Special topics for Biosystems Modeling 3: Advanced Models

Time: Fall 2017 (Module 3)

Description

Based on the need of Dalhousie graduate students who are willing to use modeling approach for their own research related to biosystems, three modules on special topics of modeling are designed in focusing mainly on the conception and resolution of mathematical models applied to biosystems. In this module 3, learners will deal with the advanced models and they could concretize their research by model(s).

Prerequisites

Modules 1 and 2; MATH 2000 or MATH2001.

Delivery: Each module will comprise of 4 weeks of 5 hour lectures/labs.

Evaluation: Assessment of this module will be in the form of weekly assignments (20%) and a final project to be submitted at the end of module (80%).

Instructors:
Dr. Tri Nguyen Quang
Department of Engineering, DAC
Banting 35 – 902 893 6711 6711
tri.nguyen-quang@dal.ca

Dr. Uday Venkatadri
Faculty of Engineering, Tel: 902 494 3987, uday.venkatadri@dal.ca

Content of the Module 3

Topic 11: Discretization and numerical simulation approach

Topic 12: Meta-heuristics for optimization

Topic 13: Model for social aspects

Topic 14: Invited Seminars for various modeling projects

Topic 15: Concretization of your research by a model.