COURSE OVERVIEW

The goal of this two-semester course is to help you to develop skills as a developmental scientist. You will be involved in every aspect of developmental research (participant recruitment, participant payments, laboratory upkeep, experimental design, apparatus construction, data collection, data coding, statistical and graphical analyses, literature reviews, grant applications, abstract submissions, presenting results in various written and oral formats, meeting/networking with professionals in the field).

In addition to gaining firsthand knowledge about infant learning and development, you will acquire technical, practical, analytic, and communication skills that transfer to other types of work (critical thinking, oral and written presentations, collaboration, personal responsibility). You will have the opportunity to participate in professional activities in the academic community (e.g., national/international conference presentations, attend colloquia, co-author journal articles).

Moreover, you will work directly with researchers at various stages in their careers. You will meet one-on-one with Dr. Adolph (KEA) each week to discuss your project, hold multiple trainings each week with your “senior mentor” (doctoral student, post-doc, research staff) and other undergraduates, and attend a weekly lab meeting with the entire lab (24+ researchers). You will join an existing project and be paired with the senior lab member who manages that project and who will help to mentor you. You will become deeply knowledgeable about your project, and you will have working knowledge of all the ongoing work in the lab. Although most of your lab work will focus on your project, you will assist with data collections on all studies. Given the size of our research program, this will allow you to gain experience across a variety of ages, behaviors, technologies, and domains. At the end of the year, you will present your work at the NYU Undergraduate Research Conference. At the end of each semester, you will meet with KEA and your senior mentor to evaluate your progress and to set new goals.

The central lab maxims are:

- Strive for personal excellence
- Respect students, participants, materials/infrastructure, and data
- Pay careful attention to detail
- Understand behavior
REQUIREMENTS & EVALUATION
The methods and tutorial courses provide a year-long research apprenticeship. You must maintain an A or B grade to continue this course in the following semester. Your grade will reflect progress in the following skills:

- Complete online CITI ethics training
- Complete 12 hours of lab work per week including:
  - weekly group project meetings (1 hour)
  - weekly lab meeting (2 hours)
  - scheduling (2 hours)
  - weekly lab upkeep (30 min)
  - data collections (0 - 6.5 hours)
  - data coding and graphical and statistical analyses (0 - 6.5 hours)
  - preparing manuscripts for presentation and publication (0 - 6.5 hours)
- Master hands-on procedures for data collections for all studies by end of first semester in lab
- Participate in informal group "Lab Quiz" to demonstrate understanding of current studies
- Demonstrate mastery of:
  - experimental design and basic statistics
  - relevant psychological theory and concepts
  - critical thinking regarding scientific articles and presentations
  - ability to read and critique research, assimilate results, and relate material to psychological theories and concepts
  - basic scientific writing skills in various formats
  - video coding and data processing
  - Databrary and the basics of open data sharing
- Presentation at the NYU Undergraduate Research Conference in May

IMMEDIATE STEPS:
A. Read this syllabus and complete the lab orientation.
B. Take CITI ethics training and receive certification; email to Brianna (bk1820@nyu.edu) when done.
C. Complete Datavyu behavioral coding training with your senior mentor.
D. Pair up with a current undergraduate to begin training for participant recruitment.
E. Create an affiliate account on Databrary.
F. Email Joey (jp5756@nyu.edu) and Tiger (tyt228@nyu.edu) to get set up with server and log-ins, including LabDocs and the Baby Database.
G. Get lab key from Justine (justine.hoch@nyu.edu).
H. Email Meyer's Facilities Coordinator Erica (erica.feeney@nyu.edu) for after-hours building access.
I. Email Maggie (maggie.shilling@nyu.edu) to give you access to the lab calendar.
J. Fill out semester availability in Google spreadsheet.

WEEKLY RESPONSIBILITIES:
A. Weekly project meetings (with KEA and senior mentor) and progress on your project as agreed in weekly syllabus updates
B. Weekly lab meeting & lab upkeep (with entire lab)
C. Scheduling participants
D. Video coding
E. Data collections

END-OF-SEMESTER RESPONSIBILITIES:
A. Participate in the lab deep clean
B. Self-evaluation and review with KEA and senior mentor
C. Undergraduate Research Conference (URC) for spring semester

GENERAL GUIDELINES
You can ask or tell KEA about any academic issue anytime—applying for jobs, applying for graduate programs, courses, other professors, research-related activities, etc. Do not hesitate to
contact her and never worry about bothering her or upsetting her. She is always available to you and will do her best to meet your needs.

