



# Please start with Communication Check In

Link is in Moodle AA 505 in  
Technical Communication



# Homework Reports, Dry Runs, and Presentations

- [Writing Best Practices for Homework and Practicum Report](#)

# Practicum Report Classes 2024

Dr. Sarah Egan Warren





# Practicum Report Class #1

# Spring Semester

Month	COMPLETED IN SUMMER & FALL
June	TIPS Intro
June	Communication Overview
June	Tech Comm Introduction
July	Introduction to Technical Writing
July	TIPS Presentations
July	Thanks for the Feedback
July	Summer Practicum Presentations
August	Communication Week
August	Writing and Blogging
August	Ethical Considerations for Data Professionals - 1
August	Homework Reports
August	Ethical Considerations for Data Professionals- 2 Emily Hadley
August	Ethical Considerations for Data Professionals - 3
August	Storytelling 1
September	Ethical Considerations for Data Professionals - 4
September	<Optional> Improv4All
September	Storytelling 2
September	Practicum Communication Leads Best Practices
September	Ethical Considerations for Data Professionals- 5 Patrick Hall
September-October	Ethical Considerations for Data Professionals- Practicum meetings
September-October	Presentation Consultations
October	Faculty Workshop Dashboards
October	Viz Presentations
October	Text Presentations
November	Faculty Workshop Online Presentations
November	Side Projects
November	Midpoint Slide Review
November	Midpoint Dry Run
December	Midpoint Presentations

Month	SPRING
January	<Optional> Improv4All
January	Practicum Report Draft 1
February	Practicum Report Draft 2
March	Unconscious Bias Workshop
March	Practicum Report Draft 3
March/April	Practicum Report to faculty
April	Slide Reivew
April	Final Dry Run
April	Final Faculty Presentation
April/May	Final Dr. Rappa Presentation
April/May	Final Sponsor Presentation



## Draft 1

Using the **template**, **start** preparing report.

Expectation: Title page, headings, updated TOC, early content (lists, tables, figures, appendix, plan for content).

Grade: ✓ -, ✓ , ✓ +

This is the draft to get the formatting and styles figured out.

## Draft 2

Make changes from comments on Draft 1.

Add **significant** content.

Expectation:  
Substantive content.  
Report does not need to be finished.

Grade: ✓ -, ✓ , ✓ +

## Draft 3

Make changes from comments on Draft 2.

**Finalize** report.

Expectation: Ready for **FINAL Tech Comm review** prior to Technical review.

Grade: ✓ -, ✓ , ✓ +



**ALL YOU NEED IS  
MOTIVATION**

**FALSE: YOU NEED FEAR AND AN  
APPROACHING DEADLINE**



### Practicum Report **Draft 1 JANUARY 23 (8am)**

- Reviewed by Dr. Egan Warren and Hiya/ Macayla
- Team applies changes to Draft 2

### Practicum Report **Draft 2 MARCH 3 (midnight)**

- Reviewed by Dr. Egan Warren and Hiya/ Macayla
- Team applies changes to Draft 3 Final

### Practicum Report **Draft 3 Final MARCH 20\***

- Reviewed by Dr. West, Dr. Egan Warren, and Hiya/ Macayla
- Team applies changes to Final for Faculty

### Practicum Report **Final for Faculty**

- Reviewed by Dr. Healey, Dr. Simmons, Dr. LaBarr, or Dr. Villanes
- Team applies changes to Final for Dr. Rappa

### Practicum Report **Final for Dr. Rappa**

- Reviewed by Dr. Rappa
- Team applies changes to Final for Sponsors

### Practicum Report **Final for Sponsors**





### Practicum Report **Draft 1** **JANUARY 23 (8am)**

- Reviewed by Dr. Egan Warren and Hiya/ Macayla
- Team applies changes to Draft 2

### Practicum Report **Draft 2** **MARCH 3 (midnight)**

- Reviewed by Dr. Egan Warren and Hiya/ Macayla
- Team applies changes to Draft 3 Final

### Practicum Report **Draft 3 Final** **MARCH 20\***

- Reviewed by Dr. West, Dr. Egan Warren, and Hiya/ Macayla
- Team applies changes to Final for Faculty

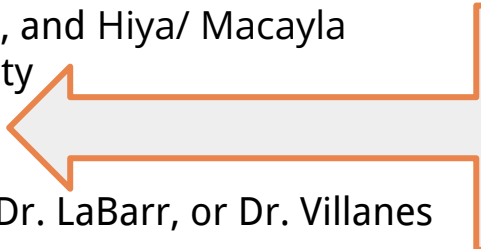
### Practicum Report **Final for Faculty**

- Reviewed by Dr. Healey, Dr. Simmons, Dr. LaBarr, or Dr. Villanes
- Team applies changes to Final for Dr. Rappa

