The following proposals, received on DAP between September 1-15, 2011, have been approved. For more information on the DAP process, see the Academic Handbook at <u>www.uwo.ca/univse/handbook</u>.

FACULTY OF ARTS AND HUMANITIES

ENGLISH

Effective **September 1, 2011**, the antirequisite of English 2730F/G: Children's Culture and Literature: 1700 to 1914 (King's University College) be added to English 2033E: Children's Literature. English 2033E is taught on main campus and at all three affiliated college.

English 2033E: Children's Literature

Antirequisite(s): English 2730F/G (taught at King's University College) 2 lecture hours, 1 tutorial hour, 1.0.course.

FACULTY OF SCIENCE

COMPUTER SCIENCE

Effective **September 1, 2011**, Computer Science 2125 F/G: Introduction to Medical Computing will be introduced in the Department of Computer Science, Faculty of Science, with the following course description:

Computer Science 2125 F/G: Introduction to Medical Computing

This course introduces computing fundamentals as they relate to medical computing. A series of topics is covered, including topics selected from: health information systems and standards, data privacy, medical imaging, modeling, simulation and data analysis, computer-aided diagnosis, embedded software in instruments, computer-aided procedures and telemedicine. 3 lecture hours, 0.5 course.

PHYSICS AND ASTRONOMY

Effective **September 1, 2011**, the department of Physics and Astronomy will add Calculus 1500A/B as an acceptable prerequisite component in the following Astronomy, Materials Science and Physics courses.

Astronomy 2201A/B - The Solar System

Celestial mechanics; dynamics of the Earth; the Earth-Moon System; planets, including atmospheres and interiors; satellites; comets; meteors; the interplanetary medium; origin and evolution of the solar system. Antirequisite(s): Astronomy 2232F/G.

Prerequisite(s): (Physics 1028A/B or 1301A/B or 1401A/B or 1501A/B) and (Physics 1029A/B or 1302A/B or 1402A/B or 1502A/B), or the former Physics 1020 or 1024 or 1026; Calculus 1000A/B or 1100A/B or 1500A/B, and Calculus 1501A/B (or Calculus 1301A/B with a minimum mark of 85%). 3 lecture hours, 0.5 course.

Astronomy 2801A/B - Stars, Galaxies and Cosmology

The sun; stars, including distances, magnitude scale, interiors and evolution; binary stars; white dwarfs, neutron stars, and black holes; supernovae; the Milky Way Galaxy; the interstellar medium; external galaxies; Hubble's Law; large-scale structure of the universe; the Big Bang, and the early universe. Prerequisite(s): (Physics 1028A/B or 1301A/B or 1401A/B or 1501A/B) and (Physics 1029A/B or 1302A/B or 1402A/B or 1502A/B), or the former Physics 1020 or 1024 or 1026; Calculus 1000A/B or 1100A/B or 1500A/B, and Calculus 1501A/B (or Calculus 1301A/B with a minimum mark of 85%). 3 lecture hours, 0.5 course.

Materials Science 2810A/B - Physical Properties of Materials

The properties of materials are described in terms of their atomic structure and interatomic bonding. The basic physical principles underlying mechanical, electrical, and magnetic properties are discussed in the context of modern materials including polymers and semiconductors.

Antirequisite(s): Physics 2810A/B, the former Physics 2800 and the former Materials Science 2800. Prerequisite(s): (Calculus 1000A/B or 1100A/B or 1500A/B) and (Calculus 1301A/B or 1501A/B), or Applied Mathematics 1413; Chemistry 1100A/B and 1200B, or the former Chemistry 023, 1020, 1050; (Physics 1028A/B or 1301A/B or 1401A/B or 1501A/B) and (Physics 1029A/B or 1302A/B or 1402A/B or 1502A/B), or the former Physics 1020 or 1024 or 1026.

3 lecture hours, 0.5 course.

Physics 1301A/B - Introductory Physics I

A calculus-based laboratory course for students intending to pursue further studies in Science. Kinematics, force and motion, energy, linear momentum, rotation, torque and angular momentum, gravitation, heat, kinetics of gases.

