

2022 REPORT TO THE OREGON LEGISLATURE: ORS 350.423 and ORS 350.429 Common Course Numbering



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Offices of Community Colleges and Workforce Development and Academic Policy and
Authorization

Higher Education Coordinating Commission

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EXECUTIVE SUMMARY

Senate Bill (SB) 233 (2021) codified in Oregon Revised Statute (ORS) 350.423 to 350.429¹ directs the Higher Education Coordinating Commission (HECC) and public community colleges and universities listed in ORS 352.02 to improve academic credit transfer and transfer pathways between Oregon’s public community colleges and universities. The bill directs the HECC to establish a 15-member Transfer Council with representation from Oregon’s public universities, community colleges, and from secondary education. Part of the work assigned to Transfer Council is the development of recommendations on a common course numbering (CCN) system. Included in the legislation is a requirement that the Commission submit a report to the legislature by December 15 of each year, including an update on the progress the Transfer Council is “*making in enhancing and maintaining the [CCN] system*”. This report contains information on the following progress made during 2022:

- The work of faculty and systems and operations subcommittees the Transfer Council established for the purpose of assisting the Transfer Council in the development of CCN;
- A list of initial courses for the CCN system that will first apply during the 2023-2024 academic year, and a list of courses for 2023 alignment (to be applied during the 2024-2025 academic year);
- Lists of courses or subject areas the Transfer Council has identified as likely to be included in the future, based on the list of the 80 most transferred courses developed by registrars from both community colleges and public universities; and
- Lists of the courses or subject areas, which may include career and technical education studies, that the Transfer Council anticipates adding to the common course numbering system after the 2025- 2026 academic year.

This report also contains a summary of the work leading up to the development of ORS 350.423 to 350.429, and the progress the Transfer Council has made, including information on the mandated elements of the report. Finally, the report concludes with next steps on the CCN System work.

BACKGROUND

The Transfer Council was established in Senate Bill (SB) 233 and ORS 350.426 with a focus on transfer and articulation across the public institutions in Oregon. Building upon the transfer work previously completed under ORS 350.400 to ORS 350.412, the Transfer Council is charged with developing recommendations on a common course numbering (CCN) system, Major Transfer Map (MTM) work, and other credit transfer-related concerns. ORS 350.423 requires the HECC to establish, by rule, a CCN system and system of transfer and articulation, based on recommendations from the Transfer Council.

Efforts to streamline transfer in Oregon—including efforts to establish a CCN System – can be traced back to 1987 when HB 2913 mandated a CCN system. While these efforts resulted in a commonly numbered course list, a “system” was not developed and implemented. CCN was again addressed by the legislature with the passage of HB 2979 (2013), which tasked the Higher Education Coordinating Commission with convening a

¹ Oregon Revised Statute 350 - https://www.oregonlegislature.gov/bills_laws/ors/ors350.html

workgroup to study strategies for establishing and implementing a CCN System between public colleges and universities. This resulted in a report to the legislature.²

Aside from efforts to establish CCN, Oregon has also focused on streamlining transfer through a focus on transfer pathways. For example, Oregon has instituted several transfer degrees and tools over the last 20 years, including the 90-credit Associate of Arts Oregon Transfer (AAOT), 44-credit Oregon Transfer Module (OTM), and Associate of Science Oregon Transfer (ASOT). In addition, many institutions have developed articulated agreements to facilitate successful credit transfer. The Legislature passed a “Transfer Student Bill of Rights” in 2011 (ORS 350.395), establishing methods to resolve credit transfer issues, which helped pave the way for HB 2998 (2017), which focused on uniform, statewide credit transfer pathways in a major.

ORS 350.412 directed the HECC and Oregon’s public community colleges and universities to improve transfer pathways between two-year public colleges to four-year public universities. Specifically, ORS 350.412 required the HECC to convene community colleges and universities to develop common foundational curriculum and to develop three unified statewide transfer agreements per year.

Since the passage of HB 2998 in 2017, progress has been made on the development of foundational curriculum (FC) and Major Transfer Maps (MTMs):

- Foundational Curriculum and USTAs were rebranded to have more student-friendly names. Foundational Curriculum are now referred to as “Core Transfer Maps” and USTAs are now referred to as “Major Transfer Maps”;
- Using an already established cross-sector group, an advisory body was created, called the Oregon Transfer and Articulation Committee (OTAC), which was comprised of representatives from key institutional roles from community colleges and universities;
- Five MTMs have been approved by OTAC, and new degrees for these MTMs have been approved by the Commission (Biology, English Literature, Elementary Education, Business, and Computer Science); and
- Three MTMs are in progress: Sociology, Psychology, and Human Development and Family Studies.

While progress has been made, work on ORS 350.412 revealed some significant gaps in the legislation. In addition, it was recognized that furthering progress on transfer and implementation of new pathways required an update to the framework under which institutions do this difficult work. For example, ORS 350.412 work has revealed the need for clear expectations for alignment, greater accountability mechanisms, and monitoring, reporting, and adjusting. SB 233 (2021) addresses many of the challenges revealed with HB 2998 work.

