

University of Houston-Downtown

Course Prefix, Number, and Title: UHD 2302 University Seminar–Mathematics

Component Area Option/Foundational Component Area: Mathematics

Credits/Lecture/Lab Hours: 3/3/0

Prerequisites: ENG 1301; sophomore standing or departmental approval

Course Description: Within the context of the discipline and the special topic, these courses introduce students to higher-level critical thinking about key mathematical concepts and the application of appropriate quantitative tools to everyday experience. These special topics courses focus on quantitative literacy in logic, patterns, and relationships. Written and oral communication within the context of the topic's related discipline are emphasized. These courses also provide opportunities for transfer students to link to their intended majors early in their academic careers at UHD. Strategies for academic success are practiced within the context of the special topic and discipline.

Learning Outcomes: Students will be able to:

- Describe and communicate mathematical information verbally, numerically, graphically, and symbolically;
- Use appropriate mathematical techniques to model situations from a variety of settings, including real-world applications in generalized mathematical forms
- Interpret mathematical models, such as formulas, graphs, tables, and schematics, and draw inferences from them
- Discern relationships and patterns in quantitative data to arrive at informed conclusions
- Utilize appropriate technology to enhance mathematical thinking and understanding, to solve mathematical problems, and to judge the reasonableness of the results
- Research and define academic and career goals within the discipline and develop learning strategies to support academic success and attainment of academic and career goals