Slide 1

I created this video to give incoming students an overview of the major BEFORE individual academic advising. You will need to make a draft schedule of your first semester at FSU based on information from Neuroscience orientation videos. It is O.K. if interested outside parties (a.k.a. Parents) watch the videos. It is NOT O.K. for interested outside parties to attend individual academic advising. If orientation were occurring in person, ONLY students would be allowed in advising. This is to ensure that every student is getting personalized assistance with schedule planning. This policy is also in place to let the student direct their own college career. Therefore, ONLY students and advisors will be in the Zoom meetings for individual academic advising.

Slide 2

We will start with a little history about the Neuroscience program. We have faculty from 2 colleges, Arts & Sciences which includes Biology, Math, Computer Science, and Psychology. We also have faculty from the College of Medicine from the Biomedical Sciences Department. There is a loose affiliation with Chemistry and Communication Science and Disorders. The research conducted by our faculty is diverse, ranging from sensory systems like taste, smell, sight, and hearing to brain disease like Alzheimer’s.

Our first BS graduate occurred in Fall 2019. Two students from our inaugural class of 2018 graduated this Spring along with 10 others. That inaugural class was about 45 freshmen and transfer students and our second incoming group from Fall 2019 had just over 100 students. This comes as no surprise since the desire to have a Neuroscience undergraduate major has been around for quite a few years.

Slide 3

So why a BS degree now? Well, to be honest, faculty want better prepared graduate students. Generally, the students that apply to the PhD program have a Psychology background with little to no experience making solutions or pipetting. But they are very familiar with behavioral experiments. On the opposite end of the spectrum, are biology or biochemistry students that have decent bench skills but have no idea how to conduct a behavioral experiment with a live rat or mouse. So how do you make sure the incoming graduate students are prepared for advanced study in the life sciences? Design a program the introduces students to the scientific investigation of the biological basis of behavior.

Studying the physical sciences is also important because having a basic understanding of how the world works is needed in order to study complex networks like the nervous system.

For those interested in healthcare, many health professional schools are recognizing that mental health is important to physical health so more topics like psychology and sociology are showing up on entrance exams. At least 80% of incoming BS students in Neuroscience indicate medical school is their goal.

The University is moving to encourage more hands-on experiences in a student’s college career. One of the ways to encourage that process is to eliminate a popular double major like Biology & Psychology. The idea is if you are taking less courses, you have more time for research, leadership, and service opportunities. Experiences are what graduate school and professional schools want incoming students to have. We already know that students are successful in school because that is what you have spent the last 18 years doing. But what else can you do besides coursework?
The healthcare career interest incorporates a much more diverse group of undergrads. Less emphasis on major choice and more emphasis on life experience also increases diversity in the life sciences. An increase in diversity means people working on solving a problem will approach the obstacles in different ways therefore increasing the number of possible solutions.

Slide 4

The graduation requirements for Neuroscience are organized as follows: in the purple are courses the university requires of all undergraduates. The starred items will be covered by courses required by the major, so you do not have to seek those out. The other items will be more or less depending on if you are coming in with test credit, dual enrollment credit, or even an AA. In the green are the requirements of the College of Arts & Sciences which we will discuss in a bit more detail in the next two slides. The blue circle is what is required of a Neuroscience major, regardless of Cell/Molecular or Behavioral variety. You must have earned 120 credits in order to graduate with a bachelor’s degree from FSU.

Slide 5

Proficiency in foreign language at FSU translates to 3 courses of 4 credit hours each. Beginning language 1, course code 1120, Beginning language 2, course code 1121, and Intermediate language 1, course code 2220. There are many ways to meet this requirement. If you have experience with French, German, or Spanish, take the placement test. You may remember more than you think. The test is free for current FSU students and a score will place you at the proper level or if high enough, you can test out of the requirement completely. You do not get credit for the course from the test, just a starting point or a waiver based on that score. The test does not have any spoken components, but it is grammar heavy. If you don’t like your score, you can wait 60 days and take it again. Another way to meet this requirement is through test credit like AP or IB for a foreign language that could exempt you from the requirement. Please make sure any related credit is reflected on your transcript. If you are proficient in a different foreign language, please reach out to Modern Languages & Linguistics to arrange for a method of testing. If you want to learn a brand-new language like Chinese or Arabic, just start at the beginning. Because this is a graduation requirement, you may take the entire series as S/U or Pass/Fail. The link explaining the requirement is on the slide.

