# Biomedical Physiology Major/Honours Program Planner

**NAME:** __________________________________________  **SEMESTER MAJOR APPROVED:** __________

**STUDENT NUMBER:** ____________________________  **DATE:** __________

**IMPORTANT:**
- Students must obtain a grade of C- or higher in all required courses.
- After a student has completed 24 credits, a Science cumulative grade point average (CGPA) of not less than 2.50 is required for continuance in the major. For students approved prior to Fall 2017, this was 2.20.
- There is a maximum number of allowable transferable credits that count towards the program from any other institution – at least half of the program’s total units and two thirds of the total upper division units must be earned through SFU.
- Upper division units counted towards this major cannot also be used to count towards the upper division units for a major or another minor.
- Note that students cannot combine: a double major, nor a double minor, nor a major/minor program in the areas of Kinesiology, Biomedical Physiology and Behavioural Neuroscience.

## LOWER DIVISION REQUIREMENTS
(Students complete 120-121 units for this major program)

### CORE COURSES:
- [ ] BISC 101 - General Biology (4)
- [ ] BISC 102 - General Biology (4)
- [ ] BISC 202 - Genetics (3)
- [ ] BPK 142 - Introduction to BPK (3)
- [ ] BPK 201 - Biomechanics (3)
- [ ] BPK 205 - Introduction to Human Physiology (3)
- [ ] BPK 207 - Sensorimotor Control and Learning (3)
- [ ] CHEM 121 - General Chemistry and Laboratory I (4)
- [ ] CHEM 122 - General Chemistry II (2)
- [ ] CHEM 126 - General Chemistry Laboratory II (2)
- [ ] CHEM 281 - Organic Chemistry I (4)
- [ ] CHEM 282 - Organic Chemistry II (2) (or CHEM 283 - Organic Chemistry IIb) (3)
- [ ] MATH 154 - Calculus I for the Biological Sciences (3) (or MATH 150 - Calculus I (4) or MATH 151 - Calculus I (3))
- [ ] MATH 155 - Calculus II for the Biological Sciences (3) (or MATH 152 - Calculus II (3))
- [ ] MBB 222 - Molecular Biology and Biochemistry (3)
- [ ] MBB 231 - Cellular Biology and Biochemistry (3)
- [ ] PHYS 101 - Physics for the Life Sciences I (3) (or PHYS 120 (3) or PHYS 125 (3) or PHYS 140 (4))
- [ ] PHYS 102 - Physics for the Life Sciences II (3) (or PHYS 121 (3) or PHYS 126 (3) or PHYS 141 (4))
- [ ] STAT 201 - Statistics for the Life Sciences (3)

## GENERAL ELECTIVES and WQB:
16 units of lower or upper division electives, including: 6 units of Humanities Breadth (B-Hum), 6 units of Social Science Breadth (B-Soc), and 3 units of lower division Writing Intensive (W). The quantitative (Q) and science breadth (B-Sci) requirements are satisfied through the completion of the biomedical physiology major lower division core course set. For more information, please visit [http://www.sfu.ca/ugcr](http://www.sfu.ca/ugcr).

- B-Hum (6 units) ________________________
- B-Soc (6 units) ________________________
- W (3 units) ________________________

Additional Free Electives: ________________________

## GRADUATION GPAs:
- [ ] BPK Cum GPA of 2.00 or higher
- [ ] BPK UD GPA of 2.00 or higher
- [ ] CGPA of 2.00 or higher
- [ ] UD CGPA of 2.00 or higher

## HONOURS CORE COURSES:
- [ ] BPK 491 - Undergraduate Honours Thesis Proposal (3)
- [ ] BPK 495 - Undergraduate Honours Research Performance (6)
- [ ] BPK 499 - Undergraduate Honours Thesis Reporting (6)

## HONOURS GRADUATION GPAs:
- [ ] BPK Cum GPA of 3.00 or higher
- [ ] BPK UD GPA of 3.00 or higher
- [ ] CGPA of 3.00 or higher
- [ ] UD CGPA of 3.00 or higher
## Biomedical Physiology Major/Honours Program Planner (Spring 2020 Calendar)

