

Course Evaluation Results

Allan Omondi

2023-10-02

Contents

1	Course Evaluation Score	2
1.1	Course Evaluation Scores per Group	2
2	Correlations	5
2.1	Interesting Correlations	7
2.2	Absenteeism Percentage	10
3	Qualitative Data (Likes and Wishes)	13
3.1	Term Frequency - Inverse Document Frequency (TF-IDF) Score	13
3.2	Lexicon-Based Sentiment Analysis	17
3.3	Raw Data	23

Key	Value
Course	Business Intelligence II
Course Code	BBT4206
Class	BBIT 4.2
Semester Duration	21 st August 2023 to 28 th November 2023
Date of Evaluation	25 th September 2023 to 29 th September 2023
	Week 6/14
Total number of students who submitted the course evaluation	94
Total number of students registered in the AMS at the time of the course evaluation	115
Response rate	81.73%
e-Learning URL	https://elearning.strathmore.edu/course/view.php?id=6599
Data collection tool URL for access to the raw data	https://elearning.strathmore.edu/mod/questionnaire/view.php?id=221958
Lecturer	Dr Allan Omondi <aomondistrathmore.edu>

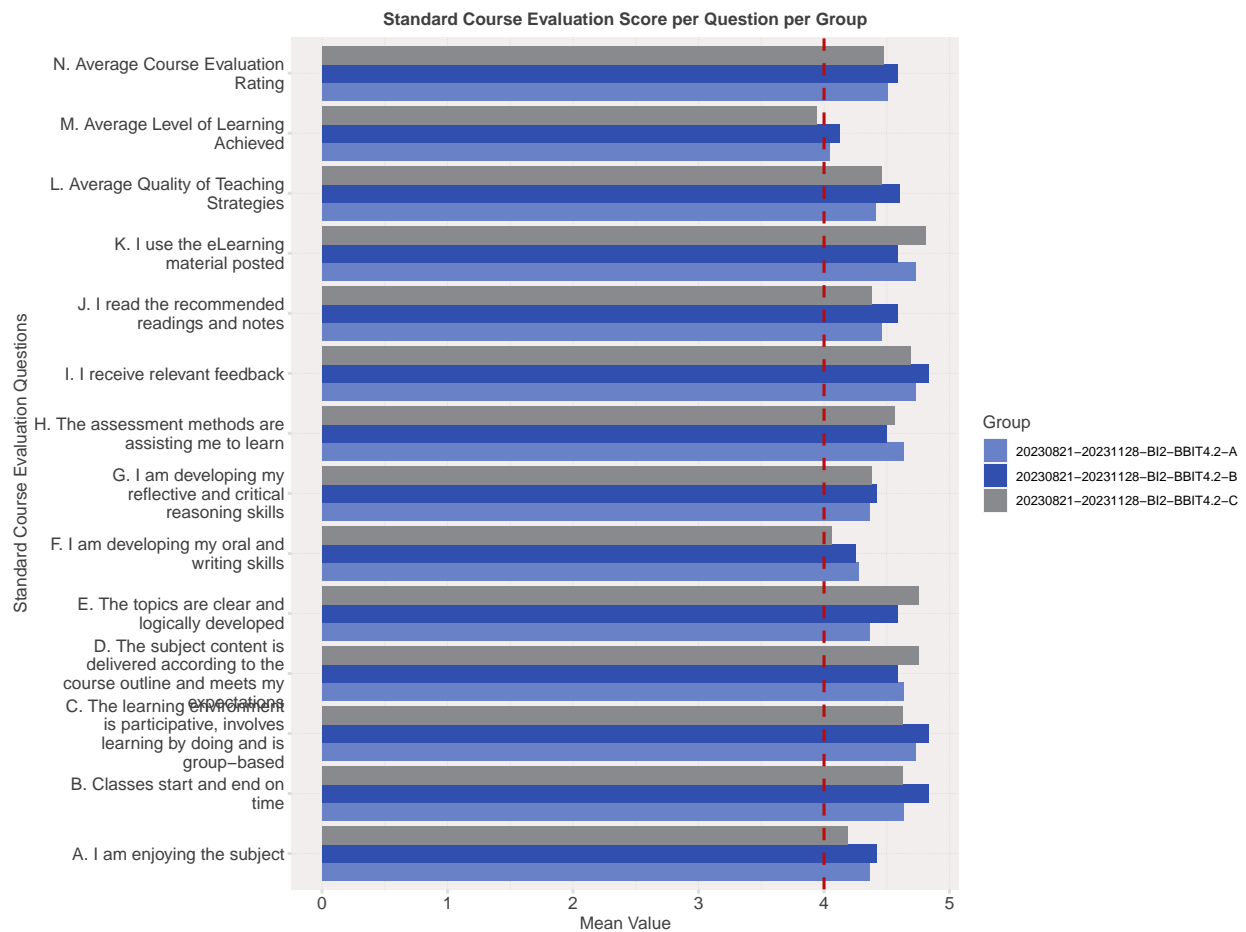
1 Course Evaluation Score

Mean Course Evaluation Score = 4.3839 / 5

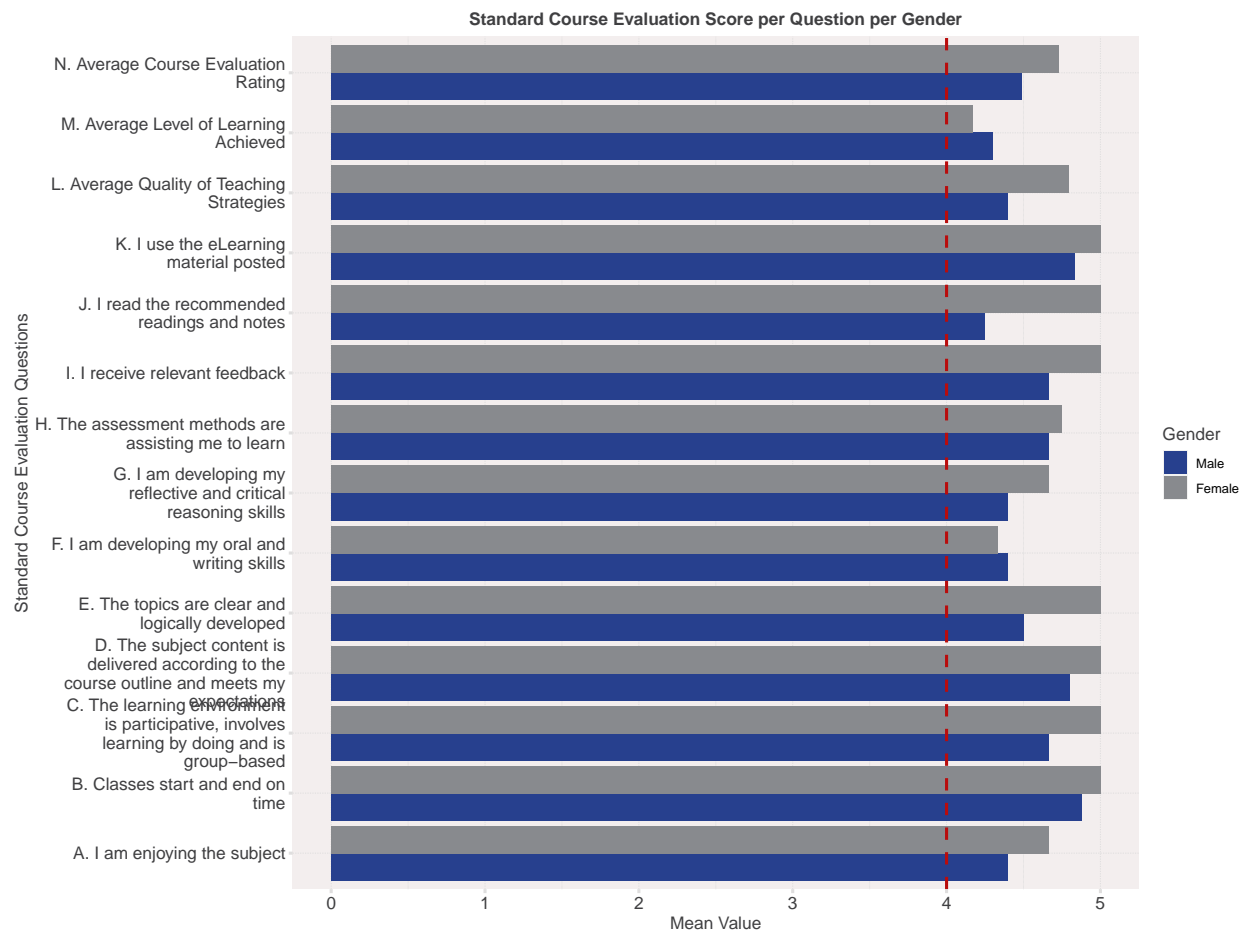
Percentage Score = 87.68%

1.1 Course Evaluation Scores per Group

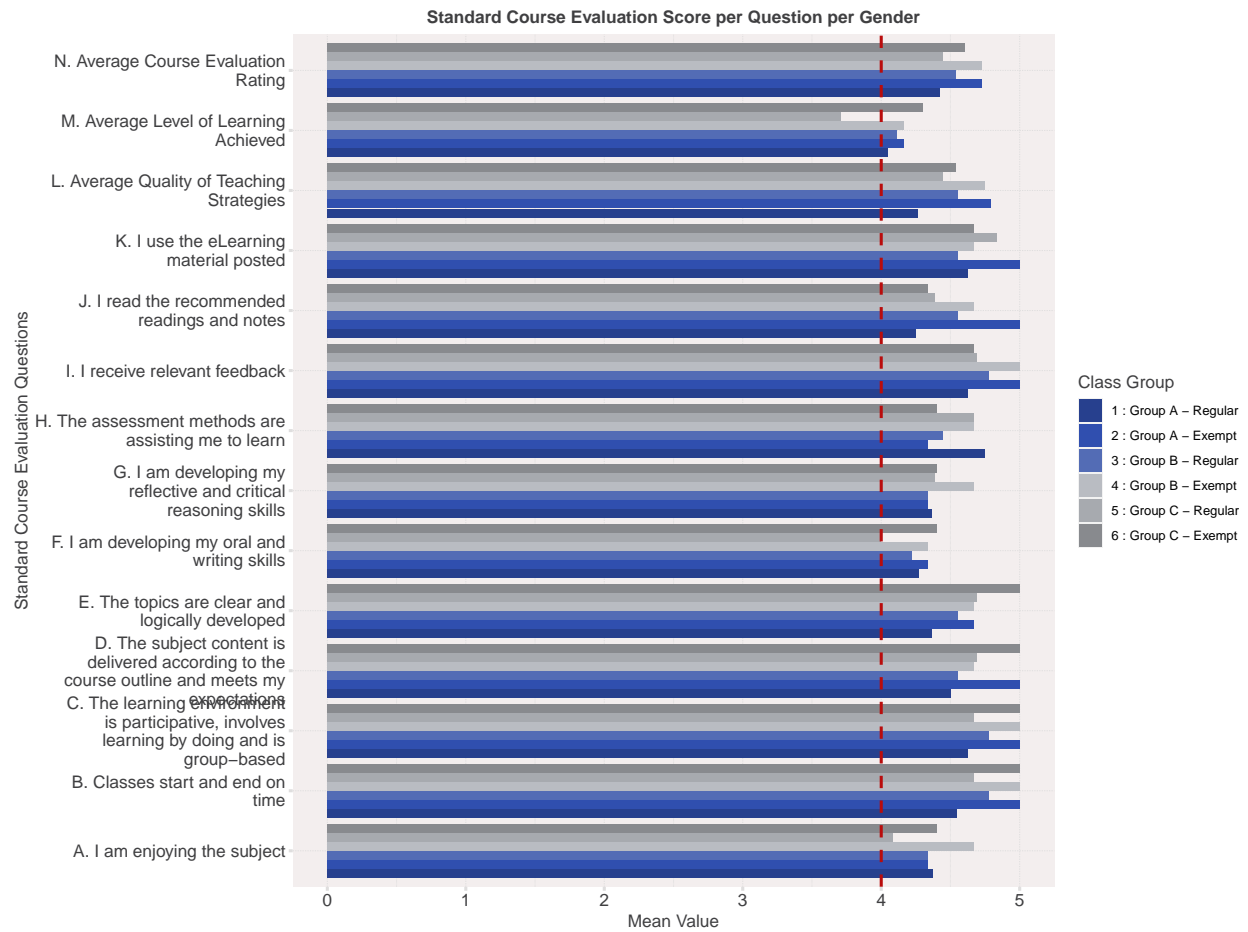
The “**Average Course Evaluation Rating**” variable in the plot below indicates the score **per group** with a baseline of 4/5.



The “**Average Course Evaluation Rating**” variable in the plot below indicates the score **per gender** with a baseline of 4/5.



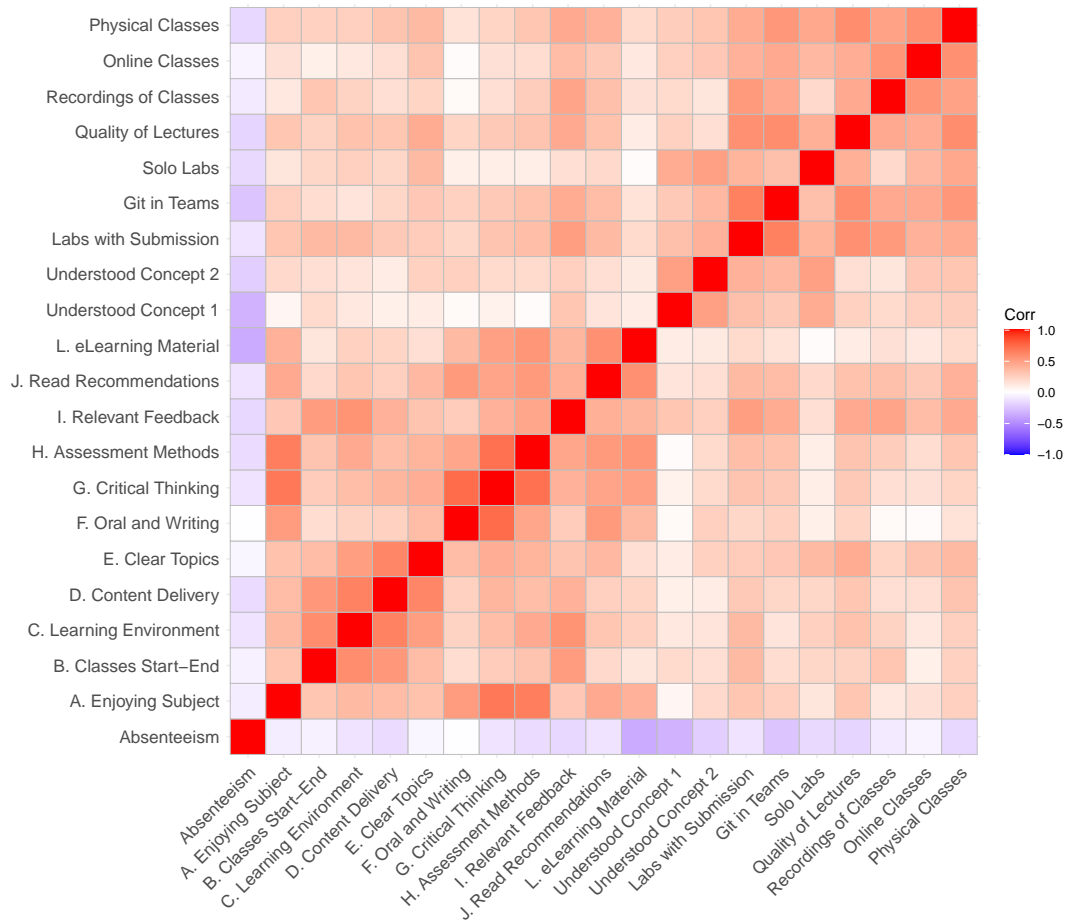
The plot below presents a drill-down of the class group into **regular** and **exempt** students:



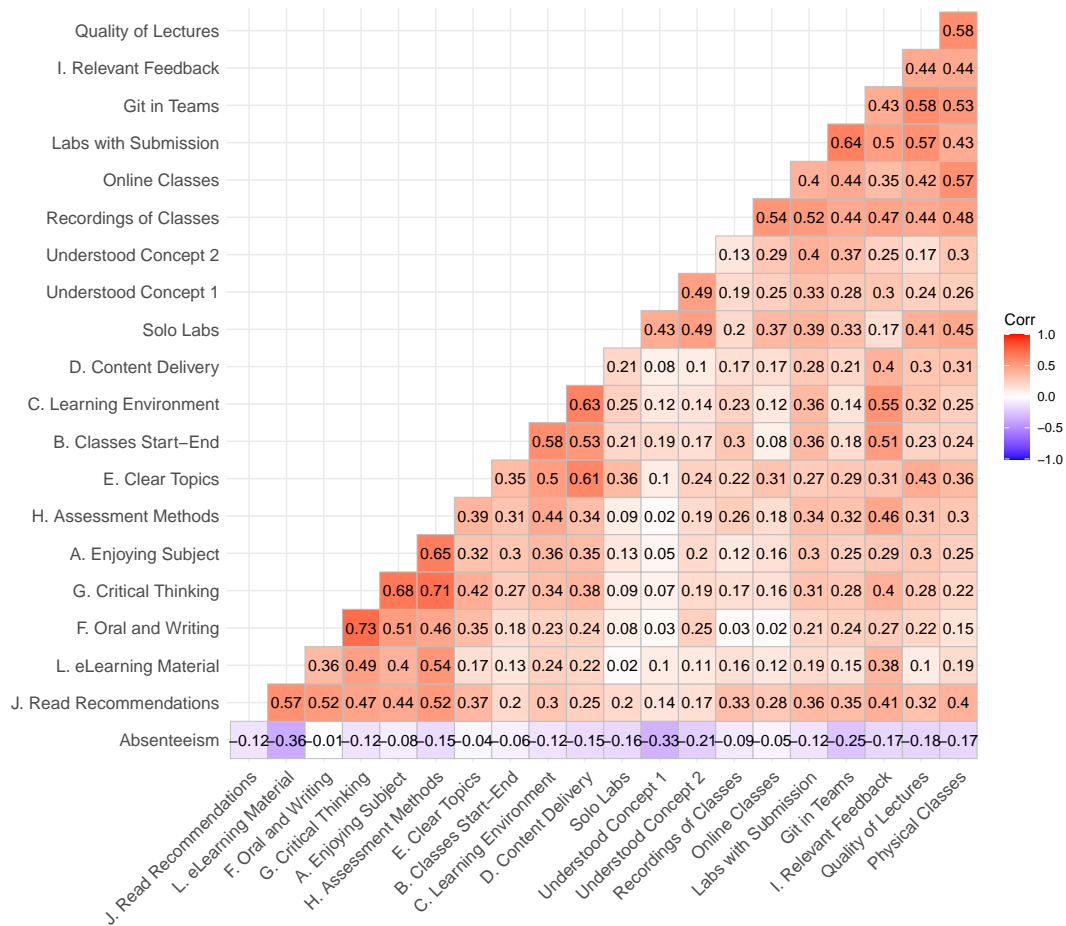
2 Correlations

The following variables have been renamed to fit the correlation plots:

