

# DEPAUL UNIVERSITY

COLLEGE OF SCIENCE AND HEALTH



# Neuroscience

## Student Guide 2022-23



### **Neuroscience Program**

McGowan North 125  
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Chicago, IL 60614  
(773) 325-8223

## Table of Contents

Purpose .....	3
Contact Us .....	3
Faculty and Staff.....	3
Advising and Program Learning Outcomes.....	4
Program Requirements and Concentrations .....	5-6
Suggested Timelines.....	7-11
o Cellular/Molecular.....	7
o Behavioral/Cognitive .....	8
o Computational .....	9
o Integrative.....	10
Electives.....	11
Pre-Med .....	12
Honors Program.....	13
Course Offerings by Quarter .....	14
Degree Conferral .....	15
Experiential Learning.....	15
Math Placement .....	16
Getting Started .....	17
o Declaring or Changing Your Major, Minor or Concentration	
o Registering & Waitlist Procedures	
o Pre-Health Advising	
Getting Involved.....	17
All About Enrollment .....	18
Senior Graduation Checklist .....	19
Transfer Students.....	20
AP Credit from High school .....	20
What to do with a B.S. in Neuroscience.....	21
Email Etiquette.....	22
Resume Writing & Career Resources.....	23-24
Research Opportunities .....	25
Additional Resources .....	26
Advising Umbrella .....	29

## Purpose

This guide is a resource to aid students interested in a Neuroscience major to successfully pursue this degree. It includes useful information on scheduling courses, selecting a concentration, and deciding on electives to take. Please use this guide to discover opportunities and suggested courses suited for your degree and future career interests within the Neuroscience field. Please also reach out to the College of Science and Health Advising Office as well as your advisor and explore our website. Our goal is to make sure that every student has access to any information they need to pursue an undergraduate degree in Neuroscience and to help them succeed academically. We look forward to working with you!

## Locations and Link

Neuroscience Main Office: McGowan North, room 125

Phone: (773)-325-8223

**Neuroscience Major Website:** <https://csh.depaul.edu/academics/neuroscience/Pages/default.aspx>

## Faculty and Staff Contact Information

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## Advising

We recommend that you meet with your academic advisor at least once a quarter to ensure you are on track for completing the Neuroscience major. Neuro students are currently advised by Lauren Paez, and can schedule an appointment with her via BlueStar, or by contacting the CSH Advising Office at 773-325-8490, or [cshadvising@depaul.edu](mailto:cshadvising@depaul.edu).

*\*Pathways Honors students in NEU will also meet with Lauren Paez.*

**Advising for new or exploring students:** Contact [the Office for Academic Advising Support \(OAAS\)](#)

Students also have assigned NEU **faculty advisors**, and are encouraged to meet with Career Advisors as well. Your assigned faculty advisor appears in your BlueStar Student Success Network. Please contact Jaimie at [jengle@depaul.edu](mailto:jengle@depaul.edu) if you do not have a faculty advisor assigned, or would like to request a certain faculty advisor. **Please see the advising umbrella** at the end of this document to better understand how each of your advisors can help you!

**Career Advising:** DePaul's Career Center has a Health Care & Science Career Community! Start working with the career center early on for assistance exploring and preparing for your post-grad endeavors: <https://resources.depaul.edu/career-center/career-advising/communities/health-care-science/Pages/default.aspx>.

**Pre-Health Advising:** Interested in a health-related career? There are many forms of Pre-Health Advising at DePaul. There is the Pre-health Advising Committee (PAC), which is comprised of an interdisciplinary body of faculty and staff whose primary function is the academic advising of students intending to pursue a career in one of the health professions. We also have dedicated Pre-Health advisors. To learn more about the PAC and our Pre-Health Advisors, Lindsey Burdick or Melissa Smith, and to obtain information about upcoming events and speakers that the PAC organizes, we encourage you to visit their website and register for their services at: <http://csh.depaul.edu/student-resources/advising-student-services/pre-health-advising>. Email [CSHADvising@depaul.edu](mailto:CSHADvising@depaul.edu) to get in touch with Pre-Health Advisors.

## **Neuroscience Program Learning Outcomes**

Students with a major in Neuroscience will be able to:

1. Describe how the cellular and systems level structure of the nervous system is responsible for neurological function, behavior, and cognition.
2. Critically evaluate scientific literature in order to communicate core concepts in a clear and organized manner both verbally and in writing.
3. Design and analyze scientific experiments.
4. Explain challenges surrounding ethical thinking posed by advancements in neuroscience.
5. Relate neuroscience content to other scientific and non-scientific disciplines.

**Summary of the Neuroscience Curriculum – See below for a summary of each component. Please always refer to the University Catalog for the most up to date curriculum:**

<https://catalog.depaul.edu/programs/neuroscience-bs/>

Liberal Studies Program	17 courses
Neuroscience Core	11 courses
Neuroscience Concentration Courses	12 courses
Open Electives	8 courses
<b>Total</b>	<b>48 courses</b>

## Liberal Studies Program

Neuroscience majors will participate in the liberal studies program in the following way:

First Year Program	4 courses
Explore/Discover, Focal Point, WRD 103, and WRD 104	
Sophomore Seminar	1 course
LS Learning Domains	
Arts & Literature	3 courses
Philosophical Inquiry	2 courses *
Religious Dimensions	2 courses *
Social, Cultural, and Behavioral Inquiry	1 course**
Historical Inquiry	2 courses
Experiential Learning:	1 course
Senior Capstone (NEU 390)	1 course
<b>TOTAL</b>	<b>17 courses</b>

\*One of the four PI and RD courses must come from the following:

- PHL 200 Ethical Theories.
- PHL 230 Contemporary Issues in Ethics.
- PHL 229 Biomedical Ethics
- REL 229 Biomedical Ethics
- HLTH 229 Ethics in the Health Sciences.
- CSC 208 Ethics in the Digital Age.

NEU 228/PHL 228 Neuroethics – if you chose Neuroethics: please register for **PHL 228** if you intend to use this course for a PI or RD designation, and use **NEU 228** if you will be taking it as an elective.

\*\*PSY 105 and 106 will fulfill the other two SCBI requirements

## Neuroscience Core

The core is designed to address the following learning outcomes stated above for all students graduating with a B.S. in Neuroscience.

### Required Courses for Neuroscience Core:

General Biology I, II, III	BIO 191, 192, 193
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General Chemistry I, II	CHE 130/131, 132/133 or CHE 120/121, 122/123
Survey of Organic Chemistry	CHE 228/229*
Students who take Organic Chemistry can substitute one quarter of it for this requirement.	
Intro to Psychology I, II	PSY 105, 106
Statistics	BIO 206 or PSY 240 or IT223 or MAT242
Introduction to Neuroscience	NEU 201
Neuroscience Research Methods	NEU 301
Neuroscience Capstone	NEU 390**

\* The Department of Chemistry and Biochemistry will be replacing this course with a new one in the 2022/3 academic year. Please keep an eye out for announcements this year as to how these changes will affect this requirement.

\*\*Students can take other capstones when circumstances prevent that from taking NEU 390 when offered, but NEU 390 is strongly recommended.

## Concentrations

The four concentrations in the Neuroscience major represent major sub-disciplines within the field. By default, students are placed into the Integrative Concentration, but can choose any concentration that suits their goals and interests:

- A. Cellular/Molecular Neuroscience, for students who are interested in the cellular and molecular mechanisms that are involved in the functioning of the nervous system and how they relate to the creation of behavior or play a role in disease.
- B. Behavioral/Cognitive Neuroscience, for students who are interested in understanding how the nervous system is involved in behaviors such as sensation/perception, movement and cognitive functioning that includes learning, memory, and emotion.
- C. Computational Neuroscience, for students who are interested in quantitative and computational modeling methods to understand the functions of the nervous system and behavior and/or in the design of human-made devices that duplicate nervous system functioning.
- D. Integrative Neuroscience, for students who would like a more integrative approach and include multiple aspects of neuroscience in their curriculum. This concentration is also good for students who are undecided, switch majors, transfer in with credits, are pursuing a health career with defined prerequisites, or have an ongoing curriculum that makes it difficult to fulfill requirements of the other concentrations.

