

# IOPS-course Optimization and Numerical Methods

## About Course and evaluation

2023 – 2024

Online Only!

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 (three by Geert, two 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.

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

Q&A Session	Date	Instructor	Time	Chapters
1	October 10, 2023	Geert Molenberghs	10:00–12:00	1–3
2	October 16, 2023	Geert Molenberghs	10:00–12:00	4,6
3	October 24, 2023	Tom Wilderjans	10:00–12:00	5
4	November 7, 2023	Katrijn Van Deun	10:00–12:00	7
5	November 13, 2023	Katrijn Van Deun	10:00–12:00	8
6	November 21, 2023	Geert Molenberghs	10:00–12:00	9–11

Note that chapter 12 is not yet added to this table!

### 3. Evaluation:

- The evaluation (passed or not) is based on active participation during the six sessions

## Course Material

1. The **course notes**, prepared by the instructors are mandatory course material. They will be provided in digital form 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/](https://kuleuven.mediaspace.kaltura.com/playlist/dedicated/1_254yohus/)

or

[https://www.kaltura.com/p/2375821/sp/237582100/embedIframeJs/uiconf\\_id/41950771/partner\\_id/2375821/widget\\_id/1\\_rme27ttn?iframeembed=true&playerId=kaltura\\_player\\_&flashvars\[playlistAPI.kpl0Id\]=1\\_254yohus&flashvars\[ks\]=&&flashvars\[imageDefaultDuration\]=30&flashvars\[streamerType\]=auto&flashvars\[localizationCode\]=en&flashvars\[nextPrevBtn.plugin\]=true&flashvars\[sideBarController.plugin\]=true&flashvars\[sideBarController.position\]=left&flashvars\[sideBarController.clickToClose\]=true&flashvars\[chapters.plugin\]=true&flashvars\[chapters.layout\]=vertical&flashvars\[chapters.thumbnailRotator\]=false&flashvars\[streamSelector.plugin\]=true&flashvars\[EmbedPlayer.SpinnerTarget\]=videoHolder&flashvars\[dualScreen.plugin\]=true&flashvars\[hotspots.plugin\]=true&flashvars\[playlistAPI.playlistUrl\]=https://kuleuven.mediaspace.kaltura.com/playlist/details/{playlistAPI.kpl0Id}](https://www.kaltura.com/p/2375821/sp/237582100/embedIframeJs/uiconf_id/41950771/partner_id/2375821/widget_id/1_rme27ttn?iframeembed=true&playerId=kaltura_player_&flashvars[playlistAPI.kpl0Id]=1_254yohus&flashvars[ks]=&&flashvars[imageDefaultDuration]=30&flashvars[streamerType]=auto&flashvars[localizationCode]=en&flashvars[nextPrevBtn.plugin]=true&flashvars[sideBarController.plugin]=true&flashvars[sideBarController.position]=left&flashvars[sideBarController.clickToClose]=true&flashvars[chapters.plugin]=true&flashvars[chapters.layout]=vertical&flashvars[chapters.thumbnailRotator]=false&flashvars[streamSelector.plugin]=true&flashvars[EmbedPlayer.SpinnerTarget]=videoHolder&flashvars[dualScreen.plugin]=true&flashvars[hotspots.plugin]=true&flashvars[playlistAPI.playlistUrl]=https://kuleuven.mediaspace.kaltura.com/playlist/details/{playlistAPI.kpl0Id})

or

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

3. A document with solutions to the exercises is made available after the Q&A contact sessions (provided by email).