Systems thinking and concept mapping

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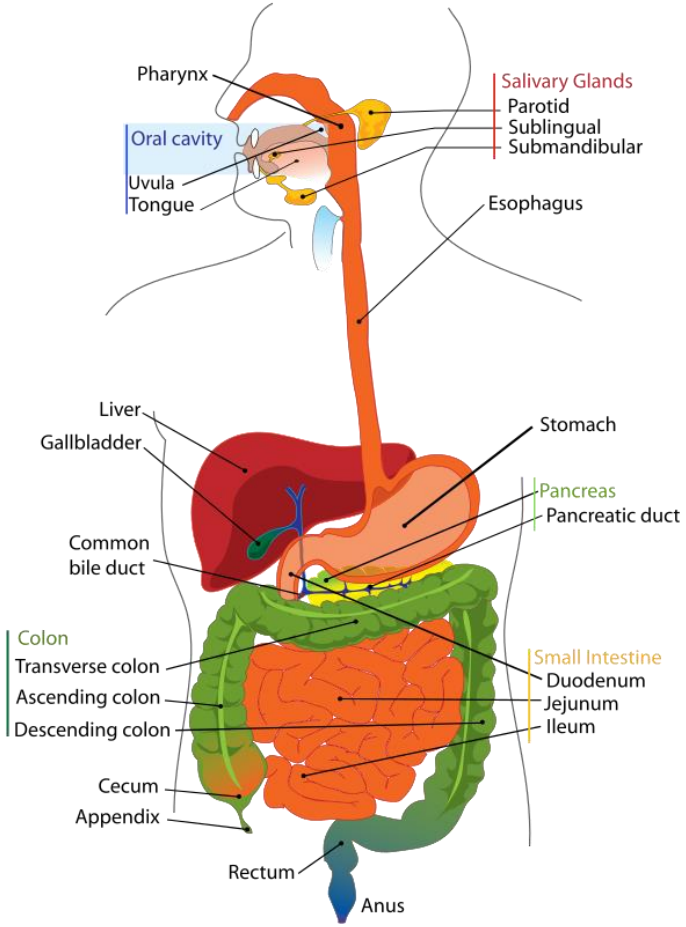
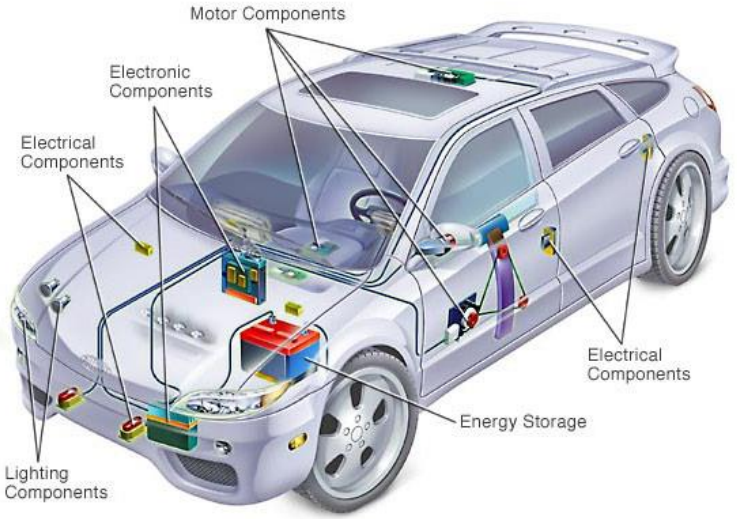
April 26, 2018

What is a system?

Set of interconnected parts that make up a **complex** whole





What is systems thinking?

A challenge/issue is a **response** to an underlying and connected web of factors

- Helps us to frame issues/challenges
- Identify potential solutions that account for complexity
- Anticipate unintended consequences or ripple effects