**You should understand everything you do.** The best (and fastest) way to learn about lab procedures is to ask questions—there are many procedures that are specific to our lab and we do not expect you to know everything immediately. If you don’t understand a procedure, lab rule, analysis, concept, etc., ask someone. Please do not do things by rote without understanding the rationale. Never assume that you are lacking; you are not. If you don’t understand something, it is lacking or not well taught.

**Tell us sooner rather than later if something goes wrong.** Mistakes do happen—if you can’t find a file, lost your key, misplaced something in the lab, deleted something accidentally, messed something up in a data collection, it will ALWAYS be easier for us to fix if we know as soon as possible.

**You should enjoy your time in the lab.** It is our goal to make this lab course your best experience at NYU. Working in a lab requires time, dedication, and hard work, but it should never be unpleasant.

You should expect that:
- All written and verbal communications among lab members (KEA, senior mentors, lab researchers, peers) are courteous and respectful.
- You will receive direct mentorship from KEA and at least one senior lab mentor, both of whom will meet with you weekly or more frequently.
- Your contributions are recognized and credited.
- You can voice concerns about any aspect of your research experience or people in the lab without fear of repercussion, and your concerns will be taken seriously.
- Your other coursework will not suffer as a result of participating in the lab course.
- You will be intellectually and personally invested in your specific research project.

If any of these expectations are not being met (for you or other lab members), please talk to (1) KEA and/or (2) your senior lab mentor. See “Reporting and Evaluations” below for further options.

**WEEKLY RESPONSIBILITIES (DETAILS)**

**(A) WEEKLY PROJECT MEETINGS AND PROJECT PROGRESS**

Every week, you will have a project meeting. The time will be scheduled based on your semester availability, so it is important that you fill out your semester availability as soon as possible! You, KEA, and your senior mentor will attend this meeting. This is a time to check in on your project, discuss issues and progress with KEA, and practice communication skills.

**MEETING NOTES:**

We keep detailed meeting notes every week—anything you would want to write down in a notebook or planner should go into these notes. It will be your responsibility to update the lab notes every week; ask your senior mentor if they have anything that should go on the agenda. Always have your meeting notes open before your meeting begins and format your notes in outline mode.

**PAPER PRESENTATIONS:**

Every week you will be assigned 1-2 papers to read and present. You should answer these five prompts in your presentation:

1. Who are the authors and how do they fit into this field of literature?
2. What did they do?
3. What did they find?
4. What do they think it means?
5. What do you think it means? How is this relevant/important for you and/or your project?

Don’t get “bogged down” by the details. Keep your presentation short and succinct. Understand the figures, and the narrative they outline in the paper (Hopefully! Some papers don’t do this well.). Be prepared to answer questions about specific details that you will not include in your presentation.

Communication is a skill that will benefit you in the future no matter your field, but it takes time and practice to master. Practice with other undergraduates and/or your senior mentor before your project
meeting. Clear and concise communication is very difficult to master, so do not be discouraged. Moreover, it is especially difficult to master for new ideas, new procedures, and new findings.

**TWO-MINUTE SPIELS:**
We will work on a “2-minute spiel” for each lab study in project meetings—think of this as the elevator pitch for your project. We will continually revise how we communicate our ideas, procedures, and findings to various audiences. Be prepared to respond to questions regarding your project/research and be prepared to think about why and how your research is being done and how it fits into what is already known.

**BACKWARD CALENDAR:**
At your weekly group project meeting, you will update a working weekly syllabus and “backward calendar.” This document represents an agreement among the members of your group about the appropriate goals for the week and long-term goals for you and your project. The weekly syllabus and calendar will keep your project on track so that you can achieve the goals you set for yourself over the academic year.

**(B) WEEKLY LAB MEETINGS & UPKEEP**

**LAB MEETINGS:**
We will meet each Wednesday from 6:30 PM – 8:30 PM. The agenda for lab meetings varies week to week, but we might edit a lab member’s paper, have a lab member present a project idea, hold a brainstorming session, or have an outside speaker give a lecture. Lab meetings are mandatory.

