Student Council Statistics & Data Science

Runder Tisch der Lehre
(Round Table of teaching)

04. Oktober 2023

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Statistics Student Council Survey

stads.fs.lmu@gmail.com Switch accounts

Not shared

Data Protection Notice

- By filling out this form, you consent to the processing of your information.
- Participation in the survey is **voluntary** and there are **no disadvantages if you do not participate**
- You can **quit** your participation in this study at **any time** without having to indicate any reasons.
- The results of the survey will only be presented in **anonymous** form.

In case you have any questions, you can reach us at: fachschaft@stat.uni-muenchen.de. Thank you for your interest and, in case you participate in the survey, we hope you enjoy participating!

- Results are based on the survey and on discussions with students.

- We will not name specific people or courses that came up during our work or through the survey.

- This presentation will be made publicly available on <u>our website</u> and will be sent to you by E-Mail.

We are trying to be a helpful link between the course instructors and the students and are not here to benefit students with complete disregards of the institute.
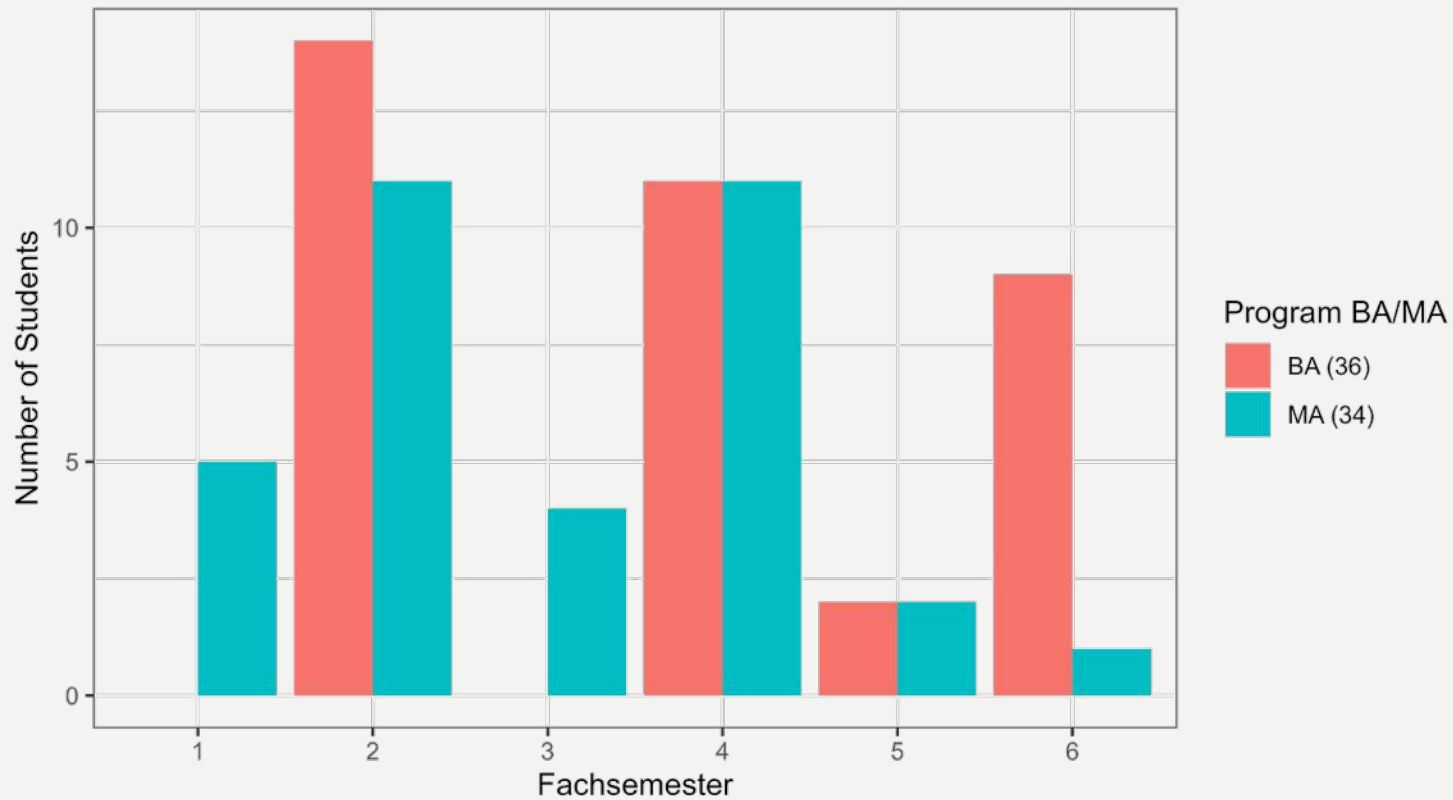
Agenda

