levels  
mylevels <- c('Strongly Agree', 'Agree', 'Neutral', 'Disagree', 'Strongly Disagree')
```

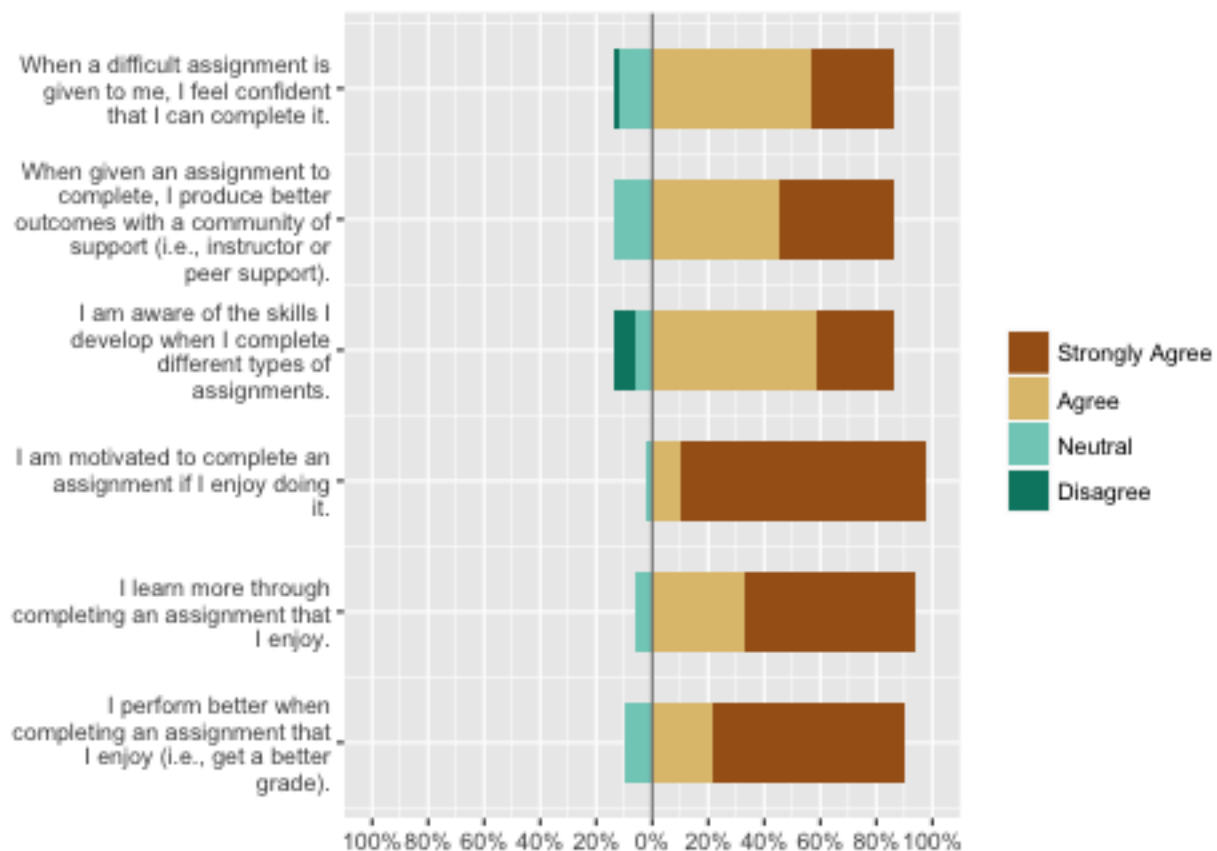
```
student.assessment.data$`When a difficult assignment is given to me, I feel confident that I can complete it.` <- factor(student.assessment.data$`When a difficult assignment is given to me, I feel confident that I can complete it.`)
student.assessment.data$`When given an assignment to complete, I produce better outcomes with a community of learners than I do on my own.` <- factor(student.assessment.data$`When given an assignment to complete, I produce better outcomes with a community of learners than I do on my own.`)
student.assessment.data$`I am aware of the skills I develop when I complete different types of assignments.` <- factor(student.assessment.data$`I am aware of the skills I develop when I complete different types of assignments.`)
student.assessment.data$`I am motivated to complete an assignment if I enjoy doing it.` <- factor(student.assessment.data$`I am motivated to complete an assignment if I enjoy doing it.`)
```

```

student.assessment.data$I learn more through completing an assignment that I enjoy.` <- factor(student
student.assessment.data$I perform better when completing an assignment that I enjoy (i.e., get a better

