

BS Biology – Neuroscience Area of Emphasis Checksheet:

(Fall 2026)

(check Degreeworks and the Bulletin for Franklin College, University, and other core requirements)

Core pre-requisites and Area VI:

- ☐ BIOL 1107 Principles of Biology I 3 AND BIOL 1107L Principles of Biology I Laboratory 1
- ☐ CHEM 1211-1211D General Chemistry I 3 AND CHEM 1211L General Chemistry Laboratory I 1
- ☐ CHEM 1212-1212D General Chemistry II 3 AND CHEM 1212L General Chemistry Laboratory II 1
- ☐ CHEM 2211-2211D Modern Organic Chemistry I 3 AND CHEM 2211L Modern Organic Chemistry Laboratory I 1
- ☐ MATH 1113 Precalculus 3
- ☐ MATH 2250 Calculus I for Science and Engineering 4
- ☐ PHYS 1111-1111L Introductory Physics-Mechanics, Waves, Thermodynamics 4 OR PHYS 1211-1211L 4
- ☐ PHYS 1112-1112L Introductory Physics-Electricity and Magnetism, Optics, Modern Physics 4 OR PHYS 1212-1212L 4
- ☐ CHEM 2212-2212D Modern Organic Chemistry II 3 AND CHEM 2212L Modern Organic Chemistry Laboratory II 1 OR MATH 2260 Calculus II for Science and Engineering 4 OR STAT 2000 Introductory Statistics 4

Major Required Courses (34 hours) 10 TOTAL courses (C or better required)

- ☐ BIOL 1108 and BIOL 1108L (4 hrs)
- ☐ BCMB3100 - (4 hrs) - Intro Biochemistry and Molecular Biology **or** BCMB 4020 - (3 hrs) - Biochemistry and Molecular Biology II
- ☐ GENE 3200 – (4 hrs) – Genetics
- ☐ CBIO 3800 – (4 hrs) – Neurobiology
- ☐ CBIO 3600 – (4 hrs) - Developmental Biology **or** CBIO 3400 – (4 hrs) - Cell Biology
- ☐ ECOL 3500/L – (4 hrs) – Ecology **or** ECOL 3505H/L -- Ecology Honors **or** GENE 3000 - (4 hrs) - Evolutionary Biology

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- ☐ Organismal Biology: Choose one from the following:

BIOL(WILD) 4740/6740 – (3 hrs) – Animal Behavior
CBIO 3010/L – (4 hrs) – Functional Human Anatomy
ECOL 4640/6640 (3 hrs) - Animal Cognition
ENTO 4450 - (3 hrs) – Insect Behavior
PSYC 5750 – (3 hrs) – Principles of Primate Phylogeny

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- ☐ Laboratory: Choose one from the following:

BIOL 3110L – (4 hrs) - Basic Skills in the Laboratory
BIOL 3710L – (3 hrs) - Animal Behavior Laboratory
BIOL 3720L – (3 hrs) – Field Animal Behavior
BIOL 4960R – (4 hrs) – Undergraduate Research
CBIO 3410L–(4 hrs)-Lab in Cellular & Developmental Biology
GENE 3210L – (3 hrs) – Experimental Genetics
GENE 4210L – (4 hrs) – Molecular Genetics Lab

Major Electives (6 hours)

Choose one of the following:

PSYC 4120 – (3 hrs) - Sensation and Perception
PSYC 4130 – (3 hrs) - Physiological and Comparative Psychology
PSYC 4140 – (3 hrs) - Cognitive Neuroscience
PSYC 4150 – (3 hrs) - Biological Foundations of Health Psychology

PSYC 5750 – (3 hrs) - Principles of Primate Phylogeny
PSYC 5770– (3 hrs) - Organization of Primate Social Groups
PSYC 5850 – (3 hrs) - Psychopharmacology – Drugs and Behavior

Choose one of the following:

ANTH 4790 – (3 hrs) - Human Adaptation
BCMB 4120 – (4 hrs) - Human Biochemistry and Disease
BCMB 4130 – (4 hrs) - Mechanisms of Human Disease
BCMB 4130H – (4 hrs) - Mechanisms of Human Disease (Honors)
CBIO 3275 – (3 hrs) – Medical Endocrinology
CBIO 3600 – (4 hrs) - Developmental Biology
CBIO 4200 – (3 hrs) - Biomedical Research in Health and Disease

ENTO 4450 - (3 hrs) – Insect Behavior
GENE 4050 – (3 hrs) - Behavior Genetics
GENE 4310 – (3 hrs) – Genetic Approaches to Developmental Neuroscience
GENE 4500 – (3 hrs) - Human Genetics
VPAT 4000 – (3 hrs) - On the Origins of Disease
VPHY 3100 – (3 hrs) - Elements of Physiology