Emmanuel Levinas, Jean Beaufret, Gabriel Marcel.

**1015 Christian Philosophy (3)** Prereq.: one course in either philosophy or religious studies or equivalent. Also offered as REL 3015. Applications of philosophy to such themes as the nature of faith, revelation, incarnation, faith and science, Christianity and other religions.

3020 MATH Topics in Philosophy (1-3) May be taken twice for credit when topics vary.

3052 Moral Philosophy (3) May be taken twice when topics vary. May be repeated for credit when topics vary. May be repeated for credit when topics vary. May be repeated for credit when topics vary.

19 topics and arguments of Kant's philosophy, with emphasis on Kantianism.

4912 Topics in Meta-Ethics (3) Prereq.: two courses in philosophy or consent of instructor. May be taken for a max. of 6. sem. hrs. of credit when topics vary. Naturalistic fallacy, truth and meaning, realism an objectivity, motivation and practical reasoning, autonomy, and justification of ethical theory.

4943 Ethics (3) Prereq.: two courses in philosophy or consent of instructor. May be taken for a max. of 6. sem. hrs. of credit when topics vary. Topics from utilitarianism, nonutilitarianism, deontological systems, intuitions, moral particularism, virtue ethics, relativism, weakness of will, and value theory. Topics from utilitarianism, nonutilitarianism, deontological systems, intuitions, moral particularism, virtue ethics, relativism, weakness of will, and value theory.

4920 Questions of logic and philosophy of language, with emphasis on modern logical philosophy and methodologies. Also offered as REL 4942. Major themes and works in philosophical theology.

4925 Political Philosophy (3) Prereq.: PHIL 1000 or 2020 or equivalent. Freedom, obligation, authority, justice, the state, and revolution.

4946 Philosophy of Law (3) Moral issues in foundations of law and legal authority; nature of law; civil disobedience; principles of punishment; legal liability; morals legislation; Good Samaritan laws; moral basis of contract law.

4948 Phenomenology (3) Prereq.: PHIL 2035 or 4936 or equivalent. Contemporary phenomenology; readings in Husserl.

4952 Advanced Epistemology (3) Prereq.: PHIL 3950 or consent of instructor. Topics may include naturalized epistemology, internalism vs. externalism about justification; a priori knowledge and belief; scientific realism; Bayesian approaches to justification, contextualist theories of knowledge, and the possibility of non-inferential justification.

4951 Philosophy of Mind (3) Prereq.: consent of instructor. Philosophical issues related to concept formation and theory construction in the natural, behavioral, and social sciences.

4953 Contemporary Analytic Philosophy (3) Prereq.: one logic course and either PHIL 2035 or 2036 or equivalent. Topics from leading philosophers in such contemporary movements as logical empiricism, formalism, and ordinary language analysis, including readings from Moore, Russell, Wittgenstein, Carnap, Goodman, Ryle, Strawson, and Quine.

4954 Recent Speculative Philosophy (3) Prereq.: two other philosophy courses or consent of instructor. Theories of being and knowing in recent absolute idealism, process philosophy, and phenomenological existentialism.

4972 Kant's Moral Philosophy (3) Study of selected Kant's works in moral philosophy such as, Groundwork of the Metaphysic of Morals, Metaphysics of Morals, Critique of Practical Reason, and Anthropology. From A Pragmatic Point of View.

4991 Independent Reading and Research (1-3) Prereq.: written consent of instructor. May be taken for a max. of 6. hrs. of credit when topics vary. Total credit earned as a graduate student in PHIL 4991 and PHIL 7991 combined will not exceed 6 hrs. Total credit earned as a graduate student in PHIL 4991 and PHIL 7991 combined will not exceed 9 sem. hrs.

7901 Seminar in Contemporary Analytic Philosophy (3) Philosophy of language, metaphysics, realism, anti-realism, and philosophy of science.

7903 Seminar in Continental Philosophy (3) Major figures and/or movements in continental philosophy.

7905 Seminar in History of Philosophy (3) May be taken for a max. of 9. hrs. of credit when topics vary. Study of a major philosopher or school of philosophy.

3840 Metaphysics (3) Prereq.: PHIL 1020 or equivalent. History of metaphysics, with emphasis on metaphysics.

3842 Philosophy of Religion (3) Prereq.: PHIL 1020 or equivalent. Recent philosophical treatments of human nature; the mind-body problem, identity of the person in time, the person as rational and volitional, and relation of the person to the world.

