THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN

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14 January 2009

To: **Okanagan Senate**

From: **Senate Curriculum Committee**

Subject: **December Curriculum Proposals (approval)**

The Senate Curriculum Committee has reviewed the material forwarded to it by the Faculties, and encloses those proposals it deems ready for approval.

As such, the following is recommended to Senate:

Motion: ***That Senate approve the new and revised courses and programs brought forward by the Faculties of Applied Science, Arts and Sciences, and Creative and Critical Studies as set out in the attached proposals.***

Respectfully submitted,
Mr. Christopher Eaton
Acting Chair, Curriculum Committee

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14 January 2009

To: **Okanagan Senate**

From: **Senate Curriculum Committee**

Subject: **December Curriculum Proposals**

Attached please find the following for your consideration:

Faculty of Applied Science

1. The following new curriculum:
    a. Fourth-Year Program for Civil, Electrical, and Mechanical Engineering

2. The following new common Engineering courses:
    a. ENGR 413 (3) Law and Ethics for Engineers
    b. ENGR 499 (6) Engineering Capstone Design Project

3. The following new Civil Engineering courses:
    a. ENGR 425 (3) Design of Steel and Timber Structures
    b. ENGR 426 (3) Matrix Structural Analysis
    c. ENGR 427 (3) Reinforced Concrete Design II
    d. ENGR 428 (3) Earthquake Engineering
    e. ENGR 429 (3) Strengthening and Rehabilitation of Concrete Structures
    f. ENGR 430 (3) System-Based Design and Construction
    g. ENGR 431 (3) Infrastructure Management
    h. ENGR 433 (3) Construction Engineering and Management
    i. ENGR 435 (3) Transportation Systems Engineering
    j. ENGR 436 (3) Transportation Planning and Design
    k. ENGR 438 (3) Rock Mechanics and Engineering
    l. ENGR 440 (3) Foundation Engineering
    m. ENGR 441 (3) Engineering Hydrology
    n. ENGR 442 (3) Water Quality Engineering
    o. ENGR 443 (3) Environmental Engineering Laboratory
    p. ENGR 444 (3) Solid Waste Engineering
    q. ENGR 445 (3) Design of Water and Wastewater Conveyance Systems

r. ENGR 447 (3) Design of Processes for Wastewater Treatment

4. The following new Electrical Engineering courses:
    a. ENGR 455 (3) Power System Analysis and Design
    b. ENGR 458 (3) Power Electronics
    c. ENGR 460 (3) Probability and Random Processes for Engineers
    d. ENGR 461 (3) Digital Communications
    e. ENGR 462 (3) Digital Signal Processing II
    f. ENGR 463 (3) Communication Networks
    g. ENGR 465 (3) Wireless Communications
    h. ENGR 466 (3) Introduction to VLSI Systems
    i. ENGR 467 (3) Real-Time and Embedded System Design
    j. ENGR 468 (3) Advanced Digital System Design
    k. ENGR 470 (3) Microwave Engineering
    l. ENGR 471 (3) Radio Frequency Integrated Circuits
    m. ENGR 472 (3) Fibre Optics and Photonics
    n. ENGR 473 (3) Antennas and Propagation
    o. ENGR 474 (3) Analog Integrated Circuits

5. The following new Mechanical Engineering courses:
    a. ENGR 475 (3) Materials Selection and Design
    b. ENGR 476 (3) Mechanics of Materials II
    c. ENGR 477 (6) Mechanical Engineering Laboratory
    d. ENGR 478 (3) Alternative Energy Systems
    e. ENGR 480 (3) Modern Control
    f. ENGR 481 (3) Mechatronics
    g. ENGR 483 (3) Advanced Vibrations: Simulation and Optimization
    h. ENGR 484 (3) Heat and Mass Transfer
    i. ENGR 485 (3) Heating, Ventilating, and Air Conditioning
    j. ENGR 486 (3) Robot Modelling and Control
    k. ENGR 487 (3) Digital Control
    l. ENGR 488 (3) Advanced Engineering Dynamics
    m. ENGR 489 (3) Multicriteria Optimization and Design of Experiments
    n. ENGR 490 (3) Applied Fluid Mechanics

Faculty of Arts and Sciences

6. The following revised program:
    a. Earth and Environmental Sciences

7. The following new program and course:
    a. History Honours Program/HIST 499 (3) Undergraduate Honours Thesis

Faculty of Creative and Critical Studies

8. The following new courses:

a. CRWR 250 (3) Workshop in Creative Writing: Screenwriting
b. GERM 302 (3) Contemporary German Literature in Translation
c. GERM 303 (3/9) d Topics in German Studies (in English)
d. JPST 420/CULT 420 (3) Japanese Video Game Studies
e. SPAN 251 (3) Upper-Intermediate Spanish I
f. SPAN 252 (3) Upper-Intermediate Spanish II
g. SPAN 280 (3/6) d Topics in Hispanic Cinema
h. THTR 103 (3) Acting for Stage and Screen
i. THTR 280 (3/6) d Devised Public Performance
j. THTR 411/CULT 480 (3) Performance Studies

9. The following revised program:
    a. Interdisciplinary Performance Program

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty/School: School of Engineering **Department/Unit:** N/A **School Approval Date:** Nov 26, 2008 **Effective Session:** 2009W	**Date:** Nov 26, 2008 **Contact Person:** Spiro Yannacopoulos **Phone:** 250-807-8722 **Email:** spiro.yannacopoulos@ubc.ca

Proposed Calendar Entry:

[14416] Fourth Year

In fourth year, students will follow a program in Civil, Electrical, or Mechanical Engineering.

Civil Engineering

ENGR 413 Law and Ethics for Engineers	**3**
ENGR 440 Foundation Engineering	**3**
ENGR 441 Engineering Hydrology	**3**
ENGR 447 Design of Processes for Wastewater Treatment	**3**
ENGR 499 Engineering Capstone Design Project	**6**
Technical Electives[1]	**18**
Total Credits	**36**

[1] To be chosen from a list of technical elective courses provided by the School of Engineering.

Electrical Engineering

ENGR 413 Law and Ethics for Engineers	**3**
ENGR 451 Microelectronics II	**3**
ENGR 460 Probability and Random Processes for Engineers	**3**
ENGR 499 Engineering Capstone Design Project	**6**
Design Electives[1]	**6**
Technical Electives[2]	**15**
Total Credits	**36**

Draft Calendar URL:
http://okanagan.students.ubc.ca/calendar/proof/edit/index.cfm?tree=18,317,989,1184

Present Calendar Entry:

[14416] Fourth Year

[14417] ~~**Specific information on these programs, including their academic requirements, will be published over the next few years in future editions of the UBC Okanagan Calendar.**~~

[1]Students must select two courses from the following list of design electives: ENGR 455, ENGR 461, ENGR 463, ENGR 466.
[2]To be chosen from a list of technical elective courses provided by the School of Engineering.

Mechanical Engineering

ENGR 413 Law and Ethics for Engineers	**3**
ENGR 476 Mechanics of Materials II	**3**
ENGR 477 Mechanical Engineering Laboratory	**6**
ENGR 499 Engineering Capstone Design Project	**6**
Technical Electives[1]	**18**
Total Credits	**36**

[1]To be chosen from a list of technical elective courses provided by the School of Engineering.