### Practicum Report **Final for Dr. Rappa**

- Reviewed by Dr. Rappa
- Team applies changes to Final for Sponsors

### Practicum Report **Final for Sponsors**



Pre-Presentation  
Review of slide  
deck and dry run



# Moodle Resources

# Support

## ScheduleOnce Meetings

Meet with Dr. Egan Warren, Hiya, or Macayla for consultation or questions

# Report Organization

Big Picture

~10 to 50 pages

Very technical and detailed content **in Appendix**

Front Matter

Title page, Abstract\*, TOC, List of Figures, List of Tables, Executive Summary\*

Body

Title, Introduction, Main sections divided into subsections, Figures, Tables, Conclusion

Back Matter

Appendix/Appendices

References

Other



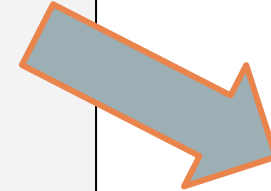


# Abstract Vs. Executive Summary

## Abstract: *Descriptive*

Helps readers decide if they want to read the document

- Appears on the cover page
- Is written for all readers
- Can be written before report
- Provides (in 3-4 sentences):
  - ☐ Who wrote the report (graduate students at IAA)
  - ☐ Why you wrote the report (8-month practicum project)
  - ☐ What the report covers
- You CAN start drafting now



|

**Descriptive Title of the Report in 24pt**

**Team Member Names listed in some logical order in 20pt**

**Date (the date you will submit to sponsor) in 20pt**

**Abstract in 18pt**

Briefly state the report's main purpose in the abstract. The text is 11pt and full justified (Note: this is the only part of the report that is full justified). Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent eu facilis massa, eu posuere velit. Nunc blandit pharetra turpis nec egestas. Sed quam lectus, lobortis euismod, lectus vitae, lectus mollis nulla. Vivamus eget erat leo. Vivamus nisi diam, bibendum mollis. Fusce in, consectetur ac arcu. Duis ut tristique posuere erat sodales lacinia. Aliquam, dolor quam, eleifend at fermentum nec, eleifend nec libero. Nam nec augue, a libero molestie lacinia id a velit. Pellentesque id magna justo. Maecenas convallis ex elit, ut molestuada tellus ut tristique.



# Abstract Vs. Executive Summary

## Executive Summary: Actionable

Helps readers make decisions about the findings

- Appears on its own (~2 pages)
- Is written for managerial audiences
- Should be finalized after report (mostly)

**You CAN start drafting now**

- Provides (in ~2 pages):
  - A capsule version of the report
  - Only the MOST important information
  - A stand-alone summary
  - Can include visuals

### Executive Summary

#### Objectives

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu facilisis massa, eu posuere velit. Nunc blandit pharetra turpis nec egestas.

1. Sed quam lectus, lobortis quis lorem vitae, lacus mollis nulla.
2. Vivamus eget erat leo. Vivamus nisi risus, finibus mollis faucibus in, consectetur ac arcu.
3. Fusce ultricies tincidunt erat sodales laoreet.

Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero. Nam nec augue a libero molestie interdum id a velit. Pellentesque id magna justo. Maecenas convallis ex elit.

#### Methodologies

Pellentesque id magna justo. Maecenas convallis ex elit, ut malesuada tellus ultricies et. Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero. Nam nec augue a libero molestie interdum id a velit. Pellentesque id magna justo. Maecenas convallis ex elit.

Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero. Nam nec augue a libero molestie interdum id a velit. Pellentesque id magna justo. Maecenas convallis ex elit, ut malesuada tellus ultricies et. Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero.

#### Findings

Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero.

1. Nam nec augue a libero molestie interdum id a velit. Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero. Nam nec augue a libero molestie interdum id a velit. Pellentesque id magna justo. Maecenas convallis ex elit, ut malesuada tellus ultricies et. Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero. Nam nec augue a libero molestie interdum id a velit. Pellentesque id magna justo. Maecenas convallis ex elit, ut malesuada tellus ultricies et. See Figure 1 below.
2. Pellentesque id magna justo. Aliquam dolor quam, eleifend at fermentum nec, placerat nec libero. Nam nec augue a libero molestie interdum id a velit. Pellentesque id magna justo. Maecenas convallis ex elit, ut malesuada tellus ultricies et. See Figure 1 below.

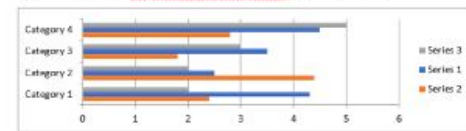


Figure 1: Descriptive Caption

#### Recommendations

Maecenas convallis ex elit, ut malesuada tellus ultricies et. Phasellus eu facilisis massa, eu velit. Turpis nec egestas. Pellentesque id magna justo. Maecenas convallis ex elit, ut malesuada tellus ultricies et. Maecenas convallis ex elit, ut malesuada tellus ultricies et.