MANDATES OF ORS 350.423 TO 350.429

SB 233 establishes the following:

- requires the establishment of a 15-member Transfer Council.
- clarifies authority related to development and implementation of Common Course Numbering (CCN) and Major Transfer Map (MTM) work.
- requires CCN (including common learning outcomes) in order to address alignment of highly enrolled lower-division courses.

² Higher Education Coordinating Commission. 2013. *Common Course Numbering House Bill 2979 Report: A Report to the Oregon Legislature*. Report to the Oregon Legislature.
https://www.oregonlegislature.gov/citizen_engagement/Reports/CCN_Report2013.pdf

- reduces the number of MTMs required annually from three to one.
- requires greater accountability (e.g., audit process, reporting, and a student appeals process).

The Transfer Council (TC) makes recommendations to the Commission regarding administrative rule creation and adoption. This helps clarify lines of authority and creates a structure where decisions are binding on institutions. The requirement of ORS 350.423 and ORS 350.429 that the TC create a CCN system helps address some of the alignment challenges faced in the MTM work, and is intended to make credit transfer more transparent for students. The inclusion of a reduction of MTMs allows the MTM momentum to continue without overwhelming the faculty and other stakeholders involved in both CCN and MTM work. Finally, because ORS 350.429 requires an audit process, regular reporting, and a student appeals process, there are multiple aspects of accountability that will help ensure the successful implementation and maintenance of the work.

THE TRANSFER COUNCIL

ORS 350.426 establishes a Transfer Council (TC) with 15 voting members and one non-voting ex-officio member from across public education sectors in Oregon. The Transfer Council can designate advisory subcommittees as needed to fulfill the mandate to make recommendations on a common course numbering (CCN) system, Major Transfer Maps (MTMs), and other credit transfer concerns.

To recruit members for the TC, HECC staff contacted key stakeholder groups who represent the legislatively mandated positions listed in ORS 350.426. Each group was asked to nominate one person and at least one alternate and to write a short description of their qualifications. Groups were encouraged to consider both a nominee's expertise in credit transfer issues and the HECCs equity lens. HECC staff also notified each group that attention to diversity by region, institution size, and by institution will be considered when the HECC finalizes the list. The final list was presented to the Commission for approval.

Recruitment for the TC began in late July of 2021, the list of members was finalized in late September, and the TC had its first meeting on October 21, 2021. Since this time, Transfer Council has met monthly, year-round.

COURSE LIST CREATION

In anticipation of the passage and fast approaching deadlines of Senate Bill 233, a cross sector group that included administrators, faculty, and registrars from public universities and community colleges, as well as HECC staff, convened to identify areas of work that could begin in advance of the passage of SB 233 to better ensure the successful implementation of the bill. One area of work was the creation of a draft course list. The list was created by registrars and reflects the top transfer courses and the number of times that a course transferred into public universities from an Oregon community college over a period of three years. The Transfer Council voted to use this list as a starting point to identify courses for a common course numbering system.

In the November 2021 TC meeting, the Transfer Council voted on a process/methodology to establish a course list to meet the state mandated deadlines. The process is as follows:

- Use the “Transfer Council CCN List of Courses”
- Attend to sequencing and start with appropriately sequenced courses (ask faculty to review course groupings to see if sequencing/grouping makes sense)
- Look at low hanging fruit (ask faculty if some courses are already aligned and/or common course numbered)

- Not task discipline faculty to work on MTMs and CCN at same time, due to workload concerns (e.g., Psychology MTM and courses at same time)
- Select courses from “Transfer Council CCN List of Courses” that are commonly pre-requisite courses for major or upper-division requirements
- The first round of courses for the 2023-2024 academic year should not be from only one discipline
- The Transfer Council will revisit the methodology annually to strengthen further work (including communication from registrars, faculty, MTMs, curriculum managers and students)

The TC also voted in favor of focusing on at least nine courses for the 2023-2024 year, and then up to at least half of the top 80 transferred course list by the 2025-2026 academic year.

Using the process identified by the TC, HECC staff created a draft list of courses for each deadline. This list, along with a faculty feedback form, was sent to Provosts, Chief Academic Officers, and Dual Credit Coordinators for distribution to relevant faculty. The form contained background information, registrar course lists, and the proposed course list. Faculty were asked to comment on course clustering (e.g., if any courses are not included that should be, which courses are already significantly aligned) and were also provided an opportunity to provide open-ended feedback. The survey had 70 responses in total, which included responses from all institutions. Based on this feedback, a refined list was created for review and voted on by the TC.

Course Lists

The following courses were part of the first round of CCN work during 2022:

2022 CCN Course List

Communication:

- COMM 100Z
- COMM 111Z
- COMM 218Z

Math:

- MATH 105Z
- MATH 111Z
- MATH 112Z

Statistics:

- STAT 243Z*

Writing:

- WR 121Z
- WR 122Z
- WR 227Z

*Note: STAT 244 was originally part of this list, but TC agreed to defer this course until STAT 243 has been implemented for a minimum of one year, to determine how revised outcomes will affect STAT 244. For more on this, see Appendix D.