Type of Action: Addition of fourth-year program curricula into Academic Calendar.

Rationale: This calendar entry is added to clarify the degree requirements for the fourth-year Bachelor of Applied Science programs in Civil Engineering, Electrical Engineering, and Mechanical Engineering.

New Common Engineering Courses (Civil, Electrical, and Mechanical)	
Proposed Calendar Entry: **ENGR 413 (3) Law and Ethics for Engineers. The Canadian legal system. Companies, partnership, independent contractors. Contract documents, specifications, liability, torts and liens. Intellectual property. Agency; evidence; expert witnessing. Employment law. Engineer Act, Code of Ethics, APEGBC. [3-0-0]** ***Prerequisite:*** **Fourth-year standing.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science programs in Civil Engineering, Electrical Engineering, and Mechanical Engineering.
Proposed Calendar Entry: **ENGR 499 (6) Engineering Capstone Design Project.** **A capstone design project in response to an actual engineering problem. The project can be multidisciplinary or in a specialized area of engineering. Students are required to submit a comprehensive project report and deliver a formal presentation. [1-4-0; 0-6-0]** ***Prerequisite:*** **Fourth-year standing.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science programs in Civil Engineering, Electrical Engineering, and Mechanical Engineering.
New Civil Engineering Courses	
Proposed Calendar Entry: **ENGR 425 (3) Design of Steel and Timber Structures.** **Introduction to limit states design of steel and timber structures: material properties, design of tension and compression members, beams, columns, and connections. [3-0-0]** ***Prerequisite:*** **All of ENGR 325, ENGR 326, ENGR 331.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 426 (3) Matrix Structural Analysis. Direct stiffness method; a systematic approach for the modelling and analysis of structural systems using the matrix stiffness method; linear and non-linear analysis; application problems, computer implementation, introduction to finite element method. [3-0-0]** ***Prerequisite:*** **ENGR 326.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.

Proposed Calendar Entry: **ENGR 427 (3) Reinforced Concrete Design II. Design of reinforced concrete members and structures, continuous beams, slender columns, footings, bearing and retaining walls, and two-way slabs. Design of concrete members using FRP reinforcement. Introduction to prestressed concrete. [3-0-0].** ***Prerequisite:*** **All of ENGR 325, ENGR 326, ENGR 327.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 428 (3) Earthquake Engineering. Strong ground motion; single-degree-of-freedom systems; earthquake response of linear and inelastic systems; subspace iteration; multi-degree-of-freedom systems; earthquake response and design; building design consideration. [3-0-0]** ***Prerequisite:*** **All of ENGR 326, ENGR 327.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 429 (3) Strengthening and Rehabilitation of Concrete Structures. Assessment, rehabilitation and strengthening of building and bridge structures; damage mechanisms, instrumentation and non-destructive test methods; conventional and innovative repair techniques. [3-0-0]** ***Prerequisite:*** **ENGR 327.** ***Corequisite:*** **ENGR 427.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 430 (3) System-Based Design and Construction.** **State-of-the-art conceptual design and construction techniques of civil engineering systems. Problem-based learning techniques using real life engineering project design and construction case studies - famous, infamous, large, small, failures. [3-0-0]** ***Prerequisite:*** **Fourth-year standing in Civil Engineering.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.

Proposed Calendar Entry: **ENGR 431 (3) Infrastructure Management. Introduction to asset management, municipal infrastructure systems, performance and prioritization measures, data management, life cycle costing, decision support tools, integrated approach. [3-0-0]** ***Prerequisite:*** **All of ENGR 305, ENGR 303, ENGR 330.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 433 (3) Construction Engineering and Management.** **Management of the firm: strategic planning, designing, construction, productivity management, and project closure. Project delivery systems: traditional, construction management, and turnkey. Estimating, bidding, and bonding. Project control tools and procedures. Safety and quality control. Project Management. [3-0-0]** ***Prerequisite:*** **ENGR 303.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 435 (3) Transportation Systems Engineering.** **Analysis, design, and operation of transport systems that support our urban and rural communities, including: traffic studies and field surveys; capacity and level of service analysis; simulation and optimization of networks; transportation demand management, and CAD optimization of horizontal and vertical corridor alignments. [3-2*-0]** ***Prerequisite:*** **ENGR 335, ENGR 330.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 436 (3) Transportation Planning and Design.** **Processes and techniques to facilitate properly integrated land use & transport systems, including: survey and data techniques; trip generation; trip distribution; modal choice; trip assignment; development traffic impact assessment; sustainable transportation strategies; and, vulnerable road users. [3-2*-0]** ***Prerequisite:*** **ENGR 335.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.

Proposed Calendar Entry: **ENGR 438 (3) Rock Mechanics and Rock Engineering.** **Mechanical properties of intact rock. Rock mass properties and classifications. Structural mapping and stereonets. Rock and rock mass strength criteria. Stresses in rock masses. Rock slope stability analysis. Empirical, analytical and numerical analysis techniques for underground excavations. Rock support and stabilization. [3-0-0]** ***Prerequisite:*** **ENGR 340.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 440 (3) Foundation Engineering. Empirical and analytical approaches for foundation engineering. Topics include site investigation, lateral earth pressure, ground improvement, design of shallow and deep foundations, and retaining structures. [3-0-0]** ***Prerequisite:*** **ENGR 340.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 441 (3) Engineering Hydrology. Hydrologic processes - weather, precipitation, infiltration, evaporation, snowmelt and runoff generation. Emphasis on quantitative techniques including: hydrograph analysis, reservoir and channel routing, statistical methods and design floods, hydrologic modelling. [3-0-0]** ***Prerequisite:*** **ENGR 310, ENGR 347.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 442 (3) Water Quality Engineering. The physical, chemical, and biological properties of water with applications to human health, and engineering solutions. The chemical and biological reactions of contaminants as they move through surface and ground water. A brief introduction to corrective actions. [3-0-0]** ***Prerequisite:*** **ENGR 310, ENGR 347.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 443 (3) Environmental Engineering Laboratory** **Testing procedures used in water quality**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course

studies and in the operation of water and wastewater treatment plants. [1-4-0] ***Prerequisite:*** **ENGR 347.** ***Corequisite:*** **ENGR 442.**	**Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 444 (3) Solid Waste Engineering.** **Applications of engineering principles and practices to land disposal of hazardous and nonhazardous wastes. [3-0-0]** ***Prerequisite:*** **ENGR 340, ENGR 347.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 445 (3) Design of Water and Wastewater Conveyance Systems.** **Identification and evaluation of design solutions for providing a community with adequate water supply, collecting and disposing of stormwater and sewage, and managing excess stormwater flow. [3-0-0]** ***Prerequisite:*** **ENGR 441.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
Proposed Calendar Entry: **ENGR 447 (3) Design of Processes for Water and Wastewater Treatment.** **Theory and design of fundamental physical, chemical and biological unit operations for drinking water and municipal wastewater treatment. The design principles of coagulation, flocculation, sedimentation, filtration, biological treatment, solid handling, disinfection, and advanced treatment processes are presented. [3-0-0]** ***Prerequisite:*** **ENGR 347.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Civil Engineering.
New Electrical Engineering Courses	
Proposed Calendar Entry: **ENGR 455 (3) Power System Analysis and Design.** **Principles of electric power systems, three-phase transformer, transmission line parameters, admittance model, impedance model, network work calculations, power-flow solution, symmetrical faults, symmetrical components and sequence**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.

