## CS3349 - Competitive Learning in Computer Science

<u>CS 3349</u> Competitive Learning in Computer Science (3 semester credit hours) The course explores the following topics and their related problems: number theory, combinatorics, divide and conquer technique, dynamic programming technique, greedy algorithms, computational geometry, numerical methods, graph algorithms, network flows, and other advanced computing techniques. Students will use various algorithmic problem-solving platforms to quickly develop and implement working solutions for non-trivial computing problems. During the course, students will be required to participate in contests during the class. Prerequisites: ((CE 2336 or CS 2336 or CS 2337) with a grade of B or better and (CE 2305 or CS 2305) with a grade of B or better and (CE 3345 or CS 3345) with a grade of B or better) or instructor consent required. (3-0) Y