2023 CCN Course List (Approved by TC November 15, 2022)

Business:

- BUS 101
- BUS 211
- BUS 213

English (Intro to series)/Writing:

- ENG 104
- ENG 105
- ENG 106
- WTG 115

Math (Calculus series):

- MTH 251
- MTH 252
- MTH 253
- MTH 254

Psychology:

- PSY 101
- PSY 201
- PSY 202

Additionally, subcommittees will consider the following during 2023, as they pertain to CCN: split courses (e.g., MTH 111A + MTH 111B = MTH 111), co-requisite courses (e.g., one-credit companion math courses that provide affective and non-cognitive support for students), and information literacy outcomes for community college students.³

2024-2026 Course List

- Spanish Cluster: Spanish 101, Spanish 102, Spanish 103 (First year Spanish series)
- Health and Fitness Cluster: Convene subcommittee to determine courses
- Economics Cluster: Microeconomics 201, Microeconomics 202
- History Cluster: History of the U.S. 201, 202, 203
- Chemistry Cluster: Chemistry 104, Chemistry 105, Chemistry 106 (Intro to Chemistry series)

³ Information literacy outcomes were approved by the Joint Boards' Articulation Committee on November 9, 2009; approved by the Council of Chief Academic Officers and Provosts on November 13, 2009; approved by Unified Educational Enterprise on November 23, 2009; and approved by the Joint Boards of Education on January 7, 2010. For more information, see [Appendix E—Outcomes and Criteria for Transferable General Education Courses in Oregon](#).

- Sociology Cluster: Sociology 204, Sociology 205 (General Sociology)
- Biology Cluster: convene group to discuss 211, 212, 213/221, 222, 223 convene group to discuss sequence

Beyond 2026

The TC voted on the following approach to selecting courses after the 2025-2026 deadline:

- Revisit highly transferred course list & prioritize completion of courses on the new course list such as Biology, Art, Sociology, Anthropology, etc.
- Prioritize courses on the most-commonly-taken course list at CCs
- Convene subcommittee to discuss approach to CTE courses

REPORT ON THE WORK OF CCN FACULTY SUBCOMMITTEES, 2022

Due to a variety of factors including staffing and faculty contract schedules, work was not completed on the first round of course alignment until November 2022. Although the timeline was challenging, all ten courses under consideration for 2022 were aligned. This was made possible by the faculty subcommittees which spent over a hundred hours meeting, conducting research, and coordinating efforts. This diligent work resulted in the identification and alignment of course number and prefix, title, credits description, and learning outcomes.

CCN Faculty Subcommittees submitted four Recommendation Reports and one Minority Report to Transfer Council (TC) at the November 2022 Transfer Council meeting. During the December 2022 meeting, TC members will vote on recommending the first ten CCN courses for HECCs approval. The following information represents a summary of the recommendations for course alignment, by subcommittee (for complete Recommendation and Minority reports, see Appendices A-E):

Summary of Approved CCN Courses for Fall 2023-2024 Implementation

All four subcommittees reached agreement on aligning course information including course number and prefix, course title, course credits, course description, and learning outcomes. The following is a list of the CCN courses aligned in 2022:

Communication

- COMM 100Z Introduction to Communication
- COMM 111Z Public Speaking
- COMM 218Z Interpersonal

Communication Math

- MTH 105Z Math in Society
- MTH 111Z Precalculus I: Functions
- MTH 112Z Precalculus II:

Trigonometry Statistics

- STAT 243Z Elementary Statistics I

Writing

- WR 121 Composition I
- WR 122 Composition II

WR 227 Technical Writing

The chart below shares information on the ten courses that were part of CCN alignment work in 2022 (to be implemented in 2023-2024). As noted in the chart, all ten courses were aligned as per the **CCN Faculty Subcommittee Charge** (e.g., course number/prefix, title, credits, description, and learning outcomes).

CCN Course/Course Information
Communication
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: <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.
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: <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.
Course Number and Prefix: COM or COMM 218Z Course Title: Interpersonal Communication Course Credits: 4 Course Description: 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: <ol style="list-style-type: none">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.
 - 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.

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

SUMMARY ON THE WORK OF CCN SYSTEMS AND OPERATIONS SUBCOMMITTEE, 2022

In addition to the four faculty subcommittees, Transfer Council convened an additional subcommittee charged with the development and implementation of a CCN System (CCN Systems and Operations or SYS/OPS). This charge included providing guidelines for implementing the CCN System and integrating CCN courses with institutions' existing Student Information Systems (SIS), or web-based platforms used to digitize and manage student data and course information (e.g., Banner, Anthology, Conclusive). In addition to managing student data, SIS are used to store, manage, retrieve, and protect course information. SIS are also used to generate catalog information for institutions and serve as a vital source of information for students and advisors.