network, unsymmetrical faults, economic dispatch. Design projects using power system simulator package. [3-2*-0] ***Prerequisite:*** **All of ENGR 320, ENGR 350, ENGR 365.**	
Proposed Calendar Entry: **ENGR 458 (3) Power Electronics.** **Applications and roles of power electronics, power semiconductor devices, diode rectifiers, phase-controlled rectifiers, DC-DC converters, DC-AC converters, resonant converters. Examples drawn from residential and industrial applications. [3-2*-0]** ***Prerequisite:*** **All of ENGR 320, ENGR 350, ENGR 365.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 460 (3) Probability and Random Processes for Engineers.** **Set theory, conditional probability, distribution function, functions of random variables, central limit theorem; random processes and their spectral characteristics, linear system with random inputs. Applications in statistics and engineering. [3-0-0]** ***Prerequisite:*** **All of APSC 250, APSC 254.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 461 (3) Digital Communications.** **Signal space concepts, baseband digital transmission on additive white Gaussian noise channel, optimum receiver design, transmission through bandlimited channels, coherent and non-coherent carrier modulations, elements of information theory, introduction to error control coding. [3-2*-0]** ***Prerequisite:*** **ENGR 361.** ***Corequisite:*** **ENGR 460.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 462 (3) Digital Signal Processing II.** **Sampling of bandpass signals, oversampling, sigma-delta modulation; decimation and interpolation; sampling rate conversation and its implementation; linear prediction and optimum linear filters; power spectrum estimation. [3-0-0]**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in

Prerequisite: **ENGR 362, ENGR 460.**	Electrical Engineering.
Proposed Calendar Entry: **ENGR 463 (3) Communication Networks. Layered architectures, digital transmission fundamentals, circuit-switching networks, peer-to-peer protocols, data link layer, medium access control, local area networks, packet-switching networks, TCP/IP, ATM networks, principles of cryptography, and multimedia information. [3-2*-0]** ***Prerequisite:*** **ENGR 460.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 465 (3) Wireless Communications. Propagation path loss, shadowing, fading, Doppler spread, classification of wireless channels, modulations for wireless communications, diversity and equalization techniques for fading dispersive channels, multicarrier modulation, spread spectrum communications, cellular networks, practical wireless systems. [3-0-0]** ***Prerequisite:*** **ENGR 460, ENGR 461.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 466 (3) Introduction to VLSI Systems. The chip design process using VLSI design styles in CMOS technology. Data path, control and register file design and layout. Clocking schemes, flip-flop and latch-based design. Design project using CAD tools. [3-2*-0]** ***Prerequisite:*** **ENGR 353, ENGR 355.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 467 (3) Real-Time and Embedded System Design.** **Multi-tasking; interrupt-driven systems; RTOSs and programming environments; task scheduling; schedulability analysis; inter-process communication and synchronization; resource management; performance measurement. [3-0-0]** ***Prerequisite:*** **ENGR 359.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.

Proposed Calendar Entry: **ENGR 468 (3) Advanced Digital System Design.** **Design flows, system-on-chip design practices, timing, clock domains, high-speed data links, intellectual property reuse and platform-based design, application specific computing, ASIC and FPGA technologies, and hardware/software co-design. [3-0-0]** ***Prerequisite:*** **ENGR 359, ENGR 466.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 470 (3) Microwave Engineering.** **Review of electromagnetic principles, waveguides, transmission lines, impedance matching, Smith charts, network characterization and microwave engineering applications. [3-2*-0]** ***Prerequisite:*** **ENGR 365.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 471 (3) Radio Frequency Integrated Circuits.** **Introduction to radio communication systems, transmission line theory, network parameters, impedance matching, noise figure and sensitivity, RF transceiver architectures, CMOS technology, low noise amplifier, mixers, oscillators, and power amplifiers. [3-2*-0]** ***Prerequisite:*** **All of ENGR 361, ENGR 451, ENGR 470.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 472 (3) Fibre Optics and Photonics.** **Introduction to fibre optic transmission, single-mode and multimode fibre optics, dispersion and absorption design criteria, semiconductor diode lasers, LEDs, modulators, pn and p-i-n receivers, point-to-point and network implementations of fibre optic networks and integrated photonic systems. [3-2*-0]** ***Prerequisite:*** **ENGR 365.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.

Proposed Calendar Entry: **ENGR 473 (3) Antennas and Propagation. Frequency designations, propagation modes, directivity and gain, impedance and efficiency, radiation patterns, polarization, dipoles, arrays, helical antennas, aperture antennas, patch antennas, atmospheric effects, propagation models, fading and multipath. [3-0-0]** ***Prerequisite:*** **ENGR 365.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
Proposed Calendar Entry: **ENGR 474 (3) Analog Integrated Circuits. Design and analysis of analog integrated circuits with emphasis on CMOS technology. MOS device physics and models, processing technology and layout, differential amplifiers, current mirrors, noise, feedback, opamp design and compensation, two-stage CMOS opamp design, switched-capacitor filters. [3-0-0]** ***Prerequisite:*** **ENGR 451.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Electrical Engineering.
New Mechanical Engineering Courses	
Proposed Calendar Entry: **ENGR 475 (3) Materials Selection and Design.** **Review of materials classifications, ASTM standard for ferrous materials and nonferrous alloys. Material property charts. Materials selection and material indices. Introduction to various materials processing. Process selection and materials selection with multiple constraints and objectives, cost analysis. [3-1*-0]** ***Prerequisite:*** **APSC 259, ENGR 376.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 476 (3) Mechanics of Materials II. Beam deflections, column buckling; Castigliano's theorem, statically indeterminate beams, frames and rings; bending of curved beams, bending of beams with asymmetric cross-sections, shear centre; principal stresses and stress invariants in three dimensions; yield and fracture criteria. [3-0-0]** ***Prerequisite:*** **APSC 260.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.

Proposed Calendar Entry: **ENGR 477 (6) Mechanical Engineering Laboratory.** **Mechanics of materials, heat transfer, and fluid dynamics. Vibrations, control, instrumentation, data acquisition and data manipulation using modern computational tools, machine shop practice, electronic circuit construction and troubleshooting. [1-4-0]** ***Prerequisite:*** **Fourth-year standing in Mechanical Engineering.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 478 (3) Alternative Energy Systems.** **Description of alternative sources of energy; electric vehicles; thermosolar energy; generation of electricity by photovoltaic effect, wind power energy, hydropower, geothermal, nuclear power, power plants with fuel cells; aspects of hydrogen as fuels, fuel from biomass, energy storage parameters, integration of alternative sources of energy. [3-0-0]** ***Prerequisite:*** **ENGR 375, ENGR 385.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 480 (3) Modern Control.** **State-space modeling and design. Review of linear and matrix algebra, highlights of classical control theory, state-space modeling, continuous and discrete state equations, stability, controllability and observability, design of feedback systems. [3-0-0]** ***Prerequisite:*** **ENGR 315.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 481 (3) Mechatronics.** **Operating principles, analysis, modeling, and performance specification of sensors and actuators such as analog/digital transducers, electric motors, hydraulic actuators, and smart actuators. Analog and digital filtering techniques. Control techniques pertaining to actuators. [3-0-0]** ***Prerequisite:*** **ENGR 315, ENGR 320.**	U **URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.

