Name:

The goal of this final worksheet is to have you reflect on what you’ve learned this semester and assess your grade. You will submit this reflection via email before a one-on-one meeting with the instructor, during which we’ll discuss your thoughts and finalize your course grade. Two important notes:

1. This reflection and meeting, combined with your Project 2, substitute for a Final Exam. That means I expect you to not rush through this worksheet, but rather **you should take time and provide thoughtful, complete responses.**
2. We will not have time to cover all your responses during the meeting. Because of this, **you must email me your reflection at least a day before your meeting!** I need the opportunity to read through your responses beforehand.

To schedule your meeting, use the [Microsoft Bookings link (you will log in via Elon)](https://outlook.office.com/bookwithme/user/8fd903641a16446f8f29cbe29e4c433b@elon.edu/meetingtype/BSUQjUHJsEiIrm0yehKIxw2?bookingcode=3201c7a9-1c17-4d04-81fa-22a6822d9ea4&anonymous&ismsaljsauthenabled&ep=mlink). **Please double-check your time zone once your log into Bookings** – it does not always default to the time zone we are in. You will meet with me in-person (Duke 201A). If you have issues with Bookings, please email me.

You must complete and email this form before your meeting. List your meeting day, time, and format below.

Meeting Day:

Meeting Time:

## General Reflection and Feedback

1. Reflect on the importance of statistics and data analytics in other disciplines. You may reference examples from this class (including projects) or examples from other classes.
2. Did you learn anything unexpected in this course? Did you expect to learn something that you didn’t learn?
3. What work was challenging? What was fun? What was useful? What didn’t seem useful?
4. Did you ever talk about the course or material outside of class? If so, how often?

## Reminder on Course Grades

The following excerpts are from the syllabus. Please review the syllabus for more details.

“Your initial grade range will be determined based on the criteria outlined in the table [below]. Note: it is possible to be in different grade ranges for different categories – this will be resolved in our…meeting.”

“Your final grade (including assigning a “+” or “-’’ as appropriate) will be determined during a final, individual grade discussion with me…Note: although you will help me evaluate your progress, I reserve the right to modify the final grade based on my observations.”

**Important note:** We adjusted the homework assignments at the end of the semester (i.e., we didn’t have a Homework 8). I adjusted the expectations for Homework in the grade table on the next page. Please reference the updated table on the next page and let me know if you have any questions. I **bolded the changes** in the table.

|  |  |
| --- | --- |
| **Grade Range** | **Criteria** |
| **D** | * Show mastery (a score of 80% or higher) on 5 Objective Assessments and attempt at least four others. * Receive a **Pass on 3** Homework Assignments and attempt at least two others. * Not Pass either project but attempted in both. * Not Pass either project Individual Assessment but attempted both. * Completes Reflection 1 and 2, but not the final reflection. |
| **C** | * Show mastery on 7 Objective Assessments and attempt at least four others. * Receive a **Pass on 4** Homework Assignments and attempt at least two others. * Pass one project and attempted in the other. * Pass one project Individual Assessment and attempted the other. * Completes the final grade reflection. |
| **B** | * Show mastery on 9 Objective Assessments and attempt the other four. * Receive a **Pass on 5** Homework Assignments and attempt the other two. * Pass both projects. * Pass one project Individual Assessment and attempted the other. * Completes the final grade reflection and one other reflection. |
| **A** | * Show mastery on all 13 Objective Assessments. * Receive a **Pass on 6** Homework Assignments and attempt the other one. * Pass both projects. * Pass both project Individual Assessments. * Completes all three reflections. |

## Determining Your Grade

This section will have you evaluate the work you’ve completed (see the Moodle gradebook as needed) to determine a final grade based in part on the table above.

