

## 2 Ling 450/650 Syllabus for Fall 2020

### 2.1 Basic Coordinates

- **Course website:** [http://prosodylab.org/~chael/2020F\\_Ling450-650/\\_book/](http://prosodylab.org/~chael/2020F_Ling450-650/_book/)  
(Login & password: See class webpage on mycourses!)
- **Time:** W 11.35am-2.25pm
- **Location:** The lectures will happen on **zoom**
  - meeting ID (click on this link, or find the link on mycourses): 942 0924 9030
- **Group chats:** after the first few lectures, we will often have shorter lectures on zoom, and have individual group meetings on zoom during the remaining class time. These meetings will happen on zoom here: <https://mcgill.zoom.us/my/prosodylab>
- **Instructor:** Michael Wagner [chael@mcgill.ca](mailto:chael@mcgill.ca)
- **Office Hours:** W 3-4 pm. You have to book a time [here](#). You can only book a time 7 days in advance. At your booked time, you can find me on zoom: <https://mcgill.zoom.us/my/prosodylab>. If you want a quick response, it might be easier to ask your question on Zulip!

See the **Preliminary Schedule** for links to lectures, homeworks, etc.!

#### Important notes:

- For some the zoom integration in mycourses stopped working. If the lecture link you see here (and on mycourses) no longer works for some reason, tell me on Zulip. If this link: <https://mcgill.zoom.us/j/94209249030> (the one listed on mycourses) doesn't work at all, then we might have moved the class here: <https://mcgill.zoom.us/my/prosodylab>
- **Class announcements:** Most class announcements will be made on Zulip to the public channel Ling450-650-2020, **and only there**. I will assume that everyone will see those messages. Throughout the semester, you have to monitor Zulip so you don't miss out on important information!
- **Questions about homeworks:** If you have questions about this homework, you can post in the same channel, under the topic 'hw1' in this case. Or send me a private direct message

on Zulip with this topic if you don't want your question to be public. **Do not use email unless you absolutely have to!**

## 2.2 Requirements

Apart from the prerequisites (Phonetics and Syntax), you will have to use various types of software (google drive for keeping track of files; Zulip for communication for class and with your group for your project; R for programming your analysis and final project). You can learn all you need as you go along, but having some background on handling files (especially spreadsheets) and programming R would certainly help. You can look for the links in the R tutorial (see in the table of contents on the right) for some useful starting points if you want to familiarize yourself with R a bit. If you have programmed in the past (even if it wasn't R), you will see that you can learn some basic R scripting very quickly (just download R and Rstudio and you can try it out a bit—see below for more information on how to install it).

## 2.3 Course Description:

Students with a background in some core area(s) of linguistics will learn how to test linguistic theories in the (online) lab. The focus is on learning by doing: Students will design and carry out their own online experiments, and will learn some basic techniques to plot the results, and evaluate and present them.

## 2.4 Goals

The goal of this class is for you to design and run a small-scale study (reading, production or perception), and in the process learn something about designing experiments, about experimental methodology, and how to analyze data. Important to know: you will not learn how to do statistical analysis in this class—however, you will learn a bit about how to explore and visualize results and evaluate data, which is the first step toward a full analysis of the data.

## 2.5 Course Logistics

- **Class website:**
- All relevant links and lecture notes will be posted on this site here
- You will always find a link to this page on the [McGill Mycourses](#) site. This is where grades will be posted.
- Videos of the lectures will be also be posted on Mycourses
- Most of the communication for the class will happen on **Zulip** (see below)

### **This is a class with a lot of group work**

- In this class, you can work your experiment in a group of ideally **no more than 4 people**
- The homeworks, however, have to be done individually, except the parts explicitly marked as group-work, which you can do with your group

### **Lectures and group meetings**

- Will be zoom for the class lectures (see link too meeting above)
- Lectures will be recorded and posted on mycourses
- For the first few weeks, we will have remote lectures for the full class time (W11:35 am - 2:25)
- We will the move to shorter lectures (11.35–12.35), and the other two hours will be spent with group work (and I will hop from group to work. The smaller Group meetings will happen on Zulip)

### **How will you know whether you've done everything you needed to do for the class?**

- Part of the point of the homeworks is that they function like a checklist on your progress.
- So as much as possible, I will list everything you need to do for the class in one of the homeworks, and as long as you finish the homework on time you should be up to speed with the class work.
- Readings will also be assigned as part of the homework, but I may assign one or two readings on top of the homeworks if necessary

**Zulip for project management:** In this class you will be working on an experiment in a group. The communication for your group project and also for group logistics more generally will happen on **Zulip**. Once you have received your invite to the prosodylab workspace on Zulip, you can install the Zulip app on your computer/tablet/phone or just log into the Zulip website. This is where class announcements will happen, and other important information will be posted. This also

were individual and group meetings will happen. Every project will have a **channel** on Zulip, and all your teammates and myself will be part of the channel. There will also be a general channel for questions to the class. Part of the first homework will be to familiarize yourself with Zulip.

**Readings:** We will not use a textbook in this class. There will some readings (to be announced), and they will all be posted on the class **Schedule**.