- Results of the Student Council Survey

- Inverted Classroom and Online Education

- Exams and Reviews
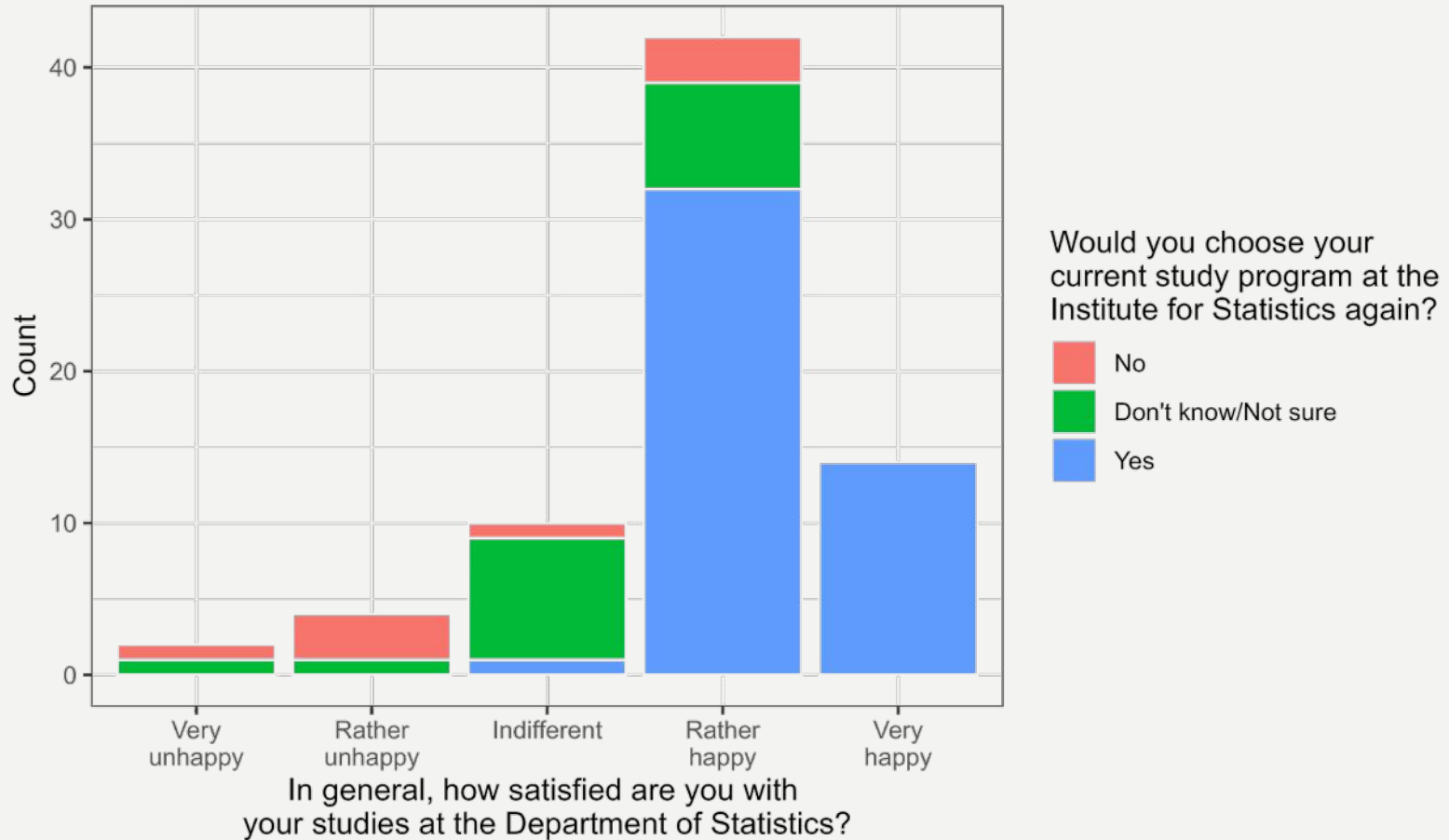
- Course Requests

- Outlook

Participation

Distribution of Respondents' Fachsemester in BA/MA Programs (NF-Stat omitted)

