

ISOS-Course

'MATLAB for PhDs' (July 2010)

Lecturer: Prof. Th. Slawig, Department of Computer Science

Please state your academic discipline (e.g. physical oceanography)

- Biological Oceanography x5
- Marine Biogeochemistry
- Chemical Oceanography x2
- Geography
- Economics
- Environmental Economics x2
- Marine Biology
- Functional Genomics
- Geochemistry
- Biology

Which topics of the course were particularly relevant to you?

- Transfer of Data into Matlab, Plots, Statistics
- General introduction, working with big data sets, differential equations
- All
- Plotting (2d), loading/saving datasets, rearranging datasets, read out special parts of the data set (defining functions), scripts
- Understanding matrices and vectors, understanding the general Matlab syntax and terminology, writing function and plotting (to see how much more I could do with mathematics if I had a more profound maths knowledge)
- ODE's, optimization, solving of equations
- Nearly everything as it was about basics, particularly, data management, plotting, optimization
- Plots, generalles "Handling" in Matlab
- Extracting & working with specific data plotting
- Everything, because like this, I got an impression what is possible with Matlab. Simulation and statistics are the topics which are most useful for me
- Basic commands, structure, Matrix **think-way**, dataset management
- All, optimization, simulation
- Big data solution
- Almost all
- Interpolation, poly fit
- Handling big data sets, plotting, optimization, interpolating, statistics

Are there any particular issues you would have liked to be addressed additionally?

- No, nothing
- Not in a 3,5 day course, in general more data management (whole data storing, processing and plotting in Matlab)
- No x2
- Trouble shooting / debugging (what does this error mean?)
- How to import and use spatial data, - but that is a) a very special wish due to my background and b) I have so far only a vague idea what I would/could do with these
- It was a good set of topics
- I would like to go deeper into optimization and statistics
- Statistik
- More "real life" examples to be able to apply the methods learned to own problems & data
- The course need 1 extra day that people bring their own data and apply "specific" problems and get the chance to ask. It is easier having something known in mind than abstract variables

- "code" schreiben am Beispiel eines kleinen Modells
- statistical analysis
- basically it is good enough
- a bit more time for own data sets, importing this data

Please summarize the "take-home message" that you have gained from this course!

- I got an excellent introduction in how Matlab works in general and how the most important tools work. Great course, thanks!
- Simple differential models are easy to make in Matlab
- Try to work more with Matlab
- Matlab is extremely complex so is the help
- A good start to learn what Matlab is useful for – and to see my own deficits in maths...
- I got a good impression of Matlab and a good starting point for my problems – further course: optimization with different constraints, difference & differential equations, analytical mathematics, solving nonlinear equations
- There are a lot of possibilities in Matlab, I feel that I got a starting knowledge to search for solutions for my research problems. Matlab II: Optimization with more difficult systems, statistics
- Matlab ist extreme umfangreich! Manchmal waren die Aufgaben zu schwierig. Gut wäre mehr Erklärung vor den Aufgaben gewesen
- Matlab is a great tool to quickly work with data but too complex to use it with my data at this point. I would need an advanced course to learn more in depth how to use it or my data analysis
- You can do a lot of things with Matlab
- Possibilities opened by programming, tool based box to combine with other skills, different approaches to my data analysis
- Ein Programm, das einem viele Möglichkeiten bietet. Hat ein wenig die „Berührungsängste“ mit Programmen dieser Art verringert. Next course: Optimization, simulation.
- Basic knowledge of Matlab, can start to learn by myself
- Basic knowledge of Matlab, the method to learn/study by myself (how to use help.doc is important after the course), pde, simulation (mathematically)
- This course is good, I got knowledge about Matlab. I want to learn more about Matlab
- Everything can be done with Matlab and it is not as difficult as expected.