Slide 6

You will automatically get a Chemistry minor as a Neuroscience major. The biggest determinant in your Organic Chemistry sequence is whether or not you intend to apply to a healthcare professional school. Medical schools require traditional Organic Chemistry CHM 2210 & CHM 2211. You will still need to add CHM 2211 Lab and BCH 4053 Biochemistry. If you are planning on PA school, please check with the schools you plan to apply to find out if there is a preference for traditional organic chemistry. If you have no intention to apply to any sort of healthcare professional school because sick people are gross, take whichever series works for you. I will say that Biochemistry is a super useful course for ANYONE considering a career in the life sciences regardless of what that occupation actually turns out to be.

Slide 7

Remember, you will be drafting a first semester schedule from this information to bring with you to academic advising so please pay careful attention to this information.
For Summer C students, you will only be taking 6 credit hours and there will be NO science courses in the 6-week section. In your first Fall semester, you will be taking at least one science course with a lab and at least one math-based course. Which combination or if you take more than one will be based on your math ability, your comfort with the rigor of University, and if you intend to apply to medical school while still an undergraduate. We will discuss these conditions in more detail in later slides.

When you have completed all of the listed courses, you will move from the NFA or Not Formally Admitted major category to the formally admitted or BS or BACH (bachelor’s) category. If you are still an NFA, you are not permitted to take certain upper division core or elective courses.

Neuroscience is a limited access major requiring a 2.8 GPA on ALL COLLEGE coursework including dual enrollment and transfer credit, NOT test credit.

Slide 8

The Neuroscience major, regardless of Cell/Molecular or Behavioral variety, consists of 38 hours of core classes including upper division electives. Collateral courses like math and chemistry total around 30 hours depending on how many math courses you need and which physics series you take. Again, you must maintain a minimum GPA of 2.8 to stay in the major. By the way, if you are considering medical school, you must maintain a GPA of at least a 3.5.

Slide 9

The core classes consist of Psychology and Biology courses. Let’s discuss the Psychology classes first. Most of you probably have test credit for PSY 2012 General Psychology. That is fine, we will accept that credit. If you don’t have credit for that course, I suggest you take the course your first semester at FSU. PSY 3213C is about applying the scientific method to behavioral & social studies. This requires statistics so you must have credit for STA 2122 before enrolling in this course. The C designation in a course code means that there is a lab portion of the course included in the course grade. This is true for some other Psychology electives as well as for Physics course. This is different from most Chemistry and Biology courses where labs are separate classes and grades from lecture. You must be a formally admitted major to register for Physio Psy. If you have NOT completed all of the aforementioned prerequisites and PSY 3213C, you cannot register for PSB 3004C. Now for the Biology courses. You cannot take ANY upper division Biology courses like PCB 3134 until you have completed lecture and labs for Biology I & II AND General Chemistry I & II. Cell Structure and Function was chosen because of the physiology component. Cell Structure and Function is a prerequisite for Fundamentals of Neuroscience. PSB 4400 is the only course that actually belongs to Neuroscience. This course is a carryover from our PhD program. In this team taught course with graduate students, you will be reading and discussing research papers from current faculty as well as some classic papers like how the neuron was discovered to be the cell of brain activity. The intent of this course is to get undergraduates involved in research by introducing them to Neuroscience activity at FSU. This course is intended for sophomores and transfer students and is only offered in the Spring. Plan for it in your schedule for Spring 22.

Slide 10

These are the required Biology courses for Neuroscience and for health professional schools. I bring this up because quite a few students had test credit for Biology. If you got a score of 3 on the AP exam, you have earned credit for BSC 1005/L which is Biology for Non-science majors. This does NOT count for ANY
credit in ANY science major nor for healthcare professional schools. A score of 4 on the AP exam gives you credit for BSC 2010/L and a score of 5 gives you credit for both BSC 2010/L and BSC 2011/L. The University and Neuroscience will accept the scores of 4 or 5. However, if you are planning to apply to medical school, it is preferred that science courses are taken for a grade at a University, not a community or state college. You may wish to re-take the Biology course. Other healthcare professional schools may not be as particular, so it is up to you to decide how you want to use your test credit.

