

Summary of Approved CCN Courses, Fall 2022

The following provides a summary of the CCN courses recommended to the HECC by Transfer Council for approval at the February 2023 Commission meeting. For more detailed information, see [CCN Reports & Memos](#) on the [Resources for CCN](#) webpage.

CCN Course/Course Information
<p>Communication</p> <p>Course Number and Prefix: COM or COMM 100Z Course Title: Introduction to Communication Course Credits: 4 Course Description: COMM 100Z is a survey course offering an overview of the communication discipline that emphasizes the development of best communication practices in different contexts. Learning Outcomes:</p> <ol style="list-style-type: none"> 1. Explain the ways communication is impacted by ethics, language, nonverbal behaviors, perception, culture, and contexts. 2. Identify communication theories, perspectives, principles, and concepts. 3. Explore different areas of communication to develop a broad base of skills and communicative tools when interacting with others. 4. Articulate the importance of communication expertise in career development and civic engagement.
<p>Course Number and Prefix: COM or COMM 111Z Course Title: Public Speaking Course Credits: 4 Course Description: COMM 111Z emphasizes developing communication skills by examining and demonstrating how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and presentations. Learning Outcomes:</p> <ol style="list-style-type: none"> 1. Develop messages for diverse audiences, purposes, and contexts. 2. Identify and utilize skills to manage communication apprehension. 3. Deliver and adapt speeches and/or presentations to live audiences. 4. Evaluate public speeches, including their own, by identifying aspects of preparation, credibility, logic, and delivery.
<p>Course Number and Prefix: COM or COMM 218Z Course Title: Interpersonal Communication Course Credits: 4 Course Description:</p>

COMM 218Z increases the knowledge and use of competent communication skills to better understand oneself, others, and the role of communication in interpersonal relationships.

Learning Outcomes:

1. Describe how culture, identity, perception, biases, and power influence the communication process.
2. Recognize and analyze interpersonal communication concepts (e.g., ethics, verbal and nonverbal communication, listening, emotions, and conflict).
3. Assess one's own interpersonal skills to become more competent in a variety of relational contexts.
4. Apply foundational concepts and theories to interpersonal communication.

Math

Course Number and Prefix: MTH or MATH 105Z

Course Title: Math in Society

Course Credits: 4

Course Description:

An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include quantitative reasoning and problem-solving strategies, probability and statistics, and financial mathematics; these topics are to be weighted approximately equally. This course emphasizes mathematical literacy and communication, relevant everyday applications, and the appropriate use of current technology.

Learning Outcomes:

At the end of this course, students will be able to:

1. Employ mathematical reasoning skills when reading complex problems requiring quantitative or symbolic analysis and demonstrate versatility in the consideration and selection of solution strategies.
2. Demonstrate proficiency in the use of mathematical symbols, techniques, and computation that contribute to the exploration of applications of mathematics.
3. Use appropriate mathematical structures and processes to make decisions and solve problems in the contexts of logical reasoning, probability, data, statistics, and financial mathematics.
4. Use appropriate representations and language to effectively communicate and interpret quantitative results and mathematical processes orally and in writing.
5. Demonstrate mathematical habits of mind by determining the reasonableness and implications of mathematical methods, solutions, and approximations in context.

Course Number and Prefix: MTH or MATH 111Z

Course Title: Precalculus I: Functions

Course Credits: 4

Course Description:

A course primarily designed for students preparing for trigonometry or calculus. This course focuses on functions and their properties, including polynomial, rational, exponential, logarithmic, piecewise-defined, and inverse functions. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology.

Learning Outcomes:

At the end of this course, students will be able to:

1. Explore the concept of a function numerically, symbolically, verbally, and graphically and identify properties of functions both with and without technology.
2. Analyze polynomial, rational, exponential, and logarithmic functions, as well as piecewise-defined functions, in both algebraic and graphical contexts, and solve equations involving these function types.
3. Demonstrate algebraic and graphical competence in the use and application of functions including notation, evaluation, domain/range, algebraic operations & composition, inverses, transformations, symmetry, rate of change, extrema, intercepts, asymptotes, and other behavior.
4. Use variables and functions to represent unknown quantities, create models, find solutions, and communicate an interpretation of the results.
5. Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.

Course Number and Prefix: MTH or MATH 112Z

Course Title: Precalculus II: Trigonometry

Course Credits: 4

Course Description:

A course primarily designed for students preparing for calculus and related disciplines. This course explores trigonometric functions and their applications as well as the language and measurement of angles, triangles, circles, and vectors. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology.

Learning Outcomes:

At the end of this course, students will be able to:

1. Translate among various systems of measure for angles including radians, degrees, and revolutions.
2. Represent, manipulate, and evaluate trigonometric expressions in terms of sides of a right triangle and in terms of the coordinates of a unit circle.
3. Graph, transform, and analyze trigonometric functions using amplitude, shifts, symmetry, and periodicity.
4. Manipulate trigonometric expressions and prove trigonometric identities.
5. Solve trigonometric equations using inverses, periodicity, and identities.
6. Define, represent, and operate with vectors both geometrically and algebraically.
7. Apply the law of sines and the law of cosines to determine lengths and angles.
8. Use variables, trigonometric functions, and vectors to represent quantities, create models, find solutions, and communicate an interpretation of the results.
9. Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.