General Satisfaction (~ 80%)

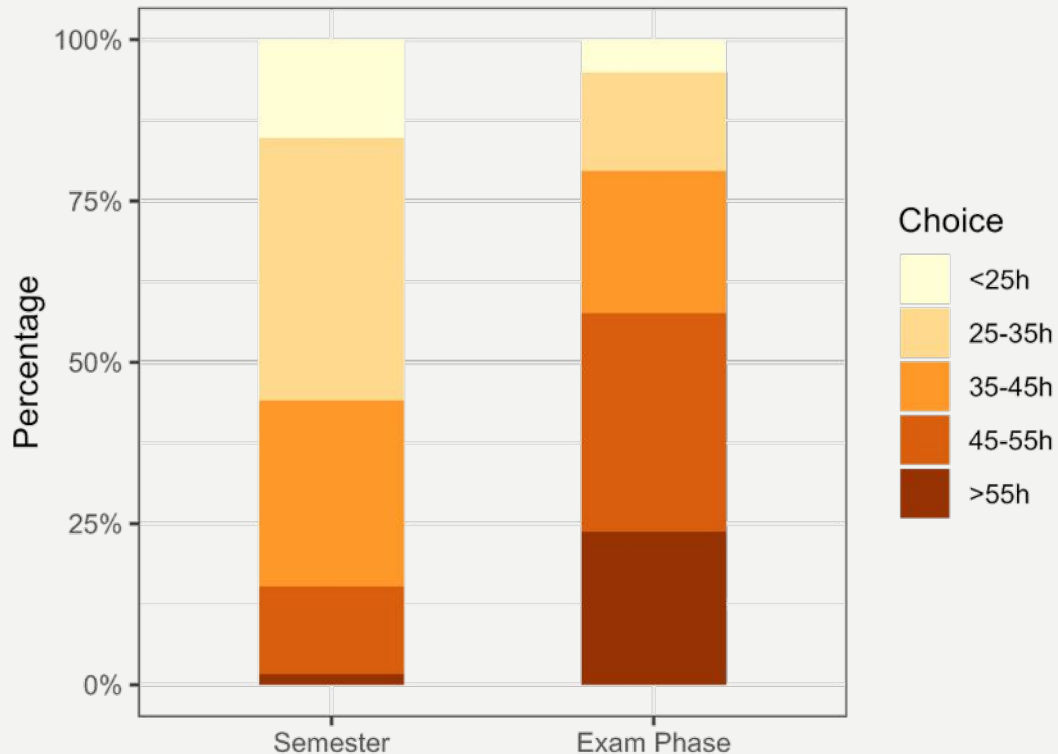Students' Satisfaction of the Current Study Program

Workload is adequate (in general)

