PHYSIOLOGY (PHS)

PHS 11007 Physiology I (3 units)
Course Component: Lecture

PHS 1107 Physiology I (3 units)
Course Component: Lecture

PHS 1200 Physiology (6 units)
Course Component: Lecture

PHS 2281 Physiology
Course Component: Lecture

PHS 3341 Physiology of Sensation, Regulation, Movement and Reproduction (3 units)
Part 1 of a comprehensive study of human physiology with an emphasis on regulatory mechanisms. This course includes the biophysical basis of excitable tissues and the physiology of the nervous, muscular, endocrine and reproductive systems. It is assumed that students have a basic knowledge of chemistry, physics and biology.
Course Component: Lecture

PHS 3342 Physiological Regulation of Intake, Distribution, Protection and Elimination (3 units)
Part 2 of a comprehensive study of human physiology with an emphasis on regulatory mechanisms. This course includes the physiology of the cardiovascular, immune, respiratory, renal and digestive systems. It is assumed that students have a basic knowledge of chemistry, physics and biology.
Course Component: Lecture

PHS 3345 Gastrointestinal and Liver Physiology (3 units)
Course Component: Lecture

PHS 3346 Reproductive Physiology (3 units)
Course Component: Lectures and seminars with emphasis on human reproduction. The course will cover various aspects of reproduction including gonadal development, ovulation, fertilization, implantation, pregnancy and parturition. The physiological basis of reproductive disorders and reproductive technology will also be covered.
Course Component: Lecture

PHS 3350 Pathophysiology of Cardiovascular and Renal Physiology (3 units)
Course Component: Lecture

PHS 3355 Renal Physiology (3 units)
Course Component: Lecture

PHS 3360 Electrophysiology of Excitable Tissues (3 units)
Course Component: Lecture

PHS 3361 Gastrointestinal Physiology (3 units)
Course Component: Lecture

PHS 3362 Reproductive Physiology (3 units)
Course Component: Lecture

PHS 3363 Pathophysiology of Endocrine and Reproductive Physiology (3 units)
Course Component: Lecture

PHS 3364 Immunology and Microbiology (3 units)
Course Component: Lecture

PHS 3365 Comparative Physiology (3 units)
Course Component: Lecture

PHS 3366 Environmental Physiology (3 units)
Course Component: Lecture

PHS 3367 Systems Biology (3 units)
Course Component: Lecture

PHS 3368 Systems Biology (3 units)
Course Component: Lecture

PHS 3369 Systems Biology (3 units)
Course Component: Lecture

PHS 3370 Advanced Topics in Cell and Molecular Biology (3 units)
Course Component: Lecture

PHS 3371 Advanced Topics in Neurobiology (3 units)
Course Component: Lecture

PHS 3372 Advanced Topics in Neuroimaging (3 units)
Course Component: Lecture

PHS 3373 Advanced Topics in Neuroprotection (3 units)
Course Component: Lecture

PHS 3374 Advanced Topics in Neuroplasticity (3 units)
Course Component: Lecture

PHS 3375 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3376 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3377 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3378 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3379 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3380 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3381 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3382 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3383 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3393 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3394 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3395 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3396 Advanced Topics in Neurorehabilitation (3 units)
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PHS 3397 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3398 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3399 Advanced Topics in Neurorehabilitation (3 units)
Course Component: Lecture

PHS 3400 Pathophysiology (3 units)
Etiology of disease states, causes and mechanisms of pathology, preventive measures and corrective therapies.
Course Component: Lecture
Prerequisites: ANP 1105, ANP 1106, ANP 1107.

PHS 4320 Special Topics in Cardiovascular and Renal Physiology (3 units)
Series of lectures and demonstrations covering cardiovascular physiology, with an emphasis on quantitative approaches.
Course Component: Lecture

PHS 4326 Seminars in Physiology (3 units)
Course Component: Lecture

PHS 43261 Seminars in Physiology (Part 1 of 2)
Course Component: Seminar

PHS 43262 Seminars in Physiology (Part 2 of 2) (3 units)
Course Component: Seminar
Prerequisite: PHS 43261

PHS 4335 Special Topics in Endocrine Physiology (3 units)
Selected topics in endocrinology and the control of metabolic homeostasis in the whole animal including elements of the biological application of systems analysis.
Course Component: Lecture

PHS 4336 Reproductive Physiology (3 units)
Lecture and seminar course with emphasis on human reproduction. The course will cover various aspects of reproduction including gonadal development, ovulation, fertilization, implantation, pregnancy and parturition. The physiological basis of reproductive disorders and reproductive technology will also be covered.
Course Component: Lecture
Recommended prerequisites: ANP1107, ANP1507 or PHS3341.

PHS 4340 Electrophysiology of Excitable Tissues (3 units)
A lecture and demonstration course. Origin and methods of measuring bioelectric potentials will be considered, including voltage clamp methods for measuring current-voltage relationships across cell membranes, an introduction to cable theory, Hodgkin-Huxley equations and the action potential as a travelling wave. Control of ionic channels through biological membranes and the role of active transport across membranes as regulators of the intracellular environment will be considered.
Course Component: Lecture

PHS 4345 Gastrointestinal Physiology (3 units)
Course Component: Lecture

PHS 4355 Renal Physiology (3 units)
Course Component: Lecture

PHS 4700 Pathophysiology (3 credits)
Étiologie des maladies, causes et mécanismes des pathologies, mesures préventives et thérapies correctives.
Volet : Cours magistral
Préalables : ANP 1505, ANP 1506, ANP 1507.