- Phasellus eu facilisis massa, eu velit. Turpis nec egestas. Aliquam dolor quam.
- Maecenas convallis ex elit, ut malesuada tellus ultricies



# Writing Best Practices

Avoid cutting and pasting content from  
Executive Summary into the Introduction or Conclusion.





# Body

Chunked information with descriptive headings

- Introduction (BLUF!) and forecast
- Methods
- Findings
- Full Recommendations
- Next steps/Stretch Goals

**IT  
DEPENDS!**



# Back Matter

Technical details that are not needed in the body.

- Appendix
  - ☐ Code (pieces of code if relevant)
  - ☐ Data
  - ☐ Figures
  - ☐ Tables
- References
- Other

**IT  
DEPENDS!**




# Template



# Template

- Open in Practicum Server
- Save with file naming conventions
  - **Practicum SPONSOR Name Draft 1**  
**Example: Go Daddy Draft 1.docx**
- Work in that document to take advantage of the template functions
- If something isn't working properly, let SEW know right away



This is my  
GIFT to you!



# Word STYLES

- [LinkedIn Learning Videos about using Word](#)
- Use the Template–styles are already there!
- Ask for help

Quick STYLES DEMO at the end of class.



# Sample Headings Example 1

## Executive Summary

- Background and Methods
- Results
- Recommendations

## Introduction

- Project Purpose and Overview
- Forecast

## Data

- Data Preparation
- Data Verification
- Entity Relationship Diagram
- Exploratory Analysis
- Creation of Analysis Dataset

## Methods

- Model Development
- Final Model Variables

## Results

## Recommendations

## Conclusion

Use the  
template!



## Sample Headings Example 2

### Executive Summary

- Challenge
- Action
- Solutions

### Challenge (Introduction)

- Background
- Forecast

### Importing Data and Anomaly Detection

### Initial Subsetting

### Data Filters

- Gephi Filter
- Filter Modifications
- Maximum Sources Allowed
- Show Neighbors

### Validation

- Validation Results

### Solutions

### Next Steps

### Conclusion

Use the  
template!



## Sample Headings Example 3 (two ways)

### Executive Summary

- Situation 1
- Situation 2
- Recommendations

### Introduction

- Background
- Forecast

### Standardization and Data Cleaning

### Modeling

- Situation 1
  - Final Model
  - Leading Factors
  - Scoring
  - Actionable Measures
- Situation 2
  - Final Model
  - Leading Factors
  - Scoring
  - Actionable Measures

### Conclusion

### Executive Summary

- Situation 1
- Situation 2
- Recommendations

### Introduction

- Background
- Forecast

### Standardization and Data Cleaning

### Modeling

#### Final Model

- Situation 1
- Situation 2

#### Leading Factors

- Situation 1
- Situation 2

#### Scoring

- Situation 1
- Situation 2

#### Actionable Measures

- Situation 1
- Situation 2

### Conclusion

Use the  
template!





Adapt to **YOUR** audience.



**Communication Leads** should reach out to **SEW** to discuss any requests or concerns about report requirements.

# Due Date Reminder

**Draft 1 due by Jan 23 by 8am**

- You can use comments to leave notes or questions for SEW
- If you submit early, send SEW an email

Submit to **Faculty Review Shared Folder**.

Remember to use file naming conventions:

- **Practicum SPONSOR NAME Draft 1**  
**Example: Go Daddy Draft 1.docx**

Slight detour, but related...

# Presentation Support

**No class presentations in spring\***

- Interview presentation support
- One-on-one or team support
- MSA Share 20
- Improv on Mondays 8-8:55am in Elm
- Side Project Poster Session
- Slide review and dry run (required)

# Optional Side Project Poster Session

**Highlight your work at our annual MSA Poster Session**

- Showcase your work
- Present on Monday 1/22 at lunchtime
- See Side Projects [slides](#)

# Resources & Getting Started

Template - on the practicum server  
ALL TEAMS Documentation (Q:)

Style Guide and Checklist - on Moodle AND practicum server

Q&A



# Draft 1

## Check Minus

- Did not use the template
- Did not update headings or labels on Figures or Tables
- Missing or late

## Check

- Title Page Drafted
- Updated headings, TOC, List of Figures, List of Tables
- Early content, bulleted/numbered lists, early drafts of figures/tables...