See the following pages for a representative timeline for each concentration. Note that these are only samples. Your specific schedule of classes may vary depending on a number of factors such as math requirements, transfer credits, AP credit, etc.

Students intending to pursue clinical professions such as medical school are strongly encouraged to contact the office of Pre-Health Advising: <https://csh.depaul.edu/student-resources/advising-student-services/pre-health-advising/Pages/default.aspx>



# Cellular/Molecular Neuroscience Concentration

All students in this concentration will take the following required courses in addition to the major core (prerequisites in parenthesis- please always check the University Catalog as they can change) and 6 major electives from an approved list of courses seen in Table 5.

CHE 134/135 - Gen Chem III	(CHE 132/133)
BIO 250 – Cell biology	(BIO 193, CHE 134)
BIO 260 – Genetics	(BIO 193)
BIO 360 – Molecular biology	(BIO 250, BIO 260, CHE 228)
BIO/NEU 339 – Cellular Neurobiology	(BIO 250 or PSY 377)
BIO 340 – Behavioral Neuroscience	(NEU 201 or BIO/NEU 339 or BIO 307 or 308/ HLTH 301 or PSY 377)

**Table 1 – Sample timeline for students in the Cellular/Molecular Neuroscience Concentration.**  
**Red = LSP requirements** **Blue = Neuro requirements** **Green = Concentration courses**

	Autumn Quarter	Winter Quarter	Spring Quarter
YEAR 1	BIO191 CHE130/131 WRD103 LSP110/111	BIO192 CHE132/133 WRD104 LSP112	BIO193 CHE134/135 PSY105 Open Elective
YEAR 2	NEU201 Intro to Neuroscience PSY106 BIO206 or PSY 240 Open Elective	NEU/PHL228– Neuro/Ethics or other Ethics course BIO250 LSP200 Learning Domain	NEU 301 – NEU Research Methods CHE228/229 BIO260 Learning Domain
YEAR 3	BIO/NEU339 BIO360 Learning Domain Open Elective	BIO340 NEU Elective Learning Domain NEU Elective	NEU Elective Learning Domain Learning Domain Experiential Learning
YEAR 4	NEU Elective Learning Domain Learning Domain Open Elective	NEU Elective Learning Domain Open Elective Open Elective	NEU390 Senior Capstone NEU Elective Open Elective Open Elective

# Behavioral/Cognitive Neuroscience Concentration

All students in this concentration will take the following required courses in addition to the major core (prerequisites in parenthesis -please always check the University Catalog as they can change) and 7 major electives from an approved list of courses seen in Table 5.

BIO 307 Animal Physiology (BIO 250)  
 OR BIO 308 – Human Physiology (BIO 250)  
 OR HLTH 301 – Human Anatomy & Physiology (BIO 193)  
 BIO/NEU 339 – Cellular Neurobiology (BIO 250 or PSY 377)  
 BIO 340 – Behavioral Neuroscience (NEU 201 or BIO/NEU 339 or BIO 307 or 308/ HLTH 301 or PSY 377)  
 BIO 342 – Cognitive Neuroscience (NEU 201 or BIO/NEU 339 or 340, or PSY 377)  
 OR PSY 379 – Cognitive Neuroscience  
 PSY 360 –Theories of Learning and Cognition (PSY 105 & 106)  
 OR PSY 373 – Happiness, Judgment and Decision Making (PSY 105 & 106)

**Table 2 – Sample timeline for students in the Behavioral/Cognitive Neuroscience Concentration.**  
**Red = LSP requirements Blue = Neuro requirements Green = Concentration courses**

	Autumn Quarter	Winter Quarter	Spring Quarter
YEAR 1	BIO191 CHE130/131 WRD103 LSP110/111	BIO192 CHE132/133 WRD104 LSP112	BIO193 CHE228/229 PSY105 Open Elective
YEAR 2	NEU201 Intro to Neuroscience PSY106 BIO206 or PSY 240 Open Elective	NEU/PHL228– Neuro/Ethics or other Ethics course [BIO310 or HLTH 301 – Anatomy & Physiology] LSP 200 Learning Domain	NEU 301 – NEU Research Methods NEU Elective Learning Domain Learning Domain
YEAR 3	BIO/NEU 339-Cellular Neuro [PSY 360 or PSY 373] Learning Domain Learning Domain	BIO340-Behavioral Neuro NEU Elective Learning Domain Open Elective	[BIO342 or PSY 379- Cognitive Neuro] NEU Elective Learning Domain Experiential Learning
YEAR 4	NEU Elective NEU Elective Learning Domain Open Elective	NEU Elective Learning Domain Open Elective Open Elective	NEU390 Senior Capstone NEU Elective Open Elective Open Elective



# Computational Neuroscience Concentration

All students in this concentration will take the following required courses in addition to the major core (prerequisites in parenthesis- please always check the University Catalog as they can change) and 6 major electives from an approved list of courses seen in Table 5.

MAT 150 – Calculus I	(Mat 131)
CSC 241– Introduction to Computer Science I	(MAT 130)
NEU 256 – Introduction to Computational Neuroscience *	(MAT 150 & CSC 241 & NEU 201)
CSC 250 – Computers and Human Intelligence	
DSC 341 – Foundations of Data Science	(IT 223 (or MAT 137, 242, 341, 04 353)
CSC 381 – Introduction to Image Processing	(MAT 150)

\* Intro to Computational Neuroscience provides an introduction to basic computational methods for understanding what nervous systems do and how they function. The course covers the structure of the brain, from neurons to circuits to regions, and also the computational and theoretical approaches to model the brain. The course will introduce students to the physiology of individual neurons, how they communicate through synapses and firing, and how they work together to create systems that control, learn and memorize. The course will include the application of mathematical and computational models to neural systems.

**Table 3 – Sample timeline for students in the Computational Neuroscience Concentration.**  
**Red = LSP requirements Blue = Neuro requirements Green = Concentration courses**

	Autumn Quarter	Winter Quarter	Spring Quarter
YEAR 1	BIO191 CHE130/131 WRD103 LSP110/111	BIO192 CHE132/133 WRD104 LSP112	BIO193 MAT150 Open Elective PSY105
YEAR 2	NEU201 Intro to Neuroscience PSY106 IT223 or BIO 206 or PSY 240 Open Elective	NEU/PHL228– Neuro/Ethics or other Ethics course LSP 200 NEU256 Intro Comp Neuro CSC 241	NEU 301 – NEU Research Methods CHE228/229 Learning Domain CSC250
YEAR 3	NEU Electives Learning Domain Learning Domain Open Elective	CSC367 NEU Elective Learning Domain Learning Domain	CSC381 NEU Elective Learning Domain Experiential Learning
YEAR 4	NEU Elective Learning Domain Learning Domain Open Elective	NEU Elective Learning Domain Open Elective Open Elective	NEU 390 Senior Capstone NEU Elective Open Elective Open Elective

# Integrative Neuroscience Concentration

For students with broad interests in neuroscience or who are pre-health, switch majors, transfer in with credits, or have other curricular requirements, the Integrative Concentration will require the following in addition to the major core requirements (prerequisites in parenthesis- please always check the University Catalog as they can change) and 6 major electives from the list in Table 5.

