

## SELECTIVES AND ADVANCED SELECTIVES

Note that a **Selective** is a course from a predetermined list, provided by the program, whereas an **Elective** is any course at Dalhousie University. In cases where prerequisites for Selectives are not offered as Medical Sciences core courses, Elective space can be used to fulfil these pre-requisites.

### Selectives:

#### Biochemistry/ Molecular Biology

BIOC 2610 - Introductory Biochemistry Lab  
BIOC 3300 - Intermediary Metabolism  
BIOC 3400 - Nucleic Acid Biochemistry & Molecular Biology  
BIOC 3610 – Laboratory Techniques in Biomedical Sciences  
BIOC 3700 - Biomolecular Chemistry

#### Biology

BIOL 2003 – Animal Diversity  
BIOL 2040 - Evolution  
BIOL 2060 - Introductory Ecology  
BIOL 3046 - Molecular Evolution – **not offered in 2021/22**  
BIOL 3050 - Developmental Biology  
BIOL 3078 – Animal Physiology I  
BIOL 3322 – Parasitology  
BIOL 3328 – Medical Entomology (only offered in Summer)  
BIOL 3336 – Vertebrate Functional Morphology  
BIOL 3421/ANAT 3421 - Comparative Vertebrate Histology  
BIOL 3430/ANAT 2160 - Introduction to Human Histology

#### Biomedical Engineering

BMNG 3000 – Technology in Medicine

#### Chemistry

CHEM 2301 - Introduction to Physical Chemistry I  
CHEM 2304 - Introduction to Physical Chemistry II  
CHEM 3601 – Chemistry of Living Systems

#### Economics

ECON 2231 – Perspective in Health Economics  
ECON 3231 – Topics in Health Economics – **not offered in 2021/22**

#### Environmental Science

ENVS 3400 – Environment and Human Health

#### Humanities and Social Sciences

ENGL 2030 – Literature, Health, and Healing (offered in alternate years to ENGL 3320) – **not offered in 2021/22**  
ENGL 3320 – Literature and the History of Medicine (offered in alternate years to the ENGL 2030)  
HSTC 2102 – Origins of Modern Medicine  
HSTC 2211 – Introduction to the History of Science I: From the Ancients to the Birth of the Modern  
HSTC 2212 - Introduction to the History of Science II: From The Birth of the Modern to the Present  
HSTC 2202 – The Beginnings of Western Medicine: The Birth of the Body  
HSTC 2206 – Biopolitics: Human Nature in Contemporary Thought  
HSTC 2350 – The Body in Early Modern Europe – **not offered in 2021/22**  
HSTC 3101/CTMP 3204 – Human Experiments

HSTC 3121 – In Search of the Philosopher’s Stone: The History of European Alchemy  
INTD 3115 - Global Health in the 21<sup>st</sup> Century  
PHIL 2805 - Ethics and Health Care: Patient Care  
PHIL 2810 – Ethics and Health Care: Social Policy (can only take one of 2805 or 2810 as selective, other as core)  
PHIL 3800 – Philosophy of Medicine – **not offered in 2021/22**  
SOSA 2502 - Biomedicine and the Illness Experience – **not offered in 2021/22**  
SOSA 3135 – The Social Organization of Health Care – **not offered in 2021/22**  
SOSA 3143 - Health, Illness, and the World System  
SOSA 3145/GWST 3800 - Gender and Health  
SOSA 3147 – Aging Cross Culturally – **not offered in 2021/22**  
SOSA 3148 - The Sociology of Addiction/ Drugs, Health, and Society  
SOSA 3403 – Qualitative and Field Methods

#### Interprofessional Health Education

IPHE/IDHS 2201 – Introduction to Aboriginal Peoples’ Health & Healing

#### Kinesiology

KINE 2465 – Introduction to Biomechanics  
KINE 3485 – Psychology of Sport & Physical Activity

#### Mathematics

MATH 1010 – Differential and Integral Calculus II

#### Medical Neuroscience

ANAT 2160/BIOL 3430 - Introduction to Human Histology  
ANAT 3421/BIOL 3421 - Comparative Vertebrate Histology

#### Microbiology/Immunology

MICI 2400 – Laboratory Methods in Microbiology & Immunology  
MICI 3114 - Virology  
MICI 3119 - Physiology of Prokaryotic Cell  
MICI 4115 – Medical Immunology  
MICI 4218 – Clinical Microbiology

#### Neuroscience

NESC 2130/PSYO 2130 – Introduction to Cognitive Psychology  
NESC 2570/PSYO 2570/PHYL 2570 - Cellular Neuroscience  
NESC 3043/PSYO 3043 – Neurobiology of Learning – **not offered in 2021/22**  
NESC 3170/PSYO 3170 – Hormones and Behaviour  
NESC 3227/PSYO 3227 – Principles of Human Neuropsychology  
NESC 3670 - Genes, Brain and Behaviour