The CCN SYS/OPS was asked to make “recommendations to the Transfer Council to address any identified recommendation or needs” that may arise in Faculty Subcommittees (CCN System Subcommittee Charge). As per the [Common Course Number System Subcommittee Charge](#), CCN SYS/OPS “shall consider a system that creates a framework for course numbers, titles, and prefixes whenever possible. The framework should accommodate the course descriptions and common course outcomes as identified by the Faculty Subcommittee. This recommendation for the framework shall be recommended to the Transfer Council prior to the start of implementation.”

In August 2022, CCN SYS/OPS submitted a Recommendation Report to TC which provided a summary of the framework for course numbers, titles, prefixes, and course descriptions for CCN. The report also includes a memo which addresses several questions raised by TC, during the July TC meeting. Finally, another memo was submitted October 2022 to TC, with information on a course designator or character that will be used to signify CCN aligned courses (for the complete Recommendation Report and Memos, see Appendix F).

Summary of Approved Framework for CCN Courses

Framework Element	Recommendation
Course Designator	There must be a course designator in the framework.
Subject Code (Prefix)	Schools are encouraged to align subject codes where feasible. If the subject matches, schools may retain their existing subject codes even if they are abbreviated differently (i.e., HIST and HST are both allowable). <i>*See the August 11, 2022 Memo for additional information.</i>
Course Number	Include a uniform designator in the course number suffix as part of all CCN course numbers. [For example, Math 111A.] Change course numbers when necessary to align across all Oregon community colleges and universities.

Course Description	<p>Individual institutional catalog course descriptions must match the baseline course description as approved by faculty subcommittees.</p> <p>Additions to course descriptions may include:</p> <ul style="list-style-type: none"> ▪ Stylistic nuances that do not change the meaning of the description, based on institutional guidelines ▪ Course requisites ▪ Other housekeeping items ▪ Substantive (less than 25% of the course) additional statements that summarize any local course outcomes
Course Title	<p>Course titles should match among institutions.</p> <ul style="list-style-type: none"> ▪ Allowing for some institutional stylistic nuances (e.g., FUNDAMENTALS OF ELEMENTARY MATHEMATICS I, FUNDAMENTALS OF ELEMENTARY MATHEMATICS 1, FUNDAMENTALS OF ELEMENTARY MATH I) <p>The course title will not be the required primary designator for the common course numbering system courses. Once the titles match, then institutions would be able to include institutional stylistic nuances, such as using Arabic or Roman numerals; abbreviating or not abbreviating words; adding or not adding additional elements, such as special characters or letters that designate university requirements.</p> <p><i>*See the August 11, 2022, memo for additional information.</i></p>

Summary of Course Designator Memo

Framework Element	Recommendation
Course Designator	Z

CONCLUSION

Pending approval (by HECC) of the first round of Common Course Numbered (CCN) courses for implementation in the 2023-2024 academic year marks a significant transformation in statewide efforts to improve the transfer experience for students in Oregon. While CCN is in the promising stage of design and implementation, it represents years of statewide work on aligning general education courses. The Higher Education Coordinating Commission is committed to simplifying and aligning pathways in the higher education network, including pathways for students to successfully transfer between institutions while maximizing credits toward degrees and certificates.

The HECC will continue to facilitate work in subcommittees and advise Transfer Council by convening policy conversations and sharing information and resources needed to align courses. This work will support the State’s commitment to equity ([Oregon Equity Lens](#)), which “requires the intentional examination of systemic policies and practices that, even if they have the appearance of fairness, may in effect serve to marginalize some and perpetuate disparities.” CCN will remain a primary conduit for achieving this goal by aligning the most transferred courses in Oregon.





Summary of CCN Communication Subcommittee Report

The following provides a summary of the Recommendation Report from the CCN Communication Subcommittee.

Recommendation	Vote
<p>Course Number: 100Z Course Subject Code (Prefix): COM or COMM 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. Course Title: Introduction to Communication 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>Yes 11 No 0 Abstain 0; Passed Yes 10 No 0 Abstain 0; Passed Yes 9 No 3 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed Yes 11 No 0 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed</p>
<p>Course Number: 111Z Course Subject Code (Prefix): COM or COMM 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. Course Title: Public Speaking 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>Yes 11 No 0 Abstain 0; Passed Yes 10 No 0 Abstain 0; Passed Yes 10 No 1 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed Yes 11 No 0 Abstain 0; Passed Yes 13 No 0 Abstain 0; Passed</p>
<p>Course Number: 218Z Course Subject Code (Prefix): COM or COMM Course Credits: 4 Course Description: COMM 218Z increases the knowledge and use of competent communication skills to better understand oneself, others, and the role of communication in interpersonal relationships.</p>	<p>Yes 11 No 0 Abstain 0; Passed Yes 10 No 0 Abstain 0; Passed Yes 10 No 2 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed</p>

<p>Course Title: Interpersonal Communication</p> <p>Learning Outcomes:</p> <ol style="list-style-type: none"> 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. 	<p>Yes 11 No 0 Abstain 0; Passed Yes 13 No 0 Abstain 0; Passed</p>
<p>Review Cycle Recommendation</p> <p>Review Cycle Recommendation</p> <ul style="list-style-type: none"> • Annual review, winter term • Every third year, alignment review 	<p>Yes 11 No 0 Abstain 0; Passed</p>

Chart approved by CCN Communication Co-chairs Laura Pelletier, Kerrie Hughes, Vicki Crooks; November 3, 2022.

