```r
library(tidyverse)
library(readxl)

df_eval <- readxl::read_excel("data/courseeval_vs_database_SS_2024-05-03.xlsx") %>%
  janitor::clean_names() %>%
  tidyr::separate(col = year_and_semester,
                  into = c("year", "sem"),
                  remove = FALSE) %>%
  dplyr::mutate(course =
                  case_when(stringr::str_match(course_num,
                                               pattern = "STAT 2000") > 0 ~ "STAT 2000",
                            stringr::str_match(course_num,
                                               pattern = "PSY 3010") > 0 ~ "PSY 3010",
                            stringr::str_match(course_num,
                                               pattern = "PSY 6600") > 0 ~ "PSY 6600",
                            stringr::str_match(course_num,
                                               pattern = "PSY 7650") > 0 ~ "PSY 7650")) %>%
  dplyr::mutate(num = response_rate*enrolled) %>%
  dplyr::mutate(year = as.numeric(year)) %>%
  dplyr::mutate(sem = factor(sem, levels = c("Spring", "Summer", "Fall"))) %>%
  dplyr::mutate(course = factor(course)) %>%
  dplyr::mutate(time = (year - 2014)*3 + as.numeric(sem) - 1) %>%
  dplyr::arrange(year, sem) %>%
  dplyr::mutate(time = case_when(sem == "Spring" ~ lubridate::ymd(paste(year,  3, 1, sep = ",
                                 sem == "Summer" ~ lubridate::ymd(paste(year,  6, 15, sep =
                                 sem == "Fall"   ~ lubridate::ymd(paste(year, 10, 1, sep = ",
  dplyr::select(time, year, sem,
                course,
                rate = response_rate, enrolled, num,
                progress_on_objectives,
                excellent_teacher,
                excellent_course,
                summary_evaluation)

df_eval %>%
  dplyr::filter(course %in% c("PSY 6600", "PSY 7650")) %>%
  tidyr::pivot_longer(cols = c(progress_on_objectives,
                               excellent_teacher,
                               excellent_course,
                               summary_evaluation)) %>%
  dplyr::mutate(name = factor(name) %>%
                  forcats::fct_recode("Student Progress on Objectives" =
                                        "progress_on_objectives",
                                      "Excellent: Teacher" = "excellent_teacher",
                                      "Excellent: Course" = "excellent_course",
                                      "Summary" = "summary_evaluation")) %>%
```

```r
  ggplot(aes(x = time,
             y = value,
             group = course)) +
  geom_hline(yintercept = c(37, 50, 62),
             linetype = "dotted") +
  geom_rect(ymin = 45,
            ymax = 55,
            xmin = lubridate::ydm("2015/1/1"),
            xmax = lubridate::ymd("2024/12/31"),
            fill = "gray",
            alpha = .01) +
  geom_line(aes(linetype = course)) +
  geom_point(aes(shape = course),
             size = 2.5) +
  theme_bw() +
  labs(x = NULL,
       y = "Mean Rating vs. IDEA Database",
       linetype = NULL,
       shape = NULL) +
  scale_linetype_manual(values = c("solid", "longdash")) +
  theme(legend.position = "bottom",
        # legend.position = c(0, 0),
        # legend.justification = c(-.1, -.1),
        # legend.background = element_rect(color = "black"),
        legend.key.width = unit(2, "cm")) +
  facet_wrap(~ name, ncol = 1)
```

```r
df_eval %>%
  dplyr::filter(course %in% c("PSY 6600", "PSY 7650")) %>%
  tidyr::pivot_longer(cols = c(progress_on_objectives,
                               excellent_teacher,
                               excellent_course,
                               summary_evaluation)) %>%
  dplyr::mutate(name = factor(name) %>%
                  forcats::fct_recode("Student Progress on Objectives" =
                                        "progress_on_objectives",
                                      "Excellent: Teacher" = "excellent_teacher",
                                      "Excellent: Course" = "excellent_course",
                                      "Summary" = "summary_evaluation")) %>%
  ggplot(aes(x = time,
             y = value,
             group = name)) +
  geom_hline(yintercept = c(37, 50, 62),
             linetype = "dotted") +
  geom_rect(ymin = 45,
            ymax = 55,
```

```r
            xmin = lubridate::ydm("2015/1/1"),
            xmax = lubridate::ymd("2024/12/31"),
            fill = "gray",
            alpha = .01) +
  geom_line(aes(linetype = name)) +
  geom_point(aes(shape = name),
             size = 2.5) +
  theme_bw() +
  labs(x = NULL,
       y = "Mean Rating vs. IDEA Database",
       linetype = NULL,
       shape = NULL) +
# scale_linetype_manual(values = c("solid", "longdash")) +
  theme(legend.position = "bottom",
        # legend.position = c(0, 0),
        # legend.justification = c(-.1, -.1),
        # legend.background = element_rect(color = "black"),
        legend.direction = "vertical",
        legend.key.width = unit(2, "cm")) +
  facet_wrap(~ course, ncol = 1)
```