## One course from the following:

BIO/NEU 339 – Cellular Neurobiology (BIO 250 or PSY 377)  
 BIO 340 – Behavioral Neuroscience (NEU 201 or BIO/NEU 339 or BIO 307 or 308/ HLTH 301 or PSY 377)  
 BIO 342 or PSY 379 – Cognitive Neuroscience (NEU 201 or BIO/NEU 339 or 340, or PSY 377)

## Five courses from any of the following:

NEU 256 – Introduction to Computational Neuroscience  
 NEU 310 – Seminar in Neuropsychopharmacology (NEU 201 or equivalent)  
 NEU 360 – Conversations with Neuroscientists (NEU 201 or equivalent)  
 NEU 399 – Independent Study in Neuroscience (NEU 201 or equivalent)  
 BIO/NEU 339 – Cellular Neurobiology if not taken to fulfill requirement above  
 BIO 340 – Behavioral Neuroscience if not taken to fulfill requirement above  
 BIO 342/PSY 379 - Cognitive Neuroscience if not taken to fulfill requirement above  
 CHE 134/135 – Gen Chemistry III (CHE 132/133)  
 BIO 250 – Cell biology (BIO 193, CHE 134)  
 BIO 260 – Genetics (BIO 193)  
 BIO 360 – Molecular biology (BIO250, BIO260, CHE 228)  
 BIO 307 – Animal Physiology (BIO 250)  
 OR BIO 308 – Human Physiology (BIO 250)  
 OR HLTH 301 – Human Anatomy & Physiology (BIO 193)  
 PSY 360 – Theories of Learning and Cognition (PSY 105 & 106)  
 PSY 373 – Happiness, Judgment and Decision Making (PSY 105 & 106)  
 MAT 150 – Calculus I (Mat 131)  
 CSC 241 – Introduction to Computer Science I (MAT 130)  
 CSC 250 – Computers and Human Intelligence  
 DCS 341 – Foundations of Data Science  
 Introduction to Data Mining (IT 223 or BIO 206 or PSY 240)  
 CSC 381 – Introduction to Image Processing (MAT 150)

**Table 4– Sample timeline for students in the Integrative Concentration**  
**Red = LSP requirements Blue = Neuro requirements Green = Concentration courses**

	Autumn Quarter	Winter Quarter	Spring Quarter
YEAR 1	BIO191 CHE130/131 WRD103 LSP110/111	BIO192 CHE132/133 WRD104 LSP112	BIO193 CHE228/229 Open Elective PSY105
YEAR 2	NEU201 Intro to Neuroscience PSY106 BIO206 or PSY 240 Open Elective or Learning Domain	NEU/PHL228– Neuroethics or other Ethics course NEU Conc Req LSP 200 Learning Domain	NEU 301- Neuroscience Research Methods NEU Elective NEU Conc Req Learning Domain

YEAR 3	BIO/NEU 339-Cell Neuro NEU Conc. Req Learning Domain Learning Domain	NEU Conc. Req NEU Elective Learning Domain Open Elective	NEU Conc. Req NEU Elective Learning Domain EL
YEAR 4	NEU Elective NEU Elective Learning Domain Open Elective	NEU Elective Learning Domain Open Elective Open Elective	NEU 390 Senior Capstone NEU Elective Open Elective Open Elective

**Table 5: Electives by Concentration**

<b>Cellular/Molecular</b> Pick 6 electives from list below:	<b>Behavioral/Cognitive</b> Pick 7 electives from list below	<b>Computational</b> Pick 7 electives from list below:
NEU 228 – Neuroethics NEU256 - Introduction to Computational Neuroscience NEU 301 – Neuroscience Research Methods NEU 310 – Seminar in Neuropsychopharmacology NEU 360 – Conversations with Neuroscientists NEU380- Topics in Neuroscience NEU399 - Independent Study BIO 201 – Anatomy BIO 210- Microbiology BIO220 – Biotechnology BIO 301 – Animal Behavior BIO307 – Animal Physiology (L) Or BIO 308 – Human Physiology (L) BIO330 – Developmental Biology BIO341 – Topics in Neurobiology BIO342 – Cognitive Neuroscience BIO362 – Bioinformatics BIO375 – Pharmacology BIO386 – Endocrinology CHE230/231, 232/233, 234/235 Organic Chemistry (Can substitute for CHE 228) CHE 340 – Biochemistry CSC250 Computers and Human Intelligence CSC 241 Introduction to Computer Science I CSC 367 – Foundations of Data Science CSC 381 Intro to Digital Image Processing HLTH 302- Anatomy & Physiology PHY 150/151/152 – General Physics or PHY 170/171/172 or PHY 155/166 PSY 317 – Psychology of Interpersonal Relationship PSY 333 – Child Psychology PSY 334 – Adolescent Psychology PSY 347 Social Psych	NEU 228 – Neuroethics NEU 301 – Neuroscience Research Methods NEU256 - Introduction to Computational Neuroscience NEU 310 – Seminar in Neuropsychopharmacology NEU 360 – Conversations with Neuroscientists NEU 380 – Topics in Neuroscience NEU399 - Independent Study BIO 201 – Anatomy BIO 210- Microbiology BIO220 – Biotechnology BIO250 – Cell biology (L) [BIO193, CHE134] BIO260 – Genetics (L) [BIO193] BIO 301 – Animal Behavior BIO 307 or 308 BIO330 – Developmental Biology BIO341 – Topics in Neurobiology BIO360- Molecular Biology BIO362 – Bioinformatics BIO375 – Pharmacology BIO386 – Endocrinology CHE 134/135 Gen Chem III (CHE 132/133) CHE230/231, 232/233, 234/235 Organic Chemistry (Can substitute for CHE 228) CHE 340 – Biochemistry CSC250 Computers and Human Intelligence CSC 241 Introduction to Computer Science I CSC 367 – Foundations of Data Science CSC 381 Intro to Digital Image Processing HLTH 302- Anatomy & Physiology PHY 150/151/152 – General Physics or PHY 170/171/172 or PHY 155/166 PSY 317 – Psychology of Interpersonal Relationship PSY 333 – Child Psychology PSY 334 – Adolescent Psychology	NEU 228 – Neuroethics NEU 301 – Neuroscience Research Methods NEU 310 – Seminar in Neuropsychopharmacology NEU 360 – Conversations with Neuroscientists NEU 380- Topics in Neuroscience NEU399 Independent Study IM210 Introduction to Human Computer Interaction IT240 Introduction to Databases CSC242 Introduction to Computer Science 2 CSC382 Image Analysis and its Applications CSC324 Data Analysis and Statistical Software IT300 Research Experience CSC399 Independent Study BIO 210- Microbiology BIO220 – Biotechnology BIO250 – Cell biology (L) [BIO193, CHE134] BIO 201 – Anatomy BIO260 – Genetics (L) [BIO193] BIO 301 – Animal Behavior BIO 307 or 308 BIO330 – Developmental Biology BIO /NEU 339- Cellular Neurobiology BIO 340- Behavioral Neuroscience BIO341 – Topics in Neurobiology BIO 342 – Cognitive Neuroscience BIO 360- Molecular Biology BIO362 – Bioinformatics BIO375 – Pharmacology BIO386 – Endocrinology CHE 134/135 Gen Chem III (CHE 132/133) CHE230/231, 232/233, 234/235 Organic Chemistry (Can substitute for CHE 228) CHE 340 – Biochemistry HLTH 302- Anatomy & Physiology PHY 150/151/152 – General Physics or PHY 170/171/172 or PHY 155/166 PSY 317 – Psychology of Interpersonal Relationship

PSY 348 – Social Cognition and Mental Control PSY 353 Abnormal Psychology PSY 360 Theories of Learning and Cognition PSY 364 – Health Psychology PSY 366- Behavior Problems of Children PSY 370 – Social and Emotional Development PSY 373 Happiness, Judgment and Decision-making PSY 377 Physiological Psychology (PSY 105 or PSY 106, PSY 240, and PSY 242)	PSY 347 Social Psych PSY 348 – Social Cognition and Mental Control PSY 353 Abnormal Psychology PSY 360 Theories of Learning and Cognition PSY 364 – Health Psychology PSY 366- Behavior Problems of Children PSY 370 – Social and Emotional Development PSY 373 Happiness, Judgment and Decision-making PSY 377 Physiological Psychology (PSY 105 or PSY 106, PSY 240, and PSY 242)	PSY 333 – Child Psychology PSY 334 – Adolescent Psychology PSY 347 Social Psych PSY 348 – Social Cognition and Mental Control PSY 353 Abnormal Psychology PSY 360 Theories of Learning and Cognition PSY 364 – Health Psychology PSY 366- Behavior Problems of Children PSY 370 – Social and Emotional Development PSY 373 Happiness, Judgment and Decision-making PSY 377 Physiological Psychology (PSY 105 or PSY 106, PSY 240, and PSY 242)
8 open Electives	8 open electives	8 open electives