Proposed Calendar Entry: **ENGR 483 (3) Advanced Vibrations: Simulation and Optimization.** **Generalized eigenvalue problems, experimental modal analysis; nonlinear systems; numerical simulation of time response, random vibrations; distributed parameter systems; dynamic finite element method; reduced order modeling; optimization problem formulation, single objective optimization algorithms; applications in vibrational systems. [3-2*-0]** ***Prerequisite:*** **APSC 256, ENGR 387.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 484 (3) Heat and Mass Transfer.** **Heat exchanger design, heat transfer with phase change, radiation heat transfer, steady and transient mass diffusion, convective mass transfer, simultaneous heat and mass transfer. [3-0-0]** ***Prerequisite:*** **ENGR 310, ENGR 385.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 485 (3) Heating, Ventilating, and Air Conditioning.** **Properties of moist air, air conditioning systems, heat transmission in building systems, heating and cooling load, refrigeration, pumps and piping design, fans and building air distribution. [3-0-0]** ***Prerequisite:*** **All of APSC 253, APSC 258, ENGR 385.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 486 (3) Robot Modelling and Control.** **Spatial description and homogeneous transformations, manipulator kinematics (forward and inverse), Jacobian, motion trajectories. Manipulator dynamics, Lagrange-Euler and Newton-Euler formulation. Linear and nonlinear control, force control. Industrial robotic system and programming. [3-0-0]** ***Prerequisite:*** **APSC 250, ENGR 315.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.

Proposed Calendar Entry: **ENGR 487 (3) Digital Control.** **Digital control theory and a brief review of classical control and its relationship to discrete systems. Discrete time systems, sampling, z-transform, stability in z-domain, digital controller design, microcontrollers and filters. [3-0-0]** ***Prerequisite:*** **ENGR 315.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 488 (3) Advanced Engineering Dynamics.** **Non-fixed axis rotation of rigid bodies, Euler angles and parameters, kinematics of rigid bodies, Newton Euler equations of motion for rigid bodies. Course material will illustrate application to gyroscopes, spinning tops, vehicles and satellites. Application of numerical methods, of simulation, and animation will be stressed. [3-0-0]** ***Prerequisite:*** **ENGR 387.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 489 (3) Multicriteria Optimization and Design of Experiments.** **Multiple attribute decision making; multiple objective decision making/optimization; fuzzy optimization; design and analysis of physical and computer experiments; uncertainty modeling; sensitivity analysis; weighting methods; computational tools and applications in multi-disciplinary design. [3-0-0]** ***Prerequisite:*** **APSC 256.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.
Proposed Calendar Entry: **ENGR 490 (3) Applied Fluid Mechanics.** **Aerodynamics, turbomachinery design and performance, one dimensional compressible flows. Application of the design to various engineering products. [3-0-0]** ***Prerequisite:*** **ENGR 310.**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course **Rationale:** This new course is added to support the fourth-year curriculum for the Bachelor of Applied Science program in Mechanical Engineering.

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN

UBC Okanagan Curriculum Proposal Form
New or Change to Course or Program

Category: 1

Faculty: Arts and Sciences **Unit/Dept.:** Unit 3 **Faculty Approval Date:** November 18, 2008 **Effective Session:** 2009W	**Date:** November 12, 2008 **Contact Person:** Dr. David F. Scott **Phone:** 250-807-8755 **Email:** david.scott@ubc.ca

Proposed Calendar Entries:

Major in Earth and Environmental Sciences

This multi-disciplinary B.Sc. program provides an education reflecting the direction of modern **E**arth and **E**nvironmental **S**cience programs in Canada and elsewhere. **Students will acquire** a fundamental understanding of past and present relationships among air, water, rocks and minerals, and biota. **Interactions between humans and the environment are emphasized. Flexible program requirements allow students to acquire a degree that meets their personal objectives. They** can highlight the environment or the solid earth and enhance their program with related elective courses from Biochemistry, Biology, Chemistry, Geography, Mathematics and Statistics. **Programs can also be designed to meet professional registration guidelines[1].** Students are referred to Canadian Council of Professional Geoscientists (CCPG) and the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) websites for current outlines of requirements. **Registration with other national and provincial bodies may be possible with careful course selection.**

First and Second[2] Years	**Credits**
Two of EESC **101,** 111, 121	6
BIOL 116, 125	6
CHEM 121, 123; or CHEM 111, 113	6
MATH 100, 101	6
PHYS 112, 122; or PHYS 102, 111	6
Two of ENGL 112, 113, 150, 151, **153**	6
STAT 230 (or equivalent courses eg. BIOL 304[3]; GEOG 271; PSYO 271; SOCI 271)[4].	3

Draft Calendar URL:
http://okanagan.students.ubc.ca/calendar/proof/edit/index.cfm?tree=18,282,858,1070

Present Calendar Entry:

Major in Earth and Environmental Sciences

This multi-disciplinary B.Sc. program provides an education reflecting the direction of modern ~~e~~arth and ~~e~~nvironmental ~~s~~cience programs in Canada and elsewhere. ~~**It is intended to prepare students to meet the knowledge requirements for professional designation according to the guidelines of the Canadian Council of Professional Geoscientists (CCPG).**~~ Students are referred to the websites for CCPG and the Association of Professional Engineers and Geoscientists of BC (APEGBC) for current outlines of requirements.

~~**The broad-based core courses ensure**~~ a fundamental understanding of past and present relationships among air, water, rocks and minerals, and biota. ~~**The emphasis is on the interactions between humans and the environment. The program is also extremely flexible so that students**~~ can highlight the environment or the solid earth in their studies and enhance their program with related elective courses from Biochemistry, Biology, Chemistry, Geography, ~~**and**~~ Mathematics and Statistics.

First Year	**Credits**
EESC 111, 121	6
BIOL 116, 125 ~~**(or introductory Physics)**~~	6
CHEM 121, 123; or CHEM 111, 113	6
MATH 100, 101	6
Two of ENGL 112, 113, 150, 151	6
Total Credits	30
Second[1], Third, and Fourth Years	
PHYS 112, 122; or PHYS 102, 111 ~~**(or BIOL as in First Year, if not already**~~	6

At least three[3] 200-level EESC courses	9
Electives	12
Total Credits	60
Third and Fourth Years	
Any eight EESC 300- and 400-level courses[5]	24
Upper-level Science electives[6]	12
Arts electives[7]	12
Electives[8]	12
Minimum total credits for degree[9]	120

[1] **Professional registration is managed by organizations outside the control of UBC Okanagan. Although we make every attempt to ensure that our courses meet provincial and national registration requirements, students are reminded that the final decision on course acceptance and registration rests with provincially-controlled organizations.**

[2] For the purposes of admission to the Co-operative Education program at the end of second year, students will be required to finish Academic Term 1 courses and 18 other Science credits.