**UPKEEP:**
- We clean the lab for the 30 minutes before lab meeting (6:00 PM – 6:30 PM). You will be assigned a job to complete each week. If you are unavailable at 6 PM, you can complete your job at another time during the week.
- Take your weekly jobs seriously and be responsible about keeping the lab tidy and hygienic. Infants are everywhere in the lab, and it is not cleaned by the building staff.
- Always put all supplies and equipment away in their proper places when you are finished with them.
- If you the last to finish using up supplies (e.g. paper towels, Cheerios, printer paper or ink), put it on the list on the whiteboard and/or email Joey and Maggie to order more.

**(C) PARTICIPANT RECRUITMENT**
You will receive more formal and specific scheduling training in the coming weeks, but part of your job as a research assistant in the lab is to call and email participants to be scheduled for our studies. You will begin training by being paired with a current undergraduate—it is your responsibility to contact the undergraduate you are paired with. You are expected to devote at least 2 hours to scheduling each week, and you will be assigned a specific day to schedule. This is crucial, because part of the scheduler’s job for the day is to confirm the next day’s participants. If for some reason you must miss your assigned day, it is your responsibility to swap days with another scheduler.

**(D) VIDEO CODING**
Large portions of your time in lab every week will be devoted to video coding.

**VIDEO TRAINING:**
Your senior mentor will train you on how to use Datayyu for video coding. After training, you will code some files together and then independently. Your senior mentor will code “reliability” trials, where your coding is matched to theirs to make sure you are both in agreement and that you have properly learned the code.

**GENERAL CODING RULES:**
Every project has its own coding manual that explains the purpose of the codes and how to do the coding. After you are familiarized with how to use Datayyu and the specific codes for your project, coding should never be extremely tedious or difficult. If it is, bring this up with KEA or your senior mentor right away.
When coding, make sure to mark files in use in the coding progress sheets – you never want to be working on the same file as someone and accidentally copy over each other’s work.

(E) DATA COLLECTIONS

DATA COLLECTION JOBS:
Every study is different, but jobs normally include: (1) set-up, (2) experimenter, (3) assist (sometimes multiple assist roles), and (4) clean-up. You will learn about the roles as you are assigned to train on each study, but you will start by training for set-up and clean-up, and then will learn assist roles (usually for the studies more relevant to your own project). The paperwork portions of set-up and clean-up are relatively universal; physical set-ups and clean-ups vary more drastically. Always ask for help if you are uncertain about anything—the success of data collections relies on every role.

YOUR AVAILABILITY FOR DATA COLLECTIONS:
• You will be assigned to data collections every week. Every weekend, a senior scheduler will send an email with all of the job assignments for each data collection. This is assigned based on your semester availability, which you will fill out in a google spreadsheet at the start of every semester. If you do not receive the email for next week’s data collection, notify the senior scheduler or your senior mentor right away.
• In the event of any deviations from this semester schedule (e.g. you’re usually free on Tuesday afternoons but you have to be out for a doctor’s appointment), you must mark them in the lab’s Google calendar with your first name (e.g. Christina out 2-3 PM).
• If you are scheduled to train/run a study at a time that doesn’t work with your schedule, it is your responsibility to look at your registered availability on that semester’s lab calendar. If you mixed up the times and will not be able to complete the task at the time/date required, you are responsible for finding a replacement within the lab to do it for you. If the scheduler made a mistake and you were not checked off as available, notify them immediately.

TRAINING FOR DATA COLLECTIONS:
If you are assigned to be trained for any portion of the study, you must email the person training you to schedule a time to complete the job. Do this with enough time to allow for differing schedules.

DATA COLLECTION RULES:
• You must arrive 30 minutes prior to the scheduled start time. If you are set-up, you must be finished setting up 30 minutes prior to the scheduled start time.
• When planning to set up or clean up, always check what other studies are being run that same day and how much time you have to “flip” the room to allow enough time for the next study to continue.
• If you must miss an experimental session for which you have agreed to participate, you must alert us in sufficient time to find a replacement. Failure to do so may result in losing a letter grade or failing the course.
• For emergencies the night before a data collection or the morning of a data collection, email and/or telephone (1) the most senior person on the data collection, and (2) all other researchers on the data collection.