**Sample timeline for students in the Integrative Concentration with an interest in Pre-Med**

**Red = LSP requirements Blue = Neuro requirements Green = Concentration courses**

	<b>Autumn Quarter</b>	<b>Winter Quarter</b>	<b>Spring Quarter</b>
YEAR 1	BIO191 CHE130/131 WRD103 LSP110/111	BIO192 CHE132/133 WRD104 LSP112	BIO193 CHE134/135 Open Elective PSY105
YEAR 2	NEU201 Intro to Neuroscience CHE 230/231 PSY106 Statistics Course	NEU/PHL228–or other Ethics course CHE 232/233 LSP 200 Learning Domain	NEU 301- Neuroscience Research Methods CHE 234/235 NEU Elective Learning Domain
YEAR 3	BIO/NEU 339-Cell Neuro PHY 150 CHE 340/341 Learning Domain	CHE 342/343 PHY 151 Learning Domain Open Elective	NEU Elective PHY 152 Learning Domain Experiential Learning
YEAR 4	NEU Conc. Req NEU Elective Learning Domain Open Elective	NEU Elective Learning Domain Learning Domain Open Elective	NEU 390 Senior Capstone NEU Elective Open Elective Open Elective

**Pre-Med Students\*:** are encouraged to major in Neuroscience- Integrative so that requirements for the major and professional school can be met.

Requirements for Medical School admission below can be met with a combination of the major requirements, major electives, and liberal studies program. Be sure that you plan ahead to use these courses as your major electives; failure to do so might overload the major elective portion of your DPR:

- 1 year General Biology – NEU major requirement
- 1 year of General Chemistry – NEU major requirement + 1 major elective
- 1 year of Physics – Major Electives
- 1 year of Organic Chemistry – Major Electives
- 1 or 2 quarters Biochemistry – Major Electives

PSY 105 & 106 – NEU major requirement

SOC 101 – Learning Domain

Many MD programs require at least some calculus; check with your preferred programs

\*For students interested in going to medical school, it is highly recommended to meet with a Pre-Health Advisor. Please visit the following webpage to register for Pre-Health Advising, and to access other Pre-Health resources: <https://csh.depaul.edu/student-resources/advising-student-services/pre-health-advising/Pages/default.aspx>.

## **Students Applying to Graduate School in Neuroscience:**

Requirements for graduate school in neuroscience differ significantly. All general prerequisites for graduate school have been included in either the required or elective courses for the major. However, students who want to go to graduate school are advised to meet with a Neuroscience faculty advisor early to make appropriate elective choices within their concentration. More information about graduate programs can be found on our website:

<https://csh.depaul.edu/academics/neuroscience/student-resources/Pages/Graduate-Programs.aspx>

## **Students in the Honors Program:**

Students admitted to DePaul as part of the Honors Program can major in any of the concentrations. Instead of the LSP requirements the students will take an equal amount of courses (17) in the Honors Program. Please continue to work with your assigned advisor in the Honors program in addition to one in Neuroscience. The courses are:

HON 100: Rhetoric and Critical Inquiry

HON 101: World Literature

HON 102: History in Global Contexts

HON 104: Religious Worldviews and Ethical Perspectives

HON 105: Philosophical Inquiry

HON 110 or 111: Discover or Explore Chicago

HON 201: States, Markets, and Societies

HON 205: Interdisciplinary Arts

HON 208: Sociocultural Inquiry

HON 301: Honors Junior Seminar in Multiculturalism

HON 350 or 351 or 395: Honors Senior Capstone

1 Fine Arts Elective

3 Language Courses (intermediate and above)

3 Honors Approved Electives

(NEU/PHL 228 Neuroethics and NEU390 Capstone, if taken can count as 2)

Experiential Learning Verification.

**2022-23 Course Offerings by Quarter – Offerings and availability may change. Use “Class Search” in Campus Connect to confirm current course offerings:**

<https://csh.depaul.edu/academics/neuroscience/Pages/class-search.aspx>

<b>Field</b>	<b>Fall Quarter</b>	<b>Winter Quarter</b>	<b>Spring Quarter</b>
<b>NEU</b>	201- Intro. to Neuroscience 301- Neuroscience Research Methods	201- Intro. to Neuroscience 228- Neuroethics 310 – Seminar in Neuropsychopharmacology 339- Cellular Neurobiology 380- Special Topics in Neuroscience 390- Neuroscience Capstone	201- Intro. to Neuroscience 301- Neuroscience Research Methods 380- Special Topics in Neuroscience 390- Neuroscience Capstone
<b>BIO</b>	191- General Biology I 193- General Biology III 206- Biostatistics 307- Animal Physiology 250- Cell Biology 380- Cancer Biology 339- Cellular Neurobiology 342- Cognitive Neuroscience	191- General Biology I 192- General Biology II 206- Biostatistics 220- Prin. Of Biotechnology 250- Cell Biology 260- Genetics 340- Behavioral Neuroscience 360- Molecular Biology	192- General Biology II 193- General Biology III 201- Human Anatomy 206- Biostatistics 250- Cell Biology 260- Genetics 308- Human Physiology 342- Cognitive Neuroscience 386- Intro. To Endocrinology
<b>PSY</b>	105- Intro. To Psychology I 106- Intro. To Psychology II 240- Statistics I 241- Research Methods I 242- Research Methods II 333- Child Psychology 353- Abnormal Psychology 360- Theories of Learning/Cog. 373- Happiness, Judgement	105- Intro. To Psychology I 106- Intro. To Psychology II 240- Statistics I 242- Research Methods II 333- Child Psychology	105- Intro. To Psychology I 106- Intro. To Psychology II 240- Statistics I 242- Research Methods II 317- Psych. Of Interpersonal Rel. 333- Child Psychology
<b>CHE</b>	130/131- General Chem. I 134/135- General Chem. III 230/231- Organic Chem. I 234/235- Organic Chem. III 340/341- Biochemistry I	130/131- General Chem. I 132/133- General Chem. II 230/231- Organic Chem. I 232/233- Organic Chem. II 340/341- Biochemistry I 342/343- Biochemistry II	132/133- General Chem. II 134/135- General Chem. III 228/229- Survey Of Organic 232/233- Organic Chem. II 234/235- Organic Chem. III
<b>CDM</b>	IT 240- Intro. To Databases IT 223- Statistics/Data Analysis CSC 241- Computer Science I CSC 242- Computer Science II DSC 324- Data Analysis and Statistical Software II DSC 341- Data Science CSC 381- Image Processing MAT 150,151,152- Calc. I,II,III	IT 240- Intro. To Databases IT 223-Statistics/Data Analysis CSC 241- Computer Science I CSC 242- Computer Science II CSC 324- Data Analysis and Statistical Software II MAT 150,151,152- Calc. I,II,III	IT 240- Intro. To Databases IT 223- Statistics/Data Analysis CSC 241- Computer Science I CSC 242- Computer Science II CSC 324- Data Analysis and Statistical Software CSC 367- Data Mining MAT 150,151,152- Calc. I,II,III



<b>HLTH</b>	140- Medical Terminology 201- Intro to Health Science 210- Intro to Public Health 301- Integrated Human Anatomy/Physiology A	201- Intro to Health Science 210- Intro to Public Health 301- Integrated Human Anatomy/Physiology A 302- Integrated Human Anatomy/Physiology B	201- Intro to Health Science 210- Intro to Public Health 302- Integrated Human Anatomy/Physiology B
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## OTHER IMPORTANT INFORMATION:

### Class Standing:

- Freshman: 0-43 credit hours
- Sophomores: 44-87 credit hours
- Juniors: 88-131 credit hours
- Seniors: 132 credit hours or more

### Degree Conferral:

- Complete a minimum of 192 quarter hours.
- Earn a minimum of 2.000 cumulative GPA.
- Satisfy all the regulations of the individual college or school granting the degree.
- Earn grades of C- or better in all major, minor and allied field classes (GPA greater than or equal to 2.000).
- Complete the residency requirement: final 60 quarter hours of credit; one-half of credit earned in the major concentration; one-half of credit earned in the minor if applicable; all courses in senior year.
- Complete the online degree conferral application in Campus Connection by the designated deadline date.

