

School of Molecular & Cellular Biology

Tina M. Knox, Assistant Director for Advising and Recruitment Jeremy Toma, Ph.D., Lecturer, School of MCB Spring 2023

CONGRATULATIONS!

You've been admitted to study Neuroscience at UIUC! Welcome to the Illini family!



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Neuroscience

Interdisciplinary field exploring biological, chemical, and physical processes behind brain functions

- How does our brain control movement?
- How do we learn new information and acquire new skills?
- How do our senses work? How do we hear, smell, taste?
- How do we recall memories?
- Why do we feel sad or depressed?

https://go.mcb.illinois.edu/neuromajor



Introductory Courses

Molecular & Cellular Basis of Life

Molecular Genetics

Cells, Tissues & Development

Introduction to Neurobiology Society & the Brain

Introduction to Psychology

Behavioral or Cognitive Neuroscience



Supporting Courses

Calculus I

Biostatistics or Calculus II

General Chemistry I and II

with labs

Organic Chemistry I with lab

College Physics Mechanics & Heat College Physics

Electrical & Magnetic

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Typical First Year			
Fall Semester		Spring Semester	
Society & the Brain, MCB 170	3 Hours	Molecular & Cellular Basis of Life, MCB 150	4 Hours
Begin Chemistry (Introductory or General)	3-5 Hours	General Chemistry with lab	5 Hours
Math or Composition	3-5 Hours	Math or Composition	4-5 Hours
1 st Year Enrichment	1 Hour	Introduction to Psychology, PSYC 100	4 Hours
Options: Language, Gen Ed, Elective	0-5 Hours		
Total hours: 14 - 16		Total h	nours: 17 - 18

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Typical Second Year			
Fall Semester		Spring Semester	
Molecular Genetics with lab, MCB 250 and MCB 251	5 Hours	Cells, Tissues and Development with lab, MCB 252 and MCB 253	5 Hours
Organic Chemistry lecture	4 Hours	Organic Chemistry lab	2 Hours
Biostatistics or Calculus II STAT 212 or MATH 231	3 Hours	Behavioral or Cognitive Psychology, PSYC 210 or PSYC 224	3 Hours
Options: Language, Gen Ed, Elective	2-5 Hours	Options: Language, Gen Ed, Elective	3-5 Hours
Total hours: 14 - 17		Total ho	urs: 13 - 15





Advanced Courses

Neuroanatomy Lab Cell & Membrane Physiology Systems & Integrative Physiology Neurobiology of Mental Illness Neurobiology of the Senses Developmental Neurobiology Neuro & Molecular Pharmacology

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Typical Third Year			
Fall Semester		Spring Semester	
Introduction to Neurobiology, MCB 314	3 Hours	Neuroanatomy Laboratory, MCB 460	2 Hours
Biochemical & Physical Basis of Life, MCB 354	3 Hours	Advanced Neuroscience Elective	3 Hours
College Physics: Mechanics & Heat PHYS 101	5 Hours	College Physics: Electrical, Magnetic, and Modern, PHYS 102	5 Hours
Options: Language, Gen Ed, Elective	3-5 Hours	Options: Language, Gen Ed, Elective	3-5 Hours
Total hours: 14 - 16		Total ho	urs: 13 - 15



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Typical Fourth Year			
Fall Semester		Spring Semester	
Cell and Molecular Neuroscience, MCB 461	3 Hours	Integrative Neuroscience, MCB 462	3 Hours
Advanced Neuroscience Elective	3 Hours	Advanced Neuroscience Elective	3 Hours
Advanced Neuroscience Elective	3 Hours	Advanced Neuroscience Elective	3 Hours
Options: Gen Eds, Electives	6 Hours	Options: Gen Eds, Elective s	6 Hours
Total hours: 15			Total hours: 15



What Do Neuroscientists Do?

- Study development of the brain
- Research causes of brain disorders
- Develop biomedical treatments
 - Epilepsy
 - Alzheimer's Disease
 - Traumatic Brain Injury
 - Brain Cancer



School of Molecular & Cellular Biology

Doctor

Scientist (Biotechnology, Pharmaceutical, Universities, Government Agencies)

Careers

Therapist (Physical, Speech, Language)

Pharmaceutical or Diagnostic Technician

Policy Maker for Health Organizations



Opportunities Outside the Classroom

Research	Conduct research in a neuroscience lab led by world-class scientists.	
Study abroad	Study abroad while earning credit in advanced courses in your major.	
Volunteer	Volunteer at hospitals and health clinics.	
Mentor Program	Receive mentoring by an Illinois alumnus in a profession of your interest.	
Connect	Develop lifelong bonds with fellow students who share your passions.	
Intern	Participate in internships. Attend career planning workshops.	