CCN Subcommittee Recommendation Report

Communication

Subcommittee Members

Laura Pelletier, Kerrie Hughes, Vicki Crooks, Josie Wood, Colin Hesse, Kristin Hocevar,
Paula Baldwin

Co-chairs

Laura Pelletier

Kerrie Hughes

Vicki Crooks

November 4, 2022

Date of last meeting

November 4, 2022

Plans for next meeting

This marks our final meeting. We will schedule a follow-up meeting in the event that the Transfer Council asks for revisions or more information on some aspect of our report.

Overview

Beginning with a meeting on April 15, 2022, the Communication Subcommittee has met 10 times logging 15 hours of work. The 15 voting members have demonstrated collegiality and a strong commitment to the subcommittee's charge under a tight deadline.

The perceived need to create fluid and equitable transfer to students has guided committee members to collaboratively align communication courses and construct appropriate course descriptions and measurable course learning outcomes. Aligning credits was an area in which the committee struggled as the known, and unknown, consequences of changing credits will have many negative impacts on students and institutions (see notes).

Action Items Completed

RECOMMENDATION	STATUS
Work plan establishment <ol style="list-style-type: none">1. Course numbers, prefix, titles2. Course description and learning outcomes basic communication3. Course description and learning outcomes public speaking4. Course description and learning outcomes interpersonal communication	APPROVED (unanimously; Yes 11, No 0) May 5, 2022
Subject Code (Prefix) <ul style="list-style-type: none">● COMM or COM● SP, SPCH, or other speech prefixes will not be used.	APPROVED (unanimously; Yes 10, No 0) June 16, 2022

<p>Rationale: Of the institutions that teach communication courses, 19 use a COM or COMM code, while 4 use SP or SPE codes. Because the communication discipline is more than speech, it makes sense for the discipline to use a COM/COMM subject code.</p>	
<p>Course Numbers</p> <ul style="list-style-type: none"> • 100Z will be used for Introduction to Communication <p>Rationale: Of the 12 institutions that teach an introductory communication course, 11 currently use 100 as the course number, and 1 institution uses 111. Therefore there is only one institution that would need to make a change to the course number.</p> <ul style="list-style-type: none"> • 111Z will be used for Public Speaking <p>Rationale: Of the 23 institutions that teach public speaking, 20 currently use 111 as the course number, 1 uses 112, 1 uses 220, and 1 uses 210. The majority was used to demand as little change as possible to current course numbers.</p> <ul style="list-style-type: none"> • 218Z will be used for Interpersonal Communication <p>Rationale: Of the 21 institutions that teach interpersonal communication, 12 currently use 218 as the course number, 6 use 214, 1 uses 111, 1 uses 224, 1 uses 125, and 1 uses 112. It was agreed that interpersonal communication should be at the 200 level and other 100-level numbers currently being used were also used for other communication courses at other institutions. Using 218 as the majority reduces some changes that will need to be made.</p>	<p>APPROVED (unanimously; Yes 11, No 0) May 5, 2022</p>
<p>Course Titles</p> <ul style="list-style-type: none"> • The course title for COM/COMM 100Z will be Introduction to Communication <p>Rationale: There are currently a variety of names for the introductory course (e.g., basic communication, intro to communication, intro to speech communication). Recently (2022) the Western</p>	<p>APPROVED (unanimously; Yes 11, No 0) May 5, 2022</p>