Visualizing systems

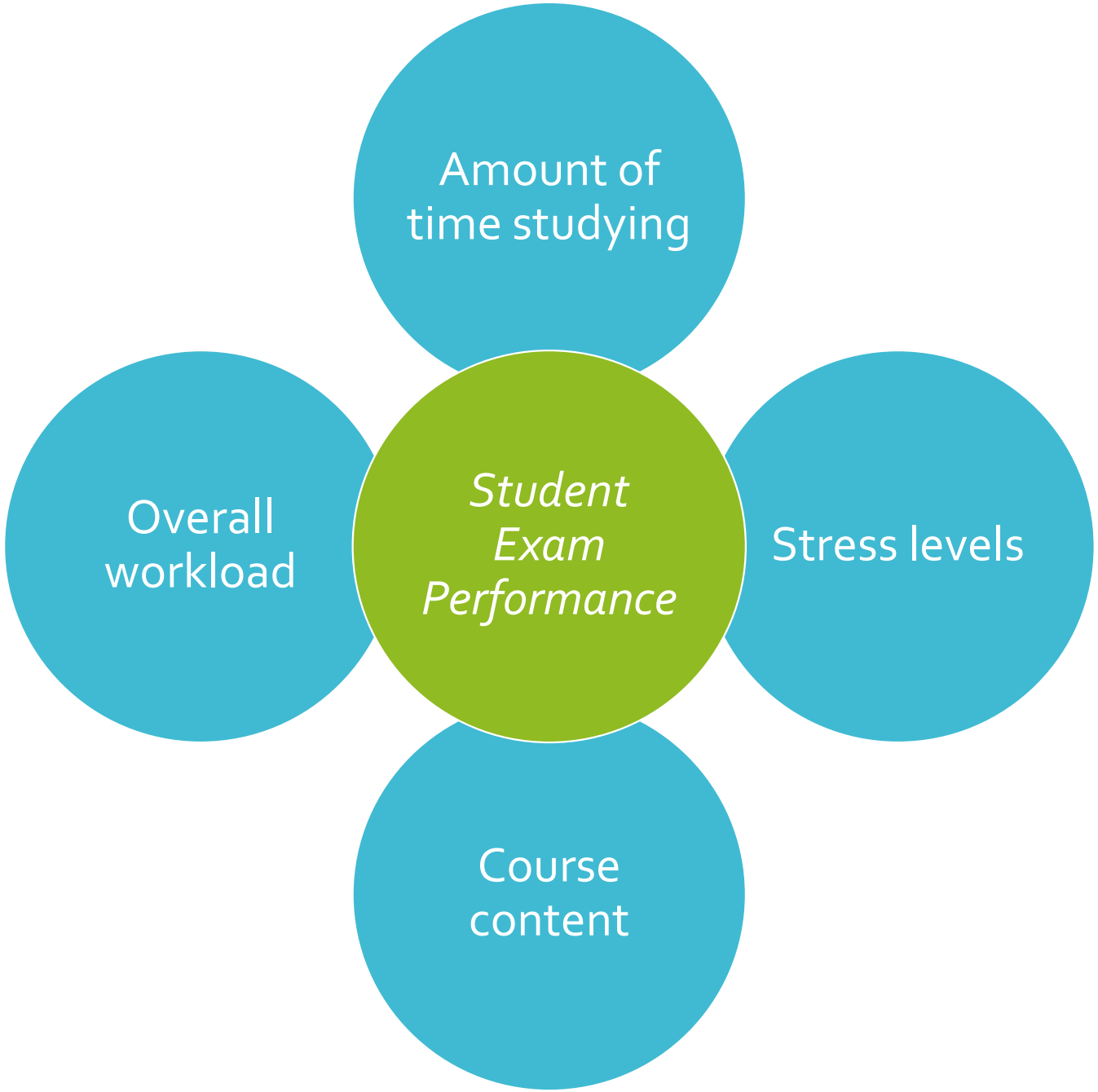
Concept maps

- Qualitative tools to map out ideas and their relationships to each other

- Used as a systems thinking method
  - Visualize and organize ideas
  - Identify leverage points, synergies, and gaps
  - Keeps language consistent in teams

