Curricular Changes for upcoming 2024-2025 Academic Year

BMB Major Changes

New requirements for the BMB major (changes in bold:

BIO 210

BMB 210

CHE 135 OR both CHE 131 and 132

CHE 241

CHE 242

MAT 165 or placement in MAT 185 or higher

PHY 110 or PHY 210

BMB 310

BMB 320

BMB 330

BMB 340

BMB 500

One of BMB 335 or BMB 345 (1-hour labs)

One of the following laboratory courses: BMB 316, BIO 335, BIO 340, BIO 345, BIO 350 or BIO 392

One of the following physical or computational science courses:

PHY 120, PHY 230, CHE 250, CHE 361, CHE 362, CSC 170

One of the following biological science courses (if not used to complete the laboratory course requirement):

BIO 335 (developmental biology), BIO 340 (microbiology), BIO 345 (histology), BIO 350 (comparative vertebrate physiology), BIO 355 (immunology), BIO385 (cellular neurobiology), BIO 386 (cancer biology), BIO 392 (bioinformatics and genomics), BIO 455 (biology of viruses)

Psychology Major and Minor Changes

Students can double major in PSY and NRO. This was not previously the case with PSY and BNS.

Foundation Requirements:

PSY 110/111 Introduction to Psychology (4) OR Introduction to Psychological Science (3)

BIO 110 Evolution, Biodiversity, Ecology (4)

MAT 130 Introduction to Statistics (3)

PSY 205 Introduction to Research Methods (3)

PSY 210 Experimental Psychology (4) OR NRO 225 if NRO Double Major

Social, Developmental & Mental Health (choose 2):

PSY 320 Abnormal Psychology (3) PSY 360 Social Psychology (3)

PSY 380 Life-Span Developmental Psychology (3)

Cognitive & Biological (choose 2, 1 must have a lab):

PSY 300 Cognition (3)

PSY 305 The Psychology of Learning (4)

PSY 330 Animal Behavior (4)

PSY 395 Physiological Psychology (4)

NRO 310 The Brain Vault: Memory and the Brain (3)

NRO 325 Sensory Mosaic: Differences in Sensory & Perceptual Experiences (4)

NRO 330 Neurological Impacts: Brain Damage and Diseases (3)
NRO 340 Mind-Altering Molecules: Neuropharmacology (3)

NRO 350 Brain, Bed, & Beyond: Neuroendocrinology) (3)

NRO 360 Synapses to Symptoms: Clinical Neuroscience) (3)

NRO 370 Making Brain Waves: Unraveling the Mysteries of EEG (3) NRO 380 MindCraft: Techniques for investigating the Brain (3)

NRO 390 Sexy, Tasty, & Fly: Investigating Neural Systems in Drosophila (3)

Cultural & Social Diversity (choose 1):

PSY 335 Cultural Psychology (3)
PSY 355 Psychology of Sexuality (3)

PSY 385 Psychology of Race & Ethnicity (3)

PSY 387 Brain and Bias (3)

PSY 390 Psychology of Women (3)

Advanced Electives:

Two additional PSY courses numbered 300 or higher excluding PSY 491, PSY 492, PSY 500.

Capstone (choose 1):

PSY 491 Advanced Research Topics, one term (3)
PSY 492 Advanced Research Topics, two terms (4)

PSY 500 Senior Seminar (3)

<u>Updated Requirements for the Psychology Minor [changes are in red]</u>

Foundation Requirements:

PSY 110/111 Introduction to Psychology (4) OR Introduction to Psychological Science (3)

MAT 130 Introduction to Statistics (3)

PSY 205 Introduction to Research Methods (3)

PSY 210 Experimental Psychology (4)

Advanced Electives:

Four additional PSY courses numbered 300 or higher excluding PSY 491, PSY 492, PSY 500

Psychology Course Numbering Changes

Existing courses being renumbered (documents already submitted to CCAS)

PSY 330 Animal Behavior (4) – Preivously BNS 330

PSY 395 Physiological Psychology (4) – Preivously PSY 295

PSY 491 Advanced Research Topics, one term (3) – Preivously PSY 351
PSY 492 Advanced Research Topics, two terms (4) – Preivously PSY 350

Politics Major Changes

Required Courses

POL 120

Political Ideologies & Issues 3

POL 130

Political Institutions 3

POL 210-219

One POL course chosen from courses numbered 210-219 3

POL 220

Law and Society 3

POL 260

Introduction to International Relations 3

POL 205

Introduction to Political Analysis 3

POL	One POL course chosen from courses numbered 300-309	3
POL	One POL course chosen from courses numbered 320-329	3
POL	One POL course chosen from courses numbered 330-339	3
POL	One POL course chosen from courses numbered 360-379	3
POL	One additional POL course numbered 300 or higher 3	

Biology Major and Minor Changes

Re-classified of BIO 455 (Biology of Viruses) as a Group B (Organisms) course for the Biology major and Biology minors.

