

Academics

[Overview](#)[Calendar](#)[Regulations](#)[Services](#)[Programs](#)[Minors](#)[Courses](#)[Faculty](#)

Course Index

[A](#)[B](#)[C](#)[D](#)[E](#)[F](#)[G](#)[H](#)[I](#)[J](#)[K](#)[L](#)[M](#)[N](#)[O](#)[P](#)[R](#)[S](#)[T](#)[U](#)[V](#)[W](#)

School of Applied Sciences

Health, Exercise Sci & Recreation Mgmt

- [PH 195: Foundations of Public Health](#)
- [PH 300: Environmental Health](#)
- [PH 305: Program Planning and Evaluation](#)
- [PH 319: Global Health](#)
- [PH 352: Basic Epidemiology](#)
- [PH 391: Special Topics in Health](#)
- [PH 470: Practical Applications in Public Health](#)
- [PH 505: Health Program Planning](#)
- [PH 511: Applied Statistics](#)
- [PH 515: Motivational Interviewing](#)
- [PH 528: Public Health Policy](#)
- [PH 555: Health Equity](#)
- [PH 595: Human Health and Illness](#)



- [PH 600: Foundations of Public Health](#)
- [PH 625: Research Design and Evaluation](#)
- [PH 626: Statistical Analysis I](#)
- [PH 635: Theories in Health Promotion](#)
- [PH 646: Epidemiology](#)
- [PH 651: Advanced Independent Study](#)
- [PH 652: Advanced Individual Study](#)
- [PH 653: Independent Research](#)
- [PH 685: Health Program Evaluation](#)
- [PH 698: Public Health Practicum](#)
- [PH 699: Public Health Capstone](#)

School of Pharmacy

Pharmacy Administration

- [Phad 393: Learning & Teaching: A Professional Elec](#)
- [Phad 394: Intermed. Biostatistics for Pharmacists](#)
- [Phad 395: Pharmacy Ethics](#)
- [Phad 396: Marketing for Community Pharmacists](#)
- [Phad 397: Survey of Medication Nonadherence](#)
- [Phad 430: Research Methods for Pharmacists](#)
- [Phad 470: Phy & Psychosoc Aspects Women's Health](#)
- [Phad 478: History of Pharmacy](#)
- [Phad 492: Current Issues in Health Care](#)
- [Phad 495: Techniques of Pharmaceutical Sales](#)
- [Phad 496: Principles of Pharmaceutical Marketing](#)
- [Phad 497: Personal Finance for Pharmacists](#)
- [Phad 541: Problems in Pharmacy Administration](#)
- [Phad 542: Problems in Pharmacy Administration](#)
- [Phad 543: Seminar in Current Health Topics](#)
- [Phad 544: Seminar in Current Health Topics](#)
- [Phad 597: Medical Anthropology](#)
- [Phad 599: Health Care and Contemporary Society](#)
- [Phad 661: Epidemiology and Health Data Management](#)
- [Phad 679: Primary Data Techniques](#)
- [Phad 687: Secondary Data Techniques](#)
- [Phad 688: Research Methodology and Techniques](#)
- [Phad 689: Pharmaceutical and Healthcare Policy](#)
- [Phad 690: Data Management and Statistical Software](#)
- [Phad 693: Health Economics](#)
- [Phad 697: Thesis](#)
- [Phad 698: Non-thesis Research](#)
- [Phad 774: Research in Pharmacy Administration](#)
- [Phad 780: General Linear Models](#)
- [Phad 781: Applied Multivariate Analysis](#)
- [Phad 783: Adv Pharmaceutical Mkting & Patient Beha](#)
- [Phad 786: Patient Reported Outcomes](#)
- [Phad 792: Drug Development and Marketing](#)
- [Phad 794: Pharmacoeconomics](#)
- [Phad 795: Special Topics in Pharmacy Administratio](#)
- [Phad 796: Pharmacoepidemiology](#)
- [Phad 797: Dissertation](#)