Key Terms and Concepts

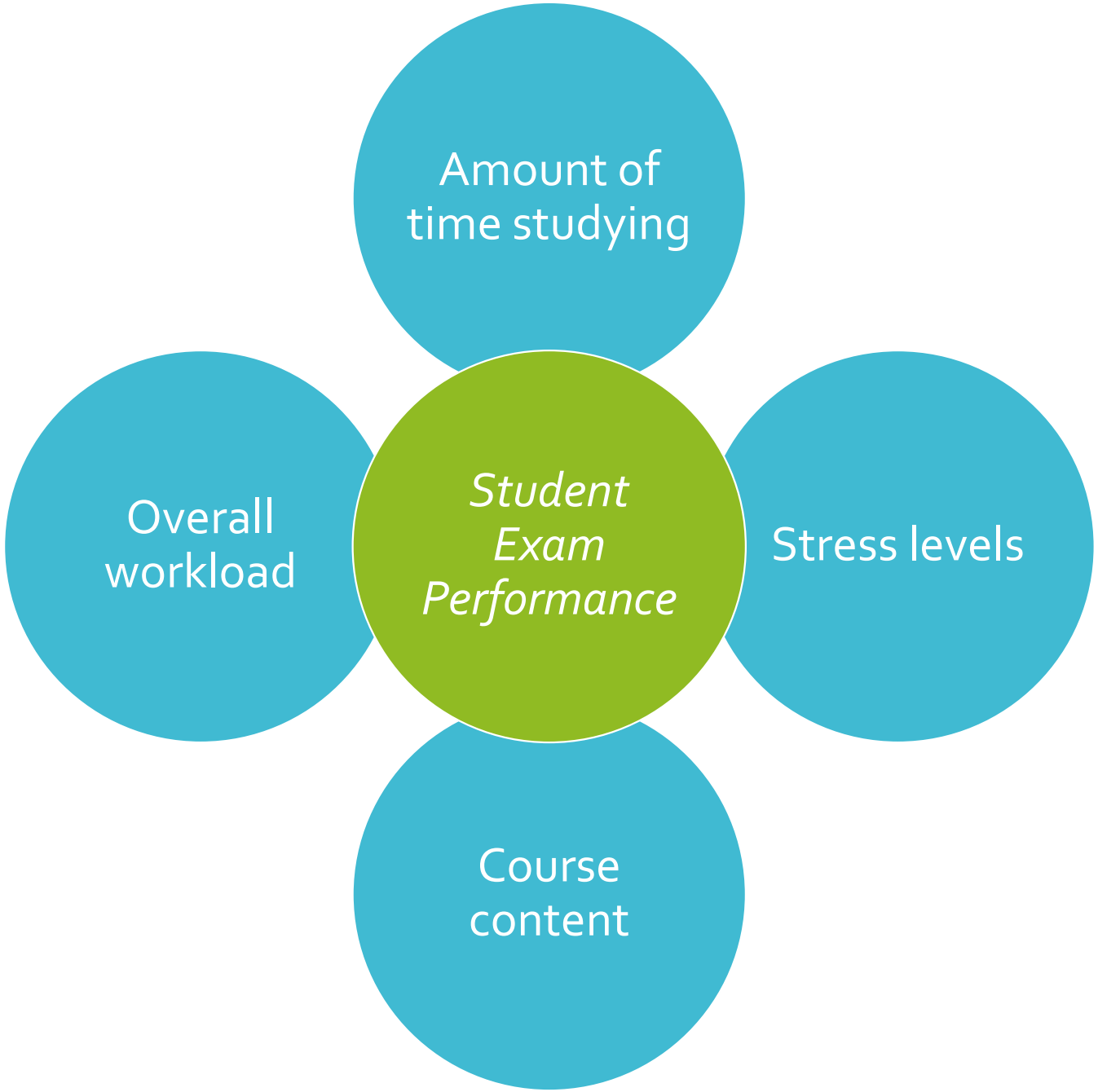
- Drivers – interconnected factors that influence, or *drive*, a problem and the affected parties


Amount of time studying
Overall workload
Student Exam Performance
Stress levels
Course content

Key Terms and Concepts

- Drivers – interconnected factors that influence, or *drive*, a problem and the affected parties