Engineering Minor Changes

Two courses were added to the list of additional electives that are required for the minor:

EGR 220 - Statics

PHY 325 - Advanced Laboratory Techniques

Convocation Requirement Change

The college provides a number of culturally and intellectually enriching experiences which could not be experienced in class. To encourage students to try some of these experiences, students who attend 12 convocation credits during an academic year will have one hour of 'A' figured into their grade point average.

BNS and NRO Major Changes

The new NRO major become an option starting Fall 2024.

Current seniors/Students graduating in Spring 2024 **BNS** major only

Current juniors/Students graduating in Spring 2025 **BNS** major only

Current sophomores/Students graduating in Spring 2026

Have completed BNS 295 by January 2025
 BNS major only*

Have NOT completed BNS 295 by January 2025 possibly NRO major **

NOT BNS major

Current first year/Students graduating in Spring 2027 NRO major only

^{*} Sophomores ('26) that have completed BNS 295 (Foundations of Behavioral Neuroscience) prior to or during Fall 2024 will be restricted to the BNS major because they cannot complete NRO 200 (Introduction to Neural Science) which is a prerequisite for NRO 215 (Behavioral Neuroscience).

^{**} Not all sophomores ('26) will be able to complete the NRO major requirements in time for graduation in May 2026. It will depend on what courses they have already completed.

Requirements for the Neuroscience Major

- 14-15 courses (depending on whether student takes CHE 131 & CHE 132 or CHE 135)
- 49-55 hrs (depending on how many electives have labs)

Foundation Courses (Take all 4 [or 3 if takes CHE 135 instead of CHE 132 AND CHE 132])

• PSY 110 (Introduction to Psychological Science)–4 OR PSY111 (Survey of Psych. Science)–3 – **GE: Exploration**

- CHE 131 (General Chemistry I)-4 GE: Exploration AND CHE 132 (General Chemistry II)-4
 OR CHE 135 (Acc General Chemistry)-4 GE: Exploration
- MAT 130 (Statistics) –3 GE: Communication

Core Neuroscience Courses (Take all 4)
--

Original Course

<u>Number</u>

• NRO 200 (Introduction to Neural Science)-3

NEW COURSE

• NRO 215 (Behavioral Neuroscience)-4

[BNS 295]

• NRO 225 (Experimental Neuroscience)-4 - GE: R-tag

[BNS 210]

NRO 230 (Integrative Neuroscience)–3

[BNS 300]

Elective Neuroscience Courses (Take 4; 1 must be lab skills LS)

NRO 310-c (The Brain Vault: Memory and the Brain)–3

NEW COURSE

NRO 325-b/c (Sensory Mosaic: Differences in Sensory & Perceptual Experiences)–4 LS
 [BNS 370]

NRO 330-b (Neurological Impacts: Brain Damage and Diseases)–3

[BNS 390]

• NRO 340-b/c (Mind-Altering Molecules: Neuropharmacology)-3

[BNS 360]

NRO 350-b/c (Brain, Bed, & Beyond: Neuroendocrinology)-3 - GE: D tag

[BNS 380]

NRO 360-b (Synapses to Symptoms: Clinical Neuroscience)–3

NEW COURSE

ullet NRO 370-c (Making Brain Waves: Unraveling the Mysteries of EEG))–3 LS

NEW COURSE

• NRO 380-c (MindCraft: Techniques for investigating the Brain)–3 LS

NEW COURSE

NRO 390-c (Sexy, Tasty, & Fly: Investigating Neural Systems in Drosophila)–3 LS
 NRO 400-b/c (Neuroscience Research Immersion)–4 LS

[BNS 451] [BNS 350/351]

Elective Auxiliary Courses (take 3 courses)

- PSY 330-b (Animal Behavior)–4
- PSY 305-b (Psychology of Learning)–4
- PSY 315-b (Health Psychology)–3
- PSY 320-b (Abnormal Psychology)–3
- PSY 300-b (Cognition)-3
- PSY 380-b (Life-Span Developmental Psychology)-3
- PSY 450-b (Research in Primate Behavior)-3 GE: S/G tags
- CHE 241-c (Organic Chemistry)–4
- BIO 210-c (Genetics)-4
- BMB 210-c (Intro to Biochemistry & Molecular Biology)–4
- BIO 385-c (Cellular Neurobiology)–3

Neuroscience Major – Optional Disciplinary Tracks

Students have the option to choose a disciplinary track in Behavioral Neuroscience or Cellular Neuroscience. Alternatively, students can opt not to follow a disciplinary track.