### Experiential Learning

\***Experiential Learning** is a LSP requirement that can be filled in several ways. A description of this requirement is found at <https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-common-core/experiential-learning/>.

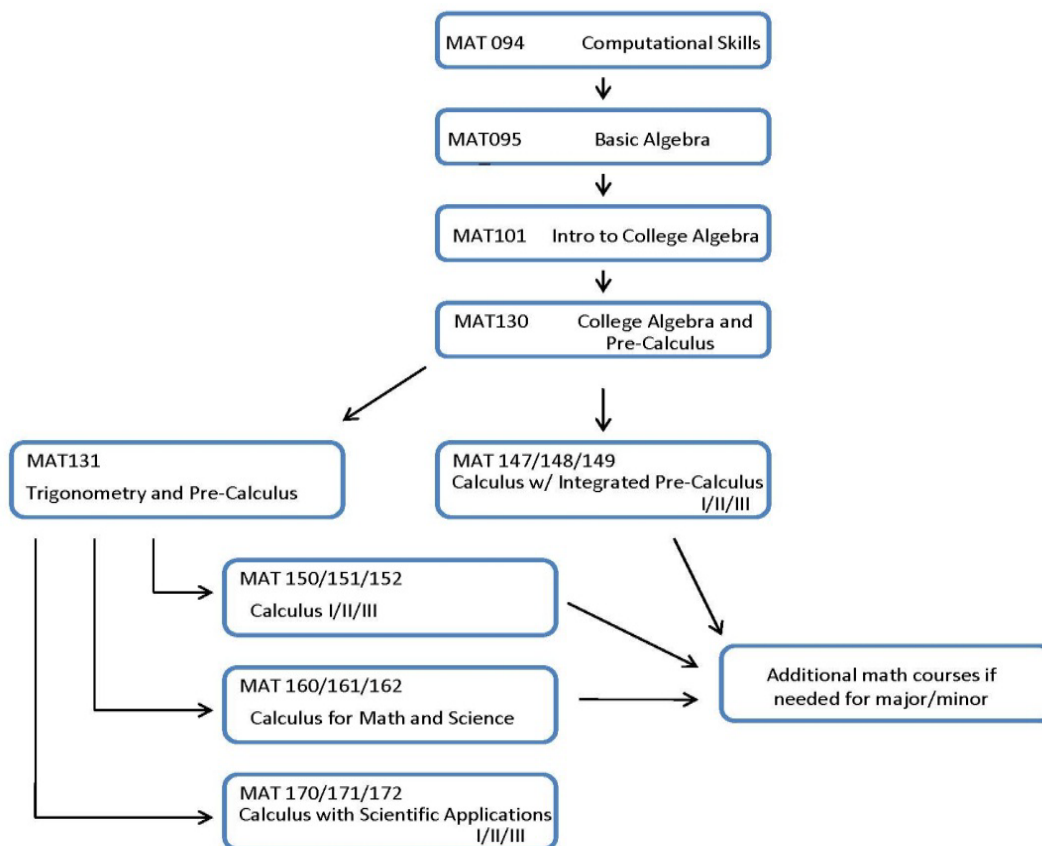
The important thing to remember is that you must be doing the experience (typically something meaningful outside the classroom, such as an internship, research, job, study abroad, etc.) while you're enrolled in the corresponding Experiential Learning course in order to actually receive credit for the EL requirement.

1. **CLD 250 Navigating the Workplace:** <https://resources.depaul.edu/career-center/services-resources/career-courses/Pages/Work-and-Learn-Courses.aspx>. Complete the course application to see if your job or internship (doesn't have to be related to the field) is eligible for CLD 250. You'll work with [uip@depaul.edu](mailto:uip@depaul.edu) to get enrolled and with any other questions. This is the University Internship Program, which is part of the Career Center, so they can also help you find jobs and internships.
2. **Research:** If you get a research opportunity in a DePaul professor's lab, you'll work with the professor and their department to get enrolled in the appropriate independent study and/or research course. For NEU, for example, that's NEU 397 Mentored Research Experience in Neuroscience. If you're working with a professor outside of Neuroscience Program, you may use NEU 397 or the EL course associated with their home department (e.g. BIO 397)
  - a. If you get a research opportunity outside of DePaul, it's treated like a job or internship and you would therefore refer back to bullet 1 and see if you can earn credit through CLD 250.
3. **Study Abroad:** <https://offices.depaul.edu/global-engagement/student-resources/study-abroad/Pages/default.aspx>.
4. **Service-Learning Courses:** These are DePaul courses that have community service project/volunteer hours assigned, so unlike the options above, the experience and course are all rolled into one. You enroll, attend class, and fulfill your assigned role or hours. These can be tricky to find because they're listed among all other EL courses, which include many that are restricted upperclassmen in certain majors. So options like Internship in Accounting, or Field Work in , for example, are not service-learning courses. So when browsing the list, you want to look for titles with words and phrases like "community engagement," "social justice," "making a difference," etc. Those appropriate service-learning courses that are open to all students will typically have a clear community service, social justice, and/or multicultural theme to them.

## Math Placement:

Below is a math path that is useful in determining your math placement. Since precalculus (MAT130 or MAT131) is the prerequisite for BIO191 and CHE130, it is considered the minimum math requirement for the Neuroscience degree. You will reach this requirement by taking a math placement test as a science major and taking any necessary courses to align with the pre-calculus requirement. While calculus is not part of the core curriculum, taking it will make you more competitive in quantitative pursuits after graduation. Computational Neuroscience concentration students will require some calculus and additional math (see the concentration requirements above).

**Take any one of the following math sequences to fulfill the math sequence for the neuroscience degree:**



## Getting Started

**Declaring or Changing Your Major, Minor, or Concentration:** You can officially register or change your intended major, minor, or concentration in Campus Connect. This can be done by the following method: *Campus Connect >Academic Records > Change College, Major, Minor, or Concentration*

**Registering & Wait list Procedures:** Follow this link for video tutorials on your Degree Progress and Registering for classes. (<http://offices.depaul.edu/depaul-central/registration/Pages/default.aspx>) Also, please understand waitlists are automatic within our system. If you are on the waitlist for a class, you will need to wait until the appropriate amount of people drop from the class to which then our system will automatically add you to the class from the waitlist. There is little to nothing your advisor or the professor can do to get you into a class you are waitlisted for, especially lab based classes. This is due to space and safety issues.

**Pre-Health Advising:** Interested in a health-related career? There are many forms of Pre-Health Advising at DePaul. There is the Pre-health Advisory Committee (PAC), which is comprised of an interdisciplinary body of faculty and staff whose primary function is the academic advising of students intending to pursue a career in one of the health professions. We also have a dedicated Pre-Health staff advisor in addition to the Neuroscience staff advisor. To learn more about the PAC and our Pre-Health Advisor, and to obtain information about upcoming events and speakers that the PAC organizes, we encourage you to visit their website and register for their services at: <http://csh.depaul.edu/student-resources/advising-student-services/pre-health-advising>

## Getting Involved

**Student Groups:** DePaul has a vast amount of student organizations for students wishing to get involved. There are many science-based organizations and clubs available. Please visit the Student Involvement website by logging in through DeHub at [Login \(campusgroups.com\)](http://campusgroups.com) to join and to learn more about all of the student organizations. Here are just a few:

- DePaul Neuroscience Club
- Nu Rho Psi – Neuroscience Honor Society
- Psi Chi – Psychology Honor Society
- Chemistry Club of DePaul
- Society of Physics Students
- DePaul Mathematics Club
- Pre-Health Advising Committee Student Organization (PACSO)
- Under-Represented Groups in Medicine
- Life Science and Pre-med Club
- Computer Science Society
- Psychology Peer Mentors
- DePaul oSTEM

## **Everything You Need to Know About Enrollment**

The biggest enrollment mistake you can make, is waiting to enroll! Do not wait till enrollment opens to begin looking at classes or trying to meet with your advisor. Look at the classes as soon as Course Carts open, and put those you think you need in your course cart, and schedule a meeting right away with your advisor if you need to meet. Do this at least a week before your enrollment opens since advisors schedules always book up quickly and pretty far in advance during enrollment seasons. You should have the classes confirmed and in your course cart ready to enroll the minute your enrollment opens.

