1. **Instructors:** Geert Molenberghs (Coordination)
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2. **Course Format & Schedule:**
The course is organized in the following format:

- First, web lectures need to be followed (for links, see bottom of this document). This can be done in the course participants’ own time.
- Second, the course notes also contain exercises. It is very strongly recommended to try these.
- Third, a total of six online Question&Answer (Q&A) sessions are organized, in real time (two by Geert, three by Francis, one by Katrijn, one by Tom)
- It is important to clearly see the goals of the Q&A sessions:
  - It is not intended to introduce additional material.
  - It is intended to respond to questions regarding course material and exercises.
  - In these Q&A sessions, 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 Q&A session and that exercises are tried.

- 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 use 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 Q&A session is planned

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

<table>
<thead>
<tr>
<th>Q&amp;A Session</th>
<th>Date</th>
<th>Instructor</th>
<th>Time</th>
<th>Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>October 8, 2024</td>
<td>Francis Tuerlinckx</td>
<td>10:00–12:00</td>
<td>1–3</td>
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<tr>
<td>2</td>
<td>October 15, 2024</td>
<td>Geert Molenberghs</td>
<td>10:00–12:00</td>
<td>4 + 6</td>
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<tr>
<td>3</td>
<td>October 29, 2024</td>
<td>Tom Wilderjans</td>
<td>10:00–12:00</td>
<td>5</td>
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<tr>
<td>4</td>
<td>November 5, 2024</td>
<td>Geert Molenberghs</td>
<td>10:00–12:00</td>
<td>9 + 11</td>
</tr>
<tr>
<td>5</td>
<td>November 12, 2024</td>
<td>Katrijn Van Deun</td>
<td>10:00–12:00</td>
<td>7–8</td>
</tr>
<tr>
<td>6</td>
<td>November 19, 2024</td>
<td>Francis Tuerlinckx</td>
<td>10:00–12:00</td>
<td>10 + 12.1-12.4</td>
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<td>7</td>
<td>November 26, 2024</td>
<td>Francis Tuerlinckx</td>
<td>10:00–12:00</td>
<td>12.5-end</td>
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</tbody>
</table>

3. Evaluation:

• The evaluation will be a written project, of which the assignment will be given in due course
• The project will consist of a numerical optimization programming task.
• Students can work in groups of 2 or alone, on the project.
• This report should be handed in prior to the oral exam.
• The oral exam (which is individual) consists of two components:
  – A five-minute presentation of the project by the student.
  – Questions and answers relative to the project and general understanding.
• The instructors will create an individual time schedule for the oral exam.
• The oral exam will take place via BlackBoard Collaborate Ultra.

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://kuleuven.mediaspace.kaltura.com/playlist/dedicated/1_254yohus/

or through the Toledo site of the course.

3. A document with solutions to the exercises is made available after the Q&A contact sessions.