1. **Objective Assessments** 
   1. Over the semester, we had 13 Objective Assessments (OAs). How many OAs did you Pass?
   2. Based on the grade range table, where does your OA grade fall?
2. **Homework Assignments** 
   1. We had **7** assignments. How many of the Homework assignments did you complete (receiving either an RR or AP as the final mark)?
   2. How many of the Homework did you receive an “Accepted/Pass” (AP)?
   3. Based on the grade range table, where does your Homework grade fall?
3. **Reflections**
   1. We had 3 reflections over the semester (beginning of the semester reflection, mid-semester reflection, and this end-of-semester reflection). How many of the reflections did you receive a “Complete” on, including this one, provided you submit it to me?
   2. Based on the grade range table, where does your Reflection grade fall?
4. **Projects – Group Products**
   1. Did you “Pass” or “Not Pass” the group portion of Project 1?
   2. By the time you complete this, you may or may not have your Project 2 group product reviewed and back to you.
      1. **If you have received feedback on your Project 2 group product,** did you “Pass” or “Not Pass” the component? [if you haven’t, skip to the next question]
      2. **If you have not received feedback yet**, please discuss how you feel about your Project 2 group portion. Do you believe you received a Pass?
   3. Based on the grade range table and your previous responses, where does your Project group grade fall?
5. **Projects – Individual Assessment**
   1. Did you “Pass” or “Not Pass” the individual assessment for Project 1?
   2. By the time you complete this, you may or may not have your Project 2 Individual Assessment reviewed and back to you.
      1. **If you have received feedback on your Project 2 Individual Assessment,** did you “Pass” or “Not Pass” the component? [if you haven’t, skip to the next question]
      2. **If you have not received feedback yet**, please discuss how you feel about your Project 2 Individual Assessment. Do you believe you received a “Pass”?
      3. **If you have not received feedback yet**, do you believe you contributed a fair share or equal amount of work compared to your other group members? Provide a brief explanation if necessary.
   3. Based on the grade range table and your previous responses, where does your Project Individual Assessment grade fall?
6. **Other Grade Factors.** The syllabus states, “Though attendance and late assignments are not directly included in the initial grade range table above, it will be hard to justify a higher grade for the course if you frequently turn work in late (“frequent” = 3 or more late assignments) or miss many classes (6 or more classes).”
   1. How many of the assignments (reflections, project components – note: homework was exempt from this) did you submit late? Provide a brief explanation if necessary.
   2. How many class sessions did you miss? You can use the Moodle attendance system (in the Quick Links and Important Info section) if needed. Provide a brief explanation if necessary.
   3. There were several ways of seeking help outside of class, e.g., tutoring sessions, TA’s office hours, and the instructor’s drop-in hours. Which of these did you attend, if any, and how often?
   4. What else would you like me to know regarding the effort you’ve been investing into the course?
7. **Final Grade Determination.** Review your responses to Questions 1-6 in this section. What do you believe your final grade should be? Feel free to provide an explanation. Keep in mind that although the course grade table only lists “whole” grades, you should assign yourself +/- if appropriate. Final grades will include +/- versions. Note: Elon does not allow A+, so the highest grade achievable is an A.

## General Reflection and Thoughts

This section will ask you to reflect on what you learned this semester and your mastery of concepts. Here’s a reminder of the topics we covered, organized by the set of notes:

* Notes 01: introduction to R and basic terminology
* Notes 02: data summaries
* Notes 03: data importing and data wrangling
* Notes 04: data visualization with ggplot2
* Notes 05: customizing ggplot2 graphics
* Notes 06: simple linear regression
* Notes 07: multiple linear regression
* Notes 08: sampling distributions and bootstrap resampling
* Notes 09: using infer for confidence intervals
* Notes 10: confidence intervals for a single value
* Notes 11: confidence intervals for differences
* Notes 12: hypothesis testing and null distributions
* Notes 13: hypothesis tests for a single value
* Notes 14: hypothesis tests for differences
* Notes 15: other hypothesis tests (Chi-squared and ANOVA)

1. What statistics or data analytics concepts do you know now that you did not know at the beginning of the semester? What are some of the main things you learned? Do not just list topics, but rather explain what key ideas stood out to you so far.
2. How do you think you may use or see statistics or data analytics in your future as a student at Elon or in your future career after Elon?
3. How confident do you feel about your ability to do statistics or data analytics in your field?
4. Do you have any other questions, comments, or concerns about the course?