**Registering for Classes:** <https://offices.depaul.edu/depaul-central/registration/Pages/add-drop-swap.aspx>.

**Waitlists** are automatic within our system. If you are on the waitlist for a class, you will need to wait until the appropriate amount of people drop from the class to which then our system will automatically add you to the class from the waitlist. You must ensure there are no time conflicts, and that you're not already at the maximum credit hours allowed in a term, or else the waitlist process will skip you and enroll the next student in line, and that will continue to happen each time a seat opens until you resolve that conflict. (See below about using the **Swap Function** to avoid this problem!) There is little to nothing your advisor or the professor can do to get you into a class you are waitlisted for, especially lab based classes. This is due to space and safety issues.

**Swap Function:** If you are enrolled in a class that has a time conflict with a waitlisted course, or if you are already enrolled in the maximum amount of hours, the automatic waitlist process will skip over you until the conflict is resolved. Therefore, you are advised to use the "Swap" function any time you add yourself to a waitlist. First, enroll in the "backup" course. Then choose "Swap Classes" from the menu on the left within Manage Classes. You'll go through and find the class that you want to waitlist for, and will initiate a Swap between that and the "backup" course. Then, if a seat opens up and you are next on the waitlist, you will be dropped from the "backup" course and added to the waitlist. The Swap function can also be used any time you are dropping and adding classes – not just for wait listing. Please contact your academic advisor with any questions or for assistance with this.

**Help Videos and Documents** for enrollment, waitlist, swapping classes, and more, can be found at <https://offices.depaul.edu/depaul-central/student-resources/learning-center/Pages/default.aspx>.

**Chemistry Enrollment Instructions:** Please note that Chemistry lists their lectures and lab separately, but require they be taken together. They're what we call **co-requisites** for each other. This means you cannot enroll in one without the other. So for all Chemistry classes, you must put both the lecture and lab in your course cart first, so that you can then enroll at the exact same time from there. In this case, 120 and 131 are the lecture and lab you would enroll in (unless you retest and place into CHE 130.) Chemistry also has pre-requisites. The pre-requisites for CHE 120 and 130 are placement via the Chemistry placement exam. This means you must take that exam before you'll be allowed to register for CHE 120 or 130 and the corresponding 131 lab co-requisite. Then, each Chem lecture and lab is a pre-requisite for the next in the sequence. You need only have the pre-requisite enrolled/in-progress, to be eligible to enroll in the next Chemistry class for the following term. You do not have to wait until you finish the pre-requisite before you can enroll. Then, if by chance you do not pass that pre-req, you will need to drop the next course or you will be dropped from it when the university runs the pre-requisite check (aka PERC) just before the start of each term.

**Transfer Students with Chem Credit:** You will most likely need a requisite override the first time you enroll in a DePaul Chemistry course, if you transferred in a Chemistry pre-requisite. This is because most transfer credits come in as just 1 course, whereas DePaul's Chemistry lists lecture and lab separately, though they must be taken together. So while your Chem transfer credit is applied to your DPR, the system has a hard time recognizing it as counting for both the lecture and the lab pre-requisite. So this simply means that you'll need to contact your assigned academic advisor, providing the specific section or class numbers for the Chemistry lecture and lab you

want, so that a requisite override can be entered in order for you to enroll. This will only be required for the first Chemistry class you as a transfer student take at DePaul. After you complete a Chem class here, the pre-requisites will correctly register in the system, and you'll be able to enroll in any additional Chem classes on your own (as long as you remember the correct way to enroll in them at the same time from your course cart, as instructed above.)

**CHE 120 v. 130:** CHE 120 is a slower paced lecture designed for students that do not have a solid Chem knowledge base right now. It spends more time on mastering concepts and problem-solving skills, which means it's a 5 credit hours class that meets about 2 more hours/week than do the other lectures which are 3 credit hour classes. CHE 130 goes at a regular pace and is for students that are assumed to have some knowledge of Chem, and have passed a high school or college Chem class in the past 2 years. So based on that, you should have an idea of which Chem sounds more appropriate for you, but can ultimately let the placement exam confirm for us. Chemistry labs will always be 1 credit. So if taking CHE 120 and 131, that will be 6 total credit hours, but all other Chem lectures and labs after that will be 4 total credit hours.

**Enrolling in Classes with Pre-Requisites:** You do not need to fully complete a pre-req before you can enroll in the next class. The system recognizes your pre-req as in progress and lets you enroll in the next class. So if you're getting a missing requisite error message and have the pre-req in progress, that means you are probably missing a co-requisite or different pre-req.

- **This info is important for Chem, and for any summer enrollment.** This is because students often mistake the "missing requisites" error message in Chem to mean pre-req, even though they're in the pre-req. The full message also mentions co-reqs, which for Chem are lecture and lab. So if you have the pre-req in progress, but are trying to enroll in either lecture or lab without the other, it is the co-requisite you're missing.
- **Taking pre-reqs over summer for autumn:** This is relevant for summer because many students try to enroll in autumn classes that might require pre-reqs they intend to take over summer. You must first enroll in the summer classes, which will then show as in progress, and can then enroll in autumn classes

**Instructor, Department, or other Special Permissions:** Whether you're trying to enroll in a full class, or a class for which you don't have the pre-requisite met or in-progress, or any other special permission, it can only come from the instructor of the course. You must email the instructor directly asking for this permission, and if they approve, either you or the instructor should then CC your assigned academic advisor to process the permission.

## **Senior Year Career Checklist**

Revamp your resume. Review and update your resume, cover letter, and portfolio.

1. Improve your profile. Strengthen your personal brand by updating your LinkedIn account and using its tools to expand and organize your network. You can start by joining the Virtual Networking Lounge.
2. Connect over coffee. Get an insider's perspective on a job or industry and learn about your field by setting up an informational interview.
3. Practice interviewing. Practice your interviewing skills from the comfort of your couch with DePaul Interview Stream.
4. Research and apply. Put your Googling skills to work. Research your ideal employers, types of jobs and positions in your field. Over 1000 new jobs and internships are posted each month in DePaul Experience.
5. Questions? Contact the Career Center.

## Transfer Students

Students transferring to DePaul from other Colleges and Universities, either within the same field or a different field or major, should see an academic advisor as soon as possible in order to ensure that your credits match up to get you on track for degree completion.

As this is still a fairly new program, we expect many students to be transferring from another major. Keep in mind that depending on previous coursework and level of science background completed it might take longer to complete the intended degree.

## AP Credit

All freshmen and transfer students who have taken an Advanced Placement (AP) test will be awarded DePaul course credit in the amounts indicated below provided that official score reports are submitted to the Office of Admission prior to enrolling at DePaul.

For information regarding other exams not listed follow this [link](#) or contact the Transfer Articulation Center at [TrAC@depaul.edu](mailto:TrAC@depaul.edu).