<p>States Communication Association approved removing “basic” from the title of the introductory course and recommends using “Introduction.” It was agreed that Introduction to Communication is a more fitting title for the broad survey course of the discipline.</p> <ul style="list-style-type: none"> The course title for COM/COMM 111Z will be Public Speaking <p>Rationale: All but two institutions that teach public speaking currently use public speaking in the course name, while the remaining two use speech (e.g., fundamentals of speech) in the course name. Public speaking is the most common naming convention.</p> <ul style="list-style-type: none"> The course title for COM/COMM 218Z will be Interpersonal communication <p>Rationale: All of the institutions that teach interpersonal communication currently have interpersonal communication as the course name. Interpersonal Communication is one of several specializations in the communication disciplines (NCA, 2022). There is very little change that will be needed for this course name.</p>	
<p>Course Credits</p> <ul style="list-style-type: none"> COMM 100: 4 credits COMM 111: 4 credits COMM 218: 4 credits <p>The majority of those in regular attendance recommend COMM courses, 100, 111, and 218, be 4 credits.</p> <p>Rationale: Because CCN COMM only has 15 members, 60% needed for a passing vote meant that nine was needed to pass a vote.</p>	<p>APPROVED; COMM 100 (Yes 9, No 3, Abstain 0); November 10, 2022</p> <p>APPROVED; COMM 111 (Yes 10, No 1, Abstain 0); November 4, 2022</p> <p>APPROVED; COMM 218 (10 yes, 2 no, 0 abstain); November 10, 2022</p>
<p>Course Descriptions</p> <p>COM/COMM 100Z: Introduction to Communication</p> <p>Course Description will be:</p> <ul style="list-style-type: none"> COMM 100Z is a survey course offering an overview of the communication discipline 	<p>APPROVED (Unanimously; Yes 14, No 0) October 27, 2022</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>COM/COMM 111Z: Public Speaking</p> <p>Learning Outcomes will be:</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>COM/COMM 218Z: Interpersonal Communication</p> <p>Learning Outcomes will be:</p> <ol style="list-style-type: none"> 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. 	<p>APPROVED (Unanimously; Yes 13, No 0) October 27, 2022</p> <p>APPROVED (Unanimously; Yes 13, No 0) October 27, 2022</p>
<p>Review Cycle Recommendation</p> <p>We propose that the annual review cycle of these courses have a twofold purpose: (1) to review the transfer effectiveness of the courses and (2) to</p>	<p>APPROVED: (Unanimously; Yes 11, No 0) November 3, 2022</p>

gather information about challenges, concerns, or changes needed from the 24 two- and four-year schools in the state. We propose that this review take place in winter term.

Every third year, we recommend a deeper review of the alignment of these courses; this is the only time that the subcommittee will consider a vote to modify the aligned content of the course, using the previous two years of data. The choice in these third year reviews will be to either affirm our existing alignment decisions or to revise a particular aspect to keep our curriculum based on the data gathered from the previous two years.

We recommend that as many members of the original subcommittee be invited to participate in these discussions. Historical memory and original context will be useful in informing future decisions.

Action Items In-progress/Pending

ACTIVITY	STATUS (include an estimate – hours/# of meetings – it will take to complete work)
N/A	

Questions for Transfer Council

- Are prerequisite requirements left up to individual institutions?
- If the recommendation is to increase credits, are there mechanisms to address the 90 credit requirements and caps?

Other Notes

- The Committee is concerned that unintended consequences may negatively impact institutions that need to reduce or increase credits. Many impacts may not be known until credit changes have been implemented. While increasing by one credit may not seem like much, if increases occur across multiple classes and disciplines (e.g., writing, math, communication) credits may increase exponentially over the course of a student’s educational career.

- Potential impacts:
 - Student Funding Caps
 - Oregon Promise at 90 credits: [Oregon promise](#)
 - Tribal Student Grants maximum of five years total: [Tribal student grant](#)
 - Oregon National Guard State Tuition Assistance maximum of two years: [Veterans education benefits](#); [Oregon National Guard State Tuition Assistance](#)
 - Faculty workload issues
 - Student load issues
 - Increases money and time required for CTE/Certificate programs and general education requirements
 - AAOT is 90 credits: [AAOT 90 credits](#)
 - Excess credit issues: [Excess credit policies](#)
 - Disparity in credits (e.g., OSU uses three credits and two courses would move to four credits while the remaining courses stay at three credits)
 - Potential loss of courses used in CTE and Certificates - programs may not require courses that are four credits because of the additional credits added.

Signed by:

Name Laura Pelletier

Signature *Laura Pelletier*

Name Kerrie Hughes

Signature Kerrie Hughes

Name Vicki Crooks

Signature *Vicki Crooks*

Date: November 3, 2022

Provide copies to:

CCN Communication
Chair/Co-chairs
CCN Communication
Subcommittee

Laura Pelletier, Kerrie Hughes, Vicki Crooks

Michele DeGraffenreid	Colin Hesse
Deac Guidi	Lee Shaker
Christina Ballard	Kristin Hocevar
Alex Markov	Paula Baldwin
Josie Wood	Chris Carey
Zach Harper	
Ben Mann	

Transfer Council Co-chairs

Susan Jeffords
Teresa Rivenes

HECC

Donna Lewelling
Veronica Dujon
Jane Denison-Furness
Brittany Miles
Kyle Lee
Daniel Anderson
Jennifer Markey

– END OF REPORT–



Summary of CCN Math Subcommittee Report

The following provides a summary of the Recommendation Report from the CCN Math Subcommittee.