### Software:

You'll have to install the software we'll be using (see below) on your own computer. Everything we will use is free. You and install the software now, but you should at the latest have installed it by September 4 2020.

### Software Installation: Obligatory

- You will need a **Gmail account** for this class. Your project will be placed in a **Google Drive** folder that we will use to sync your files and data. In order to have the files on your own computer, you need to install Google's **Backup & Sync**, and make sure the files from your Google Drive (which comes with your Gmail account) are synced. You do not need to sync everything on your computer, just your project folder (you will receive an invite to a project folder once you've picked your project). So this shouldn't take too much space on your computer.
- If your project involves sound data (it probably will), you will need the speech analysis program Praat](<http://praat.org>). Some basic scripts for annotation will be provided. However, you are expected to familiarize yourself with the program above and beyond what we will discuss in class, and figure out any problems you run into with the help function provided in the program, and online resources (such as the [praat online forum](#)) (available at [praat.org](http://praat.org))
- Stats/Figures: Install **R** and **RStudio** on your computer. We will analyze our data using RStudio.
- After installing, run the following command at the prompt in RStudio to install further packages:

```
install.packages(c("rms", "Hmisc", "lme4", "zipfR",
"languageR", "arm", "scales", "dplyr", "ggplot2", "car", "texreg", "tidyverse", "devtool
dependencies = TRUE, repos = "http://cran.r-project.org")
```

- Once you receive an invitation from the prosodylab workspace, you can install the [Zulip](#). This will make it easier to keep up to date with the class. Zulip is a project management software, that will allow us to manage your class for your group. Most of the class interactions will be on Zulip.
- If you want to write to me about something and you don't feel comfortable using Zulip, you can always email me, but you will probably get a quicker response on Zulip.

### Software Installation: Optional

- You can also install the [Montreal Forced Aligner](#) if you want to automatically annotate sound data. You will find documentation [\[here\]](http://montreal-forced-aligner.readthedocs.io/en/stable/)(<http://montreal-forced-aligner.readthedocs.io/en/stable/>).

## 2.6 Ethics certificate

- Everyone at McGill involved in research studies has to complete an Ethics training. The Since we'll do real-life (virtual!) experiments, you'll have to take this training too.
- The upside that you only have to take this once, so if after this class you want to work on experiments or in a lab, you'll already have taken it!
- To participate in this class, you will have to complete the [TCPS 2 Core Tutorial](#). **Please use your McGill email address when you take the ethics class**—this way the Research Ethics Board at McGill can check online that you have done it. You will have to submit your ethics certificate as part of homework 2.
- Note that taking that training and getting the certificate will take a few of hours, so plan ahead. You start now! You can do this in several sittings, and you can start today if you want to get a head-start. Submitting the pdf with your ethics certificate will be part of homework 2, so you will have to finish it by September 23

## 2.7 Evaluation

### In-class participation (5%):

- All students are expected to engage class discussion, and contribute to the group's understanding of the material. Give that the class will be delivered remotely, it may be hard to participate in the class lectures. But we'll have recurring meetings between me and your group. It will be easier to speak up in these group meetings. Please participate actively at least there—and also make sure that you let others speak as well!
- Also, participation presumes that you're present, so please attend the class and your group meetings regularly!

### **Homeworks (60%):**

- There will be four homeworks, each worth 15%.
- They will involve some problems in which you have to demonstrate the skills you have acquired in class and will prepare you for the work on your project. The last homework will be about your own project.
- The homeworks have to be done individually, except the parts that are explicitly marked as group-work, which you can do with your entire group

### **Experiment design and project presentation (10%)**

- Early on in the class you will present on your project idea and submit a project design describing the experiment
- Part of the project submission spread-sheet with the experimental stimuli you want to use
- You will present the project to the class using a short Google presentation—this is intended to be a 'pitch' of your study, and should be done in such a way that others can give you feedback on how to improve the experiment, for example by improving the stimuli or by tweaking the methodology, or by avoiding potential confounds
- You should work on this as a group

### **Final presentation (10%)**

- The final presentation on your project will consist of a short Google slides presentation that introduces the topic, describes your experiment, and shows the results
- It should have a clear narrative, and someone not familiar with the topic should be able to understand it, and get an idea about the data that you collected and conclusions that can be drawn from it.
- You should work on this as a group

### **Final project (15%):**

- Instructions for the final paper for Ling 450 are posted [here](#).

- This will be a short final paper on your experiment, submitted in the form for a webpage. We'll discuss how to use R to create such pages
- Due date: December 11, end of the day

### **If you are taking Ling 650:**

- Course evaluation will be the same, except that you will have different expectations for the final project. Essentially, there will be greater emphasis on grounding your experiment in the theoretical literature. I will post a link with instructions for the final project for students in Ling 650 soon.

## **2.8 McGill Policy and Additional Statements**

**Course Work in French:** In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

**Integrity:** McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <http://www.mcgill.ca/students/srr/honest/> for more information).

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**Fair assessment:** As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the [Office for Students with Disabilities](#), 514-398-6009.

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**Land Acknowledgment:** McGill University is on land which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous people whose footsteps have marked this territory on which peoples of the world now gather.

**Pandemic eventualities:** In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.