Pharmaceutics & Drug Delivery

- [Phar 432: Concepts in Pharmaceutical Biotechnology](#)
- [Phar 433: Pharmaceutical Industry](#)
- [Phar 435: Pharmaceutical Stability](#)
- [Phar 436: Product Development](#)
- [Phar 541: Problems in Pharmaceutics](#)
- [Phar 542: Problems in Pharmaceutics](#)



- [Phar 543: Seminar in Current Pharm. Topics](#)
- [Phar 544: Seminar in Current Pharm. Topics](#)
- [Phar 545: Biopharmaceutics and Pharmacokinetics](#)
- [Phar 547: Veterinary Pharmaceuticals](#)
- [Phar 548: Clinical Laboratory Data Analysis](#)
- [Phar 630: Pharm. Protein Design and Development](#)
- [Phar 650: Formulation Development](#)
- [Phar 651: Regulatory Science I](#)
- [Phar 652: Regulatory Science II](#)
- [Phar 654: Special Problems in Biopharmaceutics](#)
- [Phar 658: Pharmaceutical Manufacturing](#)
- [Phar 696: Special Projects](#)
- [Phar 697: Thesis](#)
- [Phar 735: Analytical Pharmaceutics](#)
- [Phar 741: Advanced Pharmaceutics](#)
- [Phar 744: Stability of Pharmaceutical Systems](#)
- [Phar 749: Product Development](#)
- [Phar 750: Applied Pharmaceutics](#)
- [Phar 760: Applied Pharmacokinetics](#)
- [Phar 797: Dissertation](#)

Biomolecular Sciences

- [Phcg 320: Special Topics in Oceans & Human Health](#)
- [Phcg 329: Herbal Supplements & Alternative Therapy](#)
- [Phcg 422: Natural Product Derived Pharmaceuticals](#)
- [Phcg 425: Poisonous Plants and Mushrooms](#)
- [Phcg 426: Cancer Chemo - Targets and Discovery](#)
- [Phcg 427: Drug Discovery I](#)
- [Phcg 428: Drug Discovery II](#)
- [Phcg 450: Career/Achievements in BMS: Nat.Prod.Res](#)
- [Phcg 451: Probiotics in Pharmacy](#)
- [Phcg 541: Problems in Pharmacognosy](#)
- [Phcg 542: Problems in Pharmacognosy](#)
- [Phcg 545: Individual Study in Pharmacognosy Res](#)
- [Phcg 546: Individual Study in Pharmacognosy Res](#)
- [Phcg 550: Careers/Achievements in BMS](#)
- [Phcg 620: Selected Topics in Pharmacognosy](#)
- [Phcg 627: Natural Product Chemistry](#)
- [Phcg 628: Natural Product Chemistry](#)
- [Phcg 630: Advanced Topics](#)
- [Phcg 631: Analysis of Natural Product Drugs I](#)
- [Phcg 632: Analysis of Natural Product Drugs II](#)
- [Phcg 633: Analysis of Natural Product Drugs III](#)
- [Phcg 634: Biosynthesis of Plant Constituents](#)
- [Phcg 635: Introduction to Molecular Cell Biology](#)
- [Phcg 636: Fermentation Chemistry](#)
- [Phcl 202: Environmental Health Perspectives](#)
- [Phcl 340: Animal Cells: Testing New Drugs](#)
- [Phcl 341: Human Pathophysiology I](#)
- [Phcl 342: Human Pathophysiology II](#)
- [Phcl 345: Nutritional Pharmacology](#)
- [Phcl 346: Immunological Basis for Therapeutics](#)
- [Phcl 347: Introduction to Environmental Toxicology](#)
- [Phcl 348: Principles of Life Science Research](#)
- [Phcl 349: Specialized Topics in Environ. Health](#)
- [Phcl 351: Drugs and Human Performance](#)
- [Phcl 352: Case Studies in Immunology](#)
- [Phcl 381: Introduction to Toxicology](#)
- [Phcl 382: Fundamentals of Cancer](#)



