## **Engineering Common Core** Courses (ECOR)

Faculty of Engineering

#### ECOR 1010 [0.5 credit] Introduction to Engineering

Professionalism: engineering ethics; health and safety; environment and sustainability. Graphical design communication: sketching, orthographic and axonometric projection; CAD. Managing measurement data: statistical methods; spreadsheets. Design analysis: matrix programming software; symbolic computer algebra systems. Design process: proposals; reports; presentations; reporting software.

Precludes additional credit for ECOR 1000.

Lectures three hours per week, laboratories two hours per week.

ECOR 1101 [0.5 credit] (formerly 91.111\*) Mechanics I

Introduction to mechanics. Scalars and vectors. Concurrent forces: resultant and components. Statics of particles. Moments and couples. Force system resultants. Rigid body equilibrium. Frames and machines. Internal forces. Kinematics and kinetics of particles. Conservation theorems: work-energy; impulse-momentum. Centroids and centres of gravity.

Lectures three hours a week, tutorials and problem analysis three hours a week.

ECOR 1606 [0.5 credit] (formerly 91.166\*)

#### **Problem Solving and Computers**

Introduction to engineering problem solving. Defining and modeling problems, designing algorithmic solutions, converting algorithms to C++ programs, testing, debugging. Program style, documentation, reliability. Numeric methods: representation of data, rounding and truncation errors, root finding, curve fitting.

Precludes additional credit for SYSC 1100 and SYSC 1102. Lectures three hours a week, laboratory one hour a week.

ECOR 2606 [0.5 credit] (formerly 91.266\*) Numerical Methods

Numerical algorithms and tools for engineering and problem solving. Sources of error and error propagation, solution of systems of linear equations, curve fitting, polynomial interpolation and splines, numerical differentiation and integration, root finding, solution of differential equations. Software tools.

Precludes additional credit for SYSC 2606.

Prerequisites: MATH 1005 and ECOR 1606.

Lectures three hours a week, laboratory one hour a week.

#### ECOR 3800 [0.5 credit] (formerly 91.380\*)

#### **Engineering Economics**

Introduction to engineering economics; cash flow calculations; methods of comparison of alternatives; structural analysis; replacement analysis; public projects; depreciation and income tax; effects of in ation; sensitivity analysis; break-even analysis; decision making under risk and uncertainty.

Prerequisite: third-year registration.

Lectures three hours a week.

#### ECOR 4000 [1.0 credit] (formerly 91.400) Industrial Experience Report

Students participating in the Industrial Experience Program must submit a formal report upon returning. This report should describe the organization in which the internship took place, the role of the student, the experience obtained and an appraisal of the effectiveness of the training received. ECOR 4000 is a course with a 0.0 credit value and carries no weight. Grades for the course are Sat (satisfactory) or Uns (unsatisfactory). This course is extra to the degree requirements.

# English (ENGL)

Department of English Language and Literature Faculty of Arts and Social Sciences

#### ENGL 1000 [1.0 credit] (formerly 18.100) Survey of English Literature

A study of significant works of English literature from the fourteenth to the twentieth centuries, presented as a general historical survey.

Precludes additional credit for FYSM 1004. Lectures three hours a week.

#### ENGL 1001 [1.0 credit] (formerly 18.101) **English and Continental Texts**

A study of works by English and continental writers. The list of authors to be read usually includes Dante, Boccaccio, Chaucer, Shakespeare, Byron, Flaubert, Tolstoy, Ibsen, and O'Casey. Consult the instructor or the Department for complete reading lists. The continental texts are read in translation.

Lectures three hours a week.

#### ENGL 1005 [1.0 credit] (formerly 18.105) Writing and Language

#### An introduction to the principles, styles, and structures of effective writing, including essay writing. Precludes additional credit for FYSM 1005.

Lectures and workshop three hours a week.

#### ENGL 1602 [1.0 credit] (formerly 18.162) 20th-Century Literature

An introduction to literary study, examining the poetry, drama, and fiction of the twentieth century, against the background of the social, cultural, and artistic issues that have determined the concerns of its writers. This course or FYSM 1006 is recommended for English Honours and General students.

Precludes additional credit for FYSM 1006. Lectures three hours a week.

#### ENGL 2000 [0.5 credit] (formerly 18.200\*) **Theatre Workshop I**

A course dealing with the rudiments of theatrical performance: voice, movement, improvisation, interpretation. Exercises are based upon examples drawn from the classic and contemporary repertoires.

Note: Enrolment is restricted. See Restricted-Enrolment Workshops.

Prerequisite: a 1000-level credit in English, or second-year standing.

ENGL 2001 [0.5 credit] (formerly 18.201\*)

#### Theatre Workshop II

A course dealing with techniques of characterization, principles of ensemble performance, scene analysis for actors and directors, styles of performance. Exercises are based upon examples from the classic and contemporary repertoires.

Note: Enrolment is restricted. See Restricted-Enrolment Workshops.

Prerequisite: ENGL 2000, or permission of the Department.

ENGL 2003 [1.0 credit] (formerly 18.203)

#### Introduction to the Novel

A historical and critical study of the novel from its beginnings in the eighteenth century to the present. Twelve to fifteen novels are studied.

Precludes additional credit for ENGL 3003.

Prerequisite: a 1000-level credit in English, or second-year standing.

Lectures three hours a week.

### ENGL 2006 [1.0 credit] (formerly 18.206)

Children's Literature

A historical and critical study of children's literature. The course introduces students to critical analysis and