Workload of Students

On average, how many hours of work did you have in your last semester (30 ECTS) per week during the semester and the exam phase?
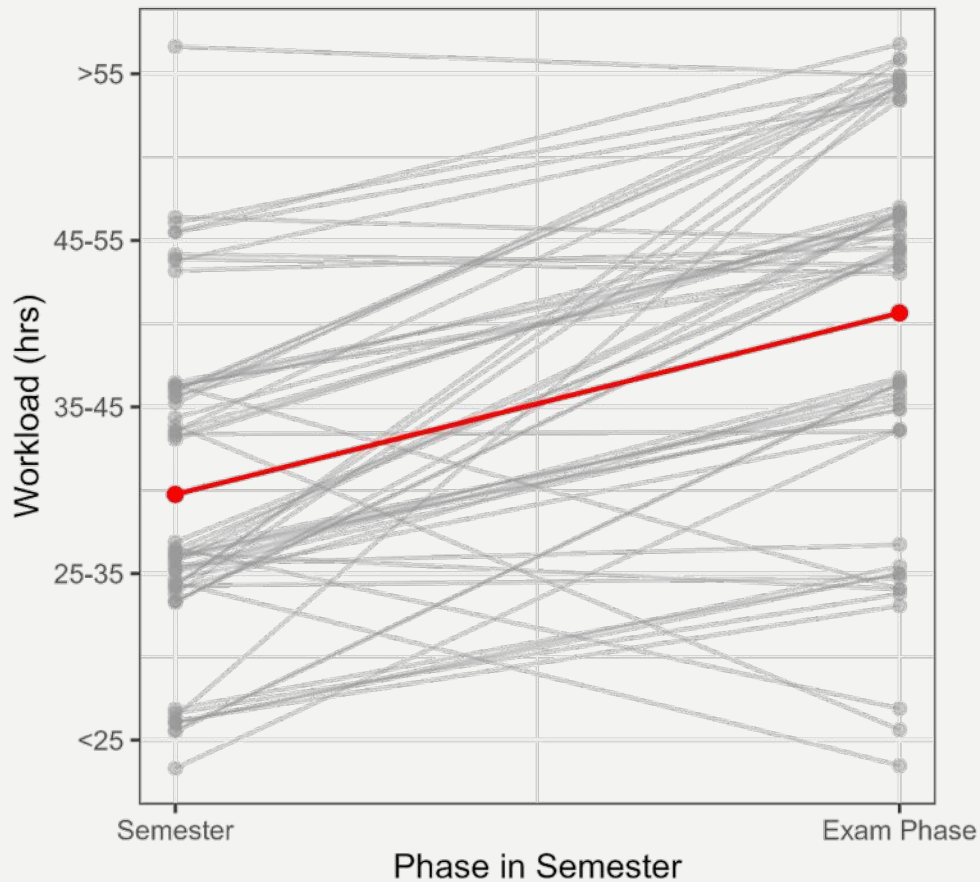
Deleted were 13 responses where "not sure" was given at least once.

