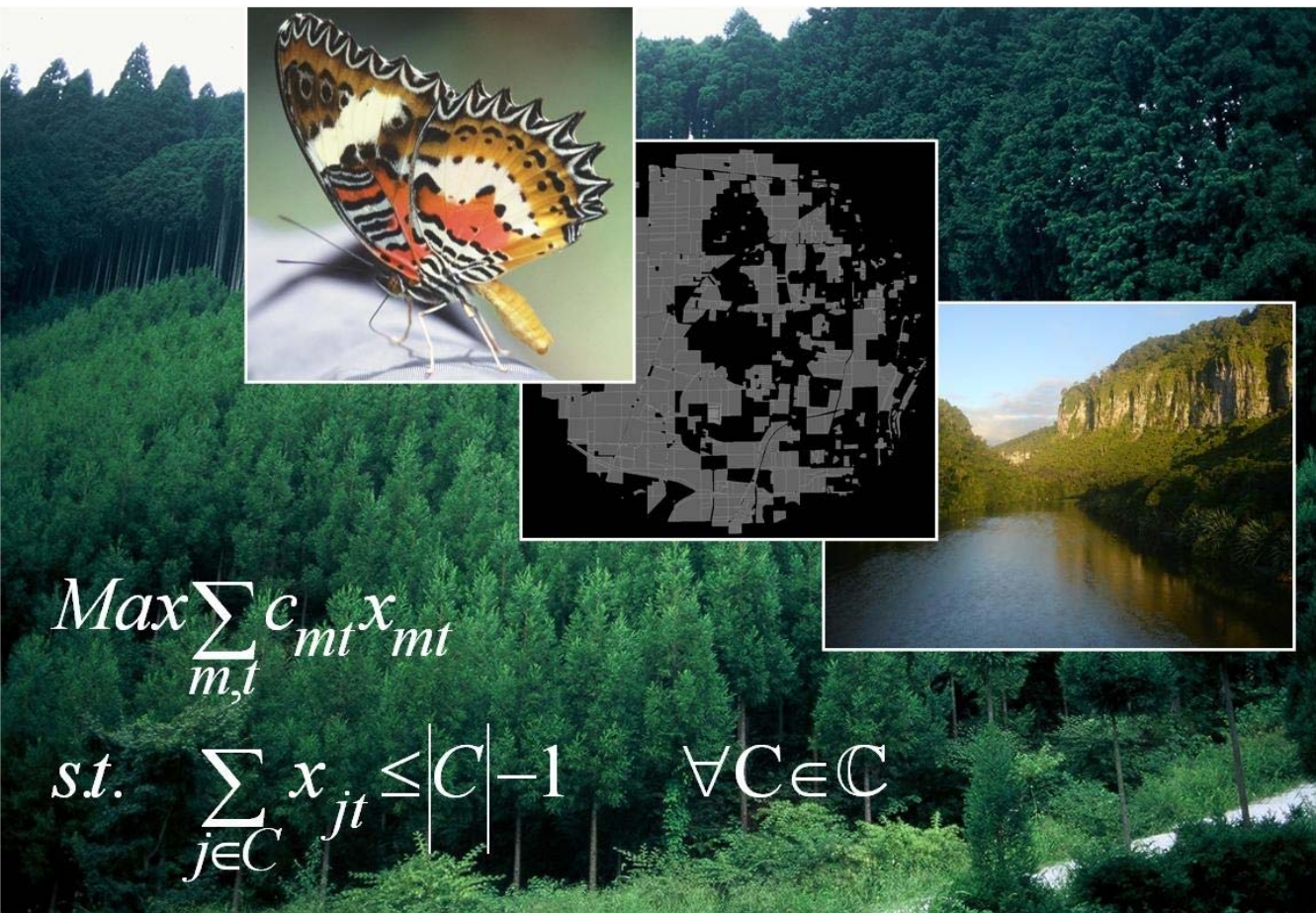


SPRING 2017

## Course Summary:

This 5-credit problem-oriented course will introduce analytical decision tools that can aid natural resource management. We will focus on spatial optimization problems in conservation, ecosystem management, landscape-level forest planning, conflict resolution and invasive species management. The following mathematical techniques will be covered: linear-, integer- and multi-objective programming, stochastic and combinatorial optimization and Markovian decision processes. The emphasis will be on model building rather than on algorithmic concepts. Solid background in linear algebra is required for this course.


$$\begin{aligned} & \text{Max} \sum_{m,t} c_{mt} x_{mt} \\ \text{s.t.} \quad & \sum_{j \in C} x_{jt} \leq |C| - 1 \quad \forall C \in \mathcal{C} \end{aligned}$$

**Instructor:** Sándor F. Tóth

**Lectures:** 4:30-5:50pm MW in WFS 107; **Labs:** 1:30-2:50pm Th in BLD 261

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**Course:** <http://faculty.washington.edu/toths/course/shtml>

**TA:** Celine Pastore; **E-mail:** [cpastore@uw.edu](mailto:cpastore@uw.edu)

**TA Office Hours:** 3:15 - 5:15pm W, 9 - 11am Th in Bloedel Hall 360