

Pre-Course Information From Neuromatch Academy

- <exynos999@outlook.com>
- Neuromatch Academy <neuromatchacademy@neuromatch.io>

Neuromatch

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To: You (exynos999@outlook.com)

Hi,

We are excited you will be joining us as an Interactive student at Neuromatch Academy (NMA)! We have some important information for you as we ramp up to the start of the school.

First: payment, TA matching, and onboarding. We expect to have our student portal ready early this coming week. We will send instructions on how to log into that portal and once there you will see your location-adjusted fee and have the ability to pay it (or request a waiver if you or your institution cannot afford the fee). You will also be told the name of your teaching assistant (TA) through the portal. Your TA and a group of ~10 other students will form your “pod”. Your pod assignment also determines the exact time zone you are working in.

We will also separately provide instructions for joining a discussion forum where you can converse with your pod and fellow students from other pods. Once you’ve been onboarded to that discussion forum, most NMA communication will take place there.

Please do not email us right now asking for further information. We will be reaching out to you again soon. If you have not yet received information about payment amount, this will be available when you login later this week.

Second: observer registration email. Some of you may have received an email asking you to fill out the registration form for the Observer track. This email was sent to a broad list of anyone who expressed interest in the Observer track in the past. As an Interactive student, you do **not** need to fill out that form and you can ignore that email. If you already did fill out that form, that’s ok; we will remove you from the Observer list automatically. Apologies for any confusion.

And finally: pre-course preparation. We have received questions from many of you about how to get prepared for NMA. And so we’d like to share some resources to help you prepare for the course, specifically in the following three areas: programming, math/statistics, and neuroscience.

Getting Ready -- Python / Python refresher

We ask that all students be comfortable with the content in the Software Carpentries Introduction to Python programming course. We have created a video [Getting Started with Python: Google colab](#) and [written instructions in the precourse repository](#) to get you started on this using Google Colab, which is the programming environment that most of you will be using during the course.

Google Colab is our preferred method of programming for NMA and should be available for nearly everyone in the world. However if you cannot access Colab for some reason, (e.g., your country limits access), we have also provided instructions in the precourse repository for how to [get started on the python tutorials with jupyter notebooks without Colab](#).

So please sometime in the next few weeks go through the lessons in this Software Carpentries mini-course. You can step past topics that you are already comfortable with.

Getting Ready -- Math / Statistics

Computational neuroscience and neural data analysis relies on linear algebra, basic statistics, and calculus (derivatives and ODEs). For this, we recommend:

1. [Youtube series "Essence of linear algebra"](#)
2. [Chapters 6-7 of this online book "Statistical Thinking for the 21st Century"](#)
3. [Youtube series "The Essence of calculus"](#)

Spend some time also with these materials, and focus on content that you are not familiar with.

Getting Ready -- Neuroscience

For those looking for a refresher or introduction to neuroscience topics, we recommend getting started with this text on [The Science of the Brain from the British Neuroscience Association](#). It provides a concise introduction to neuroscience and the brain and short introductions to various subfields within neuroscience.

Getting Ready -- Python Workshop Jul 9-10

We are having an in-person workshop led by TAs the Thu/Fri before the start of NMA. You can sign-up for this here: <https://forms.gle/3QT5a5CKn5Dreyaw5>. Sign-ups will close 11:59pm on Sunday, July 5 (last time zone on earth). Note that all materials will also be available online (by Thu Jul 9), if you cannot attend this workshop in-person. Students attending this workshop should also work through the Software Carpentries introduction (above) prior to the in-person workshop. It is essential that you feel at least somewhat comfortable

with python when the course starts as we do not have time to teach python within the tutorials.

If you would like additional preparation we've placed some [lists of resources in the precourse repository](#).

***Again, we're so glad you will be joining us at Neuromatch Academy!
We'll see you in just a few weeks.***

Sincerely,

Neuromatch Academy team

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