

## Acceptable Graduate Level Credit Courses

The following courses are acceptable graduate level (500 level and above) courses in Physiology and Science. Students may be required to take additional courses outside this list as recommended by their Supervisor and GSAAC or Graduate Program Director. NOTE: Some courses may require permission of student affairs officer and/or professor prior to registration. For detailed course descriptions see Graduate and Postdoctoral Studies Calendar.

<b>Anatomy and Cell Biology</b>	
ANAT 663	Histology
<b>Physiology</b>	
PHGY 502	Exercise Physiology
PHGY 508	Advanced Kidney and Electrolyte Physiology
PHGY 513	Cellular and Applied Immunology
PHGY 515	Blood-Barrier in Health and Disease
PHGY 516	Physiology of Blood
PHGY 518	Artificial Cells and Immobilization Biotechnology
PHGY 520	Ion Channels
PHGY 524	Chronobiology
PHGY 531	Topics in Applied Immunology
PHGY 550	Physiology of Bone
PHGY 552	Cellular and Molecular Physiology
PHGY 556	Topics in System Neuroscience
PHGY 560	Light Microscopy for the Life Sciences
PHGY 610	Biophysics

<b>Bioengineering</b>  BIEN 570	Active Mechanics in Biology
<b>Biochemistry</b>  BIOC 503  BIOC 600  BIOC 603  BIOC 604  BIOC 605  BIOC 670	Immunochemistry  Advanced Strategies in Genetics and Genomics  Genomics and Gene Expression  Macromolecular Structure  Protein Biology and Proteomics  Biochemistry of Lipoproteins
<b>Bioinformatics</b>  BINF 511	Bioinformatics for Genomics
<b>Biology</b>  BIOL 516  BIOL 518  BIOL 520  BIOL 524  BIOL 532  BIOL 544  BIOL 546  BIOL 551  BIOL 568  BIOL 569	Genetics of Development  Eukaryotic Cell Genetics  Gene Activity in Development  Topics in Molecular Biology  Developmental Neurobiology Seminar  Genetic Basis of Life Span  Genetics of Model Systems  Molecular Biology: Cell Cycle  Topics on the Human Genome  Developmental Evolution

BIOL 572	Molecular Evolution
BIOL 575	Human Biochemical Genetics
BIOL 588	Molecular/Cellular Neurobiology
BIOL 592	Integrated Bioinformatics
<b>Biomedical Engineering</b>	
BMDE 502	Modeling and Identification
BMDE 519	Biomedical Signals and Systems
<b>Biotechnology</b>	
BTEC 501	Bioinformatics
BTEC 555	Structural Bioinformatics
<b>Chemistry</b>	
<b>All 500 level courses. See Graduate and Postdoctoral Studies Calendar for detailed course listings</b>	
<b>Computer Science</b>	
COMP 552	Modeling and Stimulating
COMP 526	Probabilistic Reasoning and Artificial Intelligence
COMP 558	Fundamental of Computer Vision
COMP 563	Molecular Evolution Theory
COMP 564	Computational Gene Regulation
COMP 616D1/2	Bioinformatics Seminar
COMP 618	Bioinformatics: Funct. Genomics
COMP 644	Pattern Recognition
COMP 652	Machine Learning

COMP 680	Mining Biological Sequences
<b>Electrical Engineering</b>	
ECSE 502	Control Engineering
ECSE 509	Probability and Random Signaling 2
ESCE 512	Digital Signal Processing 1
ESCE 529	Image Processing and Communication
ESCE 620	Information Theory and Coding
ESCE 626	Statistical Computer Vision
<b>Experimental Medicine</b>	
EXMD 502	Advanced Endocrinology I (Fall)
EXMD 503	Advanced Endocrinology II (Winter)
EXMD 504	Biology of Cancer
EXMD 506	Advanced Cardiovascular Physiology
EXMD 507	Advanced Applied Respiratory Physiology
EXMD 508	Advanced Topics in Respiration
EXMD 510	Bioanalytical Separation Methods
EXMD 602	Techniques in Molecular Genetics
EXMD 603	Seminars in Endocrinology
EXMD 604	Recent Advances in Cellular & Molecular Biology
EXMD 607	Molecular Control of Cell Growth
EXMD 608	Molecular Embryology
EXMD 609	Cellular Methods in Medical Research
EXMD 610	Biomedical Methods in Medical Research
EXMD 611	Seminar in Oncology

EXMD 614	Environmental Carcinogenesis
EXMD 615	Membrane Carbohydrates
EXMD 616	Molecular & Cell Biology Topics
EXMD 635 D1/D2	Experimental/ Clinical Oncology
<b>Experimental Surgery</b>	
EXSU 684	Signal Transduction
<b>Human Genetics</b>	
HGEN 660	Genetics, Ethics and Law
<b>Mathematics</b>	
MATH 523	Generalized Linear Models
MATH 524	Nonparametric Statistics
MATH 537	Mathematical Models in Biology
MATH 574	Dynamical Systems
MATH 579	Numerical Differential Equations
MATH 586	Applied Partial Differential Equations
MATH 671	Applied Stochastic Processes
MATH 680	Computation Intensive Statistics
MATH 681	Time Series Analysis
<b>MECHANICAL ENGINEERING</b>	
<b>MECH 605</b>	Applied Mathematics I
<b>NEUROLOGY &amp; NEURSURGERY</b>	
NEUR 502	Basic and Clinical aspects of Neuroimmunology
NEUR 602	Current Topics in Neuroscience: Topics 1,2,3,6 and 7 only
NEUR 603	Introduction to Computational Neuroscience

NEUR 604	Neuroscience Seminar 3
NEUR 605	Neuroscience Seminar 4
NEUR 630	Principles of Neuroscience 1
NEUR 631	Principles of Neuroscience 2
<b>PHARMACOLOGY</b>	
PHAR 503	Drug Design and Development I
PHAR 504	Drug Design and Development II
PHAR 562	General Pharmacology I
PHAR 563	General Pharmacology II
PHAR 704	Bioinformatics in Pharmacotherapeutics
<b>PHYSICS</b>	
PHYS 559	Advanced Statistical Mechanics
PHYS 612	Advanced Mathematical Physics
<b>PSYCHIATRY</b>	
PSYT 500	Advances: Neurobiology of Mental Disorders
PSYT 630	Statistics for Neurosciences
<b>PSYCHOLOGY</b>	
PSYC 505	The Psychology of Pain
PSYC 522	Neurochemistry & Behaviour
PSYC 514	Neurobiology of Learning and Memory
PSYC 526	Advances in Visual Perception