[3] If doing BIOL 304 for the statistics requirement, a fourth 200-level EESC credit is required in second year, and BIOL 304 can serve as part of the upper-level science credits.

[4] Each of these statistics courses has different pre-requisites and there may be enrolment restrictions outside of EESC control.

[5] Many third- and fourth-year EESC courses alternate and are not offered every year. Careful planning with a department advisor is important.

[6] A UBC O degree requires 36 upper-level Science credits. These electives can come from across the sciences, including EESC.

[7] Some GEOG courses are regarded as Science courses and cannot be used for Arts credit.

[8] These electives can be at any level but a total of 42 upper-level credits in Arts and Sciences are required for graduation.

Minor in Earth and Environmental Sciences for Science Majors

A student must successfully complete 18 credits in Earth and Environmental Sciences courses at the 300- and 400-level. All upper-level EESC courses are acceptable, with the exception of EESC **402 and EESC 449.**

Minor in Earth and Environmental Sciences for Arts Majors

To complete a Science minor, a Bachelor of Arts student must have at least 30 credits of Earth and Environmental Sciences courses with at least 12 of these credits numbered 300 or above.

~~**taken)**~~	
~~**EESC 200, 213, 222**~~	~~9~~
~~**One of STAT 230, BIOL 304**~~	~~3~~
~~**Eight EESC 300- and 400-level courses to include:**~~	~~24~~
~~**— at least one of EESC 301, 302**~~	
~~**— at least one of EESC 356, 456**~~	
~~**— at least one of EESC 323, 423**~~	
~~**— at least one of EESC 335[2], 435[2]**~~	
~~**— and four upper-level EESC electives**~~	
Upper-level Science electives[3]	12
Arts electives[4]	12
Electives[4]	24
Total Credits	90
Minimum total credits for degree	120

[1] For the purposes of admission to the Co-operative Education program at the end of second year, students will be required to finish Academic Term 1 courses and 18 other Science credits. ~~**Recommended courses will include first-year Physics; EESC 200, 213, 222; STAT 230.**~~

~~**[2] Physically-challenged students with appropriate medical documentation will not be required to complete a field course.**~~

[3] Completion of these courses fulfills the requirement of 36 upper-level Science credits.

[4] A total of 42 upper-level credits in Arts and Sciences is required; ~~**two of these electives may have to be upper-level.**~~

~~**Recommended electives to consider are listed below. Some of these courses have prerequisites. Careful course planning with a program advisor is strongly recommended.**~~

~~**Science electives: EESC 201, 205, 212; BIOL 203, 309; CHEM 301, 317, 321; COSC 111, 121; PHYS 320; 300-level or 400-level EESC courses.**~~

~~**Arts electives: GEOG 217, 301, 309, 310, 316, 317, 416, 423.**~~

Minor in Earth and Environmental Sciences

A student must successfully complete 18 credits in Earth and Environmental Sciences courses at the 300 and 400 level. All upper-level EESC courses are acceptable, with the exception of EESC ~~400~~.

Earth and Environmental Sciences Honours Program The EESC Honours program is designed for dedicated students in Earth and Environmental Sciences desiring a recognized research component in their B.Sc. degree. Course requirements are similar to the Major in Earth and Environmental Sciences **(total 120 credits),** with EESC 449 (Honours Thesis Project) **representing 6 of these credits.** Admission Requirements * Fourth-year standing; * A minimum grade average of 75% **in 200- and 300-level courses**; and * Enrolment in EESC 449 with a research project and supervisor approved by the Academic Unit. Graduation Requirements * Completion of the course requirements for the Major in Earth and Environmental Sciences **with 6 of the 120 credits representing the Honours Thesis (EESc 449)**. * A 75% overall grade average; * A minimum average of 70% in all upper-level EESC courses; and * **A minimum grade of 75% in EESC 449**. A written thesis is required and must be publicly presented either as a seminar or poster.	**Earth and Environmental Sciences Honours Program** The EESC Honours program is designed for dedicated students in Earth and Environmental Sciences desiring a recognized research component in their B.Sc. degree. Course requirements are similar to the Major in Earth and Environmental Sciences, with the addition of EESC 449 (Honours Thesis Project). Admission Requirements * Fourth-year standing; * A minimum ~~**overall**~~ grade average of 75%; and * Enrolment in EESC 449 with a research project and supervisor approved by the Academic Unit. Graduation Requirements * Completion of the course requirements for the Major in Earth and Environmental Sciences; * A 75% overall grade average; * A minimum average of 70% in all upper-level EESC courses; and * ~~**EESC 449 with a minimum grade of 75%.**~~ A written thesis is required and must be publicly presented either as a seminar or poster. **Type of Action:** Revision of program **Rationale:** The Earth & Environmental Science program is in need of a major revision. The program was last revised over a decade ago. Meanwhile many pertinent new courses have been added to the EESC offerings and changes to the FWSC program also have affected the EESc program. ENGL 153 was missing from the list of possible English options. Footnotes added to give students the necessary information and warnings to enable sound course planning. Second year and beyond: increased flexibility and simplicity. There is no one second-year course that is required to get a degree. For the third and fourth years, students can now pick their courses instead of having to do at least one course in each of several categories,. Minor description is changed to exclude EESc 402 (a course that is only for FWSc students)

	and EESc 449 (the honours thesis). Honours Program entry qualification is calculated on 200- and 300-level courses because our students commonly have problems getting into the honours program at the end of third year because of poor performance in their first year. There was some ambiguity about whether the Honours thesis was in addition to the other courses or not. This ambiguity is now removed.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Arts and Sciences **Department:** Unit 6 **Faculty Approval Date:** Dec 2, 2008 **Effective Session:** 2008W	**Date:** September 30, 2008 **Contacts:** Jessica Stites Mor / Julien Vernet **Phone:** 250-807-9655 (JSM) **Email:** jessica.stites-mor@ubc.ca, julien.vernet@ubc.ca.
Proposed Calendar Entry: Faculty of Arts and Sciences > Bachelor of Arts Programs > History [11347] Major in History … **HISTORY HONOURS PROGRAM** **The Honours degree program in History enables students specializing in History to increase their concentration in History and to gain research experience in the completion of an Honours thesis. Students are expected to satisfy high levels of competency in their academic achievement and to successfully complete a research project under the supervision of a faculty member. The faculty supervisor must be approved by the Unit Head.** **ADMISSIONS REQUIREMENTS:** • **Third-year standing;** • **Minimum of 12 credits of HIST;** • **Minimum overall average of 72%;** • **Minimum average in History courses of 76%; and** • **Submission of an application form with supporting materials.** **GRADUATION REQUIREMENTS:** • **All general program requirements for the B.A. degree and History Major, including the English, Science, Language other than English, and Distribution requirements;** • **Successful completion of HIST 492**	**URL:** http://okanagan.students.ubc.ca/calendar/proof/edit/index.cfm?tree=18,282,857,982 **Present Calendar Entry:** Faculty of Arts and Sciences > Bachelor of Arts Programs > History [11347] Major in History **…**