Subject	AP Exam Name	Score	Course Credit	Course Awarded
AP Capstone	Research/Seminar Course	4 or 5	4	LSP 112
Biology	Biology	3 4 5	4 8 12	BIO 191 BIO 191 & 192 BIO 191, 192 & 193
Chemistry	Chemistry	3 4 5	4 4 8	CHE 102 CHE 130 & 131 CHE 130/131 & CHE 132/133
Computer Science	Computer Science A	3 4 5	4 4 8	IT 130 CSC 243 CSC 241 & 242
Mathematics	Calculus AB Calculus BC Statistics	3 4 or 5 3, 4 or 5 3, 4 or 5	4 8 12 4	MAT 135 or 150 MAT 150 & 151 or 135 & 136 MAT 150-152 or 135 & 136 & one SI MAT 242 or SOC 279
Physics	Physics B Physics C Part 1 Physics C Part 2 Physics 1 Physics 2	4 or 5 4 or 5 5 4 or 5 4 or 5	12 4 8 4 4	PHY 150, 151 & 152 PHY 170 PHY 171 & 172 PHY 150 PHY 152
Psychology	Psychology	4 or 5	8	PSY 105 & 106

Many professional school programs do not accept AP credit for science courses. Students who are considering applying to professional programs (e.g. medical, dental, pharmacy, optometry, etc.) are encouraged to take science courses at DePaul.



## What to do after receiving a B.S. in Neuroscience

By achieving a Bachelor of Science in Neuroscience, our students will be prepared to pursue a variety of career paths that include options such as:

- Within the health field, students can go on to graduate training programs that focus on neuroimaging and neurophysiology for example, administering electroencephalograms or magnetic resonance imaging.
- Professional health careers dealing with Neuroscience include Psychiatry, Neurology, Neuropathology, Neuro-physics, and Neurosurgery.
- Students interested in Psychology can pursue careers in counseling, clinical psychology, or neuropsychology.
- Students in computational neuroscience can go on to graduate programs in computer science, imaging, artificial intelligence, and “big data.”
- Another option is to move on to graduate programs in marketing and economics as Neuro-marketing and Neuro-economics are fairly new fields, or in law and ethics.
- Upon completion of a B.S. in Neuroscience, without pursuit of graduate studies, students will be qualified for numerous positions as biomedical, pharmaceutical, and psychology researchers, forensics technicians, science writers, data analysis, or non-for-profit agencies dealing with disease and disorder of the brain.

For additional about careers in Neuroscience visit:

<https://csh.depaul.edu/academics/neuroscience/student-resources/Pages/Career-Resources.aspx>



# Email Etiquette

(1) Send email at appropriate time of day between 9am-5pm M-F

From: Student

Sent: Monday, April 18, 2016 12:25 PM (1)

To: Thomas, Matt

Cc:

(2) Have a clear applicable subject line

Bcc:

Subject: Advising Meeting (2)

Dear Professor (3) Thomas,

(3) Always make sure you're addressing properly

(4) Use a nice greeting

(5) Identify who you are

Hope this message finds you well. (4) My name is Shannon (5), and I am a sophomore neuroscience major at DePaul. I am wondering if you would have time this week to meet with me to discuss courses (6) for next fall quarter. I am available after 1:00pm Monday through Friday this week. Whenever is most convenient for you (7) during that time, would work for me.

Let me know what time would be best, or if I can provide any further information. Thank you in advance. I look forward to hearing from you! (8)

-

(8) Include a sincere goodbye

(7) Include availability

(6) Identify why you are writing to them

Student's full name

Student's contact info (9)

(9) Make sure signatures are concise and include contact info

## Final Checks

Is the email concise?

Are there any spelling or grammatical errors?

Is the information included relevant?

Am I using the appropriate tone?

Avoid bold, underline, all capitals, but 'please' and 'thank you' go a long way!

## Key Elements of a Successful Resume

**Header:** Your header must include all contact information, such as: First and last name, phone number, email address, street address, city, state, and zip code

**Objective:** An objective aims to state your purpose in creating and submitting your resume, namely the position you are seeking. This section is optional and could be omitted to save space or substituted with a “Career Highlights” or “Summary of Qualifications” section. If you do include an objective statement, it is recommended that you be very specific with your goals and that you aim to preview your top qualities, proven skills, and knowledge.

**Education:** Your education section should include the institution and its location (city, state), degree, and (expected) graduation date. Include the full name of your expected degree along with any minors or concentrations. It is recommended that you include your GPA, but only if it is higher than a 3.0/4.0. Other possible information you might add to this section includes study abroad experiences, relevant coursework, or academic awards and honors.

**Experience:** Options include one large experience section (with positions listed in reverse chronological order) or multiple sections titled to highlight more relevant experience by placing it towards the top of your resume (e.g. “Relevant Experience,” “Health Related Experience,” or “Research Experience, followed by “Additional Experience”).

Headers for each position should include job title, employer, location (city, state), and the date range of employment (months and years or by season). Following your header, describe the skills and knowledge you demonstrated in each position using well developed accomplishment statements.

### Quick tips for quality accomplishment statements:

- Emphasize transferable and technical skills and knowledge by way of concrete examples of when you applied them.
- Start with a strong action verb, and then follow with an explanation of what you did, describe how you did it, and, when possible, include any outcomes that were achieved. Be specific by including quantity, frequency, population, and impact of your work whenever possible. Vary your action verbs throughout the resume.
- Accomplishment statements should be in the proper tense (past or present tense) and use correct grammar and punctuation.

### Consider the following questions to help you create more effective accomplishment statements:

- What were your accomplishments?
- How does this experience relate to your internship/employment goal?
- How did you help the organization?
- What skills/knowledge did you enhance?
- What was the result/outcome of your work?

**Additional Skills:** In this section include only skills that are testable and concrete. Soft skills such as communication, organizational, and interpersonal skills should not be listed here, but rather incorporated into your bulleted accomplishment statements above. Be sure to qualify your level of proficiency for each skill.

You might consider using subsections here such as:

**Laboratory Skills:** Include skills, familiarity with equipment and processes/procedures, and knowledge relevant to the laboratory setting. Examples include Distillation, Extraction, and Chromatography etc.

**Technology:** Focus on programs and proficiency levels that would not be assumed based on education and include your proficiency level. For example: Advanced user of Microsoft Office Suite, including Outlook, Excel, and PowerPoint, as well as Adobe Photoshop; Beginner user of SPSS.

**Languages:** For example: Fluent in oral and written German; Beginner knowledge of Spanish.

## **DePaul's Career Center Resume Resources**

The Career Center offers several options for getting help in creating and perfecting your resume. Take advantage of one or more of the following services available to students and alumni:

- **Peer Career Advising:** Peer Career Advisors have been specially trained to provide resume assistance and basic career services to the DePaul community. Peers are available on a walk-in basis during most business hours or via email at [peercareeradvisor@depaul.edu](mailto:peercareeradvisor@depaul.edu) for questions, job search advice, resume assistance, and cover letter critiques.
- **Online Tutorial and Resources:** Visit the Career Center's website at [www.careercenter.depaul.edu](http://www.careercenter.depaul.edu) to access an interactive resume tutorial, Instant Message a Peer Career Advisor, or access this packet and other documents electronically.
- **Career Advising:** Career Advisors, who specialize in serving the needs of students and alumni from each of DePaul's colleges, are available to meet by appointment. Advising sessions can cover a variety of topics, including selecting a major, advanced resume development, job search strategies, interviewing skills, and other career-related concerns.

Contact the Career Center to schedule an appointment with a Career Advisor or inquire about Peer Career Advisor Availability: <https://resources.depaul.edu/career-center/Pages/default.aspx>.

Lincoln Park Campus  
2320 N Kenmore Ave, SAC 192  
Chicago IL, 60614  
(773)-325-7431

Loop Campus  
1 E. Jackson Blvd, Suite 9500  
Chicago IL, 60604  
(312)-362-8437

## **Research in Neuroscience:**

**Research Opportunities at DePaul:** Faculty within the College of Science and Health often have positions available for undergraduates seeking research experience. We encourage students to contact faculty and explore the opportunity for research here at DePaul:

Visit our website and read through faculty profiles to see the current research projects of our faculty members: <https://csh.depaul.edu/academics/neuroscience/research/Pages/default.aspx>

Visit the College of Science and Health Research website for college sponsored internships and other information: <http://go.depaul.edu/cshstudentresearch> .