Teaching Experience: Graduate Level

```r
readxl::read_excel("data/teaching-experience.xlsx") %>%
  tidyr::fill(-why) %>%
  dplyr::filter(level == "grad") %>%
  vitae::detailed_entries(what, when, with, where, why)
```

Fall 2016-present	**Multilevel and Marginal Models**, *PSY 7650*, USU: Psychology Department. ○ Coverage of multilevel (ie, mixed-effects, hierarchical linear) and marginal (ie, GEE) models for both continuous and categorical outcomes. ○ Includes application of these methods to many types of cross-sectional and longitudinal research designs (eg, experimental, case-control, cohort, cross-over, complex sample, randomized controlled trials). ○ Software: R and R Studio ○ Online eBook: all class examples with code and explainations ○ Youtube: Pre-recorded lectures for course when Covid-19 induced a shift to online, asynchronous learing
Spring 2025	**Regression Analysis**, *EDUC 7610/PSY 7610*, USU: Psychology Department. ○ Multiple linear regression and GLM (logisitc) ○ Main effects and interactions with statistical control ○ Software: R and R Studio ○ Online eBook: all class examples with code and explainations

Spring 2015-2024, Summer 2015-2019	**Statistical Foundataions**, *EDUC 6600/PSY 6600*, USU-CEHS: Office of Research Services.

- ○ Research design and statistical concepts for research in education, human services, and psychology, with emphasis on the selection and interpretation of statistical analyses.
- ○ Focus on inference and ANOVA based methods. Includes a combination of traditional face-to-face and distance-site students.
- ○ Software: R and R Studio starting in 2018, SPSS prior
- ○ Online eBook: all class examples with code and explainations
- ○ Assignments online through Atomic Assessment within Canvas
- ○ Youtube: Pre-recorded lectures for course when Covid-19 induced a shift to online, asynchronous learing

Teaching Experience: Undergraduate Level

```
readxl::read_excel("data/teaching-experience.xlsx") %>%
  tidyr::fill(-why) %>%
  dplyr::filter(level == "undergrad") %>%
  vitae::detailed_entries(what, when, with, where, why)
```

Spring 2022   **Psycological Statistics**, *PSY 3010*, USU: Psychology Department.
- Descriptive and inferential statistical methods.
- Focus on behavior statistics and statistical applications.

Spring/Fall: 2005, 2014   **Statistical Methods**, *STAT 2000*, USU:Mathematics and Statistics Department.
- Introduction to statistical concepts, graphical techniques, probability, distributions, estimation, one and two sample testing, chi-square tests, and simple linear regression, one-way ANOVA.
- Software: StatCrunch

2008 Spring, 2007 Spring/Fall, 2006 Fall   **Introduction to Statistics**, *STAT 1040*, USU:Mathematics and Statistics Department.
- Descriptive and inferential statistical methods.
- Emphasis on conceptual understanding and statistical thinking.
- Examples presented from many different areas.
- Software: none

Fall 2004   **College Algebra**, *MATH 1050*, USU:Mathematics and Statistics Department.
- Functions: graphs, transformations, combinations, and inverses.
- Polynomial, rational, exponential, logarithmic functions, and applications.
- Systems of equations and matrices. Partial fractions.
- Software: graphing calculators

Summer 2006   **Intermediate Algebra**, *MATH 1010*, USU:Mathematics and Statistics Department.
- Review of introductory algebra concepts.
- Topics include manipulating and simplifying expressions, solving equations and inequalities, graphing equations, and inequalities.
- Real world applications including linear, quadratic, polynomial, rational, exponential, and radical functions.
- Software: none

Teaching Experience: College-wide Workshops

All sessions target the audience of faculty, research staff, adn graduate students in the college. Starting in the Fall of 2019, the workshops were formalized to all enrollment for continuing education (1 CEU) or standard university credit (0.5 cr), in addition to the pervious a'la cart option.

```r
readxl::read_excel("data/workshops.xlsx") %>%
  tidyr::fill(-why) %>%
  dplyr::arrange(desc(order)) %>%
  vitae::detailed_entries(what, when, with, where, why)
```

Fall 2024 **Intro to Using R for Research**, *Seven 1-hour sessions*, Utah State University.
- Managing and reshaping data
- Quickly creating descriptive tables
- Exploratory and advanced plotting
- Transparent quantitative modeling
- Creating supplemental materials

Spring 2022 **Time-to-Event Analysis, aka Survival Analysis**, *Seven 1-hour sessions*, Utah State University.
- Inferior Models: You must make a choice - censoring and duration of follow-up
- Non-parametric approach: Kaplan Meyer Plots with Log Rank Test (bivariate)
- Semi-parametric approach: Cox Proportional-Hazards Regression (multivariate)
- Extension: Time varying covariates in a Cox model