(recommended in student's third year) and HIST 499 (Undergraduate Honours Thesis); • **An overall average of at least 76% in History courses;** • **An overall average of 72% in all courses;** • **A minimum of 54 credits of History, including HIST 499.** [11353] Minor in History …	[11353] Minor in History … **Type of Action:** Create new Honours program in History. **Rationale:** At a time when UBC Okanagan is particularly interested in attracting and maintaining excellent students, this programming option will increase the likelihood of bringing in and retaining the best students. Recent NSSE and CUSC studies of undergraduate experiences across Canada indicate that undergraduates place a very high value on the level of interaction they have with individual faculty members and on the degree of challenge that pushes them to excel to meet expectations within their degree programs. In informal surveys of current and graduating UBC Okanagan history students there was a strong showing of interest in this initiative: over 50 percent of graduating students polled expressed that they would have been interested in pursuing an honours degree had it been an option available to them. Currently registered students have also expressed significant interest (which can be measured in part by enrollment in HIST 492 in Winter Term II 2008). HIST 492 also builds a bridge to graduate programming, as it can also be offered as an IGS course, with higher expectations, to students who need to understand history theory and methods during the course of their individual projects and preparation. The course already has registered 17

	undergraduate students and 3 graduate students (IGS 550G). An Honours Program in History will allow students to undertake a significant thesis project, interact on an extensive basis with a faculty mentor, gain an understanding of the theory and methodology of history practice, and build a sense of community with a well-prepared peer group. The HIST 492 course, meant to be taken in the first semester of the student's third year, will serve to create an annual cohort that will continue together in activities related to producing a thesis proposal and thesis project. Participation in this program will involve, in all but exceptional cases, two years of extensive work with this peer group, a faculty mentor, and the Honours Program Chair. Group presentations and interaction within this framework will create an extended and profound experience of intellectual community on the UBC Okanagan campus. Most universities in Canada and in the United States that send a significant percentage of students to graduate school have a comparable Honours program. In order for UBC Okanagan to continue its success in sending students to graduate school, it will need to establish an Honours program. UBC Vancouver has a well-established History Honours Program, and creating a complement on this campus will decrease the current issue of student transfers to earn an Honours degree elsewhere. Adding this program to UBC Okanagan's offerings will make it a more attractive program for well-prepared and high-quality students. In addition, it will give many of these students an edge when pursuing graduate education. Having already undertaken a long research project, they will have had an opportunity to prove that they are competent for the demands of

	graduate education and that they are capable of completing more profound independent study, research, and writing. A program of this nature will also give faculty the kind of extended exposure to a student that will produce more detailed reference letters. There is an increasing trend among graduate programs across North America to admit only students who have either completed an honours thesis or have already received their master's degree in order to begin doctoral work in the field of history. This initiative will also advance the Irving K. Barber School of Arts and Sciences mandate to bring research to undergraduates and will specifically address Unit 6 and the Barber School's current interest in developing honours programming. It will encourage history students to take greater advantage of research funding and opportunities, both internal and external to the university. Due to the nature of much historical research, it is also likely that this program will encourage students to work more closely with libraries, archives, and institutions in the Okanagan Valley and British Columbia, generating links between the university and the community and increasing regionally-specific research production and knowledge. This program will not require additional funding. The History department already plans to offer HIST 492 (and IGS 550) each year. HIST 499 will operate much like other directed studies courses requiring, for the most part, labour and interest from faculty members. Supporting Documents: Budget Impact Form; Library Consultation Form

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Arts and Sciences **Department:** Unit 6 **Faculty Approval Date:** Dec 2, 2008 **Effective Session:** 2008W	**Date:** October 14, 2008 **Contacts:** Jessica Stites Mor / Julien Vernet **Phone:** 250-807-9655 (JSM) **Email:** jessica.stites-mor@ubc.ca, julien.vernet@ubc.ca.
Proposed Calendar Entry: **HIST 499 (6) Undergraduate Honours Thesis** **Research and writing of a thesis paper under the supervision of a History faculty member. Participation in scheduled colloquia and seminars is required.** ***Prerequisites:*** **HIST 492 and admission to the Honours Program.**	**URL:** N/A **Present Calendar Entry:** **Type of Action:** New course. **Rationale:** Create course that will serve as an undergraduate Honours thesis option.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Creative Studies **Faculty Approval Date:** 2008 12 03 **Effective Session:** 2009W	**Date:** November 13, 2008 **Contact Person:** Sharon Thesen **Phone:** 250-807-9417 **Email:** sharon.thesen@ubc.ca
Proposed Calendar Entry: **CRWR 250 (3) Workshop in Creative Writing: Screenwriting** **Students are instructed and guided in the writing of screenplays, are encouraged to pursue experimentation in screenwriting, and will participate in the feedback and critique sessions that constitute the workshop method.** ***Prerequisite:*** **Any two of CRWR 116, CRWR 126, VISA 104, VISA 105, THTR 101, THTR 102. [3-0-0]**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New second-year creative writing course in screenwriting. **Rationale:** There is a large student demand for a second-year course in screenwriting. With the addition of film studies courses at the first-year level and growing enrollments in new media production and cultural studies courses, it is important that writing for film begin to be taught at UBC Okanagan. We have recently hired a faculty member in the program area who has the expertise to teach a screenwriting course. This course will supplement our range of second-year courses and can be alternated with CRWR 218 (Intermediate Workshop in Creative Writing: Drama) so it will not require extra resources. We have made the course open to students who have a year's workshop

	experience in creative writing or other relevant Creative Studies areas—the first year VISA courses that include new media (VISA 104 and 105, Three-Dimensional and New Media Art Practices I and II) and the first-year acting classes in the performance program (THTR 101: Acting I: Improvisation - The Body in Performance; THTR 102: The Actor's Process I). A mix of students who are writers, actors, and film makers will be an ideal mix for a class like this. Students will be able to share their expertise and resources. All these students will have had experience of workshop equivalent practices such as critiques. Because the prerequisites are more open, this course will not be a possible prerequisite for the regular upper level courses in Creative Writing (except possibly CRWR 382 which is a special topics course that could focus on screenwriting – students could get permission from the department based on the completion of that course if it was focused on screenwriting).

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department/Unit:** Critical Studies **Faculty Approval Date:** 2008 10 14 **Effective Session:** 2009W	**Date:** 12 Sept 2008 **Contact Persons:** Martin Blum Claude Desmarais **Phone:** 250-807-8635 250-897-9362 **Email:** martin.blum@ubc.ca claude.desmarais@ubc.ca
Proposed Calendar Entry: **GERM 302 (3) Contemporary German Literature in Translation** **Reading and discussion of selected works of post WW II literature from East, West, the united Germany, Austria and Switzerland as well as German diaspora writing. [3-0-0]** ***Prerequisite:*** **3 credits of first-year English.**	**Draft Calendar URL:** N/A **Present Calendar Entry:** **Type of Action:** New course. **Rationale:** 1. supports the mandate of the academic plan 'to take courses with a global focus' 2. enables students without knowledge of German to study the literature and culture of contemporary German speaking countries 3. allows students to study multicultural and diaspora writing of a non English speaking culture 4. constitutes the first step towards building a minor in German and a major in Critical Studies 5. successfully offered by UBC (CENES) Vancouver