Workload is adequate (in general)
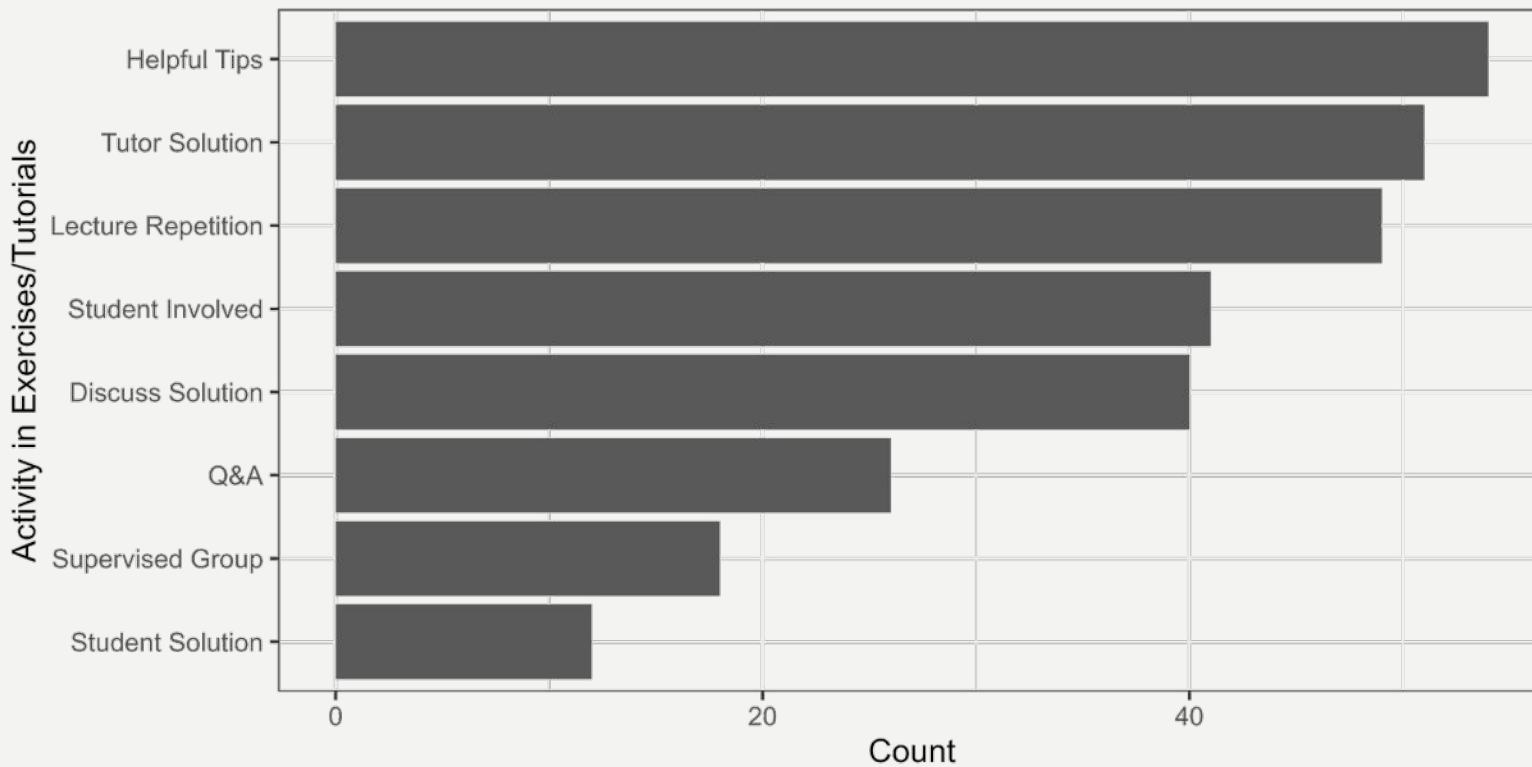

Linear Mapping of Workload and Phase during Semester

Learning success and exercise formats

Learning success and exercise formats

- **Helpful Tips:** The tutors give advice on homework and exams.

- **Tutor Solution:** The tutors show their solution of the exercises.

- **Lecture Repetition:** The tutors revisit the material from the lecture.

- **Student Involved:** Students are involved (by means of e.g., quizzes and questions) throughout the session.

- **Discuss Solution:** The sample solution will be uploaded and discussed during the session.

- **Q&A:** Questions and Answers session.

- **Supervised Group:** Supervised learning in a group.

- **Student Solution:** Students (voluntarily) present their solution ideas in front at the blackboard.