- ‘A. Enjoying Subject’ = ‘Q02_General Questions->A - 1. I am enjoying the subject’,
- ‘B. Classes Start-End’ = ‘Q02_General Questions->A - 2. Classes start and end on time’,
- ‘C. Learning Environment’ = ‘Q02_General Questions->A - 3. The learning environment is participative, involves learning by doing and is group-based’,
- ‘D. Content Delivery’ = ‘Q02_General Questions->A - 4. The subject content is delivered according to the course outline and meets my expectations’,
- ‘E. Clear Topics’ = ‘Q02_General Questions->A - 5. The topics are clear and logically developed’,
- ‘F. Oral and Writing’ = ‘Q02_General Questions->A - 6. I am developing my oral and writing skills’,
- ‘G. Critical Thinking’ = ‘Q02_General Questions->A - 7. I am developing my reflective and critical reasoning skills’,
- ‘H. Assessment Methods’ = ‘Q02_General Questions->A - 8. The assessment methods are assisting me to learn’,
- ‘I. Relevant Feedback’ = ‘Q02_General Questions->A - 9. I receive relevant feedback’,
- ‘J. Read Recommendations’ = ‘Q02_General Questions->A - 10. I read the recommended readings and notes’,
- ‘L. eLearning Material’ = ‘Q02_General Questions->A - 11. I use the eLearning material posted’,
- ‘Understood Concept 1’ = ‘Q03_Level of Learning Achieved->B - 1. Concept 1 of 4 - Ensemble Methods for Predictive Analytics’,
- ‘Understood Concept 2’ = ‘Q03_Level of Learning Achieved->B - 2. Concept 2 of 4 - Predictive Modelling Using R’,
- ‘Teaching - Labs’ = ‘Q04_Quality of Teaching Strategies->C - 1. Labs with comments that describe each step to be followed’,
- ‘Labs with Submission’ = ‘Q04_Quality of Teaching Strategies->C - 2. Labs that require you to put in effort to make a submission related to the content of the lab’,
- ‘Git in Teams’ = ‘Q04_Quality of Teaching Strategies->C - 3. Labs that require you to use Git to work in a team’,
- ‘Solo Labs’ = ‘Q04_Quality of Teaching Strategies->C - 4. Labs that require you to work alone’,
- ‘Quality of Lectures’ = ‘Q04_Quality of Teaching Strategies->C - 5. The quality of the lectures given (quality measured by the breadth (the full span of knowledge of a subject) and depth (the extent to which specific topics are focused upon, amplified, and explored) of learning - NOT quality measured by how fun/comical/lively the lectures are)’,
- ‘Recordings of Classes’ = ‘Q04_Quality of Teaching Strategies->C - 6. The recordings of online classes’,
- ‘Online Classes’ = ‘Q04_Quality of Teaching Strategies->C - 7. Online classes in general’,
- ‘Physical Classes’ = ‘Q04_Quality of Teaching Strategies->C - 8. Face-to-Face classes in general’



The specific correlation values are presented below:



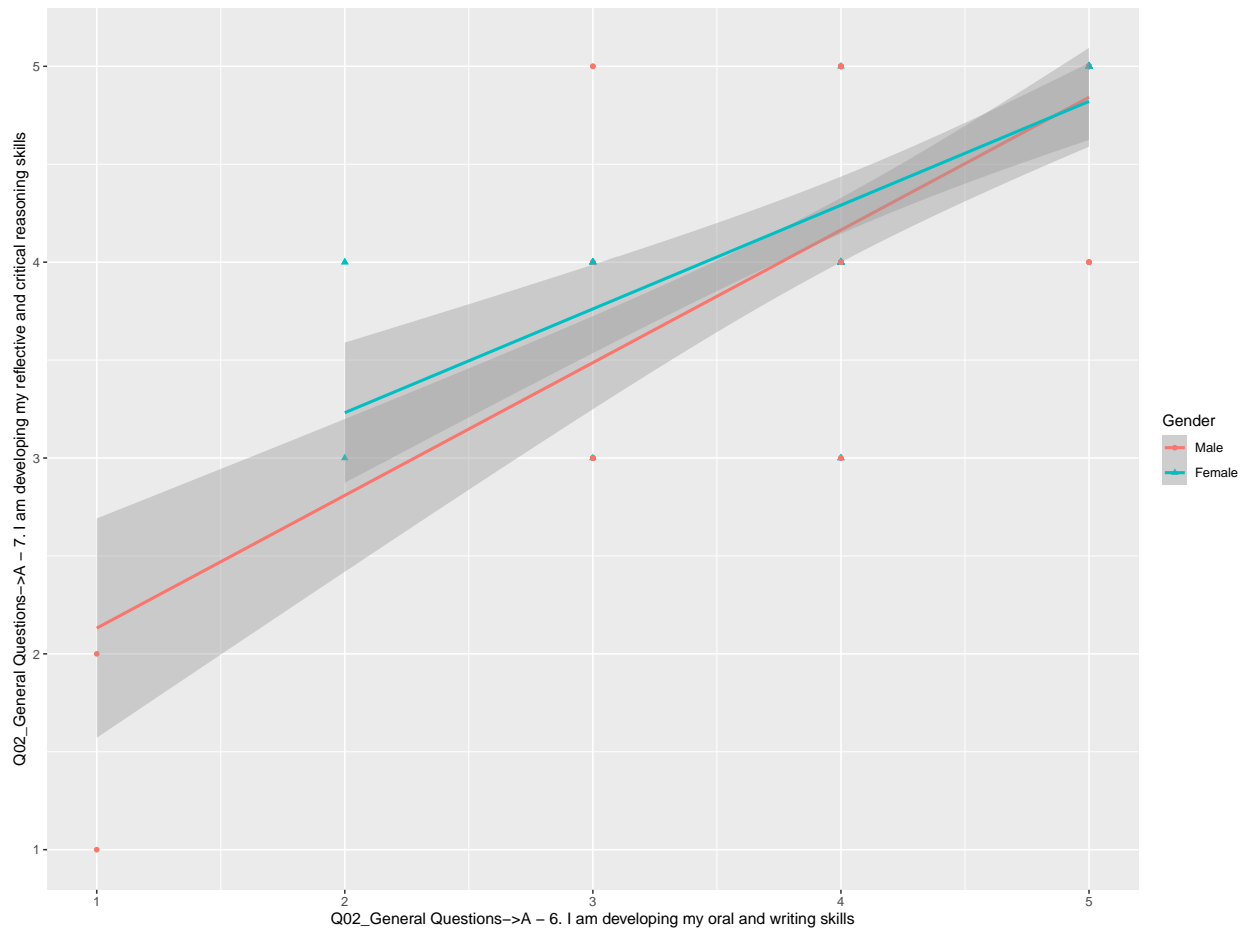
2.1 Interesting Correlations

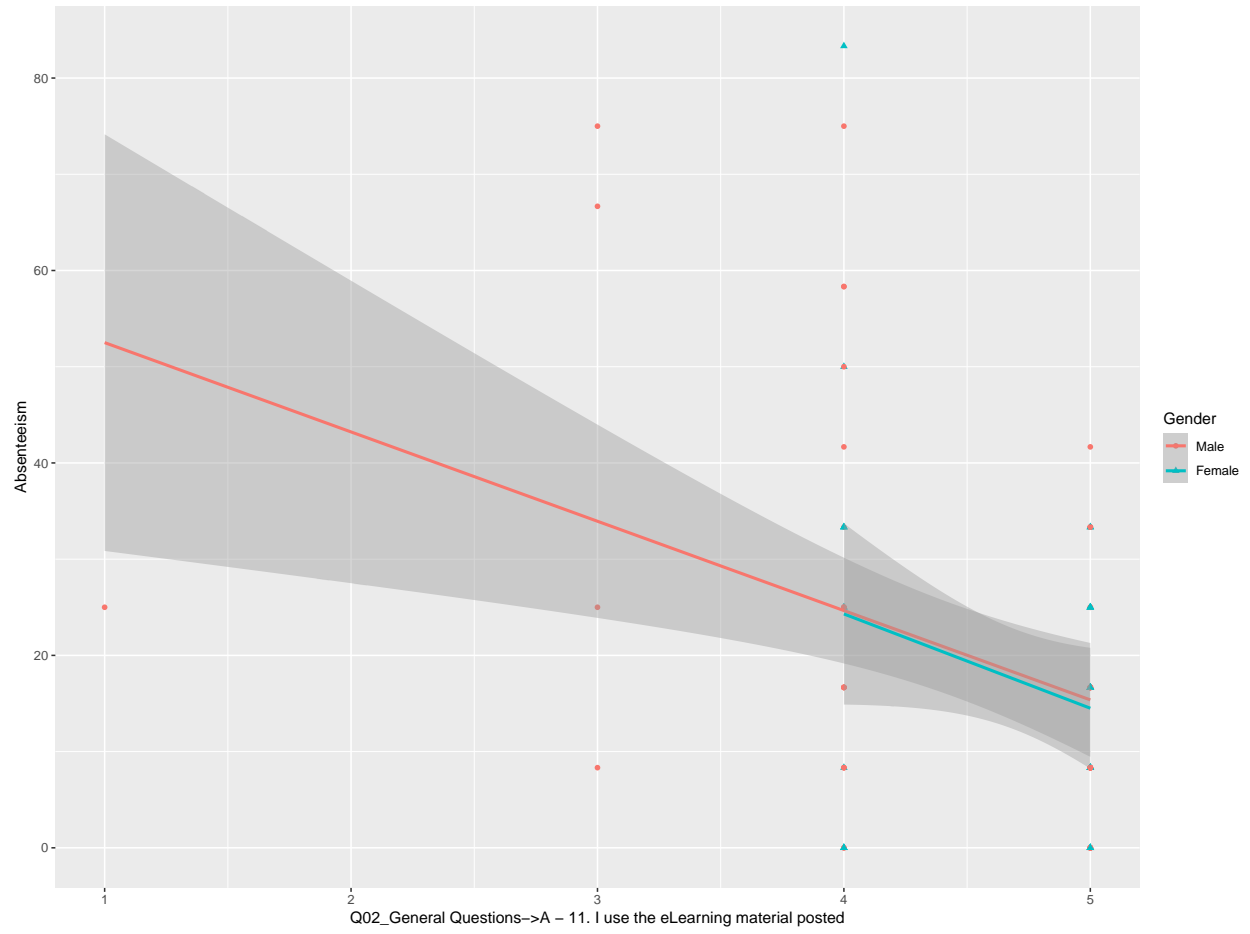
The following are hypothetical statements given that “correlation does not imply causation”.