## Check Plus

- Title Page Drafted
- Updated headings, TOC, List of Figures, List of Tables
- Some significant content and detailed plans



# STYLES DEMO



# Practicum Report Class #2





# Please start with Communication Check In

Link is in Moodle in the  
Technical Communication section



# Draft 1 Returned

Context for all teams

	Average	Minimum	Maximum
<b>Revisions</b>	176	73	325
<b>Comments</b>	51	15	99
<b>Pages</b>	17	13	23
<b>Words**</b>	2508	672	4262



# Draft 1 to Draft 2

**Draft 1 Comments/Changes available in your folder  
(Review Tab > Select All Mark Up)**

**File naming: Sponsor Name Draft 1 SEW and HB (or) MG.docx**  
SAVE and rename file: Sponsor Name Draft 2

## Work in Draft 2

(do **not** accept changes, resolve, or edit in Draft 1)

DELETE comments after you address them or add a reply  
(do not just “resolve” them)

Show Word  
Doc Example



## Draft 1



Using the **template**, **start** preparing report.

Expectation: Title page, headings, updated TOC, early content (lists, tables, figures, appendix, plan for content).

Grade: ✓ -, ✓ , ✓ +

This is the draft to get the formatting and styles figured out.

## Draft 2

Make changes from comments on Draft 1.

Add **significant** content.

Expectation:  
Substantive content.  
Report does not need to be finished.

Grade: ✓ -, ✓ , ✓ +

Delete completed Comments and Address ALL Word Grammar indicators

## Draft 3

Make changes from comments on Draft 2.

**Finalize** report.

Expectation: Ready for **FINAL Tech Comm review** prior to Technical review.

Grade: ✓ -, ✓ , ✓ +

Delete completed Comments and Address ALL Word Grammar indicators

# Grammar Check

Optimize Microsoft Word **Grammar Checker** & use it!

- *Review Tab*
- *Right Click on Spelling & Grammar*
- *Click on Proofing*
- *Select Settings on Grammar*



Write for your  
AUDIENCE  
=  
Your Sponsor



# Introduction(s)

## CONTEXT

- Explains the problem/motivation for project
- States the aims of the project and report

## ACTION

- Reviews the work you have done

## CONTENT

- Bottom Line
- Forecast

# Introduction

## Overlap

Both the executive summary and the body of the report have an introduction.

## Executive Summary

Introduction is concise and shorter than introduction in the body of the report.

## Report Body

Introduction includes more detail than Executive Summary introduction and uses more forecasting.

## Background

Details about background appear in section/subsection in the introduction in the body of the report.





## Executive Summary Introduction Example

The US government is interested in using Unmanned Air Vehicles (UAVs) for military purposes, but difficulties with determining altitude accurately as well as heavy communication hardware have made production of UAVs impractical. Therefore, the government asked EG Consulting to develop a prototype for a UAV to be used for military purposes. Our team developed a light-weight, real-time system to reliably determine the altitude of a UAV from the ground.

**Include a  
quantifiable BLUF  
here!**

This executive summary describes the system, offers the results from field tests, and provides recommendations for future work.

Adapted from [Writing an Engineering technical report - Research & Learning Online \(monash.edu\)](https://www.monash.edu/research/learning/online/writing-an-engineering-technical-report)



# Report Introduction Example

Unmanned Air Vehicles (UAVs) are increasingly being used for military purposes, particularly since technical advances have increased their range. One barrier to the greater use of UAVs, however, is the fact that altitude can be difficult to ascertain at long range by ground-based 'pilots.' Also, traditional altitude determination systems require heavy radio communication hardware to be carried aboard the aircraft, reducing fly times and adding to operational costs.

To address these concerns, the US government asked EG Consulting to fulfill the following objectives:

1. Develop a light-weight, real-time system to reliably determine the altitude of a UAV from the ground.
2. Increase fly times by using less instrumentation.
3. Create a vision-based system that requires no communication between the UAV and a base station so that information cannot be intercepted.

We met all three objectives by creating a correlation algorithm that compares known geometrical parameters with parameters calculated from the vision system, allowing three-dimensional information to be extracted from a single image in real-time. This light-weight, real-time system reliably determines the altitude of a UAV from the ground.

**Include a quantifiable BLUF here!**

This report details the findings of our work. It begins with a detailed description of the system design and operation. The results of laboratory and field tests on the prototype under a range of conditions are then presented and analyzed. Finally, limitations of the project are discussed, and recommendations are made for future work.

Adapted from [Writing an Engineering technical report - Research & Learning Online \(monash.edu\)](https://www.monash.edu/research/learning/online/writing-an-engineering-technical-report)



# Body

## DRAFTING

- Forecasting
- Tense
- Conclusion
- General

## DESIGNING

- Formatting
- *Use the template*
- Headings
- *Use the template*
- Page numbers
- *Use the template*

## SHOWING

- Figures
- Tables



# Drafting



# Forecasting

**Include forecasting for each Heading**

“This section details the data cleaning process and the model building used for meeting Objective 2: Forecasting Sales.”