sjp.likert(student.assessment.data,
  values='hide',
  show.n=FALSE)

```



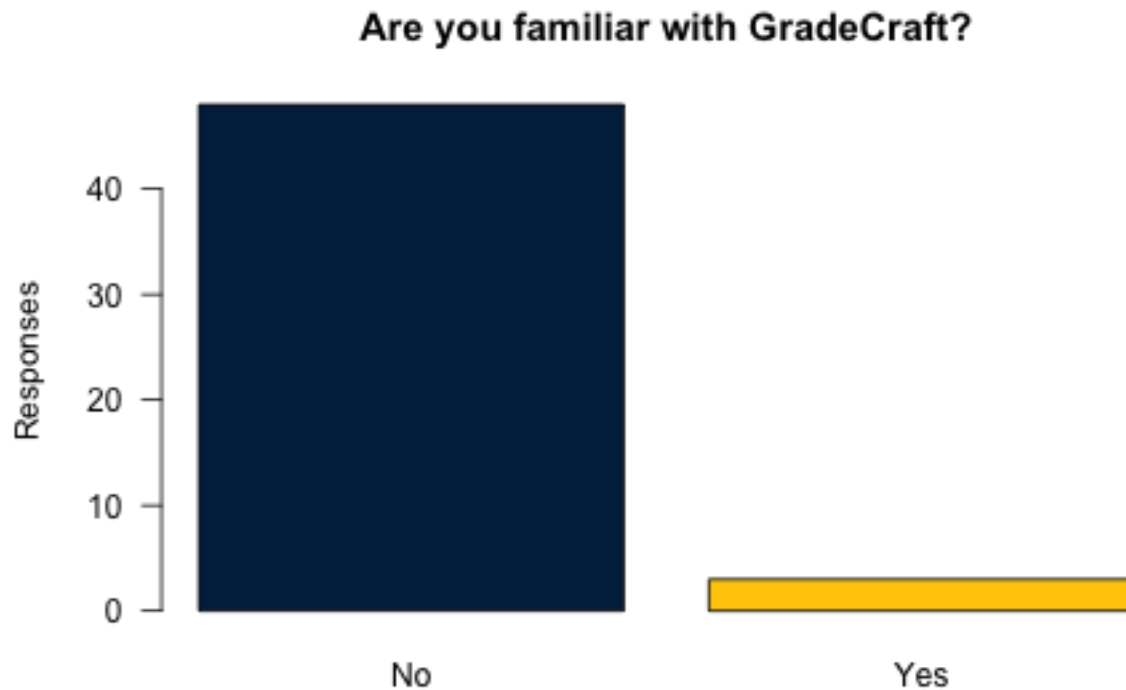
GradeCraft Familiarity

```

gradecraft <-
  data %>%
  group_by(`Are you familiar with GradeCraft?`) %>%
  count()

with(gradecraft, barplot(n,
  las=1,
  ylab="Responses",
  main="Are you familiar with GradeCraft?",
  col=color.scheme,
  names.arg=`Are you familiar with GradeCraft?`))

```



Only 3 out of 51 students were familiar with GradeCraft.

Session Information

```
sessionInfo()
```

```
## R version 3.4.2 (2017-09-28)
## Platform: x86_64-apple-darwin15.6.0 (64-bit)
## Running under: macOS High Sierra 10.13.3
##
## Matrix products: default
## BLAS: /Library/Frameworks/R.framework/Versions/3.4/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/3.4/Resources/lib/libRlapack.dylib
##
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods   base
##
## other attached packages:
## [1] stringr_1.2.0 sjPlot_2.4.0 bindrcpp_0.2 forcats_0.2.0 readr_1.1.1
## [6] dplyr_0.7.4   tidyr_0.7.2 knitr_1.17
##
```

```
## loaded via a namespace (and not attached):
## [1] nlme_3.1-131      RColorBrewer_1.1-2 rprojroot_1.2
## [4] tools_3.4.2      TMB_1.7.12         backports_1.1.1
## [7] R6_2.2.2         sjlabelled_1.0.6   DT_0.3
## [10] lazyeval_0.2.1   colorspace_1.3-2   nnet_7.3-12
## [13] tidyselect_0.2.3 mnormt_1.5-5       emmeans_1.1
## [16] curl_3.0         compiler_3.4.2     cli_1.0.0
## [19] sandwich_2.4-0   effects_4.0-0      scales_0.5.0
## [22] lmtest_0.9-35    mvtnorm_1.0-7      psych_1.7.8
## [25] blme_1.0-4       digest_0.6.12      foreign_0.8-69
## [28] minqa_1.2.4      rmarkdown_1.8      stringdist_0.9.4.6
## [31] pkgconfig_2.0.1  htmltools_0.3.6    lme4_1.1-14
## [34] pwr_1.2-1        htmlwidgets_1.0    rlang_0.1.4
## [37] rstudioapi_0.7   shiny_1.0.5        bindr_0.1
## [40] zoo_1.8-1        magrittr_1.5        modeltools_0.2-21
## [43] bayesplot_1.4.0  Matrix_1.2-12      Rcpp_0.12.14
## [46] munsell_0.4.3    abind_1.4-5        prediction_0.2.0
## [49] stringi_1.1.6    multcomp_1.4-8     yaml_2.1.15
## [52] merTools_0.3.0   snakecase_0.8.1    carData_3.0-0
## [55] MASS_7.3-47      plyr_1.8.4         grid_3.4.2
## [58] parallel_3.4.2   sjmisc_2.6.3       crayon_1.3.4
## [61] lattice_0.20-35  ggeffects_0.3.1    haven_1.1.0
## [64] splines_3.4.2    sjstats_0.14.0     hms_0.4.0
## [67] estimability_1.2 reshape2_1.4.2     codetools_0.2-15
## [70] stats4_3.4.2     glue_1.2.0         evaluate_0.10.1
## [73] modelr_0.1.1     httpuv_1.3.5       nloptr_1.0.4
## [76] gtable_0.2.0     purrr_0.2.4        assertthat_0.2.0
## [79] ggplot2_2.2.1    mime_0.5           coin_1.2-2
## [82] xtable_1.8-2     broom_0.4.3        survey_3.32-1
## [85] coda_0.19-1      survival_2.41-3    tibble_1.3.4
## [88] arm_1.9-3        glmmTMB_0.2.0      TH.data_1.0-8
```