- [Phcl 440: Physiologic Case Study for Therapeutics](#)
- [Phcl 441: Pharmacology: Novel Drugs in Clin Trials](#)
- [Phcl 442: Clinical Toxicology](#)
- [Phcl 443: Basic and Clinical Pharmacology I](#)
- [Phcl 444: Basic and Clinical Pharmacology II](#)
- [Phcl 445: Nutritional Pharmacology](#)
- [Phcl 501: Principles of Life Science Research](#)
- [Phcl 503: Lab Meth in Pharmacology & Toxicology I](#)
- [Phcl 504: Lab Meth in Pharmacology & Toxicology II](#)
- [Phcl 505: Modern Phcl: Novel Drugs Clinical Trials](#)
- [Phcl 541: Problems in Pharmacology](#)
- [Phcl 547: Introduction to Environmental Toxicology](#)
- [Phcl 563: Introductory Pharmacology I](#)
- [Phcl 564: Introductory Pharmacology II](#)
- [Phcl 569: Drug Abuse Education](#)
- [Phcl 581: Introduction to Toxicology](#)
- [Phcl 586: Receptors and Channels](#)
- [Phcl 611: Teaching in Pharmacology and Toxicology](#)
- [Phcl 612: Teaching in Pharmacology and Toxicology](#)
- [Phcl 641: Unified Lab in Pharm, Tox & Phys Chem](#)
- [Phcl 642: Unified Lab in Pharm, Tox & Phys Chem](#)
- [Phcl 643: Seminar: Curr Topics in Pharm & Tox](#)
- [Phcl 651: Directed Studies in Pharm and Tox](#)
- [Phcl 652: Directed Studies in Pharm and Tox](#)
- [Phcl 661: Advanced Physiology](#)
- [Phcl 662: Advanced Physiology](#)
- [Phcl 663: General Pharmacology I](#)
- [Phcl 665: Human Neurobiology](#)
- [Phcl 668: Externship in Pharmacology](#)
- [Phcl 669: Physiological Chemistry](#)
- [Phcl 675: Gen Princ of Pharmacology & Toxicology I](#)
- [Phcl 676: Gen Princ - Pharmacology & Toxicology II](#)
- [Phcl 677: Advanced Topics](#)
- [Phcl 679: Methods in Pharmacology and Toxicology](#)
- [Phcl 681: Sel Topics - Pharmacology and Toxicology](#)
- [Phcl 685: Externship in Toxicology](#)

School of Pharmacy

- [Phcy 100: Introduction to Pharmacy](#)
- [Phcy 400: Becoming a Pharmacist](#)
- [Phcy 401: Foundations of BioMolecular Sciences I](#)
- [Phcy 402: Foundations of BioMolecular Sciences II](#)
- [Phcy 411: Human Physiology/Pathophysiology I](#)
- [Phcy 412: Human Physiology/Pathophysiology II](#)
- [Phcy 421: Pharmaceutics and Calculations I](#)
- [Phcy 422: Pharmaceutics and Calculations II](#)
- [Phcy 431: Social and Administrative Pharmacy I](#)
- [Phcy 432: Social and Administrative Pharmacy II](#)
- [Phcy 441: Pharmacists' Patient Care Process I](#)
- [Phcy 442: Pharmacists' Patient Care Process II](#)
- [Phcy 451: Pharmacogenomics](#)
- [Phcy 452: Pharmacoinmunology](#)
- [Phcy 460: Personal and Professional Development I](#)
- [Phcy 461: Interprofessional Collaboration I](#)

Pharmacy Practice

- [Phcy 470: Distributive Intro Pharmacy Practice Exp](#)
- [Phcy 471: Institutional Immersion IPPE I](#)



School of Pharmacy

- [Phcy 501: Infectious Diseases Intensive](#)
- [Phcy 502: Integrated Systems: Cardiovascular](#)
- [Phcy 503: Integrated Systems: Respiratory](#)
- [Phcy 504: Integrated Systems: Renal](#)
- [Phcy 505: Integrated Systems: Neuromuscular](#)
- [Phcy 506: Integrated Systems: CNS/Psych](#)
- [Phcy 507: Integrated Systems: Endocrine System](#)
- [Phcy 508: Integrated Systems: GI/Nutrition](#)
- [Phcy 509: Integrated Systems: DERM/EENT](#)

Pharmacy Practice

- [Phcy 510: Community Pharmacy Practice II](#)