ATTIRE & BEHAVIOR WHEN ASSISTING WITH DATA COLLECTIONS:
• Dress in clean, neat clothes and look professional.
• Wash your hands after you enter the room in caregivers’ full view. Wash your hands immediately after you change infants’ diapers or help to measure them. Wash your hands immediately after the baby leaves the lab.
• Keep your fingernails clipped to the skin so that you don’t scratch the babies. Don’t wear colored fingernail polish. Keep your hands looking manicured with no open sores.
• Do not wear a solid black top.
• Remove rings on your fingers that stick up, dangling jewelry (necklaces, bracelets, earrings), and all visible rings not in your ears (tongue rings, eyebrow rings, nose rings).
• Wear washable shirts that do not gap at the neck, skirts that cover your legs when you sit on the floor,
and pants that do not show your bottom when you squat down.

- Pin long hair back.
- If parents need an extra set of hands when going in or out of the lab or building, you can offer to carry their belongings, but not their baby.
- If parents need to use the bathroom, watch the baby in the lab.
- Do not answer personal questions from parents and do not ask personal questions of parents.
- Do not comment about parents’ behaviors.
- If you see something concerning (e.g. suspected abuse or maltreatment, possibly undiagnosed condition), do not say anything to the parent. Immediately notify KEA or the most senior person on the data collection/in the lab.
- Never follow parents into the street. We are liable for any events outside of the building.

END-OF-SEMESTER RESPONSIBILITIES (DETAILS)

(A) UNDERGRADUATE RESEARCH CONFERENCE (URC)
Every May, undergraduates present a poster or presentation at the Undergraduate Research Conference. Much of the spring semester is devoted to preparing for this event (analyzing results, drafting posters, creating figures, etc.).

(B) END-OF-SEMESTER DEEP CLEAN
At the end of every semester, we devote an entire day to deep cleaning the lab. You are expected to be there for the entire day, apart from when you have class or exams.

(C) STUDENT SELF EVALUATIONS
You will write structured evaluations at the end of each semester that summarize your work and your contributions to the lab. These are designed to help you measure your growth, and to identify where you would like to focus your efforts in future semesters. You can look at previous undergraduate self-evaluations in their personal folders on the lab server. Have your senior mentor review your self-evaluation prior to sending to KEA. You will not receive a grade for the course until you complete this self-evaluation and KEA has received it. Self-evaluations also guide KEA to write letters of recommendation for you, so make sure you are detailed and specific and highlight your unique contributions.

GENERAL LAB PROCEDURES AND POLICIES

DIVERSITY, EQUITY, AND INCLUSION
It is our intent that students from all backgrounds and perspectives are well-served by this course, that students’ learning needs be addressed both in and out of class, and that the diversity that students bring to this lab be viewed as a resource, strength and benefit. Your suggestions are encouraged and appreciated. Please let us know ways to improve the effectiveness of the course for you personally, or for other students, or student groups.

To help us create a learning environment for our undergraduate research assistants that supports diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.):

- Please let us know your preferred name and pronouns
- If you feel that your performance in lab is being affected by your experiences outside of class, please don't hesitate to come and talk with (1) KEA or (2) your senior mentor.

If something was said (by anyone) that made you feel uncomfortable, please talk to KEA about it, and she will fix it without harming anyone. (Anonymous feedback is also an option—see below).

DATA MANAGEMENT

- Never under any circumstances remove original (identifiable) data from the lab. This includes all paperwork and digital files (video and other data). Any original data outside the lab violates guidelines for participant confidentiality and may result in the lab being shut down.
• Be extremely careful about managing data in lab and on Databrary. Pay special attention to filling out cover sheets, returning altered files to Labdocs (any files not in your personal folder that are left on other computers will be deleted), putting computer files and hard copies in their appropriate folders, and notating the top of each spreadsheet and hard copy. Follow the protocols for set-up and procedures (if protocol is unclear, fix it).

• Respect participants’ privacy and their wishes for sharing. Be extremely careful about how you tag sharing permissions in Databrary. Do not label data with participants’ names. Do not store contact information with processed data. Do not take pictures of participants or pictures of videos in lab.

• Always drag what you need from the server to the computer desktop before opening. Never open it directly on the server.