Recommendation	Vote
<p>Course Title: Math in Society</p> <p>Course Prefix: MTH or MATH</p> <p>Course Number: 105Z</p> <p>Course Credits: 4</p> <p>Course Description:</p> <p>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.</p> <p>Course Outcomes:</p> <p>At the end of this course, students will be able to:</p> <ol style="list-style-type: none"> 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. 	<p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p>
<p>Course Title: Precalculus I: Functions</p> <p>Course Prefix: MTH or MATH</p> <p>Course Number: 111Z</p> <p>Course Credits: 4</p> <p>Course Description:</p> <p>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.</p> <p>Course Outcomes:</p> <p>At the end of this course, students will be able to:</p>	<p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 12 No 2 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p>

<ol style="list-style-type: none"> 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. 	
<p>Course Title: Precalculus II: Trigonometry Course Prefix: MTH or MATH Course Number: 112Z Course Credits: 4 Course Description:</p> <p>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.</p> <p>Course Outcomes: At the end of this course, students will be able to:</p> <ol style="list-style-type: none"> 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. 	<p>Yes 14 No 0 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed Yes 12 No 2 Abstain 0; Passed Yes 14 No 0 Abstain 0; Passed</p> <p>Yes 14 No 0 Abstain 0; Passed</p>

Chart approved by CCN Math Co-chairs Nikki Gavin and Celeste Petersen, November 3, 2022.

CCN Subcommittee Recommendation Report Math

Authored by the CCN Math Co-Chairs
Nikki Gavin, Lane Community College
Celeste Petersen, Clatsop Community College

November 4, 2022

Date of last meeting

November 3, 2022

Plans for next meeting

This report represents the final recommendation of the CCN Math Subcommittee convening in Fall 2022. This Subcommittee was tasked with recommending course prefixes, numbers, titles, credits, descriptions, and outcomes for three math courses identified by the Transfer Council as some of the most frequently transferred courses in Oregon. The recommendations made in this report conclude the work of the subcommittee at this time; requests to modify or clarify the recommendations can be reviewed and addressed in a future convening of the subcommittee, if required. Plans for further assembly of this subcommittee depend upon: the acceptance of the recommendations made in this report, and any further assignments of math courses from the Transfer Council for inclusion in the CCN process.

Overview

The Math Subcommittee (MATHS) met in April 2022 to begin the process of designing courses as legislated by the Common Course Number (CCN) mandates of [SB 233](#). As outlined in the Faculty Course Alignment Subcommittee Charge, MATHS was charged with completing the following tasks for math courses commonly transferred between Oregon Community Colleges (ORCCs) and Oregon Public Universities (OPUs):

1. Align designated course learning outcomes.
2. Align the number of credits for which the course is offered.
3. Recommend course number, prefix, and title.
4. Align the course description.

The first round of courses assigned to MATHS by the Transfer Council for inclusion in the CCN process were MTH/MATH 105, MTH/MATH 111, and MTH/MATH 112, with a deadline of November 4, 2022.

MATHS met four times in the Spring of 2022 but struggled to make significant progress due to lack of understanding of the nuances of the legislation, the scope of the work assigned, and the purview of the subcommittee in its ability to define and prescribe course components to statewide institutions. The lack of pervasive and timely communication to stakeholders and administrators educating them on the far-reaching impacts of CCN led to concerns about authority and validity in the work of the subcommittee and to apprehension over the awareness of the sweeping

implications inevitably resulting from any recommendations made by the subcommittee. A plethora of systems/operations and scope questions held up much of the work and efforts of the subcommittee in the spring, resulting in only a cursory initial review of MTH/MATH 105. Much of the conversation at this time was focused on reviewing the previous work to outline MTH 105, facilitated by the HECC in 2015 and completed by an empowered group of math faculty and staff. This outline titled MTH 105, "Math in Society," and declared it as a course capable of satisfying the Mathematics Foundational Requirement of the AAOT and simultaneously established the new quantitative reasoning pathway. Over Summer 2022, the CCN Systems & Operations Subcommittee diligently worked to answer the many questions and issues submitted by MATHS and the other CCN subcommittees. Their memos, responses, and reports helped facilitate the significant progress that was then made when MATHS reconvened in September 2022 after faculty were back on-contract for the academic year.

In late September, just before the start of the Fall term, it was confirmed by the Transfer Council that the deadline for the recommendations would remain November 4th, at that time just seven short weeks away. With fresh answers from the Systems & Operations Subcommittee, MATHS moved forward at a furious pace, meeting twice a week for two-hours each meeting for a total of 21 hours of meeting time logged in a period of six weeks. The intense meeting schedule and the dedicated engagement of the members enabled the subcommittee to meet the ambitious deadline, abide by public meeting law, and consider many facets of the impacts of the recommendations, but the pace limited some members from engaging in the work as deeply as would have been preferred. Even with the challenging pace and schedule, MATHS had impressive attendance and diligent and good-spirited participation from its members. The subcommittee functioned professionally and collegially and produced high-quality curriculum for this first round of CCN Math courses.

Despite these challenges, the members of MATHS see this legislation and the ensuing subcommittee work as a unique opportunity to improve the experience of thousands of students each term who take these courses. We see this as an opportunity to clarify misconceptions about the calculus and quantitative reasoning pathways, revisit, refine, and align the goals of courses in these pathways, identify major curricular themes, and collaborate to provide recommendations that will enable these courses to better transfer amongst our institutions.