School of Pharmacy

- [Phcy 550: Integrated Institutional IPPE](#)
- [Phcy 560: Personal and Professional Development II](#)
- [Phcy 561: Interprofessional Collaboration II](#)

Pharmacy Practice

- [Phcy 591: Elective APPE](#)
- [Phcy 592: Elective APPE](#)
- [Phcy 593: Elective APPE](#)

School of Pharmacy

- [Phcy 601: Multisystem Complex Patient Care I](#)
- [Phcy 602: Hematology/Oncology/Immunology](#)
- [Phcy 603: Integrated Genitourinary & Reproductive](#)
- [Phcy 604: Pediatrics and Geriatrics](#)
- [Phcy 605: Integrated Selective IPPE](#)
- [Phcy 606: Population and Rural Health](#)
- [Phcy 607: Practice Law Application](#)
- [Phcy 608: Multisystem Complex Patient Care II](#)
- [Phcy 650: Integrated Comm & Ambulatory IPPE](#)
- [Phcy 651: Integrated Inst & Specialty IPPE](#)

Pharmacy Practice

- [Phcy 653: Community Required APPE](#)
- [Phcy 654: Institutional Required APPE](#)

School of Pharmacy

- [Phcy 660: Personal & Professional Development III](#)
- [Phcy 661: Interprofessional Collaboration III](#)

Pharmacy Practice

- [Phcy 666: Personal & Professional Development IV](#)
- [Phcy 667: Personal & Professional Development V](#)
- [Phcy 686: Adult Medicine Required APPE](#)
- [Phcy 687: Ambulatory Care Required APPE](#)

College of Liberal Arts **Philosophy & Religion**

- [Phil 101: Introduction to Philosophy](#)
- [Phil 102: Introduction to Professional Ethics](#)
- [Phil 103: Logic: Critical Thinking](#)
- [Phil 104: Contemporary Moral Issues](#)
- [Phil 201: Ultimate Questions](#)



- [Phil 204: Intro to Ethical Policy Debate](#)
- [Phil 209: Asian Philosophy](#)
- [Phil 301: History of Philosophy I](#)
- [Phil 302: History of Philosophy II](#)
- [Phil 307: Medieval Philosophy](#)
- [Phil 308: Buddhism](#)
- [Phil 309: Chinese Religions: Confucianism & Daoism](#)
- [Phil 310: Socrates & Sophistry](#)
- [Phil 311: Plato](#)
- [Phil 313: Aristotle](#)
- [Phil 314: Kant and the Problems of Philosophy](#)
- [Phil 315: Nineteenth Century Philosophy](#)
- [Phil 316: Topics in Philosophy in American History](#)
- [Phil 318: Existentialism](#)
- [Phil 319: Symbolic Logic](#)
- [Phil 320: Aesthetics](#)
- [Phil 321: Ethical Theory](#)
- [Phil 322: Epistemology](#)
- [Phil 323: Metaphysics](#)
- [Phil 324: History of Analytic Philosophy](#)
- [Phil 325: Theories of Truth](#)
- [Phil 328: Biomedical Ethics](#)
- [Phil 330: History of Western Political Philosophy](#)
- [Phil 331: Political Philosophy](#)
- [Phil 332: Personal Identity and the Self](#)
- [Phil 333: Philosophy of Language](#)
- [Phil 340: Philosophy of Technology](#)
- [Phil 342: Philosophy of Mind](#)
- [Phil 344: Moral Psychology](#)
- [Phil 345: Environmental Ethics](#)
- [Phil 347: Advanced Ethical Policy Debate](#)
- [Phil 348: Topics in Religion and the Environment](#)
- [Phil 349: Religious Ethics: Issues and Methods](#)
- [Phil 350: Philosophy of Law](#)
- [Phil 351: Philosophy of Religion](#)
- [Phil 352: Care Ethics](#)
- [Phil 353: Consequentialism](#)
- [Phil 355: Philosophy of Film](#)
- [Phil 357: Business Ethics](#)
- [Phil 360: Philosophical Issues in Science/Religion](#)
- [Phil 370: Philosophy of Leadership](#)
- [Phil 371: Public Policy and Ethics](#)
- [Phil 372: Conservative Political Philosophy](#)
- [Phil 380: Community-Based Internship](#)
- [Phil 390: Feminist Philosophy](#)
- [Phil 395: Topics in Philosophy](#)
- [Phil 396: Philosophical Topics in Religion](#)
- [Phil 399: Topics in Philosophy Abroad](#)
- [Phil 401: Seminar in History of Ancient Philosophy](#)
- [Phil 402: Seminar in History of Modern Philosophy](#)
- [Phil 421: Seminar in Ethical Philosophy](#)
- [Phil 422: Seminar in Epistemology/Metaphysics](#)
- [Phil 431: Seminar in Legal/Political Philosophy](#)
- [Phil 432: Seminar in Philosophy of Mind/Language](#)
- [Phil 460: Seminar: Philosophy of Science/Religion](#)
- [Phil 490: Directed Readings in Philosophy](#)
- [Phil 491: Honors Thesis](#)
- [Phil 499: Philosophy Assessment Exam](#)
- [Phil 590: Adv Seminar Epistemology/Metaphysics](#)