Antirequisite(s): Physics 1021, 1028A/B, 1401A/B, 1501A/B, the former Physics 1020, 1024, 1026. Prerequisite(s): Grade 12U Calculus and Vectors (MCV4U) or the former Grade 12U Advanced Functions and Introductory Calculus (MCB4U) or Mathematics 0110A/B.

3 lecture hours, 3 laboratory/tutorial hours, 0.5 course.

Note: The department recommends that students also take a concurrent course that includes Calculus. Please be aware that some of the programs for which Physics 1301A/B is a prerequisite also require Calculus 1000A/B or 1100A/B or 1500A/B plus Calculus 1301A/B or 1501A/B, or Applied Mathematics 1413. This course, together with Physics 1302A/B, is a suitable prerequisite for modules in the Faculty of Science and modules offered by the basic medical science departments, and for professional schools having a Physics requirement.

Physics 1302A/B - Introductory Physics II

A calculus-based laboratory course for students intending to pursue further studies in Science. Oscillations, waves, fluids, electric fields and potential, DC circuits, magnetic fields, modern physics.

Antirequisite(s): Physics 1021, 1029A/B, 1402A/B, 1502A/B, the former Physics 1020, 1024, 1026. Prerequisite(s): One of Physics 1301A/B or 1401A/B or 1501A/B, or a minimum mark of 70% in Physics 1028A/B.

3 lecture hours, 3 laboratory/tutorial hours, 0.5 course.

Note: The department recommends that students also take a concurrent course that includes Calculus. Please be aware that some of the programs for which Physics 1302A/B is a prerequisite also require Calculus 1000A/B or 1100A/B or 1500A/B plus Calculus 1301A/B or 1501A/B, or Applied Mathematics 1413. This course, together with Physics 1301A/B, is a suitable prerequisite for modules in the Faculty of Science and modules offered by the basic medical science departments, and for professional schools having a Physics requirement.

Physics 1501A/B - Enriched Introductory Physics I

A calculus-based laboratory course for students intending to pursue further studies in science, particularly the physical sciences. Newton's laws, energy, linear momentum, rotations and angular momentum, gravitation and planetary motion.

Antirequisite(s): Physics 1021, 1028A/B, 1301A/B, 1401A/B, the former Physics 1020, 1024, 1026. Prerequisite(s): Grade 12U Physics (SPH4U); Grade 12U Calculus and Vectors (MCV4U) or the former Grade 12U Advanced Functions and Introductory Calculus (MCB4U) or Mathematics 0110A/B. Corequisite(s): Calculus 1000A/B or 1100A/B or 1500A/B or Applied Mathematics 1413.

3 lecture hours, 3 laboratory/tutorial hours, 0.5 course.

Note: This course, together with Physics 1502A/B, is a suitable prerequisite for all modules in the Faculty of Science, for all modules offered by the basic medical science departments and for professional schools having a Physics requirement.

Physics 1502A/B - Enriched Introductory Physics II

A calculus-based laboratory course for students intending to pursue further studies in science, particularly the physical sciences. Relativity, the electromagnetic interaction, the strong and weak interactions, oscillations and waves.

Antirequisite(s): Physics 1021, 1029A/B, 1302A/B, 1402A/B, the former Physics 1020, 1024, 1026. Prerequisite(s): One of Physics 1501A/B (preferred) or Physics 1301A/B or 1401A/B, or a minimum mark of 80% in Physics 1028A/B; Calculus 1000A/B or 1100A/B or 1500A/B.

Corequisite(s): Calculus 1501A/B (preferred) or Calculus 1301A/B, or Applied Mathematics 1413. 3 lecture hours, 3 laboratory/tutorial hours, 0.5 course.

Note: This course, together with Physics 1501A/B, is a suitable prerequisite for all modules in the Faculty of Science, for modules offered by the basic medical science departments and for professional schools having a Physics requirement.

