Topic area. Plant-herbivore interactions, with special reference to evolutionary processes

Question.
Your task is to develop and justify the intellectual content for a graduate short course on: Plant-herbivore interactions, with special reference to evolutionary processes. The target audience is your peers (EEB grad students at Dartmouth or a similarly stellar program). The course structure will be six two-hour meetings.

Part 1. Introduce your course content with a compelling one-page overview (~2 pp double-spaced) that will readily capture the interest of your target audience and can be used to recruit participants.

Part 2. Follow with the body of your course prospectus presented as six modules (matching the six meetings). For each module, identify and summarize with clear engaging prose and illustrative models the curriculum elements in terms of theory, data, critical tests, and historically important study systems. For each theory or model that will be highlighted, finish with a summary of its current status as viewed by workers in the field, and offer your own assessment of its future. Do not automatically reject theories or models that are now discounted but that have been important in maturation of the field. Provide context for each theory or model that will be highlighted by recognizing the theories with which it competes, has supplanted, or has been supplanted by. For each module cite the important papers and identify with asterisks the subset of papers that would be assigned readings to accompany each module. (Use your judgment regarding the length of response that is appropriate. Graphical and mathematical abstractions are encouraged.)

Part 3. Identify 3 or more theories, models, or bodies of work that might have appeared in such a curriculum but which you’ve left out. Briefly justify why. (1-2 paragraphs).
Choose your curriculum material to highlight the connections between plant-herbivore interactions and EEB in general. Wherever appropriate, emphasize the broader relevance
for EEB of theory, models, and data that came from studies of plant-herbivore interactions. Also note the reciprocal cases wherever appropriate: i.e., when our understanding of plant-herbivore interactions has gotten a boost from borrowing theory, models, or technology from fields outside of plant-herbivore interactions. Describe these connections within part 2 and refer to them in part 1.

Choose your curriculum material to highlight any notable practical applications of knowledge from studies of plant-herbivore interactions. Where appropriate, identify within part 2 of your response those theories and models that have practical value for human endeavors. If appropriate, refer to them in part 1.

**Part 4.** Is the field of plant-herbivore interactions a natural intellectual cluster of knowledge and understanding like, for example, ______fill-in-the-blank____? Or is this field more of a sociological construct like, for example, ______fill-in-the-blank____? (One or a few paragraphs)

**Part 5.** The broader goal is to have a one term course that would have three topic areas (one on “plant-herbivore interactions”), each with six two-hour meetings. Suggest and justify two other topic areas to complement “Plant-herbivore interactions”. Also suggest a title for the overall course (1-2 paragraphs)