- Actors – parties held within a system, who are *influenced by* the drivers

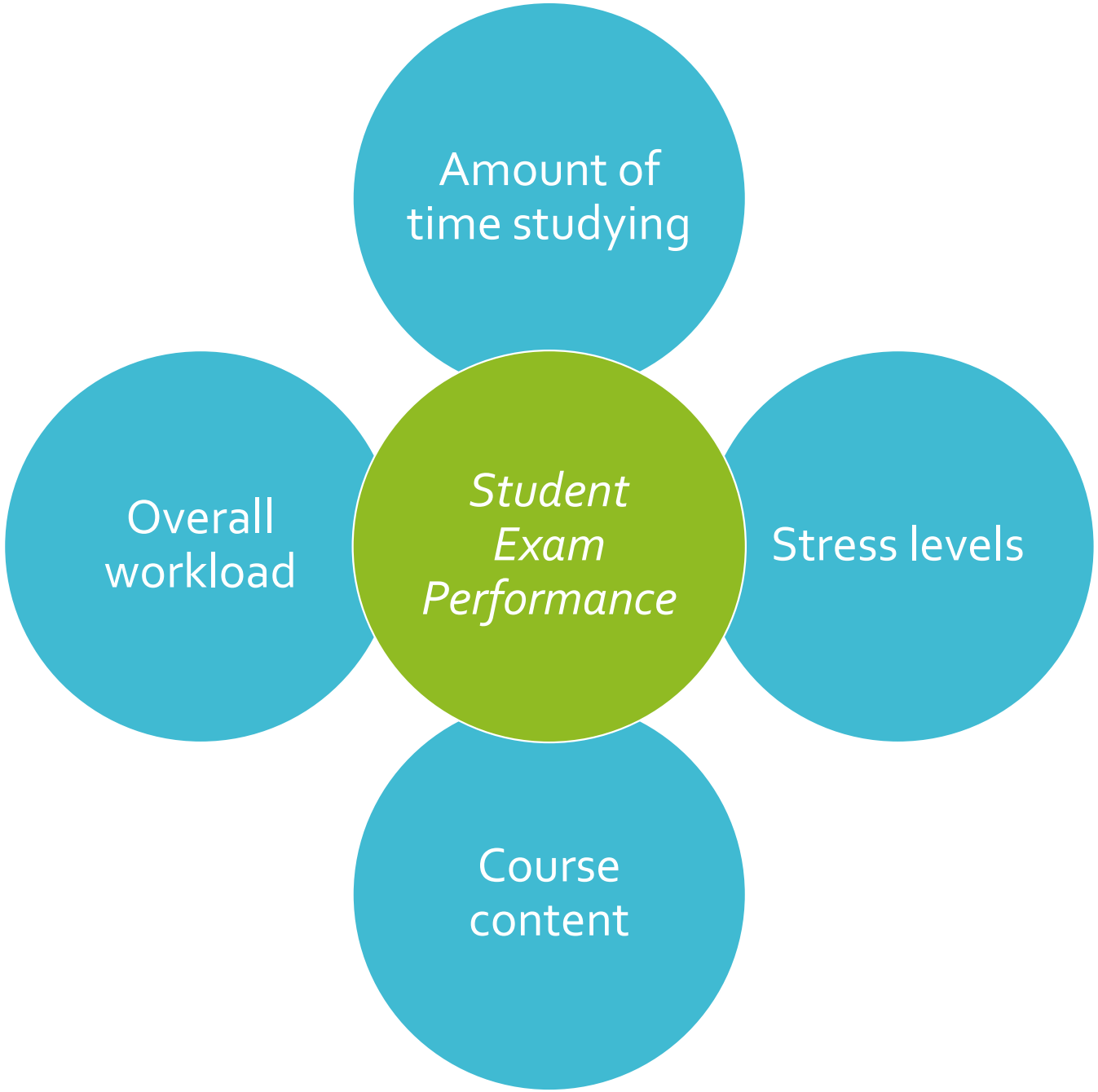


Actors

- Students
- Class peers
- Instructor
- Teaching assistants

Key Terms and Concepts

- Drivers – interconnected factors that influence, or *drive*, a problem and the affected parties
- Actors – parties held within a system, who are *influenced by* the drivers
- Stakeholders – parties with *influence over* the drivers, have specific goals in their interest



