# Bid Analysis

## Load Libraries

```r
install.packages("tidyverse")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4      v readr     2.1.5
## v forcats   1.0.0      v stringr   1.5.1
## v ggplot2   3.5.1      v tibble    3.2.1
## v lubridate 1.9.3      v tidyr     1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```r
install.packages("ggplot2")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library(ggplot2)
install.packages("here")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library("here")
```

```
## here() starts at /Users/luanjiechen/Desktop/Personal Projects/bidding_analysis/Code
```

```r
install.packages("skimr")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library("skimr")
install.packages("janitor")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library("janitor")
```

```
##
## Attaching package: 'janitor'
##
## The following objects are masked from 'package:stats':
##
##     chisq.test, fisher.test
```

```r
install.packages("dplyr")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library("dplyr")
install.packages("readxl")
```

```
##
## The downloaded binary packages are in
##  /var/folders/49/cyj4306s591c7v890zddyx_c0000gn/T//RtmpcWEFjN/downloaded_packages
```

```r
library(readxl)
```

## Prepare the data

```r
library(dplyr)
library(readxl)

# Define the years and initialize an empty list to hold data frames
years <- c("2021-22", "2022-23", "2023-24")
bidding_data_list <- list()

# For loop to read datasets for each year and add them to the list
```

```
for (year in years) {
  file_path <- paste0("../bidding_data/", year, "_T1.xls")
  temp <- read_excel(file_path)
  temp <- temp %>% mutate(Year = year)
  bidding_data_list[[year]] <- temp
}

# Combine all data frames in the list into a single data frame
bidding_data <- bind_rows(bidding_data_list)
```
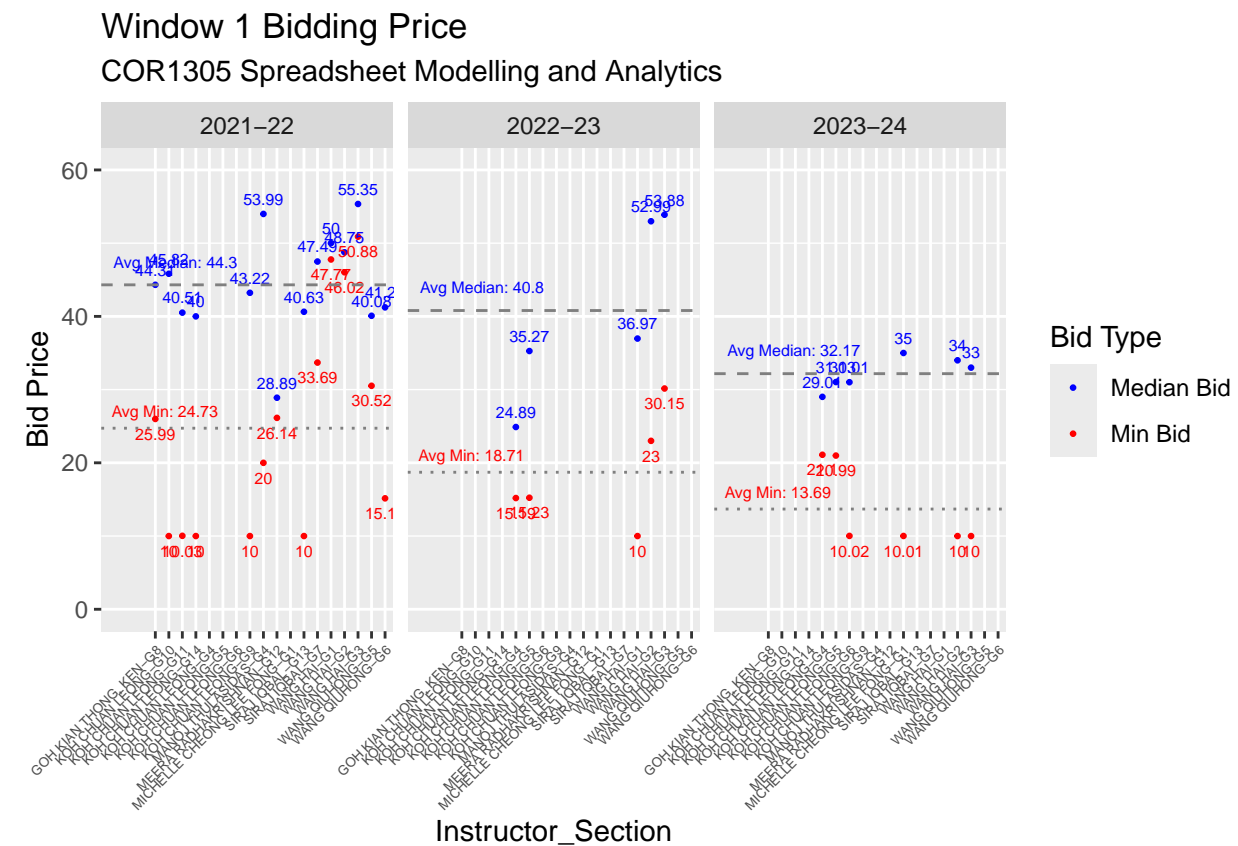
## Module Information

```
course <- "COR1305" #edit intended course
course_name <- "Spreadsheet Modelling and Analytics" #edit intended course name
semester <- "Y2S1"
max_range <- 60
instructor <- "WANG HAI"
```

## Plot 1 -> Bidding Price vs ALL Instructor

**Plot 2 -> Bidding Price vs SPECIFIC Instructor**

## Window 1 Bidding Price
### COR1305 Spreadsheet Modelling and Analytics