• Don’t forget to save your work and “ship it back to the server.” To do this, take the document on your desktop, drag to server and select the correct option from there.

• You will want to format your documents to sort themselves by year. Our lab convention is: FileName_YEAR_MONTH_DAY

• Example: LabSyllabus_2020_06_21

• Add a version number if there are numerous from the same day: LabSyllabus_2020_06_21v2

• Make a personal folder on the lab server (LabDocs ->Personal). Most things will be stored in your project folder, but please add a folder called “CITI.” Put your CITI certifications here so you and lab admin can find them if needed.

REPORTING & COURSE EVALUATIONS

We want to know if something said or done in the lab, by lab seniors or other undergraduates, is troubling or causes discomfort or offense. If and when this occurs, there are several ways to alleviate some of the discomfort or hurt you may experience.

DIRECT REPORTING:

If you feel comfortable doing so, please talk directly with KEA—in most cases, KEA is the one who can fix the problem (including problems with her), but she cannot do so if she does not know a problem exists. You can also discuss the situation with your senior mentor. If you prefer to speak with somebody outside the lab, you can talk with Professor Marjorie Rhodes (marjorie.rhodes@nyu.edu), who can maintain your anonymity, if requested.

We also have two neutral senior people in the lab (Brianna and Christina) who can help you with any issues you may be having that you may not feel comfortable bringing to Karen or your senior mentor. They will talk with you one-on-one and if necessary, will help you decide the best course of action. They will always preserve your anonymity unless you explicitly consent otherwise. You can email Brianna (bk1820@nyu.edu) or Christina (christina.hospodar@nyu.edu), or just pull them aside in lab at any time.

For issues concerning sexual assault and sexual harassment, KEA, graduate students, research staff, and postdocs are mandated reporters (this means they are required by NYU to report it to the Title IX coordinator).

If you feel you are harassed in a discriminatory manner at any point in your NYU experience (with other professors, in other courses, etc.), please talk to KEA, your senior mentor, or call the Office of Equal Opportunity (212-998-2370).

MID-SEMESTER AND END-OF-SEMESTER COURSE EVALUATIONS:

We will conduct two lab-specific, internal course surveys at the middle and end of the semester. One is purely anonymous, and one asks for more identifiable information regarding your project, senior mentor, KEA, and the course. Most of the senior mentors in lab want to eventually be PIs, and all are learning how to mentor effectively. Feedback is crucial for building their skills as mentors, and for improving the course in general.

We will also disseminate the Psychology Department’s course evaluations at the middle and end of the semester that may ask for more identifiable information regarding your project, senior mentor, KEA, and
the course. These course evaluations are read by others in the department and are important for improving the course and allowing it to continue.

SECURITY
Lab doors should be locked at all times when you are not in the lab in sight of the door. You must protect yourself and your belongings from intruders and the lab equipment from theft. If you lose your key, we will have to rekey the entire lab. Please tell us immediately if you have lost your key. If you are the last one in the lab, lock all lab doors and double-check that they are locked before you leave.

PROFESSIONALISM
The lab is a professional work environment that functions in the real world. Behave in a professional manner at all times while you are in the lab, in your interactions with anyone associated with the lab, and when you are representing the lab in a professional setting such as a seminar or conference (nothing illegal, no drugs, no drunkenness, no sexual harassment). When interacting with parents in the lab, refrain from discussing personal information—if parents ask you something personal, politely divert the conversation.

COLLABORATION
No project can function without the help of many researchers. As a lab member, you will be involved in some way with every lab project—regardless of whether it is your primary project. You should be as careful, meticulous, and responsible with secondary projects as with your primary project. Use the opportunity to work on secondary projects as a way to expand your knowledge and further your own work. What you learn in helping others will serve you.

AUTHORSHIP
All students (undergraduate, masters, doctoral, postdoctoral) and research staff have the opportunity to submit ongoing work to professional conferences. If you would like to present at a professional conference, names will be listed by order of contribution (conceptual) or alphabetically. Co-authors are responsible for preparing and delivering presentations.

Students/staff who make a substantial conceptual contribution to projects also have the opportunity to co-author journal articles. Names will be listed by order of contribution or alphabetically. Authors are responsible for preparing the manuscripts, revising them after review, and reading page-proofs.