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department/Unit:** Critical Studies **Faculty Approval Date:** 2008 10 14 **Effective Session:** 2009W	**Date:** September 9, 2008 **Contact Person:** Martin Blum, Claude Desmarais **Phone:** M. Blum 250-807-9362 C. Desmarais 250-807-8635 **Email:** martin.blum@ubc.ca claude.desmarais@ubc.ca
Proposed Calendar Entry: **GERM 303 (3/9) d Topics in German Studies (in English)** **Examining and interpreting different aspects of German culture, in particular the intersections between literature, film, and other manifestations of popular culture. [3-0-0]** ***Prerequisite:*** **3 credits of first-year English.**	**Draft Calendar URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course proposal **Rationale:** 1. supports the mandate of the the academic plan "to take courses with a global focus" 2. enables students without knowledge of German to study the culture (literature, film, visual arts) of Germany 3. allows students to study the increasingly multicultural, historical nature of Germany. 4. constitutes the first step toward building a minor in German 6. contributes to cultural studies through a cross-listing

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Critical Studies **Faculty Approval Date:** 2008 12 03 **Effective Session:** 2009W	**Date:** Feb. 29, 2008 **Contact Person:** Alwyn Spies **Phone:** 250-807-8126 **Email:** alwyn.spies@ubc.ca
Proposed Calendar Entry: **JPST 420 (3) Japanese Video Game Studies** **Gaming theory and research methodologies in a Japanese context. Taught in English. Credit will not be granted for both JPST 420 and CULT 420.** ***Prerequisite*: JPST 201 and JPST 215/CULT 235.** ***Equivalency*: CULT 420 [3-0-1]** **CULT 420 (3) Japanese Video Game Studies** **Gaming theory and research methodologies in a Japanese context. Taught in English. Credit will not be granted for both CULT 420 and JPST 420.** ***Prerequisite*: JPST 201 and CULT 235.** ***Equivalency*: JPST 420 [3-0-1]**	**URL:** N/A **Present Calendar Entry:** **Type of Action:** New course and cross-listing. **Rationale:** Expanding upper-level Japanese cultural studies courses offered in English. This course will contribute to the media stream of the CULT major and JPST courses.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Critical Studies **Faculty Approval Date:** 2008 10 14 **Effective Session:** 2009W	**Date:** February 17, 2008 **Contact Person:** Bernard Schulz-Cruz **Phone:** 250-807-9379 **Email:** bernard.schulz-cruz@ubc.ca
Proposed Calendar Entry: **SPAN 251 (3) Upper-Intermediate Spanish I** **Intensive grammar through an introduction to the cultures and literatures of Spain and Spanish America. Credit will not be granted for both SPAN 251 and SPAN 201 or SPAN 231. [3-0-0]** ***Prerequisite:*** **Either (a) Spanish 12 or (b) a score of 70% or higher in SPAN 102.**	**URL:** N/A **Present Calendar Entry:** **Type of Action:** New course**.** **Rationale:** This course replaces SPAN 231: 1. To systematize Spanish grammar. 2. To expand on cultural topics. 3. To raise prerequisite score from 65% to 70 % in Span 102 to ensure students meet the proficiency levels required in the course.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Critical Studies **Faculty Approval Date:** 2008 10 14 **Effective Session:** 2009W	**Date:** February 15, 2008 **Contact Person:** Bernard Schulz-Cruz **Phone:** 250-807-9379 **Email:** bernard.schulz-cruz@ubc.ca
Proposed Calendar Entry: **SPAN 252 (3) Upper-Intermediate Spanish II** **A continuation of SPAN 251. Credit will not be granted for both SPAN 252 and SPAN 202 or SPAN 241. [3-0-0]** ***Prerequisite:*** **Either (a) a score of 70% or higher in SPAN 201 or (b) SPAN 251.**	**URL:** N/A **Present Calendar Entry:** **Type of Action:** New course. **Rationale:** This course replaces SPAN 241. 1. To systematize Spanish grammar. 2. To introduce students to Spanish and Spanish American literature. 3. To raise prerequisite score from 65% to 70 % in SPAN 201 to ensure students meet the proficiency levels required in the course.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Critical Studies **Faculty Approval Date:** 2008 10 14 **Effective Session:** 2009W	**Date:** February 17, 2008 **Contact Person:** Bernard Schulz-Cruz **Phone:** 250-807-9379 **Email:** bernard.schulz-cruz@ubc.ca
Proposed Calendar Entry: **SPAN 280 (3/6) d Topics in Hispanic Cinema** **Key issues in Spanish and Latin American cinema. In English. Movies will be subtitled. Available for credit towards a Major or Minor in Spanish with departmental permission. [3-0-0]**	**URL:** N/A **Present Calendar Entry:** **Type of Action:** New course **Rationale:** To expand accessibility to Spanish cinema studies in the context of global citizenship. This course will be available in English. This course examines key issues in Spanish and Latin American cinema, including the construction of gender and sexuality, questions of race and ethnicity, the representation of border issues, migration, urban life, and youth culture. Focuses on films within the cultural and social contexts of their production, and in the light of current theories of film. Shows how these films stand in strong contrast to the traditional and often stereotypical images of Latin America and Spain fabricated by Hollywood.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Creative Studies **Faculty Approval Date:** 2008 11 04 **Effective Session:** 2009W	**Date:** October 10, 2008 **Contact Person:** Denise Kenney **Phone:** 250-807-9632 **Email:** denise.kenney@ubc.ca
Proposed Calendar Entry: **THTR 103 (3) Acting for Stage and Screen** **An introduction to acting techniques pertaining to the style of psychological realism for stage and screen. [2-3-0]**	**URL:** N/A **Present Calendar Entry:** **Type of Action:** New course. **Rationale:** To create a new introductory acting course to complement our existing program and to familiarize students with the style of psychological realism and its application to stage and screen performance.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Creative Studies **Faculty Approval Date:** 2008 12 03 **Effective Session:** 2009W	**Date:** November 26, 2008 **Contact Person:** Denise Kenney **Phone:** 250-807-9349 **Email:** denise.kenney@ubc.ca
Proposed Calendar Entry: **THTR 280 (3/6) d Devised Public Performance.** **An intensive laboratory course in performance creation leading to a public presentation. Compulsory rehearsals will be scheduled outside of class time. [2-3-0]** ***Corequisite:*** **THTR 101**	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** New course. **Rationale:** • THTR 280 has been introduced in the first and second year of the program to provide students with the opportunity to put into practice the skills they are learning in their studio courses. We also wanted to introduce, earlier in the process the relationship between the work being explored and the community within which it is being created. • The THTR 280 courses also prepare students for production required in the third and fourth years of the program and to familiarize them with the technical infrastructure currently on campus. Students take this 3 credit course once in the first year and once in the second year. • Because this is a BFA program, students are expecting to be trained

	as performers, and as such, more actual physical training opportunities are desired. This is more difficult to provide in a program that is training in all 3 disciplines in the first two years. Currently their only studio courses in the first two years of the program are the 101/201 and 102/202 streams. The THTR 280 course augments the students' practical studio experience. • To accommodate these two courses, two sections of THTR 480 have been removed from the third and fourth year load (essentially a more advanced version of the same course). In this way, students take a production course each year of their program and in their 4th year, THTR 482/483 satisfies this option.