- [Phil 591: Advanced Seminar in Value Theory](#)
- [Phil 592: Advanced Seminar in History of Phil](#)
- [Phil 593: Adv Seminar Epistemology/Metaphysics II](#)
- [Phil 594: Advanced Seminar in Value Theory II](#)
- [Phil 595: Advanced Seminar in History of Phil II](#)
- [Phil 599: Professional Development in Philosophy](#)
- [Phil 601: Studies in Ancient Philosophy](#)
- [Phil 607: Major Western Philosophers](#)
- [Phil 608: Studies in Eastern Philosophy](#)
- [Phil 609: Studies in Existential Philosophy](#)
- [Phil 611: Problems of Metaphysics](#)
- [Phil 613: Problems in the Philosophy of Religion](#)
- [Phil 614: Kant](#)
- [Phil 617: Problems of Epistemology](#)
- [Phil 619: Value Theory](#)
- [Phil 620: Problems of Aesthetics](#)
- [Phil 621: Problems in Ethics](#)
- [Phil 622: Studies in Early Modern Philosophy](#)
- [Phil 624: Problems in Philosophical Analysis](#)
- [Phil 625: Major Figures of Analytic Philosophy](#)
- [Phil 628: Problems in Biomedical Ethics](#)
- [Phil 630: Studies in the History of Political Phil](#)
- [Phil 631: Problems in Political Philosophy](#)
- [Phil 632: Problems of Personal Identity](#)
- [Phil 633: Philosophy of Language](#)
- [Phil 642: Problems in the Philosophy of Mind](#)
- [Phil 644: Studies in Moral Psychology](#)
- [Phil 645: Problems in Environmental Ethics](#)
- [Phil 647: Graduate Ethical Policy Debate](#)
- [Phil 650: Problems of Philosophy of Law](#)
- [Phil 652: Problems in Care Ethics](#)
- [Phil 653: Problems in Consequentialism](#)
- [Phil 655: Advanced Symbolic Logic](#)
- [Phil 656: Problems in the Philosophy of Film](#)
- [Phil 657: Problems in Business Ethics](#)
- [Phil 660: Problems of Science and Religion](#)
- [Phil 665: Philosophy of Science](#)
- [Phil 680: Studies in Feminist Philosophy](#)
- [Phil 690: Seminar](#)
- [Phil 691: Research](#)
- [Phil 692: Special Topics in Ethics](#)
- [Phil 693: Special Topics in Metaphysics](#)
- [Phil 694: Special Topics in History of Philosophy](#)
- [Phil 697: Thesis](#)

Physics & Astronomy

- [Phys 101: Introduction to Physics I](#)
- [Phys 102: Introduction to Physics II](#)
- [Phys 107: Conceptual Physics I](#)
- [Phys 108: Conceptual Physics II](#)
- [Phys 111: Physics of Sound & Music](#)
- [Phys 112: Physics of Light, Color, & Art](#)
- [Phys 123: Physics of the Atmosphere](#)
- [Phys 201: Physics Toolbox](#)
- [Phys 211: Physics for Science & Engineering I](#)
- [Phys 212: Physics for Science & Engineering II](#)
- [Phys 213: General Physics I](#)
- [Phys 214: General Physics II](#)
- [Phys 215: Physics for Pharmaceutical Sciences](#)