Discrimination and Disadvantage

Majority did not experience discrimination or disadvantage,

but there are individual exceptions – more on this later.
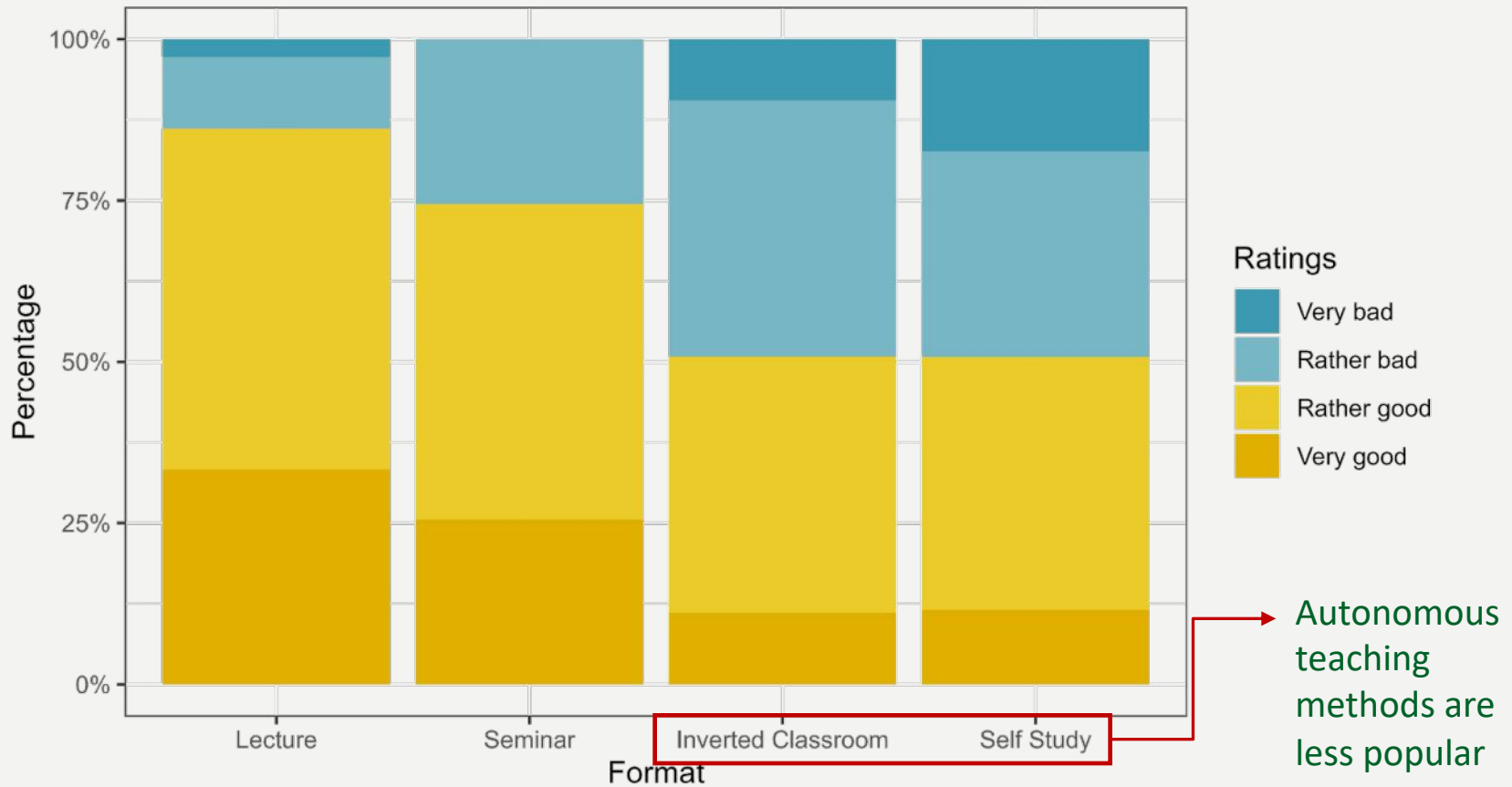
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Learning success and lecture formats

Students' Opinion on Lecture Formats
How would you rate the following lecture formats for your learning success?

Autonomous teaching methods are less popular

Attendance Teaching vs. Inverted Classroom vs. Online Teaching

In general...

- We support innovative education/teaching ideas and are willing to stand behind experiments.

- We appreciate the effort that has been put into the videos and hope that the noticeable rapid improvement continues.

But...

- We do not support courses, that mainly consist of videos and (passive) Q&A – sessions. Videos should be an addition and not a replacement.

- We do not support mostly-online courses and we demand **at least** one (meaningful) live attendance event per week for every course.

Challenges of inverted classroom

Socializing

- Students often feel like they are at an open university where they mostly do distance learning. They lack friends and study groups.

Motivation

- Lack of environment, fixed date and time and study groups leads to demotivated students.

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Student Preference of Examination Formats