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UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department/Unit:** Critical Studies **Faculty Approval Date:** Nov. 4th, 2008 **Effective Session:** 2009W	**Date:** September 9, 2008 **Contact Person:** Daniel Keyes **Phone:** 250-807-9320 **Email:** daniel.keyes@ubc.ca
Proposed Calendar Entry: THTR 411 (3) Performance Studies **S**eminar **in** the interdisciplinary field of performance studies, broadly conceived as the investigation of aesthetic, ritual, and everyday life performance practices. **Credit will not be granted for both THTR 411 and CULT 480**. [3-0-0] *Prerequisite:* Third-year standing. ***Equivalency :* CULT 480** **CULT 480 (3) Performance Studies** **Seminar in the interdisciplinary field of performance studies, broadly conceived as the investigation of aesthetic, ritual, and everyday life performance practices.** **Credit will not be granted for both CULT 480 and THTR 411. [3-0-0]** ***Prerequisite*: Third-year standing.** ***Equivalency :* THTR 411**	**URL:** N/A **Present Calendar Entry:** THTR 411 (3) Performance Studies ~~**This s**~~eminar ~~**familiarizes students with**~~ the interdisciplinary field of performance studies, broadly conceived as the investigation of aesthetic, ritual, and everyday life performance practices. [3-0-0] *Prerequisite:* Third-year standing. **Type of Action:** Cross-list new course THTR 411 as CULT 480 and add a credit restriction. **Rationale:** This course is a logical fit within the CULT program media stream. It will contribute to the theory stream of the major. The credit restriction reflects the cross-listing of the course with CULT 480.

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UBC Okanagan Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Creative and Critical Studies **Department:** Creative Studies **Faculty Approval Date:** Dec 3, 2008 **Effective Session:** 2009W	**Date:** November 24, 2008 **Contact Person:** Denise Kenney **Phone:** 250-807-9632 **Email:** denise.kenney@ubc.ca
Proposed Calendar Entry: Major in Interdisciplinary Performance First Year: • CCS 100, CCS 101 (Creative and Critical Forum I and II) 6 credits • CRWR 116 (Introduction to Creative Writing I) 3 credits • CRWR 126 (Introduction to Creative Writing II) 3 credits • 6 credits from ENGL 112, 113, 114, 150, 151, 153 • THTR 101 (Acting I: Improvisation – The Body in Performance) 3 credits • THTR 102 (The Actor's Process I) 3 credits • THTR 111 (Introduction to Theatre and World Performance Traditions) 3 credits • **THTR 280 (Devised Public Performance) 3 credits[1]** • VISA 102, VISA 103 (Drawing and Two-Dimensional Art Practices I and II) or VISA 104, VISA 105 (Three-Dimensional and New Media Practices I and II) 6 credits **Second Year:** • CRWR **200-level** electives 6 credits • FILM 100 (Introduction to Film Studies) 3 credits **or THTR 103**	**URL:** http://okanagan.students.ubc.ca/calendar/index.cfm?tree=18,283,833,973 **Present Calendar Entry:** Major in Interdisciplinary Performance First Year: • CCS 100, CCS 101 (Creative and Critical Forum I and II) 6 credits • CRWR 116 (Introduction to Creative Writing I) 3 credits • CRWR 126 (Introduction to Creative Writing II) 3 credits • 6 credits from ENGL 112, 113, 114, 150, 151, 153 • THTR 101 (Acting I: Improvisation – The Body in Performance) 3 credits • THTR 102 (The Actor's Process I) 3 credits • THTR 111 (Introduction to Theatre and World Performance Traditions) 3 credits • VISA 102, VISA 103 (Drawing and Two-Dimensional Art Practices I and II) or VISA 104, VISA 105 (Three-Dimensional and New Media Practices I and II) 6 credits • ~~**Electives 3 credits.**~~ **Second Year:** • CRWR electives 6 credits • FILM 100 (Introduction to Film Studies) 3 credits

(Acting for Stage and Screen) 3 credits • THTR 201 (Acting II: Actor/Creator Resources) 3 credits • THTR 202 (The Actor's Process II) 3 credits • THTR 211 (Performance, Embodiment, and Creativity) or DRAM 200 (Drama: Forms and Ideas I) 3 credits • **THTR 280 (Devised Public Performance) 3 credits[1]** • VISA **200-level** electives 6 credits • Electives 6 credits **Third and Fourth Years:** • ARTH 350 (Contemporary Art Theory and Practice) 6 credits • 12 credits of 300 level CRWR or VISA electives • THTR 301 (Acting III: Performance Styles) 3 credits • THTR 401 (Live Art/New Media) 3 credits • THTR 411 (Performance Studies) 3 credits • THTR 480 (Special Topics in Performance Creation) • THTR 482, THTR 483 (Advanced Performance Practices I and II) 12 credits • Electives (may include up to 6 credits in THTR 485 Directed Studies) **15** credits **[1]Students must complete THTR 280 twice, once in first year and once in second year.**	• THTR 201 (Acting II: Actor/Creator Resources) 3 credits • THTR 202 (The Actor's Process II) 3 credits • THTR 211 (Performance, Embodiment, and Creativity) or DRAM 200 (Drama: Forms and Ideas I) 3 credits • VISA electives 6 credits • Electives 6 credits **Third and Fourth Years:** • ARTH 350 (Contemporary Art Theory and Practice) 6 credits • 12 credits of CRWR or VISA electives • THTR 301 (Acting III: Performance Styles) 3 credits • THTR 401 (Live Art/New Media) 3 credits • THTR 411 (Performance Studies) 3 credits • THTR 480 (Special Topics in Performance Creation) ~~**Students must take this course 3 times for a total of 9 credits**~~ • THTR 482, THTR 483 (Advanced Performance Practices I and II) 12 credits • Electives (may include up to 6 credits in THTR 485 Directed Studies) ~~**12**~~ credits **Type of Action:** To make several small changes to the Interdisciplinary Performance Program. **Rationale:** • THTR 280 has been introduced in the first and second year of the program to provide students with the opportunity to put into practice the skills they are learning in their studio courses. We also wanted to

	introduce, earlier in the process the relationship between the work being explored and the community within which it is being created. • The THTR 280 courses also prepare students for production required in the third and fourth years of the program. Students take this 3 credit course once in the first year and once in the second year. • Because this is a BFA program, students are expecting to be trained as performers, and as such, more actual physical training opportunities are desired. This is more difficult to provide in a program that is training in all 3 disciplines in the first two years. Currently their only studio courses in the first two years of the program are the 101/201 and 102/202 streams. The THTR 280 course augments the students' practical studio experience. • In order for THTR 280 not to add an extra course to the first year load, the elective option has been dropped for this year. • To accommodate these two courses, two sections of THTR 480 have been removed from the third and fourth year load (essentially a more advanced version of the same course). In this way, students take a production course each year of their program and in their 4th year, THTR 482/483 satisfies this option. • THTR 103 has been added as an OPTION for our students (either this or Film 100) so that students have the opportunity to become familiar with mainstream training systems in practice in North American stage, film and television. Although our program is not designed to train students

	specifically for this practice, exposure to it enhances their training and creates awareness of their orientation within contemporary performance practice. • Because of staffing concerns, this course has been added as an option to Film 100 so that the instructor who would be teaching this course (Denise Kenney) can make this available when possible. In this way students can fulfill their degree requirements with either course.