- **.73 correlation** between “I am developing my oral and writing skills” and “I am developing my reflective and critical reasoning skills”: *Consider writing as formalized thinking.*
- **.71 correlation** between “The assessment methods are assisting me to learn” and “I am developing my reflective and critical reasoning skills”: *The more effort students put into the assessment, the more they develop their reflective and critical reasoning skills.*
- **.68 correlation** between “I am enjoying the subject” and “I am developing my reflective and critical reasoning skills”: *The more a student enjoys the subject, the more they consider their reflective and critical reasoning skills as developing.*
- **.65 correlation** between “The assessment methods are assisting me to learn” and “I am enjoying the subject”: *Students who value the assessments enjoy the subject more.*
- **.64 correlation** between “Labs that require you to use Git to work in a team” and “Labs that require you to put in effort to make a submission related to the content of the lab”: *The more students appreciate the use of Git for working in teams, the more they appreciate labs that require a submission to be made.*

- **.61 correlation** between “The subject content is delivered according to the course outline and meets my expectations” and “The topics are clear and logically developed”: *The more the course outline is followed, the clearer and more logically developed the topics are.*
- **-.33 correlation** between “Concept 1 of 4 - Ensemble Methods for Predictive Analytics” and “Absenteeism”: *Students who started the semester late (high absenteeism), had a harder time understanding concept 1 which was covered at the beginning of the semester.*
- **-.36 correlation** between “I use the e-learning material posted” and “absenteeism”: *The higher the number of classes missed, the lower the student's engagement with content posted on e-learning*

Below are the two most extreme (positive and negative) correlations:



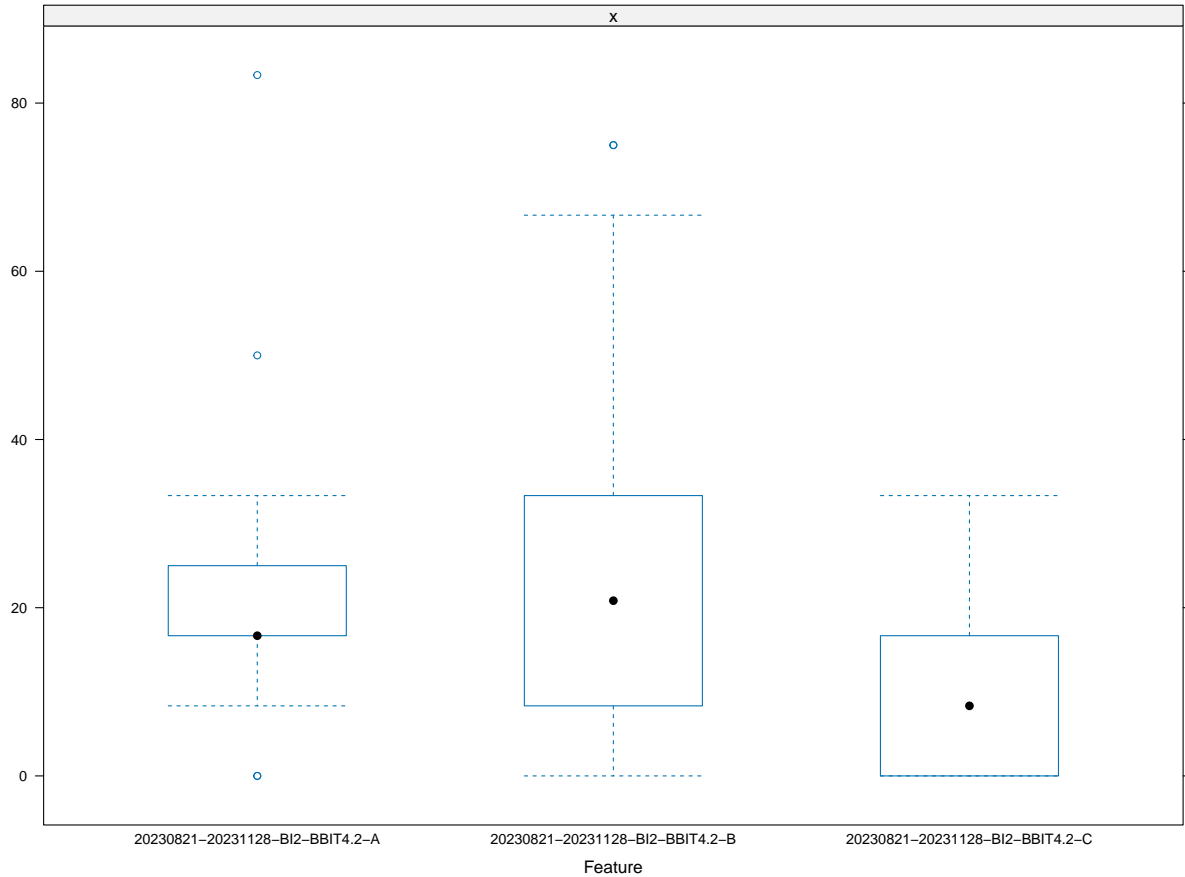


2.2 Absenteeism Percentage

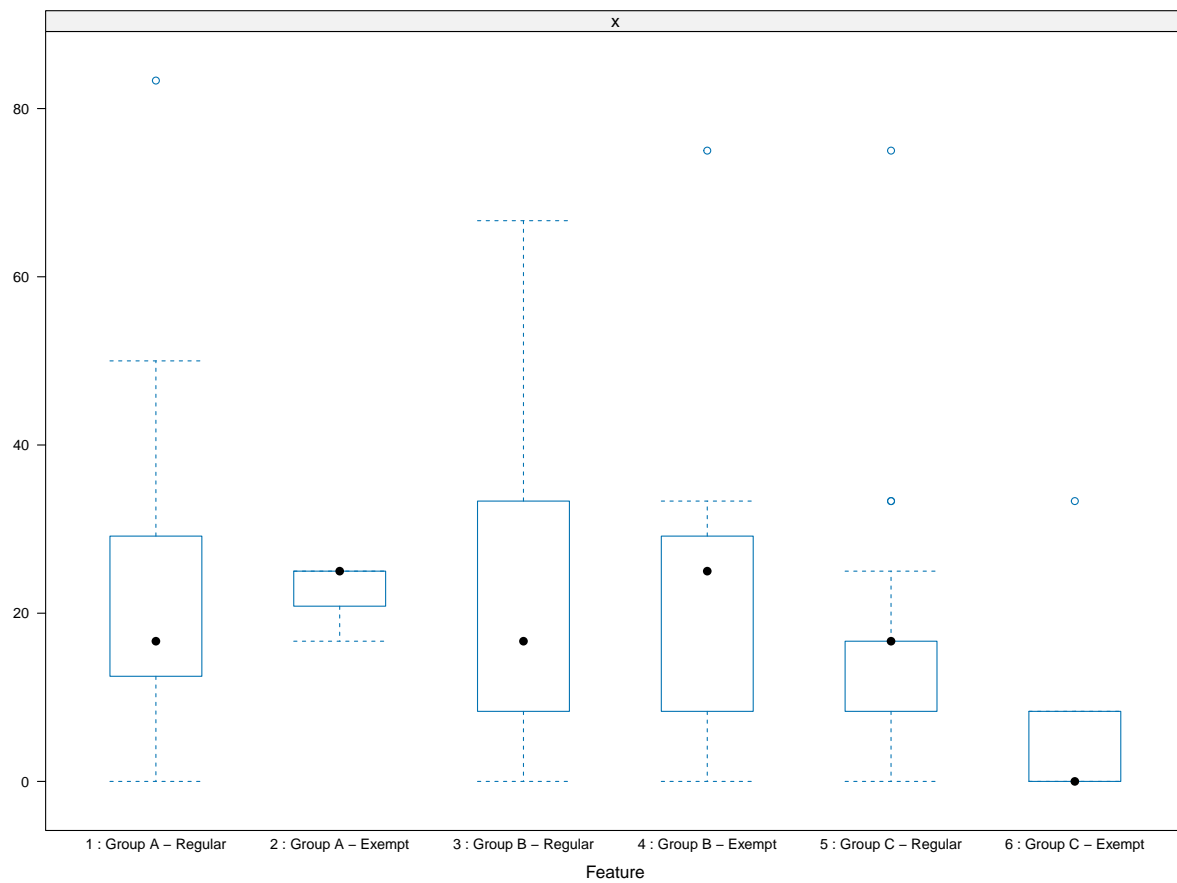
The lower the absenteeism, the more a student makes use of the e-learning materials posted. And the more a student makes use of the e-learning materials posted, the higher their overall grade in the course.

With this in mind, a further investigation of the **absenteeism percentage** is presented below.

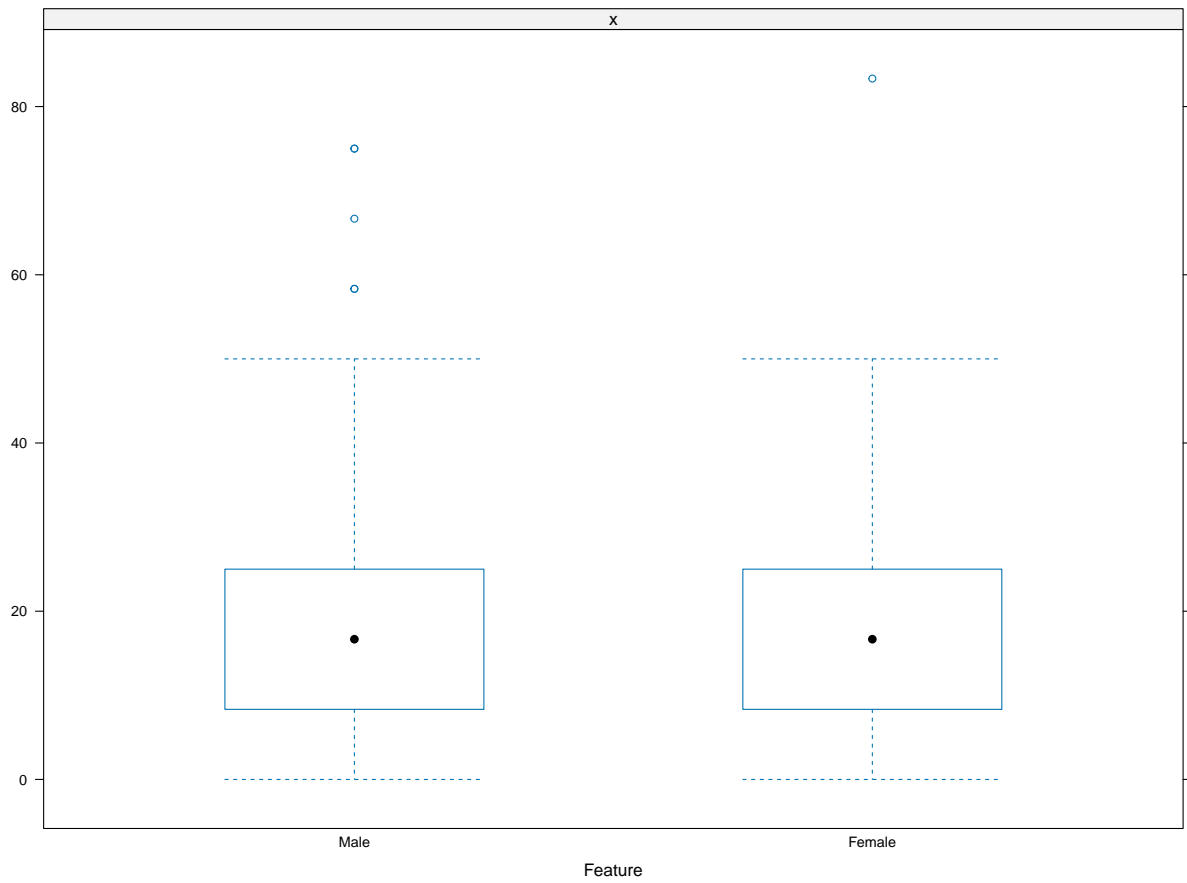
Absenteeism by general class group:



Absenteeism by specific class group:



Absenteeism by gender:

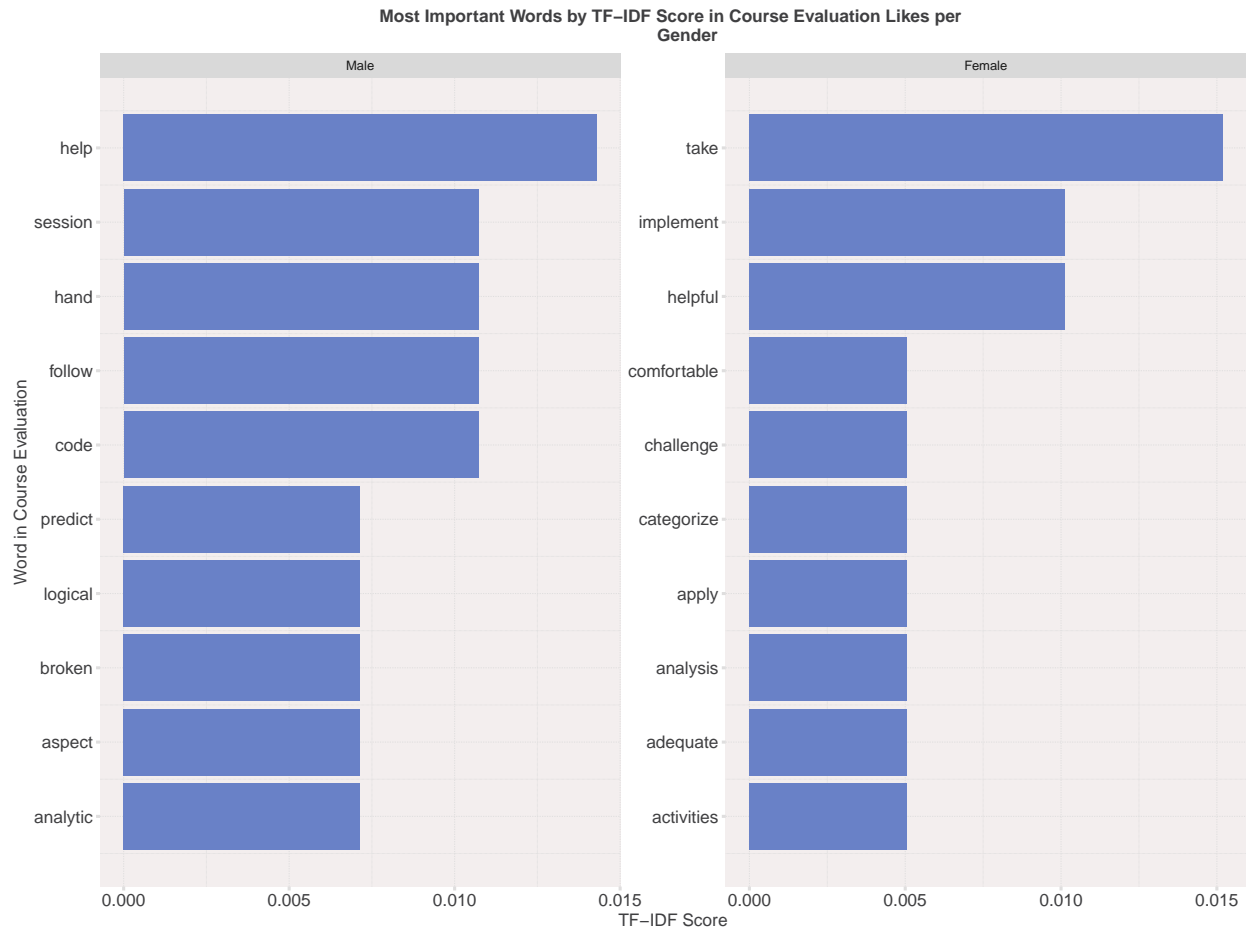


3 Qualitative Data (Likes and Wishes)

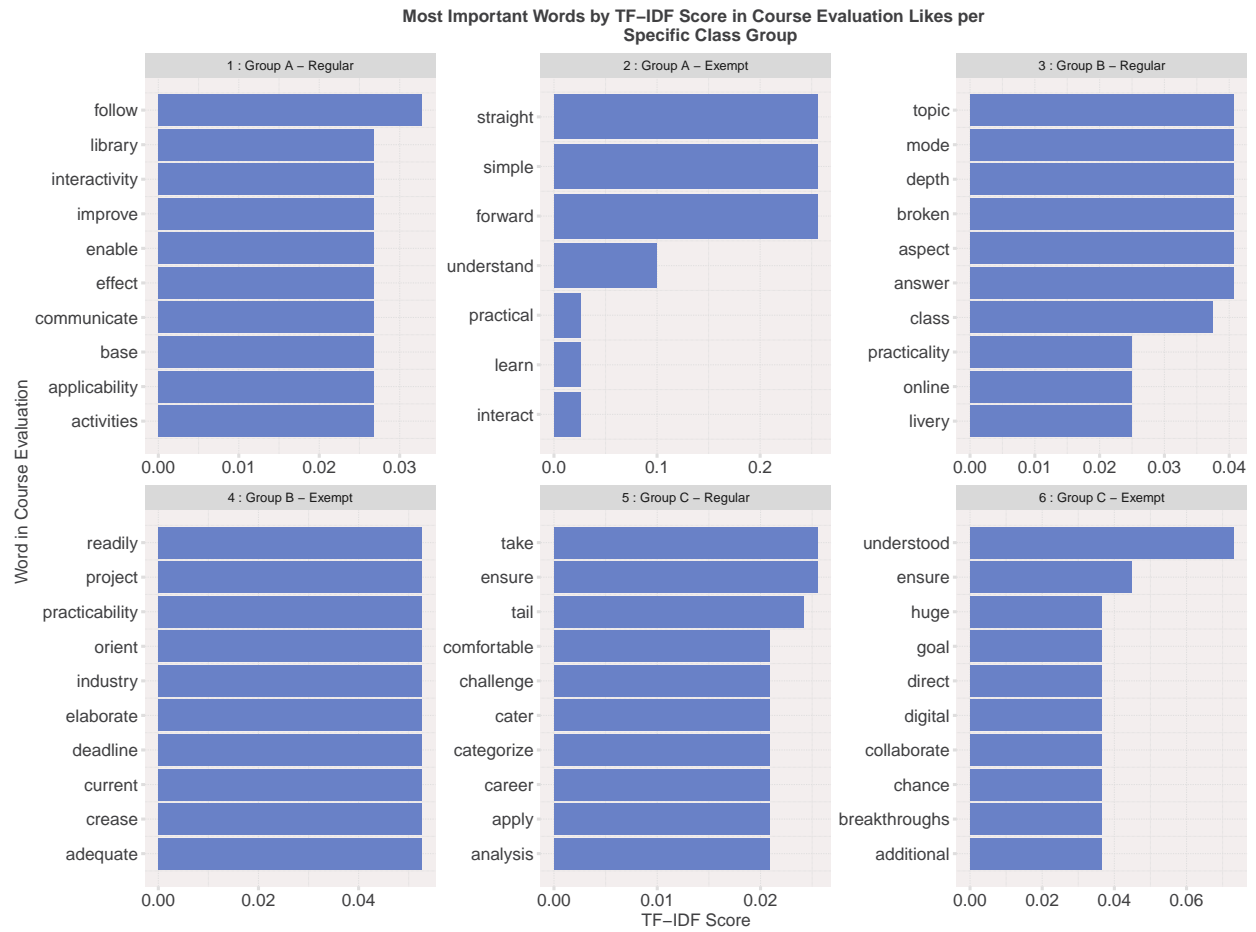
3.1 Term Frequency - Inverse Document Frequency (TF-IDF) Score

The plot below presents the quantitative measure of “significance” using the Term Frequency - Inverse Document Frequency (TF-IDF) score:

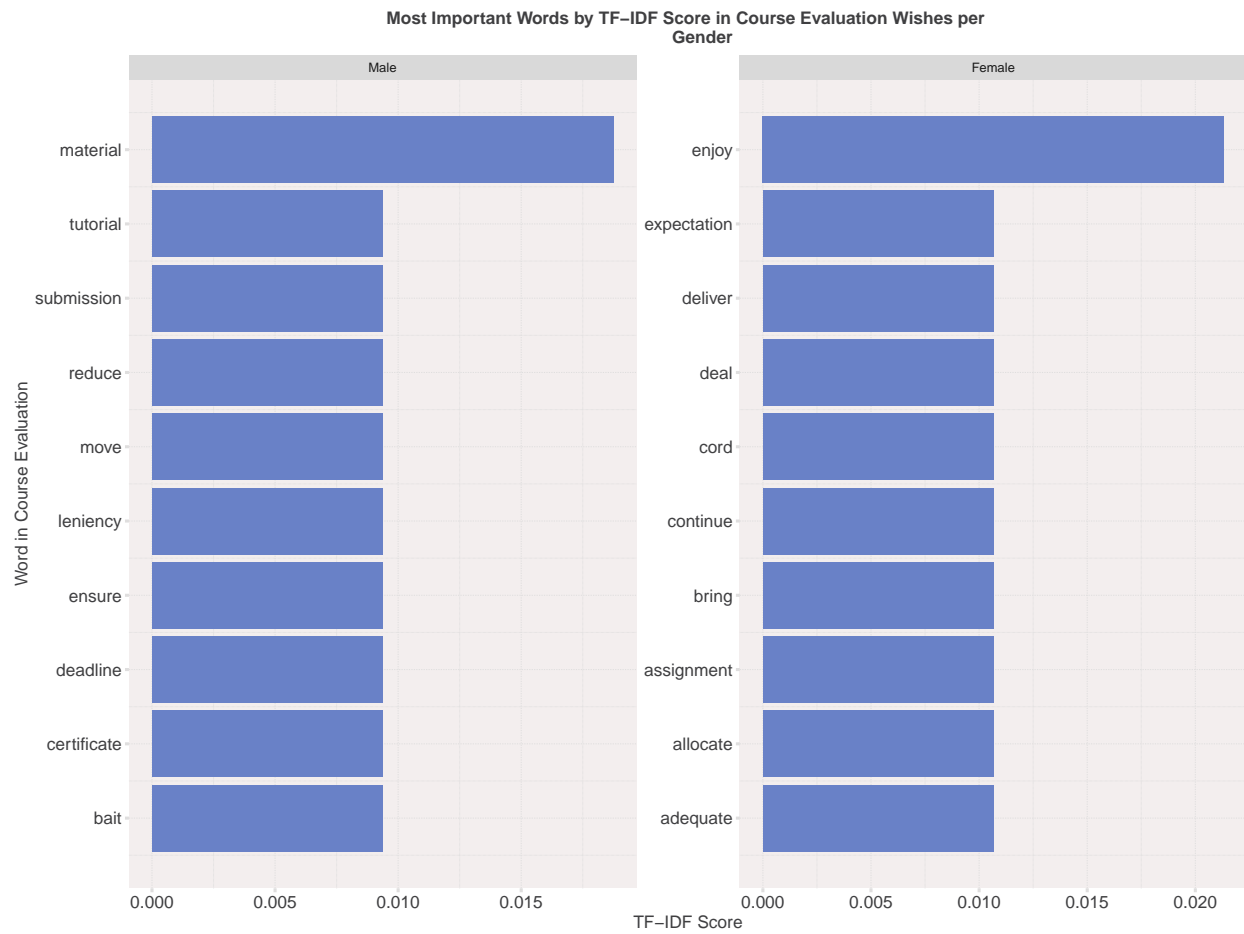
TF-IDF Score (likes) per gender:



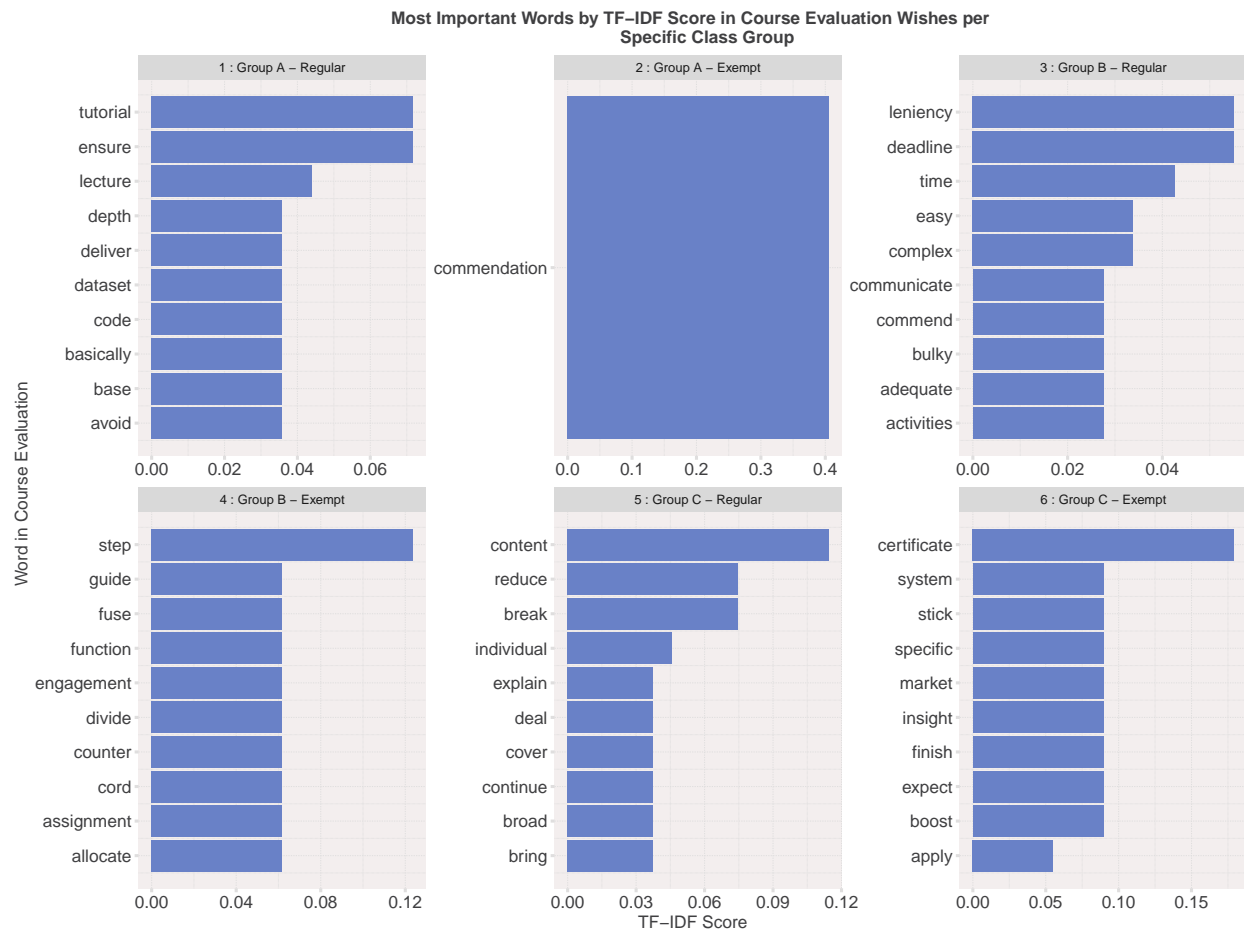
TF-IDF Score (likes) per specific class group:



TF-IDF Score (wishes) per gender:

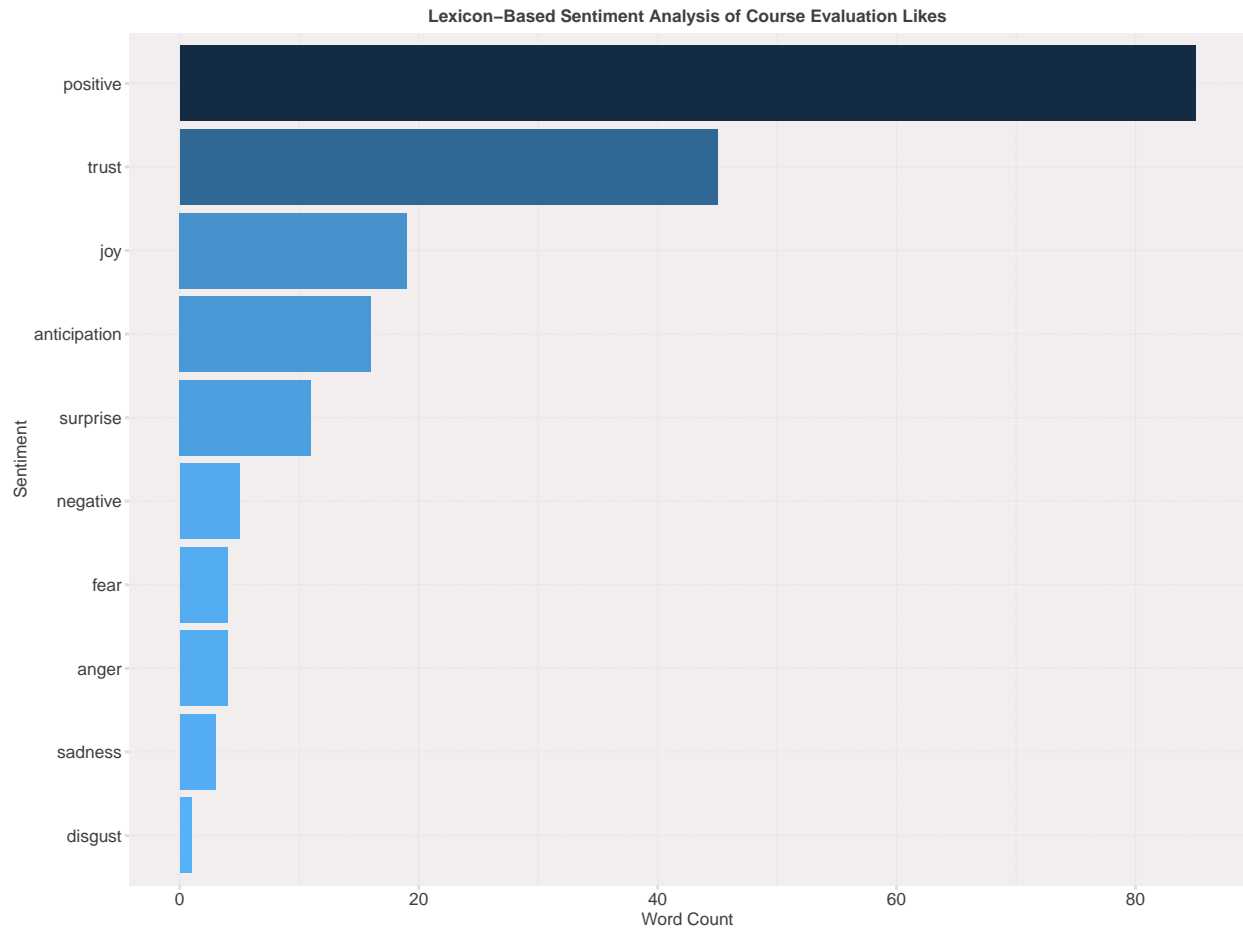


TF-IDF score (wishes) per specific class group:

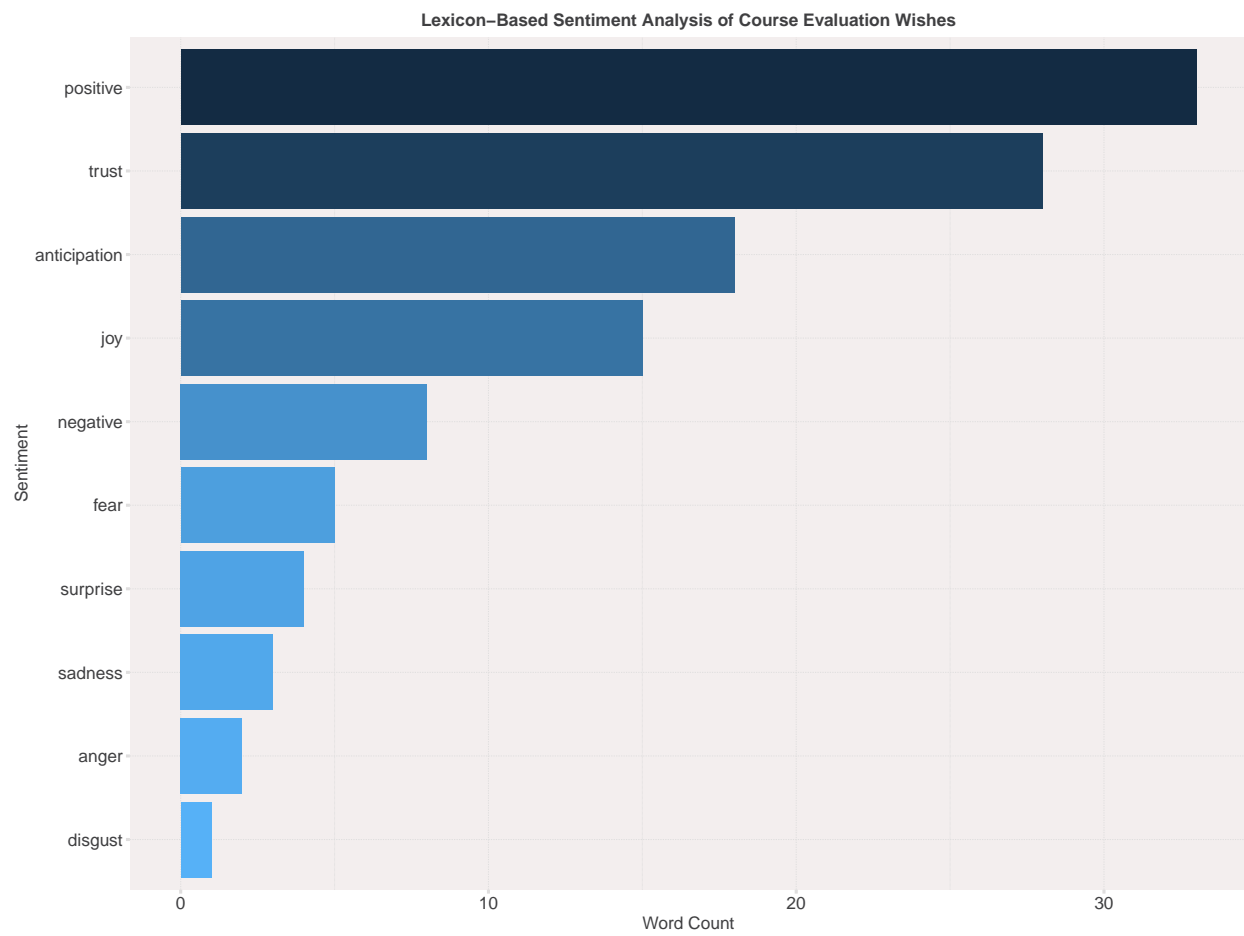


3.2 Lexicon-Based Sentiment Analysis

The overall sentiment for the likes is:

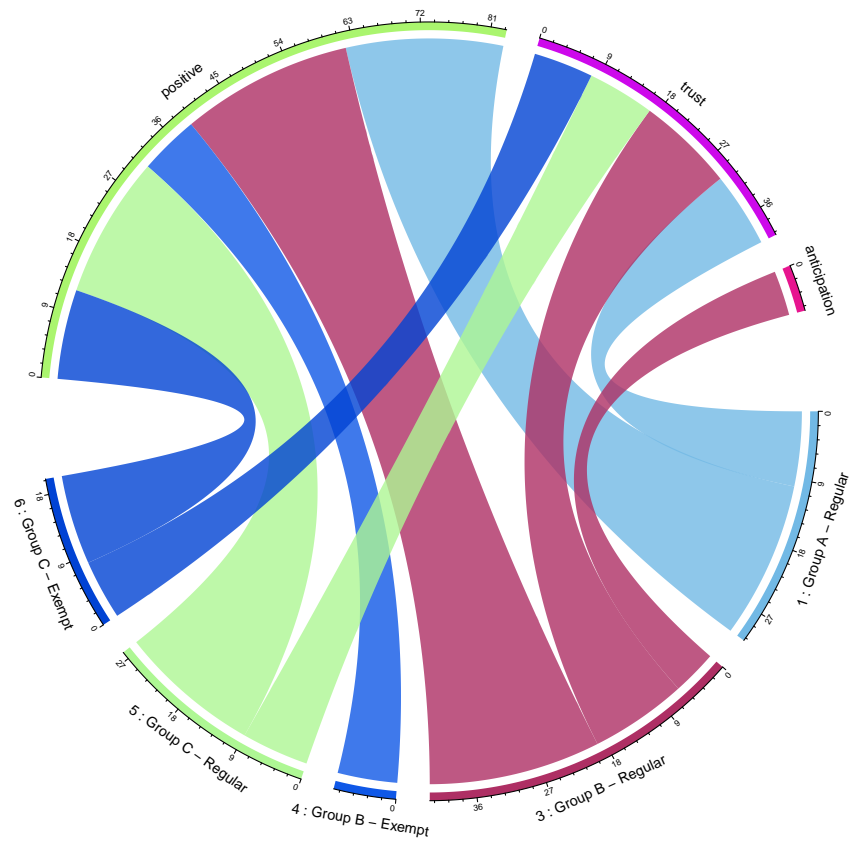


The overall sentiment for the wishes is:



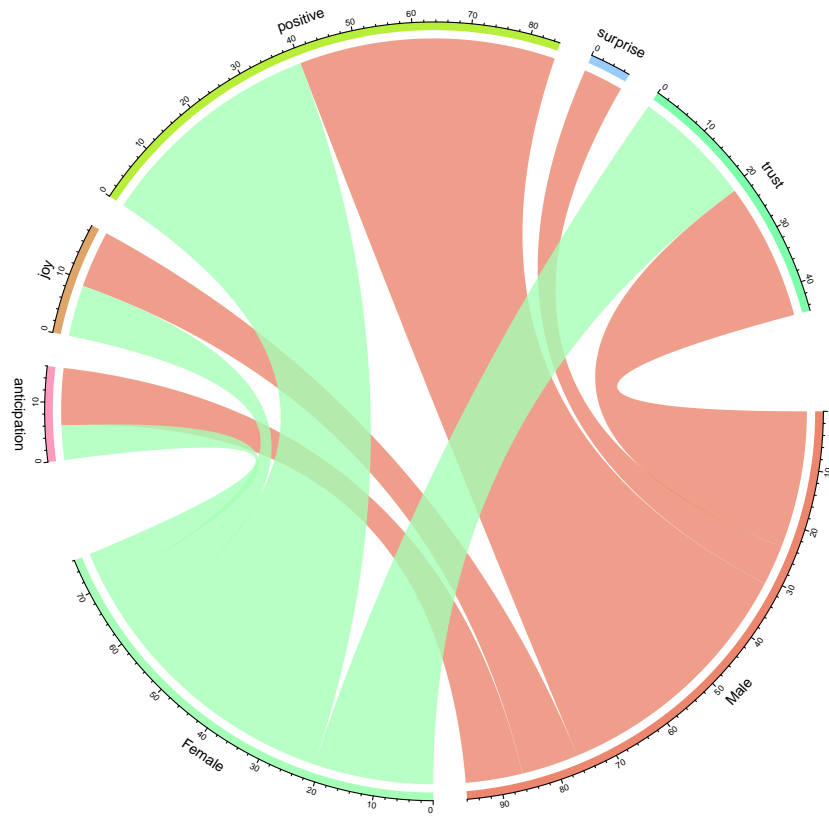
Chord Diagram of Likes per Class Group:

Lexicon-Based Sentiment Analysis of Course Evaluation Likes per Class Group



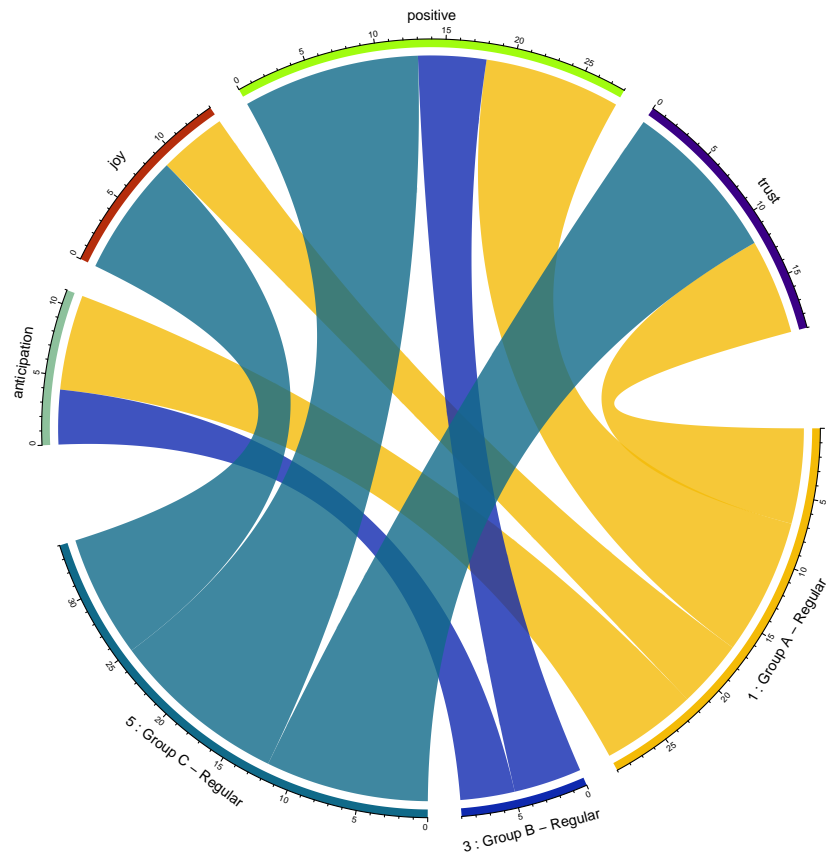
Chord Diagram of Likes per Class Gender:

Lexicon-Based Sentiment Analysis of Course Evaluation Likes per Gender



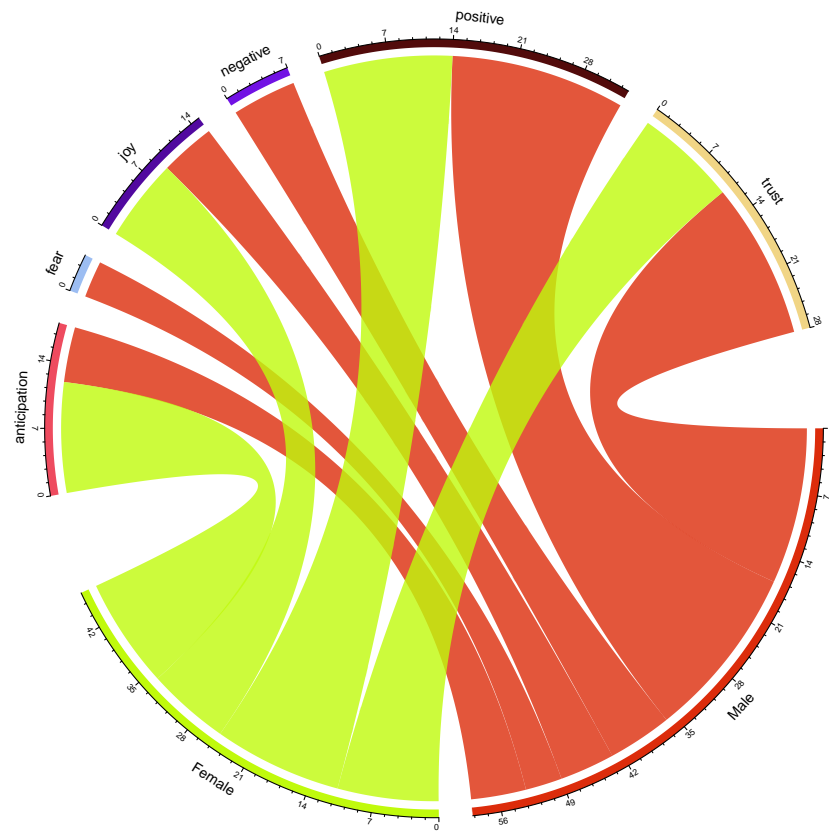
Chord Diagram of Wishes per Class Group:

Lexicon-Based Sentiment Analysis of Course Evaluation Wishes per Class Group



Chord Diagram of Wishes per Gender:

Lexicon-Based Sentiment Analysis of Course Evaluation Wishes per Group



3.3 Raw Data

3.3.1 Likes

The raw data of the likes is as follows:

Write two things you like about the teaching and learning in this unit so far

x

It is interesting and helps improve coding skills

it is very detailed hence of great help It is interactive both in the unit and in regards to other units such as IS project II

Ensemble Methods for Predictive Analytics Predictive Modelling Using R

Interactive

The concepts are well explained Communication is effective

It is a bit more practical due to the use of python and r The instructor is well organized and the teaching methods are useful

It is practical and based on modern concepts The labs are interesting and thought provoking

I like that the labs are practical I like being given enough time to do the labs

Everything is good

It is interesting and interactive since we get to use different tools in our sessions.

So far its been a hard unit and fortunately the teaching style for the lecture is helping as he guides us along

Lecturer is efficient classes start and end on time

Increase submission deadline

The practical labs are engaging hence skill development the teaching method and lectures

1. It is comprehensive
2. It is interesting.

It is step by step

- The content is really engaging and intense and shows that learning is there. - Also additional hands on skills like using GitHub and collaborations which plays a huge role in the personal development goals in the digital space.

N/A

Interactivity and applicability of the unit

The online classes The Labs that require submissions help me to dig deeper.

The unit is very practical which helps me in the long run. The lecturer does not leave anyone behind, ensures everyone has understood the concept

Work is clearly and easily broken down The lecturer is very available for consultation

The teaching for this unit has been very comprehensive so far and engaging with the lecturer.

The learning implements group works.

Learning to use GIT Being taught practically and through walk-throughs

The step by step explanation of the concepts is very helpful The time to complete the labs is sufficient

The lec takes his time to teach the concept

Detailed Explanations. Quick feedback by lecturer.

The lecturer is readily available to help when one is stuck The unit is well structured and organized

Very in depth Very practical

Its practical and has interactive learning

It is interactive It is engaging
 The lecturer does everything in his power to ensure we are comfortable with content being taught and make sure we are following along together. The e-learning site is also very well organized and categorized for this unit
 Answers the questions asked Explains well
 Patience and flow
 mode of delivery Information
 The mode of delivery The assistance of reference links put on elearning for easy reference
 The lecturer ensures everyone understands The labs are fun
 The lecturer ensures everyone has understood. It is practical.
 The explanations to the various concepts are well explained
 the labs sessions are nice
 i like the group labs i like the topics
 I find it current industry oriented
 The lecturer provides adequate feedback on the questions asked. The lab work clearly elaborates on the work taught.
 The lecturer explains the content really well.
 Takes time to organize his work, I appreciate the effort
 So far so good The lecturer is very clear
 It is comprehensive It is easy to follow
 Labs that describe each step to be followed are engaging and learning enables me to follow through the lab properly It is very engaging and interactive.
 The lecturer asks questions The lectures are clear
 Interactive Interesting
 The assistance by the lecturer, the practicality
 Lab work Class sessions
 It is very participative and lecturer gives room for questions
 feedback is quick Lecturer is willing to help
 Working as a team
 the fact that we get to do the lab work in groups the interactive online and on campus classes
 I like how the Lecturer explains the concepts and takes us through the labs
 The concept are explained very well A chance to learn R I have wanting to interact with R and data
 very interactive and hands on
 on hand Practice Good delivery
 It's interactive and very logical.
 The technical aspect of the unit. The attentiveness to detail when it comes to the labs and concepts are clearly explained.
 Wide scope of content Practicability
 Once you follow the steps for the lab you will be okay. The lecturer helps in one on one for the labs if one has an issue
 I like the way the topics are broken down very logical and easy to understand. I like that we are constantly able to ask questions and be answered regardless of the nature of the question.
 The lectures
 Its Good
 the lecturer the lectures
 Lecturer, Teaching method
 I like this unit because it prompts me to think actually think and connect the dots
 Well explained content
 Gaining R skills
 Use of realistic code group work
 practicality Engagement
 Group Labs
 its straight forward and simple to understand

I like the practicality of R and learning github in depth through the group work

Group work Practical Exercises

The learning of this unit is good in terms of the detailed and step by step practicals shown by the lecturer for each lab. The recordings.

I like that it challenges me to apply everything practically.

None

The practical aspect. The group work is good.

Labs activities, Quizzes help a lot on learning during the semester

clear and direct to the point step by step teaching works for me

The lecturer explains everything in detail and caters for both IDEs that is VS Code and R Studio

N/A

N/A

How to use and implement R as a language for data analysis

I am learning to use new language, R language, and how to use it together with the available libraries for predictive analytics.

Its practical

It is very practical and a good example of a prospective career path for many.

1. The lecturer makes the content easy to understand
the teaching method the recording being online is also helpful
The practicals

3.3.2 Wishes

The raw data of the wishes is as follows:

Write at least one recommendation to improve the teaching and learning in this unit (for the remaining weeks in the semester)

x

none

i would like if the concepts were divided where we learn the functions first online then do the practicals of it in person

N/A

Flexibility

I don't have any

Leniency with regards to lab work submission and future project work

More tutorials based on the labs

Use of less complex datasets

i have no recommendations

A guide to help us counter different problems like installation of packages during labs.

I would like lab exercises to be done more in class so as to easily understand

Lecturer might be a bit fast at times

Step by step materials/videos on how to do the lab works

student involvement

1. Nothing

Go easy on us abit, it is te last semester

- To give us insights or recommendations about certifications that we can as well do, related to this unit which will boost our C.Vs for the interested students.

N/A

A bit more tutorials on technical errors such as ones on knitting and rendering the markdown files

If the concept requires many practicals, the classes should be more online.

For the physical class to be moved to a lab

Being more lenient with lab work

Everything is okay so far.

Sticking to a specific application to be used

No recommendation at the moment

None

The content is too broad and covers a lot i.e new softwares which make the unit overwhelming.

It would be better if the physical classes were being recorded because at times one might be behind or missed an important lab step

No recommendations

N/A

Make the course work less bulky and complex

no comment

n/a

Too much content to deal with

time leniency
 That the labs should be given more time to them
 Breaks in between classes
 Nothing. I am enjoying and understanding the course.
 None
 increase more labs
 the labs are quite hefty so it really makes the work easier to do in a group
 More engagement
 More time to be allocated in the lab work assignments.
 Nothing
 I am content
 Reduce content Reduce labwork
 .
 Proper detailed explanation of the labs, rather than rushing through them quickly More time is needed for lab completion and progressive follow-up so the lecturer knows where you are stuck.
 More time for labs
 So far none
 Reduce the workload, its honestly too much
 More reference material Breaks during classes at least 5 mins
 None...The unit met my expectation and was delivered perfectly
 Avoid online classes
 Deadlines to be extended abit
 N/A
 i am enjoying the unit as it is
 Since we are about to finish our 8.4.4 system. To give us more recommendation on certificates and what the job market expects from us
 better communication of activities btwn the students and the lec
 .
 Ensure that the code work can work with any dataset and not fixated on provided dataset
 I would like there be more simpler labs with easier datasets to understand the concepts first then move on to more complex data handling and manipulation.
 None so far
 Kindly share more reading materials and past papers.
 I recommend that the deadlines on the labs be more flexible as there are many subject and projects running concurrently.
 The labs are long, they are individually basically the same size as an entire same project
 No recommendation
 so far so good
 Greater in depth exploration into labs to ensure we're actually understanding what is going on.
 The content is so hard to understand and the lec solving other people's issues only bring more confusion to some of us, I wish he would go through the content first then afterwards focus on individual problems
 He is doing a good job
 Personally I use linux and its kinda hard for me You can add some YouTube materials
 Lab submissions still very confusing
 More online sessions
 None
 so far so good
 Adequate time for completing the labs
 More group work, less individual work
 No recommendations there is good delivery.
 One recommendation may be to explain how these concepts can relate to and apply to our IS Project 2.
 None

It is okay.

- Slide are very long (too much content) lecture can improve on that-
nothing really

There are many labs

N/A

N/A

No comment, everything is fine

None

nothing all is well

n/a.

N/A

so far I have been struggling a little with the Lab a bit but i'm hoping it will get better as
we continue with the other labs

N/A