Now for math courses. All incoming students in any major requiring MAC 2311 Calculus I are required to take the ALEKS placement test. If you have not done so, do this ASAP so you know which math class to take. If you have a grade in a dual enrollment course or other kind of previous college credit for any of the listed courses, you do not need to take the ALEKS test. Everyone else, take the test. If you need the info to register for the test, please let me know during your individual advising appointment.

Based on your ALEKS test, you will be placed in the appropriate math course. For example, if you have a total score of at least 61%, you can skip MAC 1105 and choose either MAC 1140 Pre-calculus or MAC 1114 Trigonometry. You need both Pre-calculus and Trigonometry to get to Calculus, but the order does not matter. Even if you have a total ALEKS score that places you directly into Calculus I, you must have a Trig sub-score of at least 56% to take Calculus. As long as you have an ALEKS score greater than 61% you can take CHM 1045/L General Chemistry I your first semester. You must have proof of algebra ability to enroll in General Chemistry. That proof is credit for MAC 1105 or an appropriate ALEKS score. Even if you anticipate getting test credit for Calculus I, the ALEKS test is insurance that you can keep a seat in General Chemistry. If you are placed in MAC 1105 College Algebra, your first science course at FSU will be Biology. You do have the option to re-take the ALEKS test a few times as part of the test fee if you feel you could do better a second time.

Now for stats. Statistics is not covered on the ALEKS test. In order to take STA 2122, you must have college credit for algebra as test or dual enrollment credit or an appropriate ALEKS score. If you have AP or IB test credit for statistics, it does not matter what your score is because that equates to STA 2023. STA 2023 is NOT acceptable for the Neuroscience major. You will be required to take STA 2122. There is a lot of overlap in the two classes so as long as you were comfortable with AP stats, STA 2122 should be mostly review.

Physics is part of the collateral courses in the major. PHY 2053C and 2054C are College or Trigonometry based Physics. PHY 2048C and 2049C are General or Calculus based Physics. Calculus I and Newtonian Physics do have a lot of overlap and an Engineering, Math, Physics or Chemistry major will say those two courses are complementary. However, which one you take is based solely on your math comfort level. The Neuroscience major, the Physics department, nor medical schools care which Physics you take so long as you can solve the Physics problems on the MCAT. Again, what is your math comfort level?

It is important for students to know that you can be made to change your major.
Not only must you maintain a minimum GPA of 2.8, you are only allowed 4 grades below C-. This is not to punish students but to allow students to be successful in their chosen major. It does not feel good to get grades below C-; therefore it is more important to advisors that you graduate with a good GPA from FSU than a BS in Neuroscience. Please remember that FSU does not have grade forgiveness. I am going to repeat that: FSU does not have grade forgiveness. Once you get a D or an F in a course, you will be required to repeat it AND the D or F is on your transcript FOREVER. So if you are having to repeat Organic Chemistry multiple times, we will need to have a conversation about other majors that can help you reach your long term goals.

Slide 14

Your enrollment window will open tomorrow. Depending on which semester you are starting at FSU will determine how long this window will be open. This slide brings up other important things to know about registration. Drop/add is a magical fluid time at FSU. Here is where students can fine tune their schedule by dropping and adding courses at will. It starts the Saturday before the semester and ends the Thursday night of the first week. Once drop/add is over on 12:01 am Friday morning, anything on your schedule is fee liable meaning any changes you make now will carry a financial penalty. FSU has a mandatory first day attendance policy. If you want to keep your seat in a course, DO NOT MISS the first day of class. During online instruction, this is usually an ungraded assignment for a class in Canvas. Canvas is where all course content is kept for the students and the instructor.

You need to be aware of drop deadlines to avoid getting a bad grade on your transcript. Remember FSU does not have grade forgiveness. The first drop deadline is the 7th week. At this point if you drop a class it disappears from your transcript as if you never took it. You still have to pay for it but there is no academic penalty. The next deadline is late drop or Dean’s withdrawal. The is the 12th week of a 16-week semester. Here you will need the Dean’s permission and it will result in a “W” or withdraw on your transcript. It will not affect your GPA but you will have to take the class again.

The important dates for upcoming semesters are listed below. If you are ever wondering about a date related to academics, the Registrar’s website always has the most up to date calendar.