Students' Opinion on Exam Formats
Rank the following types of exams by your preference.
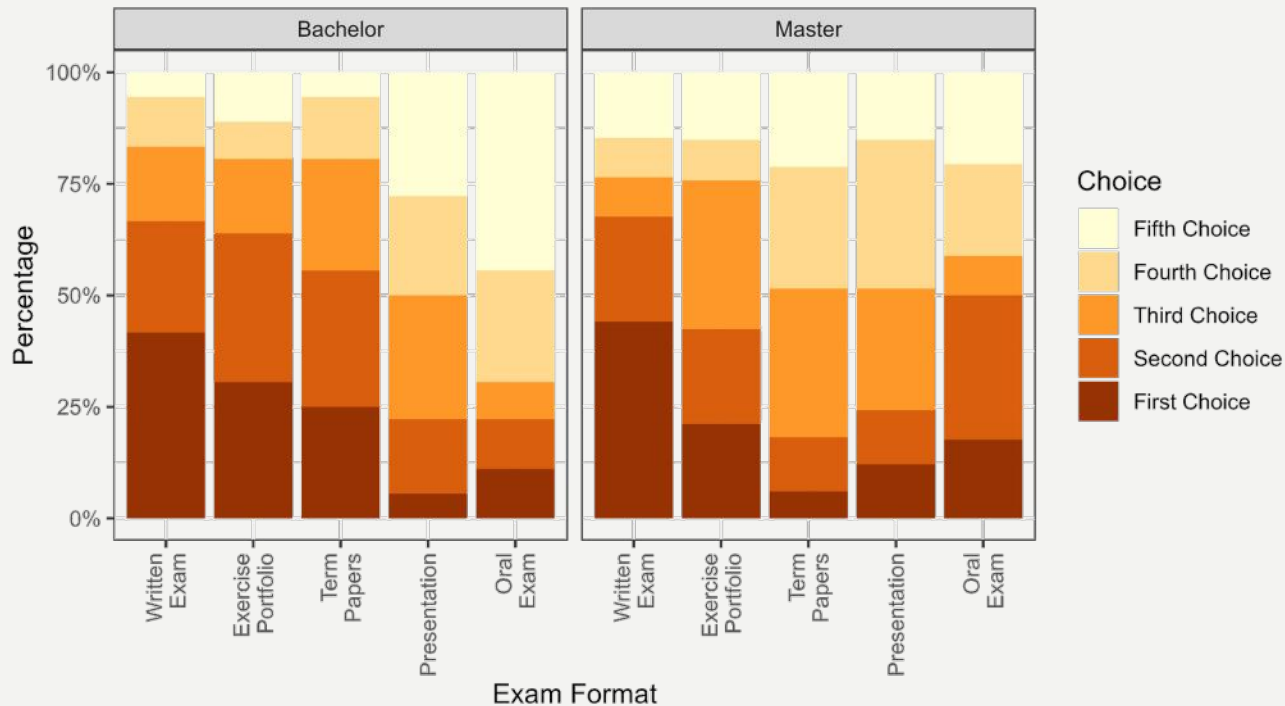
MRVO §12 Abs. 4 - "Die vorgesehenen Prüfungen und Prüfungsformen müssen es den Studierenden ermöglichen, zu zeigen, in welchem Umfang sie die angestrebten Lernergebnisse erreicht haben. [...] Um dies sicherzustellen, ist eine permanente Überprüfung und Weiterentwicklung der zum Einsatz kommenden Prüfungsformen zu gewährleisten."

Guidelines for fair exams

Draft

- **Quality Assurance:** Following these guidelines helps ensure that the exams meet certain quality standards and prevent common errors and causes of variations in performance outcomes.

- **Communication and Collaboration:** Collaborating with us on the guidelines promotes the communication between the student council and the lecturers with regards to examination and in cases of student complains.

- **Continuous Improvement:** Guidelines are not static; By following guidelines and providing feedback, students and lecturers can contribute to the ongoing process of refining best practices.

Exam Reviews

Student have the right for a copy of their exam

1. Kopien und Ablichtungen von Prüfungsarbeiten

Studierenden darf die Möglichkeit, im Rahmen der Einsichtnahme Kopien und Ablichtungen von Prüfungsarbeiten zu fertigen, nur aufgrund entsprechender Bestimmungen in den Hochschulprüfungsordnungen verwehrt werden. Da Studierende zur Wahrnehmung der Rechtsbehelfe gegen eine fehlerhafte Korrektur substantiierte Rügen vorbringen müssen, sind Regelungen der Hochschulprüfungsordnungen, die das Anfertigen von Kopien oder Ablichtungen untersagen, nur dann rechtlich nicht zu beanstanden, wenn es einen sachlich rechtfertigenden Grund dafür gibt, der auch in der Regelung angegeben sein muss (Recht auf effektiven Rechtsschutz, vgl. Art. 19 Abs. 4 Grundgesetz). Dass die Prüfungsaufgabe bei einer späteren Prüfung erneut herangezogen werden soll, ist dabei nicht ausreichend.

