

Minutes of the 187th Meeting of the Applied Mathematics Programme Committee

Friday 26 January 2024

15:45 – 17:15 hr. HB 2F & MS Teams

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Present: Members: Prof. Dr. F.P. Schuller (Chair), Dr. K. Proksch (online), Dr. C. Pérez Arancibia, L.S. Lanting (online), J.P. Boon, M. Snoeren, E. van der Veer.

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Guests: Prof. Dr. A.A. Stoorvogel (Programme Director), Dr. J.B. Timmer (B-coordinator), N. Luijten (Protocolist).

Absent: Dr. B. Manthey (Vice chair) with notice,
Drs. J. Schut (M-coordinator) with notice.

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1. Opening

The chairman opens the meeting at 13:09.

2. Minutes 186th meeting 21 November 2023

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a. Changes Page 4 Line 144: first student.

With this change, the minutes are approved.

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b. Action points 481: Can be removed from the list (Walter gets hours to work on this)
482: Can be removed from the list (Letter has been sent)
483: Can be removed from the list (Feedback has been received)
484: Can be removed from the list (Email has been written)
485: Can be removed from the list (Will be discussed today)

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3. Style adaption of future minutes / document portfolio

a. Style adaptation of future minutes

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Future minutes of the committee meetings will present a concise summary of the results of discussions had, conclusions drawn and decisions taken. In order to arrive at such notes, the protocolist will continue to prepare a more extensive draft version of the notes and propose a summary for each agenda point. The Chair will then prepare a final concise version of the summary for publication and it is this version that will be approved by the committee in the following meeting. The extensive version will be kept as an internal document only.

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b. Style adaptation of the document portfolio

Future document portfolios will have consecutive numbering on each page and the agenda will refer to these page numbers including hyperlinks from the agenda to these pages.

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c. Suggestion for a comparative discussion of module evaluations

45 The Programme Director and the Chair will work out a scheme on how to reorder the discussion of module evaluations such as to compare them to previous years.

4. Announcements

50 The Programme Director announces that due to delayed programme accreditations during the COVID pandemic, Applied Mathematics is required to undergo a mid-term accreditation this year. The Programme Director will start setting up the mid-term accreditation in February and involve the programme committee in the process from the beginning.

5. Advice / correspondence

- 55
- Mail from Chair to members about improving tutorials
 - Mail from Manthey about beautiful tutorials
 - Mail from Lanting about beautiful tutorials
 - Mail from Pérez Arancibia about beautiful tutorials

6. Bachelor evaluations

60 *a. Evaluation of Module 1 (SEQ and Panel Reports)*

Analysis I

65 A recurring topic in the evaluation of the Analysis courses is the question of the division of the material into Analysis and Calculus which currently underlies the structure of the exam and the grading.

70 The committee agrees that every proper mathematics course teaches foundational aspects (the corpus of definitions, theorems and proofs) and calculations techniques and that students need to master both aspects, but also that these aspects have inextricable overlap. It is the responsibility of the teacher to set up lectures, tutorials and exams such that both aspects are properly learnt and tested in the exam. A clear division of a course's material into foundational topics and calculational topics, however, is ultimately ill-defined due to significant overlaps and interdependences. Such a division is indeed not made, for instance, 75 in Linear Structures 1 and 2. In contrast, the current course Analysis 1 and 2 adheres to such a distinction of the material into foundational aspects (Analysis) and calculational aspects (Calculus), particularly by providing separate grades for both aspects in the exam. This confuses both experts and students.

80 The programme committee recommends to abolish this distinction and to award one only grade for the Analysis exams. The committee has no objection to award a second grade for other aspects, such as tutorial performance or the like, that would enter the final overall grade, if the lecturer and examiner of the course wish to do so.

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85 *Linear Structures*
No comments.

Modelling and Programming
No comments.

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Intercultural communication
The committee discussed this course, which was quite negatively evaluated by students, as part of the curriculum. While it is agreed that communication in general, and intercultural communication in particular, is a necessary skill to be mastered by university students, it is not obvious that this is achieved, or even positively advanced, by a formal course. The staff members of the committee think that such skills are learnt by meaningful interaction with fellow international students while working on actual mathematical subjects. Some staff members further hold that the foundations of mutual respect and communication are an appropriate learning goal in elementary and middle school but do not merit a university course, not the least since it is not an academic topic that merits the award of EC points.

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b. Evaluations Module 5 (SEQ and Panel Reports)
There were 5 responses to the SEQ and thus the evaluation result will be disregarded. The Panel evaluated the module very positively.

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c. Intermediate Evaluations Module 2
No comments.

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d. Intermediate Evaluations Module 6
Non-linear optimization and learning

The evaluation of the course contents was positive but there was criticism in the panel evaluation about the way the course was taught. The lecturers are surprised about this criticism, since they heard different from the students in class. It was not possible for the committee to come to a conclusion on the basis of this contradictory information. On the basis of the final evaluation, the salient points will be addressed again.

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e. General discussion on the response rate of all evaluations
Both the long-term response rates to course evaluations and the expert opinion of the programme committee's staff and student members lead to the conclusion that the evaluation questionnaire sent out by the central administration significantly lacks substantial insight into relevant issues for mathematics courses and is entirely unfit for its intended purpose. The committee holds that the response rates are prohibitively low for any decision to be based on these data. The committee learnt that the programme directors of the faculty recognized that problem. The chair will prepare a statement on this central issue.

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130 f. General discussion on choice of lecture notes and books for courses
It is the responsibility of the teacher to provide either (i) self-contained lecture notes, (ii) a textbook at the level of the course or (iii) present self-contained lectures that allow students to prepare their own notes. The material is not to be decided at a higher level.

135 **7. Object Oriented Programming**
The teachers of programming courses in the bachelor found that the students are generally not mature enough to handle object oriented programming in the introductory modules. They asked for approval to push this topic to module 4. The programme committee approved this change.

140 **8. Beautiful tutorials**
The committee discussed a detailed and resource-neutral proposal for a significant improvement of tutorials with respect to widely and strongly perceived problems with tutorial attendance and effectiveness.

145 **9. AOB / Questions before closing the meeting**
No comments.

10. Closure
The chairman closes the meeting at 15:05.

150 *Next meeting: 27 February 2024*

Nr	Description	Meeting	Responsible
486	Meet and delineate a reordering of when module evaluations are discussed, such as to also take previous years into account.	26/01/2024	Chair & PD
487	Provide global and consecutive page numbering in the all-documents file, refer to these page numbers in the agenda and set corresponding hyperlinks.	26/01/2024	Registrar
488	Discuss the midterm accreditation.	26/01/2024	Chair & PD
489	Draft a comment on the evaluation questionnaire's unfitness for purpose with the aim to communicate this up the hierarchy.	26/01/2024	Chair
490	Send approval for proposes changes for timing of object oriented programming in bachelor programme.	26/01/2024	Chair