#### Physics

PHYC 1290 – Introduction to Physics  
PHYC 1320 – Physics in and Around You  
PHYC 2250 – Physics of Biological and Medical Technology – **not offered in 2021/22**  
PHYC 2610 – Introduction to Biomechanics – **not offered in 2021/22**

#### Physiology & Biophysics

PHYL 3120 - Exercise Physiology in Health & Disease  
PHYL 3320 - Human Cell Physiology  
PHYL 3420 - Sensory Physiology – **not offered in 2021/22**

PHYL 3520 - Core Concepts in Medical Physiology (can't take this AND PHYL 4504)  
PHYL 3600 – Directed Project in Physiology  
PHYL 3620 – Human Physiology Lab – **not offered in 2021/22**

#### Psychology

PSYO 2080 - Social Psychology  
PSYO 2090 - Developmental Psychology  
PSYO 2130/NESC 2130 – Introduction to Cognitive Psychology  
PSYO 2220 - Abnormal Behaviour  
PSYO 2444 – Forensic Psychology  
PSYO 2770 - Brain & Behaviour (alternate years) – **not offered in 2021/22**  
PSYO 3043/NESC 3043 – Neurobiology of Learning – **not offered in 2021/22**  
PSYO 3129 - Childhood Psychopathology (Instructor Permission)  
PSYO 3170/NESC 3170 – Hormones and Behaviour  
PSYO 3227/NESC 3227 – Principles of Human Neuropsychology

#### Science

SCIE 3100 – Experiential Learning in Medical Sciences

#### **Advanced Selectives:**

##### Biochemistry/Molecular Biology

BIOC 4010 – Bioinformatics (alternate years)  
BIOC 4302 – Biochemistry of Lipids  
BIOC 4305 – Mechanisms of Signal Transduction  
BIOC 4403 – Genes and Genomes  
BIOC 4404 – Gene Expression  
BIOC 4501 – Medical Biotechnology I (alternate years until 2017/18, then possibly every year)  
BIOC 4700 – Proteins – **not offered in 2021/22**  
BIOC 4701 – Enzymes  
BIOC 4835/BIOL 4035 – Human Genetics

##### Biology

BIOL 3079 – Animal Physiology II  
BIOL 4020 – Advanced Cell Biology  
BIOL 4035/BIOC 4835 – Human Genetics

##### Computer Science

CSCI 4180 – Introduction to Computational Biology and Bioinformatics – **not offered in 2021/22**  
CSCI 4181 – Algorithms in Bioinformatics

##### Humanities and Social Sciences

SOSA 4006 – Issues in Critical Health Studies  
PHIL 4801 – Topics in Ethics and Healthcare (offered every 3-4 years)  
POLI 4260 - The Politics of Health Care – **not offered in 2021/22**

##### Medical Neuroscience

ANAT 4010 – Advanced Human Anatomy

##### Microbiology/ Immunology

MICI 4027 - Molecular Mechanisms of Cancer (alternate years) – **not offered in 2021/22**  
MICI 4033 - Advanced Microbial Genetics – **not offered in 2021/22**

MICI 4100 – Processes & Mediators of Inflammation  
MICI 4114 – Advanced Topics in Molecular & Medical Virology  
MICI 4116 – Current Topics in Mucosal Immunology  
MICI 4302 – Clinical & Molecular Immunology (alternate years) – **not offered in 2021/22**

#### Neuroscience

NESC 3180/PSYO 3180 - Psychoneuroimmunology/Ecological Immunology (alternate years) – **not offered in 2021/22**  
NESC 3970/PSYO 3970 – Molecular Neuroscience  
NESC 4185/ PHYL 4000 - Current Advances in Synaptic Function and Plasticity

#### Pathology

PATH 4100 – Critical Thinking in Neuropathology

#### Pharmacology

PHAC 4001 - Pharmacology II

#### Physiology & Biophysics

PHYL 4000/NESC 4185 - Current Advances in Synaptic Function and Plasticity  
PHYL 4324 - Endocrine Physiology  
PHYL 4504 – Respiratory Physiology (can't take this AND PHYL 3520)  
PHYL 4680 - Cardiovascular Physiology

#### Psychology

PSYO 3180/NESC 3180 - Psychoneuroimmunology/Ecological Immunology (alternate years) – **not offered in 2021/22**  
PSYO 3970/NESC 3970 – Molecular Neuroscience

#### Science

SCIE 4101 & 4102 – Directed Project in Medical Sciences I & II