Prohibiting students from taking pictures/copies of their exam or telling them that they are not allowed to when they ask for permission, will not be tolerated by us.

Old Exams

Current/Old system:

FAKULTÄT FÜR MATHEMATIK, INFORMATIK UND STATISTIK
FACHSCHAFT STATISTIK

www.lmu.de | LMU-Portal | Sitemap

Old exams

For many modules, we have previous exams for preparation.

General notes:

For modules, for which we do not receive exams/memory tra
In order to improve our stock, you can always give us exams
altklausuren@fs.lmu.de.
We generally do not have solutions!
Please send us your requests early (i.e. before the learning p

New System:

- In general, we will not provide copies/transcripts/etc. of past exams.

- We want you to provide at least one past exam or mock exam that is representative – content wise and structure wise – for the upcoming exam.

- If no past exam or mock exam is provided by the examiner, we might provide memory logs of the latest exam.

Grade distributions and transparency

We wish for the grade distributions to be made publicly available
(see for example BWL)

- **Transparency and Benchmarking:** It allows students to understand how their performance compares to their peers and can help students identify their strengths and weaknesses in a particular subject or course.

- **Enhancing Accountability:** Students can hold themselves accountable for their performance. For instructors, publicly sharing grade distributions can encourage them to maintain consistent grading practices and fairness.

- **Realistic Expectations:** Students are provided with realistic expectations about what to anticipate in terms of grading and performance standards. This information can help them determine if it aligns with their academic interests and capabilities.

The new LSF system offers promising opportunities for implementing this idea, but specific realization can (and must) be further discussed.

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Math pre-course - Master

> I feel discriminated because I did not have a lot of math knwoledge and i never learned it, but when i said i dont have the knowlaedge i was just disregarded and said i wasnt good enough

- Block-course before beginning of semester

and/or

- Weekly course over the duration of a semester

and/or

- Recorded Video-course with self evaluation test
  (can be extended/replenished with YouTube Videos)

→ No ECTS obtainable

Visualytics / Adv. Data Visualization / Data Analytics - Master

- Essential skill for almost all Data Scientists and Statisticans

- Common in Bachelor - Descriptive Statistics, R-courses (especially the first one)

- Common at other universities (UZH, MIT, TUM)
  - There is a similar course offered by Prof. Andreas Butz at the IFI

- Can be a 3-6 ECTS non-mandatory (block) course or seminar
  - Refreshes methods/concepts: EDA, data manipulation, plotting types
  - Introduces advanced tools: SQL, Tableau, PowerBI, more advanced Python & R libraries

- Exam or project

Applied Machine Learning - Master

- A collection of applied topics that are currently not addressed (enough)

- Given a real-world scenario, how do I approach (and what do I focus on?):

    - EDA

    - Feature Engineering

    - ML-Method selection (Statistical Reasoning & Modeling Approach)

    - Model Training and Tuning

    - Deployment

- Can be a good preparation/side course for the Consulting Project/Practical

- Helps students in building a project portfolio

- Can be based on field specific applications:

    - Applied ML in Economics/Social Science/Life Science/Computer Science/etc.

- Exam or project submission

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Idea of a "Task-Force-Teaching"

We are trying to be a helpful link between the course instructors and the students and are not here to benefit students with complete disregards of the institute.

§ 14 Studienerfolg

[1]Der Studiengang unterliegt unter Beteiligung von Studierenden und Absolventinnen und Absolventen einem kontinuierlichen Monitoring. [2]Auf dieser Grundlage werden Maßnahmen zur Sicherung des Studienerfolgs abgeleitet. [3]Diese werden fortlaufend überprüft und die Ergebnisse für die Weiterentwicklung des Studiengangs genutzt. [4]Die Beteiligten werden über die Ergebnisse und die ergriffenen Maßnahmen unter Beachtung datenschutzrechtlicher Belange informiert.

- We want to receive insight into the teaching evaluations.
- We plan on offering in-class teaching evaluations and discussions.
  - Details will need to be discussed and plans will be provided over the course of the next semester

We are looking forward to work with you to improve the study and teaching environment and the connection between the students and the institute