Slide 15

If we were doing in-person orientation, I would leave this slide up as I came around to answer specific questions about your first semester. When you come to individual advising, please have a draft schedule with a list of options. For instance, if you have credit for ENC 1101, add ENC 2135 to your schedule. Based on your ALEKS score, which math course are you going to start with? If you don’t have PSY 2012, add it to your schedule. If you do have PSY 2012, consider a PSY elective like Social Psy or Abnormal Psy. Do you need to start foreign language? Based on your ALEKS score, are you starting Chemistry or Biology? Do you need more liberal studies courses? In the how to register portion of orientation, they will show you how to search for these courses.

I am going to end Part I of Neuroscience Orientation at this point. As a reminder, you will need to make a draft schedule of your first semester at FSU based on information from this video so please watch it in its entirety. I will provide an email friendly version of this presentation via your FSU email.

Slide 16
Welcome to Part II of Neuroscience Orientation!

Remember, it is O.K. if interested outside parties (a.k.a. Parents) watch the videos. It is NOT O.K. for interested outside parties to attend INDIVIDUAL academic advising. If orientation were occurring in person, ONLY students are allowed in advising. Therefore, ONLY students and advisors will be in the Zoom meetings for individual academic advising.

In addition to the major overview in Part I, Part II will discuss some things you can do in your first Fall semester at FSU to make sure you have a successful college career.

Slide 17

Why are Chemistry, physics, and Calculus part of a life sciences major? Those disciplines are essential tools in understanding the natural world. Also, it would be nice to know how to interpret data from things like a functional MRI. Knowledge of magnetic fields and the math to assign intensity might be important in that scenario. In this movie, provided by Dr. Frank Johnson, is a live awake functioning mouse. He or she could be sniffing pee or food, making a nest, or just hanging upside down on the cage lid. On the neural activity side, change is occurring too quickly to detect a discernible pattern. On the fMRI side, the activity is slowed down enough that you could compare it to a video of what the mouse is actually doing. So maybe when it is red the mouse is sniffing pee. Now the question is “Does it belong to a potential mate or rival?” When it is blue, the mouse could have found food but is it yummy high fat chow or boring ol’ regular chow? So please appreciate the complexity of behavior.

Slide 18

Academic advisors are here to help you make schedules, but we are also here to navigate those bumpy times. I want you all to think of us as your first stop when you have a question about anything. Certainly, classes, University policies and departmental rules are part of our repertoire but so is how to find resources related to mental health, student groups, and job experiences. Sometimes it is hard to know if you should drop a class or how to manage your time between work and studying. A common issue I run into with students is related to career goals. Many of you have indicated medical school as a next step. But sometimes life experiences or coursework forces a re-examination of future goals. And that is O.K. Medical school is not the only path to success. In essence, don’t be afraid to ask me questions. But, please refrain from saying “I have a quick question”. To me that means you want an easy answer for a complicated problem. No such thing.

Slide 19

This is what your college career should look like. A BS in Neuroscience is set up to take 4 years as long as you are keeping up with milestones and maintain the required GPA. Milestones are courses that should be completed by certain terms within the major. You first Fall semester is considered Term 1, the following Spring is Term 2, and summers are considered catch up terms so they are not numbered. Hence your second Fall semester is Term 3 and so on and so forth. For example, PSY 2012 General Psychology and PSY 3213C Research Methods must be completed by Term 5 and PCB 3134 Cell Structure & Function and PSB 4400 Molecules to Behavior must be completed by Term 6.

Even if you are set on a career path, you could still benefit from courses like Careers in Psychology, Careers in Biology or Introduction to Career Development to help prepare for your career goals. You
should be trying to balance prerequisite courses with liberal studies requirements. We want you to balance your time so you are not taking all liberal studies courses your freshmen and sophomore years and only science courses your junior and senior years. A number of you will have significant amounts of incoming test or dual enrollment credit. Please considering adding a certificate to your college career because unlike minors, you get an actual piece of paper that says you did extra coursework and most certificates require a project to demonstrate knowledge. You can use certificates to enhance your college and professional career.

Once you are set on your career path, you should be building skills and gaining experience to be successful in your next step. For example, leadership roles in student organizations can enhance any resume, research experience is crucial for graduate school applications, and clinical skills are important for pre-professional schools like Physician’s Assistant.

If you are considering a career in healthcare, you need to start gaining some clinical experience and/or job shadowing. How can you do that?