Physics 2101A/B - Intermediate Electromagnetism

The physics of electromagnetic fields, including Maxwell's equations and electromagnetic waves, is studied with emphasis on practical calculations. Modern physics is introduced via Special Relativity. Prerequisite(s): A minimum average of 60% in (Physics 1301A/B or 1401A/B or 1501A/B) and (Physics 1302A/B or 1402A/B or 1502A/B), or a minimum average of 80% in Physics 1028A/B and 1029A/B, or a minimum mark of 60% in the former Physics 1020 or 1024 or 1026; a minimum mark of 60% in each of (Calculus 1000A/B or 1100A/B or 1500A/B) and (Calculus 1301A/B or 1501A/B), or in Applied Mathematics 1413.

3 lecture hours, 1 tutorial hour, 0.5 course.

Physics 2102A/B - Introduction to Modern Physics

Introduction to quantum mechanics, wave-particle duality, atomic physics, nuclear physics, particle physics and the origins of the universe.

Prerequisite(s): A minimum average of 60% in (Physics 1301A/B or 1401A/B or 1501A/B) and (Physics 1302A/B or 1402A/B or 1502A/B), or a minimum average of 80% in Physics 1028A/B and 1029A/B, or a minimum mark of 60% in the former Physics 1020 or 1024 or 1026; a minimum mark of 60% in each of (Calculus 1000A/B or 1100A/B or 1500A/B) and (Calculus 1301A/B or 1501A/B), or in Applied Mathematics 1413.

3 lecture hours, 1 tutorial hour, 0.5 course.

Physics 2110A/B - Oscillations and Waves

A unified treatment of oscillatory and wave motion, with examples from mechanics, electromagnetism, optics and

materials science. Topics include simple harmonic motion, forced oscillations and resonance, coupled oscillations, transverse waves on strings and in crystals, longitudinal waves in gases and solids, electromagnetic waves,

Fourier methods, nonlinear oscillations and chaos.

Prerequisite(s): A minimum mark of 60% in Physics 1302A/B or 1402A/B or 1502A/B, or a minimum average of 80% in Physics 1028A/B and 1029A/B, or a minimum mark of 60% in the former Physics 1020 or 1024 or 1026; a minimum mark of 60% in each of (Calculus 1000A/B or 1100A/B or 1500A/B) and (Calculus 1301A/B or 1501A/B), or in Applied Mathematics 1413.

Pre-or Corequisite(s): Mathematics 1600A/B, or the former Linear Algebra 1600A/B. 3 lecture hours, 2 laboratory/tutorial hours, 0.5 course.

Physics 2128A/B - Fundamental Concepts of Medical Imaging

Fundamental concepts in medical imaging, including atomic physics, nuclear physics, and sound and electromagnetic waves. These topics will be discussed with an emphasis on basic medical sciences applications, including their role in X–ray computed tomography, mammography, positron emission tomography, ultrasound, and magnetic resonance imaging.

Antirequisite(s): Physics 1301A/B, 1302A/B, 1401A/B, 1402A/B, 1501A/B, 1502A/B, 2101A/B, 2102A/B, 2600A/B, the former Physics 1020, 1024, 1026, 222a/b, Medical Biophysics 2128A/B.

Prerequisite(s): Physics 1028A/B and 1029A/B, Calculus 1000A/B or 1100A/B or 1500A/B, and Calculus 1301A/B or 1501A/B.

3 lecture hours, 0.5 course.

Note: The sequence Physics 1028A/B, 1029A/B, 2128A/B, 2129A/B is a suitable prerequisite for third-year courses for which Physics 2101A/B, 2102A/B are a prerequisite.

Physics 2600A/B - Introduction to Medical Physics

A practical introduction to key physical principles as applied to medical imaging and radiation therapy. Topics covered will include: imaging metrics, ionizing radiation and radiation safety, radioactivity, radiation therapy, computed tomography, nuclear medicine, ultrasound and magnetic resonance imaging. Antirequisite(s): Medical Biophysics 4475A/B.

Prerequisite(s): (Physics 1028A/B or 1301A/B or 1401A/B or 1501A/B) and (Physics 1029A/B or 1302A/B or 1402A/B or 1502A/B), or the former Physics 1020 or 1024 or 1026; Calculus 1000A/B or 1100A/B or 1500A/B and Calculus 1301A/B or 1501A/B, or Applied Mathematics 1413. 3 lecture hours, 0.5 course.