1021 Physical Science with Laboratory (3) F,S Prereq.: MATH 1022 or 2102. 2 hrs. lab. Exposition of physical science concepts through laboratory investigations of mechanics, heat, light, electricity, magnetism, and sound.

1022 Physical Science Laboratory (3) F,S Prereq.: MATH 1022 or 2102. Coreq.: PHYS 1020 or 2102. Credit will not be given for both this course and PHYS 1001. 2 hrs. lab. Exposition of physical science concepts through laboratory investigations; topics such as changes in matter, light and color, energy, and observational astronomy.

**PHYSICS**

**PHYSICS**

Prerequisites • All prerequisites in physics courses should be rigidly observed.

Corequisites • A student may not continue in a course after dropping a corequisite course prior to the last day of the midsemester examination period.

Of the 7000-level courses, those numbered in the 7200s, as well as 7434, 7533, 7385, 7398, and 7411 are offered every year, except in the case of those marked with an asterisk.* All other courses are offered sporadically as interest demands and in order to provide a varied curriculum.

General education courses are marked with stars (★).

1100 Introduction to Physics (3) Prereq.: credit or registration in MATH 1550. Measurement, vectors, kinematics, Newton's laws of motion, wave motion, temperature, the development of the science, DC circuits, AC circuits.

★ 1201, ★ 1202 General Physics for Majors (4,4) F,S Prereq. for 1201: Grade of C or better in PHYS 1010 or equivalent by examination in MATH 1550. Prereq. for 1202: PHYS 1201 and credit or registration in MATH 1552. 4 hrs. lecture/demonstration. Primarily for students intending to major in physics. Credit will not be given for these courses and PHYS 2001, 2002 or 2101, 2102. Fundamentals of classical physics and some concepts of modern physics. Credit will be given for these courses and PHYS 2108, 2109. Laboratory to accompany PHYS 1201, 1202.

★ 2001, ★ 2002 General Physics (3,3) Prereq. for PHYS 2001: MATH 1022 or 2102; Prereq. for PHYS 2002: PHYS 2001. 3 hrs. lecture/demonstration. Credit will not be given for these courses and PHYS 1201, 1202 or 2101, 2102. Mechanics, heat, sound, light, electricity, and magnetism; topics in modern physics.

★ 2101 General Physics for Technical Students (3) Prereq.: Grade of "C" or better in PHYS 1100 or placement examination; credit or registration in MATH 1552. Credit will not be given for both this course and PHYS 1201, 1202. Fundamentals of classical physics and some concepts of modern physics. Mechanics, wave motion, thermodynamics, and kinetic theory.

★ 2102 General Physics for Technical Students (3) Prereq.: PHYS 2101 and MATH 1552. Credit will not be given for both this course and PHYS 1202, 2102. Electromagnetism, magnetic, physical optics, and topics from modern physics.

2108 Introductory Physics Laboratory (1) Prereq.: credit or registration in PHYS 2001 or 2101. 3 hrs. lab. Credit will not be given for both this course and PHYS 1208. Laboratory to accompany PHYS 2001 or 2101.

2109 General Physics Laboratory (1) Prereq.: PHYS 2108 and credit or registration in PHYS 2002 or 2102. 3 hrs. lab. Credit will not be given for both this course and PHYS 2108. Laboratory to accompany PHYS 2002 and 2102, electricity, magnetism, geometrical and physical optics, and other topics in modern physics.

2111 Elementary Mathematical Physics (3) F Prereq.: PHYS 2102 or 2102; and credit in MATH 1552. Mathematical methods of physics; vector calculus, complex variables. Fourier series, matrices and determinants, differential equations with application to selected problems in physics.

2203 Introductory Modern Physics (3) F Prereq.: PHYS 2102 or 2102. Elementary modern physics; special relativity, wave particle duality, quantum mechanics, hydrogen atom, many-electron atoms, nuclear structure, elementary particles, solid state, astrophysics, and cosmology.

2207 Introductory Modern Physics Laboratory (1) F Coreq.: PHYS 2203. Required for physics majors. Laboratory to accompany PHYS 2203.

1100 Introduction to Physics (3) Prereq.: credit or registration in MATH 1550. Measurement, vectors, kinematics, Newton's laws of motion, wave motion, temperature, the development of the science, DC circuits, AC circuits.