# Forecasting

**Include forecasting for each Heading**

“This section details the data cleaning process and the model building used for meeting Objective 2: Forecasting Sales.”

**When appropriate, connect CURRENT section to PREVIOUS section**

“While the previous section detailed our teams’ approach to building a model to forecast sales, this section highlights our recommendations based on our model’s results.”



# Tense

## PAST

- What you finished
- Used for most of the report

“The team cleaned...”

“We selected...”

## PRESENT

- What will always be true
- Used throughout the report

“The purpose of this report is...”

“Figure 3 shows...”

## FUTURE

- What are future impacts
- Used mostly in Next Steps or Recommendations

“These changes will...”

“Additional data collection will...”



# Conclusion

**Concise summary of overall report**

**Next steps / Forward-looking statement(s)**





# General

## Avoid

- **Teach-y sections**
- **Student-y references**
  - fall and spring semester
- **Aspirational writing**
  - “We set out to accomplish these goals.”
  - “We needed to decide whether...”



# Designing



# Lists

Lists can include words, phrases, or sentences but NOT a mix.

Numbered list - specific order or hierarchy

Bulleted list - order does not necessarily\* matter

Use a lead-in or introductory statement before a list.

- If the introductory statement is a complete sentence, it should be followed by a colon.

Keep the following in mind when using lists:

- Include a period after every point that is a sentence.
- Use parallel structure.

**Use the  
template!**

**Refer to  
the style  
guide.**



**Showing**



# Figures and Tables

## Dos

- Put right after reference in text.
- Label appropriately: title, number, caption.
  - Captions are in 11 point.
  - Captions for Tables appear ABOVE. *"Table Top"*
  - Captions for Figures appear BELOW. *"Figure Floor"*
- Start with Figure 1 in Executive Summary and continue numbering **through** appendix.
- Use a colon to separate the illustration type and number from the description.
  - Figure 1: Challenge complexity
  - Table 1: Top ten incorrect city-state combinations

Use the  
template!


Refer to  
the style  
guide.



# Figures and Tables

## Don'ts

- Don't split tables over 2 pages.\*\*
- Don't write "see figure below."
  - Use actual figure number.
  - Correct: "Figure 3 shows the sales in the first quarter."
- Don't include variable names.

 \$\$date.csv = sales\_20130226.csv

 Sales

Use the  
template!

Refer to  
the style  
guide.



# Styles in Word

If you have issues with TOC, page #, formatting, please contact me before Draft 2 due date.



# Writing

## CONCISION

Brief but  
comprehensive

## PRECISION

Exact and accurate

## REVISION

Changes to improve

\*During Class 3





# Concision



# Strategies

- Create manageable sentences & paragraphs.
  - Sentences ~15-20 words
  - Paragraphs ~100-150 words
- Avoid nominalizations.
- Eliminate dummy subjects.
- Reduce wordy constructions.

**Use the  
checklist.**

**Refer to  
the style  
guide.**



# Avoiding Nominalizations

Nominalizations are **nouns that are created from adjectives (words that describe nouns) or verbs (action words)**.

We **have made an estimation** that you will **need an initial investment of** between \$290,000 and \$605,000.

(17 words)

We **estimate** that you will **initially invest** between \$290,000 and \$605,000.

(11 words)



# Avoiding Nominalizations

- in violation of —**violate**
- provide an illustration of —**illustrate**
- conduct an examination of —**examine**
- make provision for —**provide for**
- make a contribution —**contribute**
- provide a description of —**describe**
- submit an application —**apply**
- take into consideration —**consider**
- in preparation for —**to prepare for**
- have a discussion about —**discuss**
- take into consideration —**consider**
- have a discussion about —**discuss**
- provide responses —**respond**
- make inquiry —**inquire**
- provide assistance —**assist**
- place a limitation upon —**limit**
- provide protection to —**protect**
- reach a resolution —**resolve**
- makes mention of —**states or says**
- are in compliance with —**comply**



# Eliminating Dummy Subjects

Common expressions of dummy subjects: “**It is**” and “**There are**”

**It is** important to clean the data before attempting to complete the assignment.

Clean the data before beginning the assignment.

**There are** many ways students can interpret large datasets.

Students can interpret large datasets in many ways.



## Reducing Wordy Constructions (example 1)

Original:        We made the decision to develop a new model.\*

Better:         We were able to develop a new model.

Best:            We developed a new model.



## Reducing Wordy Constructions (example 2)

Drop unnecessary modifiers (such as very, really, and extremely) and **quantify** instead.

Original:           The model performed extremely well.

Better:            The model performed better than the original model.

Best:              The model outperformed the original model by achieving a 95% accuracy rate.\*

Remember the  
Talk Like an Analyst Exercise?



# Precision





# Level of Detail

Be **specific** and **quantify**.