- Behavioral Neuroscience Track
 - Complete all Foundation Courses
 - o Complete all NRO Core Courses
 - 6 of the 7 Elective courses (4 NRO and 3 Auxiliary) have "b" tags (e.g., NRO 360-b) which indicates an emphasis on behavioral neuroscience

- Cellular Neuroscience Track
 - o Complete all Foundation Courses
 - Complete all NRO Core Courses
 - 6 of the 7 Elective courses (4 NRO and 3 Auxiliary) have "c" tags (e.g., NRO 370-c) which indicates an emphasis on cellular neuroscience
- Neuroscience (General)
 - Students that take a mix of b-tagged and c-tagged courses will graduate with a broader degree in Neuroscience (no disciplinary track).

Neuroscience

PSY 110/111
CHE 131
MAT 130
NRO 200
NRO 215
NRO 225
NRO 300
4 NRO Electives
3 Auxiliary Electives

Behavioral Neuroscience

PSY 110/111
CHE 131
MAT 130
NRO 200
NRO 215
NRO 225
NRO 300
4 NRO Electives
3 Auxiliary Electives

6 of 7 NRO and Auxiliary Electives emphasize Behavior Neuroscience

Cellular Neuroscience

PSY 110/111
CHE 131
MAT 130
NRO 200
NRO 215
NRO 225
NRO 300
4 NRO Electives
3 Auxiliary Electives

6 of 7 NRO and Auxiliary Electives emphasize Cellular Neuroscience

Requirements for the Neuroscience Minor

- 8-9 courses
- 32-34 hrs (depending on how many electives have labs)

Foundation Courses (Take all 3/4):

- PSY 110 (Introduction to Psychological Science)–4 OR PSY111 (Survey of Psych. Science)–3
 GE: Exploration
- CHE 131 (General Chemistry I)–4 *GE: Exploration* AND CHE 132 (General Chemistry II)-4

OR CHE 135 (Acc General Chemistry)-4 - GE: Exploration

• MAT 130 (Statistics) –3 – *GE: Communication*

Core Neuroscience Courses (Take all 3)

Original Course Number

• NRO 200 (Introduction to Neural Science)-3

NEW COURSE

• NRO 215 (Behavioral Neuroscience)-4

[BNS 295]

NRO 225 (Experimental Neuroscience)–4 OR PSY 210 (Experimental Psychology – 4 AND an additional BNS course numbered 300 or higher, excluding NRO 400/401. [BNS 350/351] –
 GE: R tag [BNS 210]

Elective Neuroscience Courses (Take 2)

NRO310-c (The Brain Vault: Memory and the Brain)–3

NEW COURSE

- NRO 325-b/c (Sensory Mosaic: Differences in Sensory & Perceptual Experiences) LS-4
 [BNS 370]
- NRO 330-b (Neurological Impacts: Brain Damage and Diseases)–3 [BNS 390]
- NRO 340-b/c (Mind-Altering Molecules: Neuropharmacology)–3
 [BNS 360]
- NRO 350-b/c (Brain, Bed, & Beyond: Neuroendocrinology)–3 GE: D tag [BNS 380]
- NRO 360-b (Synapses to Symptoms: Clinical Neuroscience)–3

NEW COURSE

 NRO 370-c (Making Brain Waves: Unraveling the Mysteries of EEG)–3 LS NEW COURSE

- NRO 380-c (MindCraft: Techniques for investigating the Brain)-3 LS
 NEW COURSE
- NRO 390-c (Sexy, Tasty, & Fly: Investigating Neural Systems in Drosophila)–3 LS [BNS 451]

NRO 400-b/c (Neuroscience Research Immersion)-4 LS

[BNS 350/351]

MAT Major Changes

MAT 165

MAT 185

MAT 235

MAT 240

MAT 300

MAT 330 or 380

CSC 170

Five electives:

At least three MAT courses numbered 301 or higher.

At most one of: MAT 400, MAT 401, MAT 402, or MAT 405 (must be at least 3 hours)

At most one of: any MAT 490 or greater

At most one of: any MAT 250-299 (CentreTerm offerings)

At most one of: CHE 362, CSC 370, CSC 374, DSC 330, ECO 392, ECO 395, PHY 310, or another

course approved by the MAT program

MAT Minor Changes

MAT 165

MAT 185

MAT 200 or MAT 235 or DSC 230

MAT 240

Three electives:

At least two MAT courses numbered 300 or higher.

At most one of: MAT 400, MAT 401, MAT 402, or MAT 405 (must be at least 3 hours)

At most one of: any MAT 490 or greater

At most one of: any MAT 250-299 (CentreTerm offerings)

At most one of: CHE 362, CSC 170, CSC 370, CSC 374, DSC 330, ECO 392, ECO 395,

PHY 310, or another course approved by the MAT program