Actors
- Students
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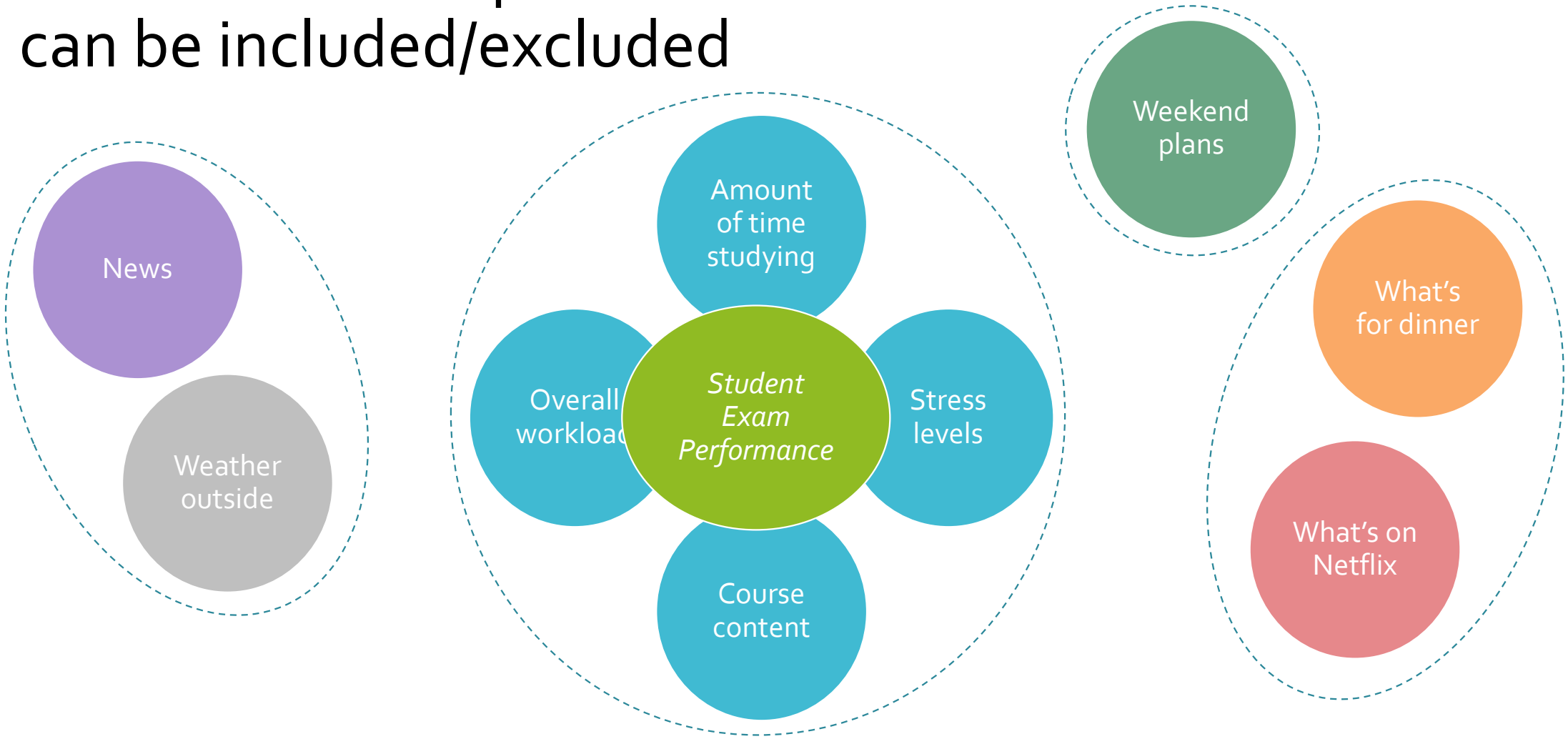
- Instructor
- Teaching assistants

Stakeholders
- Faculty Dean
- University President

Key Terms and Concepts

- Boundaries – maps have set limitations about what can be included/excluded



Key Terms and Concepts

- Leverage points – places within a system where change can occur and impact other parts of the system

Concept mapping steps

1. Preparation
2. Generation of statements
3. Structuring of statements
4. Representation of statements
5. Interpretation of maps
6. Utilization of maps

Activity

1. Find a group of 6!

2. What influences the food system at UW?
    1. Drivers
    2. Actors
    3. Stakeholders

3. Map your notes on the flipchart.

Activity

1. Who/what influences food demand?
2. Who/what influences food availability?
3. How is food consumed on campus?
4. What are food security issues for the campus community?
5. How is campus waste influenced by food availability?
6. What roles does food play on campus?
7. How (or how might) the campus food system relate to other university functions, e.g. teaching, research, student life, local community relations? This could be broken up to focus on specific university functions, i.e.
8. "How (or how might) the campus food system relate to teaching?"
9. "How (or how might) the campus food system relate to research?"
10. "How (or how might) the campus food system relate to student life?"
11. "How (or how might) the campus food system relate to local community relations?"