Less precise: “The development rate was fastest in the higher temperature treatment.”

More precise: “The development rate in the 30°C temperature treatment was 10% faster than the development rate in the 20°C temperature treatment.” \*

Remember the  
Talk Like an Analyst Exercise?



Remember the  
Talk Like an Analyst Exercise?

## Level of Detail examples

We were able to identify key attributes of potential customers who may wish to buy products.

What are those “key attributes”? Which products?

Figure 1 shows that our recommended model generated relatively accurate predictions.

What does “relatively accurate predictions” mean? MAPE?

Our model is better than the one currently being used.

What does “better” mean? By how much?



## Avoid Suggesting You Didn't Do the Work

We wanted to identify the variable that...

Instead use: **We identified...**

We aimed to determine the best...

Instead use: **We determined the best...**

Our intention was to compare the...

Instead use: **We compared...**



# Questions

# Due Date Reminder

**Draft 2 due by March 3 by midnight**

- You can use comments to leave notes for SEW
- Moodle Resource - Practicum Report Checklist

# Presentation Support

## No class presentations in spring

- Interview presentation support
- One-on-one or team support
- MSA Share 20
- Improv on Mondays 8am
- Slide review and dry run (required)

**Reach out for  
the support  
you need!**



# Practicum Report OPTIONAL Q&A



## Draft 1



Using the **template**,  
**start** preparing report.

Expectation: Title page,  
headings, updated TOC,  
any early content  
(bulleted lists, tables,  
figures, appendix).

Grade: ✓ -, ✓ , ✓ +

## Draft 2

Make all changes from  
comments & accept  
changes on Draft 1.

Add **significant** content.

Expectation:  
Substantive content.  
Report does not need to  
be finished.

Grade: ✓ -, ✓ , ✓ +  
Delete completed Comments and  
Address ALL Word Grammar indicators

## Draft 3

Make all changes from  
comments on Draft 2.

Finalize report.

Expectation: Ready for  
**FINAL Comm review** prior  
to Technical review.

Grade: ✓ -, ✓ , ✓ +

Delete completed Comments and  
Address ALL Word Grammar indicators





# Practicum Report Class #3



# Please start with Communication Check In

Link is in Moodle in the  
Technical Communication section



## Draft 1



Using the **template**,  
**start** preparing report.

Expectation: Title page,  
headings, updated TOC,  
any early content  
(bulleted lists, tables,  
figures, appendix).

Grade: ✓ -, ✓ , ✓ +

## Draft 2



Make changes from  
comments on Draft 1.

Add **significant** content.

Expectation:  
Substantive content.  
Report does **not** need  
to be finished.

Grade: ✓ -, ✓ , ✓ +

## Draft 3 **and DRAFT of ppt\***

Make ALL changes from  
comments on Draft 2.

Finalize report.

Expectation: Ready for  
**FINAL Tech Comm**  
**review** prior to  
Technical review.

Grade: ✓ -, ✓ , ✓ +



# PPT Draft

- Early draft of Final Presentation
- Title slide, BLUF, Agenda, Main Sections
  - Use Midpoint design (unless you got feedback about issues)
- Early visuals, early text
- Use feedback from Midpoint. What did the technical faculty like? What did the sponsors like? Did you get a template or guidance from your sponsors?

## What Midpoint Information to Include?

- It Depends!
- Review and reorient



Your report should should read as **ONE voice**.

Your team has created a **shared document** that is the responsibility of the whole team.

The needs of your **audience** must be the focus of the entire report.

# Review and accept all changes in Draft 2.



Discuss and address all comments.

- If a comment is problematic (*wrong, changes meaning, unclear*), ask or reply to the comment in Draft 3.
- Check and fix throughout/Recurring
  - Use CTRL F and make sure you are consistent

Comments that are questions are QUESTIONS and need answers.

- The answer could be “no”  
(*Does your audience want more detail here? Can you quantify this? Should this order be ranked differently?*)



## Follow instructions on Draft 2

- Accept changes from Draft 2
- Delete comments once you have addressed them
  - Do not just “resolve” the comments
  - For Draft 3 only keep comments that are questions/explanations for SEW, GTAs, or Dr. West
- Be sure to accept all changes your team makes on Draft 3 before submitting



# Editing

## CONCISION

Brief but  
comprehensive

## PRECISION

Exact and accurate

## REVISION

Changes to improve





# Revision



- Check for consistent **capitalization** throughout.
- Use the same **terms**.
- Verify consistent **spelling**.
- Format **tables / figures** the same throughout the report.
- Optimize Microsoft Word **Grammar Checker** & use it!
  - *Review Tab*
  - *Right Click on Spelling & Grammar*
  - *Click on Proofing*
  - *Select Settings on Grammar*
- Go through the **checklist** as a team.  
(checklist on Moodle and ALL TEAMS Documentation Q)