Slide 20

A great place to start is the Career Center. They have wonderful resources to not only help you explore career fit but also how to look for internships or other relevant experiences. Neuroscience, PSY, and Bio have a dedicated Career Liaison, Alexis Fraites. Although she is not taking in-person appointments, she is still doing virtual career advising. She also sends out a weekly newsletter with relevant events and postings geared toward these three majors to your FSU email.

Slide 21

Alexis is employed by the main Career Center in Dunlap Student Success Center (black building with the star). It is located in the middle of campus by some dorms and a place with food called the Den. They are seeing students virtually this summer. Check out the webpage listed for instructions.

If you are unsure about what career path you will take, I highly recommend taking SDS 3340 Introduction to Career Development. The course is designed to help students find a major and a career path that is the best fit for their values and interest.

Slide 22

For those of you interested in health careers, please visit with pre-health advising. They are still open for virtual appointments via Zoom. They often host workshops to help you prepare for professional school. The most common question is when should I take the MCAT? If you intend to apply to medical school while still an undergraduate, it is recommended that you take General Chemistry your first semester. In order to take the Medical College Admissions Test or MCAT at the appropriate time, you need to have completed General Chemistry I & II with labs, Organic Chemistry I & II, Biochemistry, Biology I & II with labs, and Physics A & B. You can discuss this timeline and other questions during an appointment with one of the advisors.

Slide 23

Freshmen Interest Groups or FIGS are pre-packaged clusters of high-demand freshman courses that have been linked by a theme or academic program. Some advantages to registering for a FIG are: it
makes the registration process very easy because you register for most of your classes at once; Take classes with the same 15-20 students, so even a lecture class will seem small; Take courses that fulfill liberal studies requirements.

One of the most significant advantages to registering for a FIG is enrolling in the FIG Colloquium HUM1920. This course is designed to provide you a set of experiences that will introduce you to the academic culture at FSU. In the colloquium, you will: Learn how to identify and reflect on your in-class and out-of-class learning experiences and how to utilize your reflections for learning about yourself and planning for the future; Reflect on your out-of-class experiences and to learn how you can connect your identities and interests with the people and places of the FSU community; Learn how to interact with your instructors and fellow students in ways which support your own goals and the values of the FSU community.

If there is no FIG that sounds appealing, please consider registering for a different engagement experience that can help you adjust to University life.

Please refer to your It’s All Academic booklet for more info.

Slide 24

Student organizations are important not just for meeting people but to gain leadership and teamwork experience. Employers are minimally concerned with course work and major but are extremely concerned about communication and problem-solving skills. Officer roles in student groups are a great way to hone those skills.

There are a few student organizations that are part of the Neuroscience program. The Neuroscience Undergraduate Student Association or NUSA is a group that is open to any student with an interest in Neuroscience. They often have faculty or grad students present their work at meetings. NUSA students also work with the grad student version of this group on outreach projects like the open house Brain Fair and the trivia competition Brain Bee. Nu Rho Psi is the honor society for Neuroscience. They focus more professional development. You will need to have taken a few Neuroscience core classes and electives before being able to apply to this group. CELLS is a student group that is dedicated to getting undergraduates involved in research. It is housed in the College of Medicine and the faculty advisor, Dr. Foster, will host workshops on how to find research opportunities.

A number of you are considering healthcare as a career. There are too many pre-health groups to list so please check out Nole Central. Any student registered group on campus must be listed in Nole Central.

Slide 25

I want to make you all aware of a mandatory advising appointment during your first semester at FSU. I call it Neuro Check-In. Since we are doing virtual orientation, this advising session will be important for making sure things are going well and we can plan for the next semester. Keep an eye out for emails once the semester starts.

Slide 26

Here is some contact and location info. Once we are back on campus, I will have drop-in advising as well as appointments. You can always check our web page for detailed info about how to schedule
appointments and advising hours. Please note, I will not answer emails from non-FSU accounts about any student related business post-orientation. Do not forward your FSU email to a Gmail account. You are all adults so start keeping your “work” email (a.k.a. your FSU email) separate from your personal email.

I will follow up with each of you after you register to make sure everything is O.K and provide an email friendly version of this presentation via your FSU email.

Make a draft schedule BEFORE individual advising and write down the questions you want to ask.

I will see you all soon.