- [Phys 221: Lab Physics for Science & Engineering I](#)
- [Phys 222: Lab Physics for Science & Engineering II](#)
- [Phys 223: Laboratory Physics I](#)
- [Phys 224: Laboratory Physics II](#)
- [Phys 303: Physical Theory and Techniques](#)
- [Phys 308: Mathematical Physics](#)
- [Phys 309: Thermodynamics](#)
- [Phys 310: Mechanics](#)
- [Phys 313: Physics & Biophysics of Air & Water](#)
- [Phys 315: Radiation Science](#)
- [Phys 317: Introduction to Modern Physics I](#)
- [Phys 318: Introduction to Modern Physics II](#)
- [Phys 319: Optics](#)
- [Phys 321: Electronics](#)
- [Phys 401: Electromagnetic Theory I](#)
- [Phys 402: Electromagnetic Theory II](#)
- [Phys 413: Introduction to Biophysics](#)
- [Phys 415: Radiation Physics Laboratory](#)
- [Phys 417: Modern Physics Laboratory](#)
- [Phys 422: Digital Electronics & Microprocessors](#)
- [Phys 425: Nuclear & Particle Physics Laboratory](#)
- [Phys 436: Introduction to Cosmology](#)
- [Phys 451: Introduction to Quantum Mechanics](#)
- [Phys 461: Senior Seminar](#)
- [Phys 463: Senior Research Project](#)
- [Phys 464: Senior Research Project](#)
- [Phys 498: Senior Review](#)
- [Phys 501: Intermediate Electromagnetic Theory I](#)
- [Phys 502: Intermediate Electromagnetic Theory II](#)
- [Phys 503: Selected Topics in Physics I](#)
- [Phys 507: Directed Research](#)
- [Phys 510: Physics and Astronomy Colloquium](#)
- [Phys 521: Acoustics](#)
- [Phys 522: Acoustics Laboratory](#)
- [Phys 532: Advanced Acoustics Laboratory](#)
- [Phys 533: Survey of Topics in Physics I](#)
- [Phys 534: Survey of Topics in Physics II](#)
- [Phys 540: Introduction to Scientific Computing](#)
- [Phys 605: Advanced Acoustics](#)
- [Phys 607: Atomic and Nuclear Physics](#)
- [Phys 629: Selected Topics in Physics I](#)
- [Phys 630: Selected Topics in Physics II](#)
- [Phys 634: Electronics in Research](#)
- [Phys 636: Advanced Physical Optics](#)
- [Phys 651: Mathematical Methods of Physics I](#)
- [Phys 652: Mathematical Methods of Physics II](#)
- [Phys 697: Thesis Research in Physics](#)
- [Phys 709: Advanced Mechanics I](#)
- [Phys 710: Advanced Mechanics II](#)
- [Phys 711: Quantum Mechanics I](#)
- [Phys 712: Quantum Mechanics II](#)
- [Phys 717: Modern Physics I](#)
- [Phys 718: Modern Physics II](#)
- [Phys 721: Advanced Electromagnetic Theory I](#)
- [Phys 722: Advanced Electromagnetic Theory II](#)
- [Phys 723: Nuclear Physics I](#)
- [Phys 724: Nuclear Physics II](#)
- [Phys 725: Solid State Physics I](#)
- [Phys 726: Solid State Physics II](#)



- [Phys 727: Adv Thermodynamics/Statistical Mech I](#)
- [Phys 728: Adv Thermodynamics/Statistical Mech II](#)
- [Phys 731: Quantum Field Theory I](#)
- [Phys 732: Quantum Field Theory II](#)
- [Phys 733: Elementary Particle Physics](#)
- [Phys 735: Gravitational Physics](#)
- [Phys 749: Advanced Topics in Physics I](#)
- [Phys 750: Advanced Topics in Physics II](#)
- [Phys 797: Dissertation](#)