Handshake is our online hub for all things college to career - jobs, internships, career fairs, events, mentors and more. Goal in mind: to help connect students to their dream career.

<https://depaul.joinhandshake.com/> .

New course-based research opportunities are being developed in multiple departments throughout the college. Keep an eye out for these opportunities.

**Research at Rosalind Franklin:** <https://rosalindfranklin.edu/academics/chicago-medical-school/departments/neuroscience/>

“The mission of the Department of Neuroscience is to conduct high quality research and to educate medical and graduate students at Rosalind Franklin University of Medicine and Science regarding molecular, cellular, and clinical aspects of central nervous system function.”

DePaul/Rosalind Franklin University of Medicine and Science Summer Research Program: DePaul and RFUMS offer a paid summer biomedical sciences research program for undergraduates on the Rosalind Franklin campus in North Chicago. In this program you are matched with a faculty member at RFUMS and assist in various research areas, including neuroscience. For questions see the college website: <http://go.depaul.edu/cshstudentresearch> . The application deadline is typically in January for the following year.

## **Study Abroad and Internships in Neuroscience for Undergrads:**

Resources to help you find study abroad and internship opportunities in Neuroscience can be found at: <https://csh.depaul.edu/academics/neuroscience/student-resources/Pages/Internships-and-Study-Abroad.aspx>

## **INTERESTING NEUROSCIENCE RESOURCES:**

**The BRAIN Initiative:** <http://www.braininitiative.nih.gov/>

“The Brain Research through Advancing Innovative Neurotechnologies® (BRAIN) Initiative is part of a new Presidential focus aimed at revolutionizing our understanding of the human brain. By accelerating the development and application of innovative technologies, researchers will be able to produce a revolutionary new dynamic picture of the brain that, for the first time, shows how individual cells and complex neural circuits interact in both time and space. Long desired by researchers seeking new ways to treat, cure, and even prevent brain disorders, this picture will fill major gaps in our current knowledge and provide unprecedented opportunities for exploring exactly how the brain enables the human body to record, process, utilize, store, and retrieve vast quantities of information, all at the speed of thought.”

**The Human Brain Project:** <https://www.humanbrainproject.eu/>

“The Human Brain Project (HBP) is a European Commission Future and Emerging Technologies Flagship. The HBP aims to put in place a cutting-edge, ICT-based scientific research infrastructure that will allow scientific and industrial researchers to advance our knowledge in the fields of neuroscience, computing and brain-related medicine. The Project promotes collaboration across the globe, and is committed to driving forward European industry.”

**Emory University’s Program:** <http://compneurosci.college.emory.edu/index.html>

“The Emory University – Georgia Institute of Technology training program in Computational Neuroscience, “From Cells to Systems and Applications,” selects graduate and undergraduate students admitted to one of the existing programs in Biology, Neuroscience, or Biomedical Engineering and obtain a 2 year stipend to complete a specialization in Computational Neuroscience with a focus on biologically applied questions. Lab rotations facilitate the choice of a thesis advisor, and an interactive format of Methods Clinics, Journal Clubs, and an Annual Program Retreat engender an atmosphere of personal interactions and mentorship.”

**Neurological Sciences Programs:** <http://www.ninds.nih.gov/funding/training-career-awards/summer-internships>

“The National Institute of Neurological Disorders and Stroke's Summer Program in the Neurological Sciences is a student research training program in brain and nervous system research. The Summer Program in the Neurological Sciences offers a unique opportunity for academically talented high school, undergraduate, graduate, and medical students to receive first-rate training in neuroscience research. Students get hands-on experience working with leading scientists in the Institute's Division of Intramural Research, the "in-house" research component of the NINDS. NINDS Labs are located in Bethesda, Rockville and Cape Cod, Massachusetts.”

NINDS also has mechanisms in place to support students in combined MD-PhD or other dual-doctoral degree training programs, as well as for PhD students. They will only consider applications



designed to support the training and development of scientists with interests relevant to the mission of NINDS. Check out the link for more information. <http://www.ninds.nih.gov/Funding/Training-Career-Development/Predoctoral-Fellows>

**Allen Brain Atlas:** [www.brain-map.org](http://www.brain-map.org)

“The Allen Institute for Brain Science, founded in 2003 by philanthropist Paul G. Allen, is dedicated to understanding how the human brain works in health and disease. As part of a 10-year plan launched in March 2012 to understand the neural code—how activity in the brain’s cortex leads to perception, decision making, and ultimately action—the Allen Institute has created a set of large-scale programs to understand the fundamentals of the cortex. We will be focusing our understanding through simultaneous study of the brain’s components, computation, and cognition.”

## **Local Neuroscience Organizations:**

**Society for Neuroscience:** <https://www.sfn.org/>

**Society for Neuroscience Chicago Chapter:** <http://chicagosfn.org/>

**Cognitive Neuroscience Society:** <https://www.cogneurosociety.org/>

## **Additional Resources**

### **Student Success:**

Students interested in locating tutoring, mentoring, advising, and study help should check out the Student Success Website. <https://resources.depaul.edu/student-success/Pages/default.aspx>

### **Is Neuroscience right for you:**

Students who are unsure about a Major in Neuroscience can check out this link from the College Board website to get further insight on the vast amount of research and career opportunities! <https://bigfuture.collegeboard.org/majors/biological-biomedical-sciences-neuroscience> .

### **Next Steps for Incoming Students:**

Now that you’ve been admitted, there are important steps that you need to take before you start your first quarter. Check out DePaul’s website to select your student type (Freshman, Transfer/Adult, International) and follow the checklist. <http://www.depaul.edu/admission-and-aid/Pages/default.aspx> .

## **Social Media**

We use social media platforms to help inform our students about potential internships and research opportunities, upcoming events in the department, and other departmental news and information.



<https://twitter.com/DePaulNeuro>



<https://www.facebook.com/depaulneuro/>



<https://instagram.com/depaulneuro>



Join the DePaul Neural Network on LinkedIn to see opportunities, news, and share ideas with DePaul Neuroscience Students and alumni

<https://www.linkedin.com/groups/14072087/>

# NEU Advising Umbrella – “We’ve Got You Covered!”

See below for how the various advisors available to you can each help.

## What does the Neuroscience Staff Advisor do in appointments?

Assists with course scheduling and long-term planning

Addresses Academic probation and the needs of struggling students, emotional, and/or stressed students

Helps you stay on track towards graduation

Refers to other helpful DePaul Resources of here at DePaul

Addresses Transfer Credit concerns

Explains CSH Exceptions Process

Discusses how to change major/concentration/minor

Adding, Dropping, Swapping, Withdrawing



## What does the Faculty Advisor do in appointments:

Provides mentorship

Discusses different fields within neuroscience and how these relate to the student’s interests

Provides upper level course suggestions

Encourages students to think of other possible career opportunities or different routes to get to where they want to go

Provides guidance on finding jobs, internships, and other opportunities within neuroscience

Offers advice on pursuing graduate training—program selection and applications



## Types of Advising: What's the Difference?



Neuroscience  
Staff  
Advisor

Career Center  
Advisor

Faculty  
Advisor

PRE-HEALTH  
ADVISOR

## WHAT DOES THE PRE-HEALTH ADVISOR DO IN APPOINTMENTS?

Outlines the academic requirements necessary for pre-health and pre-medicine programs

Helps develop a timeline for completing requirements

Explains additional graduate program expectations

Advises on opportunities for internships, volunteering, shadowing and student research

Provides information on application processes and standardized exams

Supports interactions with the Pre-health Advising Committee (PAC)



## What does a Career Center Advisor do in appointments?

Helps students explore their passions, interests, skills, and values

Discusses possible career paths and exploring various career options

Provides resources and insight about how to gain experience and build skills

Provides resources and guidance on finding and applying to jobs, internships, and other opportunities

Reviews and discusses resumes and cover letters

Provides resources about graduate school

Provides resources about connecting and networking with professionals and DePaul alums