# Practicum Report Checklist Handout on Moodle



**Read the first section in the executive summary and the introduction to the report.**

- Does each section use the **CAC** method?
  - Does it provide **context** about the business problem itself (including the objectives given to your team), not about the sponsor?
  - Does it briefly touch on **what your team did** to address the problem?
  - Does it end with a **forecasting statement about the content** of the executive summary or report?
- Is the writing concrete and **not aspirational**? \*SEE NEXT SLIDE
  - Concrete: We achieved our goals by \_\_\_\_\_. We did \_\_\_\_\_.
  - Aspirational: Our goals were to \_\_\_\_\_. We hoped to accomplish \_\_\_\_\_.
- If there are different phases or separate methodologies, is this structure introduced in the introduction?
- Are the paragraphs brief (no longer than about 150 words)?
- Does each paragraph have a topic sentence?
- Do bulleted/numbered lists use parallel structure? Do they avoid being split between 2 pages?



# Aspirational VS Actual

**Aspirational:** We needed to clean the data. X

**Actual:** We cleaned the data.

**Aspirational:** We wanted to check for irregular spellings. X

**Actual:** We checked for irregular spellings.

**Aspirational:** We felt we would need to use logistic regression. X

**Actual:** We used logistic regression.

**Aspirational:** We wanted to include some additional variables. X

**Actual:** We included 11 additional variables.

**\*\* Actual AND quantified!**

# Practicum Report Checklist Handout on Moodle



## Read the methodology and analysis sections.

- Do these sections primarily use past tense? Use present tense when referencing what is shown in a specific figure/table/section. Use future tense when referencing future outcomes/next steps/recommendations.
- Are there any portions that seem overly teachy?
- Does every level 1 heading have a forecasting statement?
- Are the paragraphs brief (no longer than about 150 words)?
- Does each paragraph have a topic sentence?
- Do bulleted/numbered lists use parallel structure? Do they avoid being split between 2 pages?
- Is the writing concrete and **not aspirational**?
  - Concrete: We achieved our goals by \_\_\_\_\_. We did \_\_\_\_\_.
  - X Aspirational: Our goals were to \_\_\_\_\_. We hoped to accomplish \_\_\_\_\_.

# Practicum Report Checklist Handout on Moodle



## **Read the results and recommendations section.**

- Do these sections primarily use past tense? Use present tense when referencing what is shown in a specific figure/table/section. Use future tense when referencing future outcomes/next steps/recommendations.
- Are there any portions that seem overly teachy?
- Does every level 1 heading have a forecasting statement?
- Are results quantified and supported by numbers when appropriate?
- Are the paragraphs brief (no longer than about 150 words)?
- Does each paragraph have a topic sentence?
- Do bulleted/numbered lists use parallel structure? Do they avoid being split between 2 pages?

# Practicum Report Checklist Handout on Moodle



## **Read the conclusion and appendices.**

- Is there a conclusion? Remember, you shouldn't end with recommendations/next steps. You need some content to bring everything together, even if you don't have a separate section heading titled "Conclusion."
- Are the paragraphs brief (no longer than about 150 words)?
- Does each paragraph have a topic sentence?
- Do bulleted/numbered lists use parallel structure? Do they avoid being split between 2 pages?
- Do the appendices have a title page?
- Do the appendices have a table of contents listing each appendix and its corresponding page number?
- Is the table of contents for the appendices numbered with continuous pagination (page numbers do not start over in the appendix)?
- Does each appendix include a letter (A, B, C,...) and descriptive title?

# Practicum Report Checklist Handout on Moodle



## **Review all figures and tables.**

- Are all figures and tables numbered sequentially, starting with Figure/Table 1 in the executive summary and ending in the appendix (make sure numbers match with the introductions in the text)
- Are all figures labeled with captions below the figure? Are all tables labeled with captions above the table?
- Are all figures and tables introduced before being shown?
- Are numbers in tables right aligned so that place values line up?
- Do all figures and tables avoid use of variable names?\*
- Do tables avoid being split between 2 pages?
- Do figures and tables appear close to where they are introduced?
- Are all figures and tables positioned the same way (centered or left aligned, captions appear in the same place)?
- Are all figures and tables easy to read with large enough text, no blurry images, and appropriate color scheme (no green and red)?
- Does each illustration include a title with the following information:
  - Type (table or figure)
  - Number
  - Descriptive title



# Practicum Report Checklist Handout on Moodle



## **Review entire report.**

All teammates should look for the following issues:

- Consistency in terms: how you refer to your team, the sponsor, variable names, dataset vs. data set, etc.
- Consistency in capitalization: statistical concepts (only those named after people should be capitalized), variable names, etc.
- Consistency in grammar: [MSW grammar checker](#), [common grammar errors](#)



