

# G0A63A: Optimization and Numerical Methods

## About Course, Assignments, and Exam

2018 – 2019

1. **Instructors:** Geert Molenberghs (Coordination)  
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2. **Course Format & Schedule:**

The course is organized in a dual format:

- First, web lectures need to be followed (for links, see bottom of this document).
- Second, a two-day contact session is organized (for schedule, see below; organized as 6 sessions).
- It is important to clearly see the goals of the two-day contact session:
  - It is not intended to introduce additional material.
  - It is intended to resolve problems and concerns.
  - In other words, questions and answers is a major goal of the two-day session.
  - Students are encouraged to try exercises prior to the two-day sessions. If questions about these remain (even though the solutions are available), then they can be asked during the two-day session.
  - The lecturers will also be able to paint the broader picture behind the material covered in the various chapters.

Again, these are not formal lectures; it is important that the web lectures are watched prior to the contact session.

- Important: questions can be submitted prior to the face-to-face sessions, by way of the Discussion Board on Toledo or by emailing them to the teacher. **Participants are strongly encouraged to submit questions ahead of time; it allows for efficient face-to-face sessions.**
- Students are encouraged to bring their own software (on their own device). This can be used for some of the exercises. Evidently, the instructors are not necessarily familiar with a given software tool.

- For regular Master of Statistics Students, an additional face-to-face contact is planned (Session 'A', Day 3)

Note, one of the web lectures is a brief overview of the entire course, with useful information and suggestions.

Session	Date	Instructor	Time
1	November 21, 2018	Francis Tuerlinckx	10:30–12:15
2	November 21, 2018	Geert Molenberghs	13:15–15:00
3	November 21, 2018	Tom Wilderjans	15:30–17:15
4	November 22, 2018	Geert Molenberghs	08:45–10:30
5	November 22, 2018	Francis Tuerlinckx	11:00–12:45
6	November 22, 2018	Katrijn Van Deun	13:45–15:45
A	December 4, 2018	All	TBD
Exam	January XX, 2019	—	09:00–11:30

3. Evaluation: The evaluation will be a written, open book exam. The exam will be scored in the range  $[0, 20]$ . Three types of questions will be expected:
  - General understanding of the course.
  - Applications/exercises: if necessary, programs and output will be provided by the instructions, together with a set of questions based there upon.

## Course Material

1. The **course notes**, prepared by the instructors are mandatory course material. They will be provided in digital form through Toledo or by email.

The course notes contain a list of references with additional reading. The additional reading is optional.

2. **Web lectures:**

<https://videolab.avnet.kuleuven.be/jukebox/?album=762b4b55c5315064f11d103dbd059a00>

or through the Toledo site of the course.

3. A document with solutions to the exercises is made available (on Toledo and send around by email).