Physics 2700A/B - Introduction to Planetary Atmospheres

Basic physical principles are used to investigate the dynamics, thermodynamics and composition of planetary atmospheres. Further insight in earth's atmosphere will be gained by comparisons with other planetary atmospheres.

Antirequisite(s): Physics 2070A/B.

Prerequisite(s): (Physics 1028A/B or 1301A/B or 1401A/B or 1501A/B) and (Physics 1029A/B or 1302A/B or 1402A/B or 1502A/B), or the former Physics 1020 or 1024 or 1026; Calculus 1000A/B or 1100A/B or 1500A/B and Calculus 1301A/B or 1501A/B, or Applied Mathematics 1413. 2 lecture hours, 1 tutorial hour, 0.5 course.

Physics 2810A/B - Physical Properties of Materials

The properties of materials are described in terms of their atomic structure and interatomic bonding. The basic physical principles underlying mechanical, electrical, and magnetic properties are discussed in the context of modern materials including polymers and semiconductors.

Antirequisite(s): Materials Science 2810A/B, the former Physics 2800 and the former Materials Science 2800. Prerequisite(s): (Calculus 1000A/B or 1100A/B or 1500A/B) and (Calculus 1301A/B or 1501A/B), or Applied Mathematics 1413; Chemistry 1100A/B and 1200B, or the former Chemistry 023, 1020, 1050; (Physics 1028A/B or 1301A/B or 1401A/B or 1501A/B) and (Physics 1029A/B or 1302A/B or 1402A/B or 1502A/B), or the former Physics 1020 or 1024 or 1026.

3 lecture hours, 0.5 course.

Physics 2910F/G - Introduction to Physical Measurement

Students will gain an introduction to experimental techniques through experiments on electricity and magnetism, and modern physics. Concurrent lectures will cover circuit theory and experimental design. Antirequisite(s): The former Physics 2900E.

Prerequisite(s): A minimum mark of 60% in Physics 1302A/B or 1402A/B or 1502A/B, or a minimum average of 80% in Physics 1028A/B and 1029A/B, or a minimum mark of 60% in the former Physics 1020 or 1024 or 1026; a minimum mark of 60% in each of (Calculus 1000A/B or 1100A/B or 1500A/B) and (Calculus 1301A/B or 1501A/B), or in Applied Mathematics 1413.

3 lecture hours, 3 laboratory hours, 0.5 course.

KING'S UNIVERSITY COLLEGE

SOCIOLOGY

Effective **September 1, 2011**, the antirequisites for Sociology 2206A/B: Research Methods in Sociology will be revised to include Health Science 2801 or the former Health Sciences 2800, at King's University College and Brescia University College.

Sociology 2206A/B: Research Methods in Sociology

An introduction to the research process and ethical dilemmas faced by sociologists, as well as a survey of the essential procedures used to collect sociological data, e.g. sampling, questionnaire design, and observational field research techniques.

Antirequisite(s): The former Sociology 231, Social Work 2205, Health Sciences 2801A/B or the former Health Science 2800.

Prerequisite(s) At least 60% in Sociology 1020 or 1021E.

3 hours, 0.5 course.

Mandatory for students registered in Year 2 of an Honors/Combined Honors program (old curriculum), or an Honors Specialization (new academic choices, offered through the Department of Sociology (Brescia, King's)

REGISTRAR'S UPDATE

HURON UNIVERSITY COLLEGE

CENTRE FOR GLOBAL STUDIES

Effective, September 1, 2011, to revise the title of the course which was submitted as 'Cultures' in error:

Proposed Calendar copy:

Centre for Global Studies 4017F/G – Honors Seminar: Narrating Culture

Examinations of the cultural functions and roles of artistic expression, primarily through comparative examples of literature and cinematic film. For core themes in the current session, see the Centre for Global Studies. Prerequisite(s): 0.5 course from <u>Centre for Global Studies 3001F/G</u>-3005F/G or permission of the Centre for Global Studies. 3 hours, 0.5 course. (Huron)