# Advice from previous reports...

- Remember different faculty have different preferences
- Flag elements in tables to show where to look (color or additional column or text in bold)
- Avoid variable names in report when possible
- Indicate order of magnitude for lists or tables... or alpha
  - In the introduction to the list, indicate order (The following list shows X in descending order of significance)
- Use “insights about” instead of “insights into” or “insights on”
- Choose a common method of visualization and stick to it unless there is a reason
  - Don't alternate between vertical and horizontal bar charts—make them all the same
- Explain why you select a certain number of clusters
- Use the “talk like an analyst” exercise - provide specific details instead of using about, around, close to, some, few, more, many, a bit, quite a lot...
- Statistical tests? Can't say significant unless you have done a significance test. Don't just eyeball it
- Don't use percent increase...use the “times” notation (for example, an odds ratio of 2 is 2 times higher....)
- Don't use “below” as in Table 12 below
- Be careful about suggesting causation



Read your report **out loud** to each other.



# Reminders

- Accept all changes and stop tracking
  - Read, address, and then DELETE all comments from Draft 2
  - Fix all errors indicated by Word
  - Use CTRL F to check for common issues like “data set” vs “dataset”
    - Note—either is fine! Just be consistent
  - Make sure your TOC, List of Figures, and List of Tables are working
  - Use the checklist, template, slides to support your final draft
- 
- You will get feedback from faculty—and different faculty have different preferences

# Due Date Reminder

**Draft 3 and *initial* PPT draft due by March 20\* by midnight**

- You can use comments to leave notes for SEW
- This is your **FINAL** communication draft before technical review.
- Reports is due to **technical faculty 5 days after** you get feedback from Dr. West. He will email you when your feedback is ready.
  - We review them in the order of faculty presentations

\*later teams have different due dates shown on the final comment on Draft 2.

# Slide Review and Dry Runs

- Slide Reviews Start April 1
- Dry Runs Start April 3
- Presentations Start April 5

# TIPS

[https://docs.google.com/forms/d/e/1FAIpQLSdoU0cnOoZZsn60qejkNnPCTHivLVBhLSCLLKHUyDpjkxOAZA/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdoU0cnOoZZsn60qejkNnPCTHivLVBhLSCLLKHUyDpjkxOAZA/viewform?usp=sf_link)

- Open for submissions
- Please complete before your faculty presentation
- Can submit multiple times



Month	COMPLETED IN SUMMER & FALL	Month	SPRING
June	TIPS Intro	January	<Optional> Improv4All
June	Communication Overview	January	Practicum Report Draft 1
June	Tech Comm Introduction	February	Practicum Report Draft 2
July	Introduction to Technical Writing	March	Unconscious Bias Workshop
July	TIPS Presentations	March	Practicum Report Draft 3
July	Thanks for the Feedback	March/April	Practicum Report to faculty
July	Summer Practicum Presentations	April	Slide Reivew
August	Communication Week	April	Final Dry Run
August	Writing and Blogging	April	Final Faculty Presentation
August	Ethical Considerations for Data Professionals - 1	April/May	Final Dr. Rappa Presentation
August	Homework Reports	April/May	Final Sponsor Presentation
August	Ethical Considerations for Data Professionals- 2 Emily Hadley		
August	Ethical Considerations for Data Professionals - 3		
August	Storytelling 1		
September	Ethical Considerations for Data Professionals - 4		
September	<Optional> Improv4All		
September	Storytelling 2		
September	Practicum Communication Leads Best Practices		
September	Ethical Considerations for Data Professionals- 5 Patrick Hall		
September-October	Ethical Considerations for Data Professionals- Practicum meetings		
September-October	Presentation Consultations		
October	Faculty Workshop Dashboards		
October	Viz Presentations		
October	Text Presentations		
November	Faculty Workshop Online Presentations		
November	Side Projects		
November	Midpoint Slide Review		
November	Midpoint Dry Run		
December	Midpoint Presentations		





# Questions



## Draft 1



Using the **template**,  
**start** preparing report.

Expectation: Title page,  
headings, updated TOC,  
any early content  
(bulleted lists, tables,  
figures, appendix).

Grade: ✓ -, ✓ , ✓ +

## Draft 2



Make all changes from  
comments & accept  
changes on Draft 1.

Add **significant** content.

Expectation:  
Substantive content.  
Report does not need to  
be finished.

Grade: ✓ -, ✓ , ✓ +  
Delete completed Comments and  
Address ALL Word Grammar indicators

## Draft 3

Make all changes from  
comments on Draft 2.

Finalize report.

Expectation: Ready for  
**FINAL Comm review** prior  
to Technical review.

Grade: ✓ -, ✓ , ✓ +

Delete completed Comments and  
Address ALL Word Grammar indicators