Fall 2021 **Categorical Data Analysis**, *Seven 1-hour sessions*, Utah State University.
- Exact, permutation/bootstrap, and parametric methods
- GLM: Binary logistic regression
- GLM: Count outcomes: poisson regression, overdispersion, and negative binomial regression
- GLM: Zero inflated models (ZIP and ZINB)

Spring 2021 **Missing Data and Multiple Imputations**, *Seven 1-hour sessions*, Utah State University.
- Missing Data Mechanisms, Implications and Testing
- Historical Methos and Reporting Missing Data
- Multiple Imputations: basic and advanced topics

Fall 2020 **Extensions to Regression**, *Seven 1-hour sessions*, Utah State University.
- Multiple Linear Regression Refresher
- Powerful Publishable Plots: The Grammer of Graphics
- Time-to-Event Modeling: Survival Analysis
- Intro to Multileel and Marginal Modles: MLM, HLM, GEE

Spring 2020 **Common Design Issues**, *Seven 1-hour sessions*, Utah State University.
- Effect Size and Power Analysis uisng G*Power and R
- Propensity Score Matching and Alternatives
- Missing Data and Multiple Imputations

Fall 2019	**Extensions to Regression**, *Seven 1-hour sessions*, Utah State University.

○ Review of Regression (MLR and GLM), including creating tables and figures for publication

○ Time-to-event/Survival Analysis: including KM plots with Log-Rank test (bivariate), Cox-PH_Regression (multivariate)

○ Regularized Regression (Ridge and LASSO)

○ Intro to Multileel and Marginal Modles: MLM, HLM, GEE

2015-2020	**Quantitative Methods: Stand-along Sessions**, *Two-three hour workshop*, Utah State University.

○ Effect Size and Power Analysis uisng G*Power (fall 2015, fall 2017, fall 2018)

○ Exact Methods for Categorical Data in SPSS, R, and StatXact (spring 2018)

○ Exploring your Data with ggplot in R (spring 2016)

○ GEE: General Estimating Equations (spring 2017)

○ Intro to Multilevel and Marginal Modles: MLM, HLM, GEE (spring 2018, spring 2019)

○ Intro to R and Rstudio for Absolute Beginners (fall 2015)

○ Intro to R: The Tidyverse (fall 2016)

○ Logistic Regression (fall 2017)

○ Missing Data and Multiple Imputations (fall 2018)

○ Multiple Linear Regression Refresher in SPSS and R (spring 2018)

○ Powerful Publishable Plots: The Grammer of Graphics (spring 2016, fall 2018)

○ Random Forests: Classificantion and Regression Trees (spring and fall 2017, spring 2019)

○ Reproducible Workflow: Intor to SPSS via syntax (spring 2018)

○ Time-to-Event Modeling: Survival Analysis with SPSS and R (spring 2018, spring 2019)

▬▬▬ Talks

```
readxl::read_excel("data/talk.xlsx") %>%
  tidyr::fill(-why) %>%
  dplyr::arrange(desc(order)) %>%
  vitae::detailed_entries(what, when, with, where, why)
```

Feb 2024   **Food for Thought Speaker Series**, *Instructional Technology and Learning Sciences Department*, USU - College of Education and Human Services.
- Invited by: Hillary Swanson
- Topic: USU-CEHS quantitatie methods course offerings and the CARMA certificate

April 2022   **Internal Training**, *Institutional Review Board*, Utah State University.
- Invited by:
- Topic: Power and Sample Size Considerations in Human Subjects Research

April 2021   **Guest lecturer: HDFS 7200: Meta Analysis**, *Human Development and Family Studies Department*, USU - College of Education and Human Services.
- Invited by Dr. Diana Meter, instructor of the course
- Topic: Meta-analysis for single subject design studies

Sept 2020   **Brown Bag Series: Meta-analysis**, *Office of Research Services*, USU - College of Education and Human Services.
- Invited by Dr. Shawn Whiteman, CEHS Associate Dean for Research
- Topic: Meta-analysis for single subject design studies

Nov 2019   **Guest preseter, College-wide Seminar**, *Office of Research Seminar*, USU - College of Agriculture and Applied Sciences.
- Invited by Dr. Abby Benninghoff to present to all college faculty.
- Topic: Powerful Publishable Plots, Best strategies for data visualization
- Also covered: Creating plots that reveal your data and communicate complex ideas with clarity and precision.

Jan 2019   **Seminar: Data Analytics Student Seminar Series**, *Math and Stat Department*, USU - College of Science.
- Invited by the chapter perseident to present to the student group.
- Topic: What should I git? Getting started with Git and GitHub
- Also covered using the GitKracken interface for version control and collaborative research.