Statistics

Course Number and Prefix: ST or STAT (or similar statistics prefix; not math) 243Z

Course Title: Elementary Statistics I

Course Credits: 4 credits

Course Description:

A first course in statistics focusing on the interpretation and communication of statistical concepts. Introduces exploratory data analysis, descriptive statistics, sampling methods and distributions, point and interval estimates, hypothesis tests for means and proportions, and elements of probability and correlation. Technology will be used when appropriate.

Learning Outcomes & Objectives:

Students will be able to:

1. Critically read, interpret, report, and communicate the results of a statistical study along with evaluating assumptions, potential for bias, scope, and limitations of statistical inference.
2. Produce and interpret summaries of numerical and categorical data as well as appropriate graphical and/or tabular representations.
3. Use the distribution of sample statistics to quantify uncertainty and apply the basic concepts of probability into statistical arguments.
4. Identify, conduct, and interpret appropriate parametric hypothesis tests.
5. Assess relationships in quantitative bivariate data.

Required Course Content:

In order to ensure alignment across institutions, faculty needed to develop a shared understanding of the skills and concepts that must be covered in this course. Each institution is responsible for ensuring that faculty have access to this outline to inform course content.

1. Critically read, interpret, report, and communicate the results of a statistical study along with evaluating assumptions, potential for bias, scope, and limitations of statistical inference.
 - a. Classify study designs and variable types and identify methods of summary and analysis.
2. Produce and interpret summaries of numerical and categorical data as well as appropriate graphical and/or tabular representations.
 - a. Identify patterns and striking deviations from patterns in data.
 - b. Identify associations between variables for bivariate data.
 - c. Apply technology to calculate statistical summaries and produce graphical representations.
3. Use the distribution of sample statistics to quantify uncertainty and apply the basic concepts of probability into statistical arguments.
 - a. Interpret point and interval estimates.
4. Identify, conduct, and interpret appropriate parametric hypothesis tests.
 - a. Identify the appropriate test based on variable type.
 - b. Identify situations where a one or two tailed test would be appropriate.
 - c. Conduct tests of one mean.
 - d. Conduct tests of one proportion.
 - e. Explain the distinction between statistical and practical significance and the potential for error in hypothesis test conclusions.
 - f. Apply technology to perform hypothesis tests calculations.
5. Assess relationships in quantitative bivariate data.

- a. Address questions relating correlation as a linear association between variables.
- b. Distinguish between correlation and causation within data.
- c. Apply technology to explore bivariate data.

Review Cycle Recommendation:

The Subcommittee will meet to review objectives for STAT 243 in Spring 2025.

- Implementation of changes to course content will not be in place until Fall 2023.
- Stakeholder feedback will be critical in evaluating how these changes have impacted the courses where STAT 243Z serves as a prerequisite. Such data will not be available until the year after initial implementation.
- Departments should contact these programs within their schools and search for feedback prior to review of topics in spring 2025 in order to adjust the course.
- Review of deferred topics will be addressed at the behest of Transfer Council at a later date

Writing

Course Number and Prefix: WR 121Z

Course Title: Composition I

Course Credits: 4

Course Description:

WR 121Z engages students in the study and practice of critical thinking, reading, and writing. The course focuses on analyzing and composing across varied rhetorical situations and in multiple genres. Students will apply key rhetorical concepts flexibly and collaboratively throughout their writing and inquiry processes.

Learning Outcomes:

1. Apply rhetorical concepts through analyzing and composing a variety of texts.
2. Engage texts critically, ethically, and strategically to support writing goals.
3. Develop flexible composing, revising, and editing strategies for a variety of purposes, audiences, writing situations, and genres.
4. Reflect on knowledge and skills developed in this course and their potential applications in other writing contexts.

Course Number and Prefix: WR 122Z

Course Title: Composition II

Course Credits: 4

Course Description:

WR 122Z builds on concepts and processes emphasized in WR 121Z, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own compositions.

Learning Outcomes:

1. Apply rhetorical concepts to achieve writing goals within a given discourse community
2. Locate, critically evaluate, synthesize, and integrate multiple perspectives from a variety of sources
3. Engage in research and writing as recursive and inquiry-based processes, participating in the communal and conversational nature of academic discourses

4. Develop strategies for generating, drafting, revising, and editing texts based on feedback and reflection
5. Reflect on knowledge and skills developed in this and other courses and potential transfer to future contexts

Course Number and Prefix: WR 227Z

Course Title: Technical Writing

Course Credits: 4

Course Description:

WR 227Z introduces students to producing instructive, informative, and persuasive technical/professional documents aimed at well-defined and achievable outcomes. The course focuses on presenting information using rhetorically appropriate style, design, vocabulary, structure, and visuals. Students can expect to gather, read, and analyze information and to learn a variety of strategies for producing accessible, usable, reader-centered deliverable documents that are clear, concise, and ethical.

Learning Outcomes:

1. Apply key rhetorical concepts through analyzing, designing, composing, and revising a variety of deliverable documents for technical/professional contexts
2. Engage in project-based research, applying appropriate methods of inquiry for clearly defined purposes (e.g., user experience research and client/organization research)
3. Collaborate with various stakeholders to develop and apply flexible and effective strategies for managing projects
4. Develop and adapt document design and composition strategies to meet the demands of diverse clients, organizations, and multicultural audiences
5. Examine and respond to individual and professional ethical responsibilities across organizational contexts