### UPPER DIVISION REQUIREMENTS

**CORE COURSES:**
- [ ] BPK 304W - Inquiry and Measurement in BPK (3)
- [ ] BPK 305 - Human Physiology I (3)
- [ ] BPK 306 - Human Physiology II (3)
- [ ] BPK 307 - Human Physiology III (3)
- [ ] BPK 326 - Functional Anatomy (4)
- [ ] BPK 407 - Human Physiology Laboratory (3)
- [ ] BPK 408W - Cellular Physiology Laboratory (3)
- [ ] MBB 321 - Intermediary Metabolism (3)

Students Complete six Courses from Lists A and B

**One or two of List: A**

- [ ] BISC 300 - Evolution (3)
- [ ] BISC 302 - Genetic Analysis (3)
- [ ] BISC 302W - Genetic Analysis (3)
- [ ] BISC 303 - Microbiology (4)
- [ ] BISC 316 - Vertebrate Biology (4)
- [ ] BISC 333 - Developmental Biology (3)
- [ ] BISC 357 - Genetic Engineering (4)
- [ ] BISC 403 - Current Topics in Cell Biology (3)
- [ ] BISC 405 - Neurobiology (3)
- [ ] BISC 421 - Models in Biology: From Molecules to Migration (3)
- [ ] BISC 423 - Developmental Neurobiology (3)
- [ ] BISC 424 - Applied Genomics (3)
- [ ] BISC 428 - Cell Anatomy (3)
- [ ] CHEM 360 - Thermodynamics and Chemical Kinetics (3)
- [ ] MBB 308 - Molecular Biology Laboratory (3) ^
- [ ] MBB 309W - Biochemistry Laboratory (4)
- [ ] MBB 322 - Molecular Physiology (3)
- [ ] MBB 323 - Introduction to Physical Biochemistry (3)
- [ ] MBB 324 - Protein Biochemistry (3)
- [ ] MBB 331 - Molecular Biology (4)
- [ ] MBB 342 - Introductory Genomics and Bioinformatics (3) ^
- [ ] PHYS 347 - Introduction to Biological Physics (3)

* require additional prerequisites outside of program requirements

**Four or five of List: B**

- [ ] BPK 301 - Biomechanics Laboratory (3)
- [ ] BPK 308 - Experiments and Models in Systems Physiology (3)
- [ ] BPK 310 - Exercise/Work Physiology (3)
- [ ] BPK 336 - Histology (3)
- [ ] BPK 340 - Active Health: Behavior and Promotion (3)
- [ ] BPK 401 - Muscle Biomechanics (3)
- [ ] BPK 402 - Mechanical Behavior of Biological Tissues (3)
- [ ] BPK 412 - Molecular Cardiac Physiology (3)
- [ ] BPK 415 - Neural Control of Movement (3)
- [ ] BPK 417 - Obesity, Adipocyte Function and Weight Management (3)
- [ ] BPK 420 - Selected Topics in Biomedical Physiology and Kinesiology I (3) *
- [ ] BPK 421 - Selected Topics in Biomedical Physiology and Kinesiology II (3) *
- [ ] BPK 422 - Selected Topics in Biomedical Physiology and Kinesiology III (3) *
- [ ] BPK 423 - Selected Topics in Biomedical Physiology and Kinesiology IV (3) *
- [ ] BPK 426 - Functional Human Neuroanatomy (3)
- [ ] BPK 431 - Integrative Cancer Biology (3)
- [ ] BPK 432 - Physiological Basis of Temperature Regulation (3)
- [ ] BPK 444 - Cardiac Disease: Pathophysiology and Assessment (3)
- [ ] BPK 446 - Neurological Disorders (3)
- [ ] BPK 448 - Rehabilitation of Movement Control (3)
- [ ] BPK 484 - Altitude and Aerospace Physiology (3)
- [ ] BPK 496 - Directed Study Literature (3) *

and three upper division units from any department including BPK except for BPK 325, 342, 457, 459, 491, 495 and 499.

#A maximum of six units from these courses may be used towards the List B requirements

* must be selected topics courses in physiology

+ BPK (or KIN) 304W or BPK 408W satisfies the University’s breadth requirements of three upper division units in writing

^ require additional prerequisites outside of program requirements

**Minimum Total Units (Major): 120 Units (45 Upper Division)**

**Minimum Total Units (Honours): 135 Units (60 Upper Division)**

Page 2 of 3  This is a working document. Students approved on a previous Calendar should refer to the Calendar archive for program requirements.