



MACKENZIE PRESBYTERIAN UNIVERSITY
Social and Applied Sciences Centre
Graduate Program in Business Management

TEACHING PLAN

Graduate Program: Business Management		
Course: <input checked="" type="checkbox"/> Academic Master's <input type="checkbox"/> Professional Master's <input checked="" type="checkbox"/> Doctorate		
Discipline: Fundamentals of Multicriteria Decision Analysis		Discipline code: ENST54796
Professor: Fellipe Silva Martins		DRT: 1168235
Workload: 48h	Credits: 4	<input type="checkbox"/> Mandatory <input checked="" type="checkbox"/> Elective
Syllabus: Multicriteria Decision Analysis (MCDA) methods assist in complex decision-making by evaluating alternatives with multiple conflicting criteria. They involve defining the problem, identifying relevant criteria, assigning weights to criteria, and ranking alternatives based on their performance. MCDA is widely used in various fields to support rational and transparent decision-making. Common MCDA techniques include AHP, ANP, TOPSIS, and ELECTRE, among others, offering valuable tools for addressing multifaceted decision problems. MCDA methods are widely applied in various fields, including business, environmental management, healthcare, and public policy, to support rational and transparent decision-making in complex situations where trade-offs are inherent. These methods provide valuable tools for tackling decision problems with multiple dimensions and can assist in achieving more robust and informed outcomes.		
Course objectives <ul style="list-style-type: none">• Providing students with theoretical and methodological tools to understand the basics of structured decision-making processes;• Providing inductive reasoning instead of mathematical foundations, whenever possible, to make it easier for management / business students;• Introducing students to the theory of decision-making and their applications in the management / business scenarios;• Presenting easy-to-use starter tools to model MCDA decision-making processes to both research projects and industry applications.		
Learning objectives On successful completion of this course, students are expected to show basic understanding of the fundamental theories of structured decision-making and conduct their own short-term research project using an MCDA method as a main conduit for the final results.		
Assessment Criteria: <ul style="list-style-type: none">• 60% paper development• 20% case study analysis / presentation• 20% class participation		



Bibliography:

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Köksalan, M. M., Wallenius, J., & Zionts, S. (2011). *Multiple criteria decision making: from early history to the 21st century*. World Scientific.

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