SUPPORTIVE COMMUNITY

9 PROFESSIONAL ADVISORS

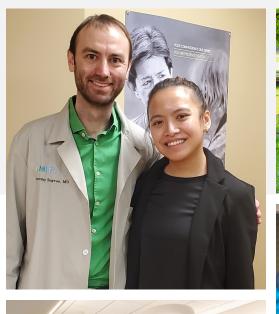
- First resource on campus
- Guide into appropriate courses
- Assist with career planning
- Recommend co-curricular activities
- Refer to appropriate campus resources



"I felt like I was at home with my family whenever I stepped into the Advising Office, and I know that helped me to succeed in my classes and my research." Kevin Stehllik, MCB class of 2020

SUPPORTIVE COMMUNITY

- Dedicated Faculty & Grad Students
- Alumni Mentoring Programs
- Community Spaces, Learning Centers
- Peer Mentoring Programs
- Biology & Pre-health Specific Student Organizations









ADVICE ON AP CREDIT

COURSE	USE CREDIT!	MAYBE USE!	DO NOT USE!
Biology Credit			\checkmark
Chemistry Credit			
Physics Credit		\checkmark	
Calculus Credit			
Additional Credit	\checkmark		

Disclaimer: ultimately what credit you use and don't use is up to you, this is just what we strongly advise

BIOLOGY & **CHEMISTRY AP**

- Strongly suggest against using for: (MCB 150, CHEM 102, CHEM 104)
- Need strong foundation to advance in the curriculum successfully
- Many professional programs do not accept AP credit for prerequisite courses
- AP credit doesn't factor into your **GPA**

AP SCORES

- Calculus AB: 4 or 5 • Calculus BC: 4 or 5 o English Lang & Comp: 4 or 5 • English Lit & Comp: 4 or 5 • Physics 1:5 • Physics 2:5 • Psychology: 5
- Statistics: 4 or 5

- **MATH 220** MATH 220&231 **RHET 105 RHET 105 PHYS 101 PHYS 102 PSYC 100**
- **STATS 100**

NEXT STEPS

Welcome to University of Illinois, Urbana-Champaign!





ACCEPT YOUR OFFER OF ADMISSION

Accept any time up until May 1st Pay non-refundable enrollment fee*



Manage your checklist through *MYILLINI* Includes financial aid, housing, registration, etc.

*unless approved for fee waiver

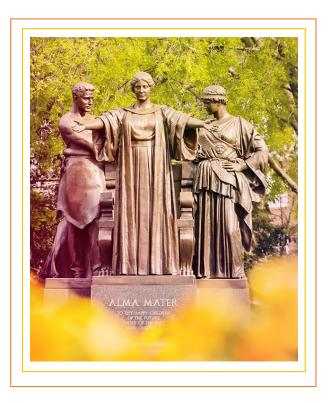
NEW STUDENT REGISTRATION

What happens at Summer Registration:

- Meet with a Neuroscience Advisor
- Learn important details about your major
- Tell us about you & your goals
- Register for fall classes (*Peer Mentors will assist*)

IMPORTANT!

- BLOCK OFF A FULL DAY!
- $\circ~$ Plan for no distractions during registration
- Sign-up will be available in mid-March
- **Know your password!** You'll NEED your NetID and NetID password to log in to the course registration system





REQUIRED PLACEMENT EXAMS!

Online Exams - Open May 1

- Math, ALEKS PPL takes about 1.5 hours
- Chemistry, takes about 30 min
- Biology takes about 35 min more conceptual
- Foreign Language (LOTE/NPL), if needed
- Not necessary to take MCB or PHYS exams

Take at least 1 week prior to your registration appointment! Cannot register if you do not take the exams



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Contact Us:

Tina M. Knox, <u>tmknox@Illinois.edu</u> Jeremy Toma, <u>jtoma@illinois.edu</u>