MATHS is proud of the hard work completed by our members and is appreciative of the support of the HECC staff and other subcommittees throughout this process.

We provide the following recommendations to the Transfer Council:

Action Items Completed

RECOMMENDATION	STATUS
MTH/MATH 105Z Decisions	

<ul style="list-style-type: none"> Course Prefix: MTH or MATH Rationale: This prefix was selected because all OR CCs and OPUs use this prefix. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Number: 105Z Rationale: This course number was selected because all OR CCs and OPUs use this number. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Title: Math in Society Rationale: This course title was selected because the majority (16/24) of OR CCs and OPUs use this course title. Additionally, this title was recommended in 2015 when the Foundational Requirements of the AAOT were revised to include MTH 105. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Credits: 4 Rationale: This number of credits was selected because it represents the number of credits already in use at a majority (21/24) of OR CCs and OPUs. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> 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.” Rationale: This course description was written to emphasize the focus of the course being on mathematical literacy and quantitative reasoning. Additionally, to emphasize the relevancy and present-day aspect of this course and to encourage appreciation for mathematics as a subject present and valuable in everyday life. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>

<ul style="list-style-type: none"> Course Outcomes: At the end of this course, students will be able to: <ol style="list-style-type: none"> Employ mathematical reasoning skills when reading complex problems requiring quantitative or symbolic analysis and demonstrate versatility in the consideration and selection of solution strategies. Demonstrate proficiency in the use of mathematical symbols, techniques, and computation that contribute to the exploration of applications of mathematics. Use appropriate mathematical structures and processes to make decisions and solve problems in the contexts of logical reasoning, probability, data, statistics, and financial mathematics. Use appropriate representations and language to effectively communicate and interpret quantitative results and mathematical processes orally and in writing. Demonstrate mathematical habits of mind by determining the reasonableness and implications of mathematical methods, solutions, and approximations in context. <p>Rationale: These course outcomes were written to emphasize the major goals of the course being: the development of skills in mathematical literacy, communication, and reasoning and in the use of symbols, techniques, structures, processes, habits of mind, and computation found in everyday applications of mathematics.</p> 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
MTH/MATH 111Z Decisions	
<ul style="list-style-type: none"> Course Prefix: MTH or MATH Rationale: This prefix was selected because all OR CCs and OPUs use this prefix. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Number: 111Z Rationale: This course number was selected because all OR CCs and OPUs use this number. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present</p>

	to vote. PASSED
<ul style="list-style-type: none"> Course Title: Precalculus I: Functions Rationale: This course title was selected to represent the preparatory nature of this course for the study of calculus and to emphasize its focus on the topic of functions. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p>PASSED</p>
<ul style="list-style-type: none"> Course Credits: 4 Rationale: This number of credits was selected because it was identified as the minimum number of credits required to deliver MTH 111Z as recommended in this report. Identifying the minimum number of credits allows institutions to employ corequisite models or lecture/lab credit types to customize the course to meet the needs of different student populations. This minimum number of credits also reduces the cost to students, for those students that do not require a corequisite to be successful in this course, and requires no increase to program credit totals that require this course. OR CCs and OPUs are split evenly on current use of 4 or 5 credits, but the 5-credit implementations exist solely at the CCs, emphasizing the significant differences in student populations and resources existing between CCs and OPUs. A Minority Report has been submitted alongside this recommendation report to provide an overview of the concerns and disagreements about this recommendation. 	<p>12 out of 16 members voted in favor of this recommendation. 2 voted not in favor of this recommendation. 2 members were not present to vote.</p> <p>PASSED</p>
<ul style="list-style-type: none"> 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 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p>PASSED</p>

<p>other disciplines, and the appropriate use of present-day technology."</p> <p>Rationale: This course description was written to represent the preparatory nature of this course for the study of calculus and to emphasize its focus on the topic of functions and their application in related disciplines.</p>	
<ul style="list-style-type: none"> ● Course Outcomes: At the end of this course, students will be able to: <ol style="list-style-type: none"> 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. <p>Rationale: These course outcomes were written to emphasize the major goals of the course being: the development of skills in the language and use of functions in various applications and representations; in mathematical communication and reasoning; and in the use of symbols, techniques, structures, processes, habits of mind, and computations commonly found in calculus and related disciplines.</p> 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>

MTH/MATH 112Z Decisions	
<ul style="list-style-type: none"> Course Prefix: MTH or MATH Rationale: This prefix was selected because all OR CCs and OPUs use this prefix. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Number: 112Z Rationale: This course number was selected because all OR CCs and OPUs use this number. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Title: Precalculus II: Trigonometry Rationale: This course title was selected to represent the preparatory nature of this course for the study of calculus and to emphasize its focus on the topic of trigonometry. 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Credits: 4 Rationale: This number of credits was selected because it was identified as the minimum number of credits required to deliver the course as recommended in this report. Identifying the minimum number of credits allows institutions to employ corequisite models or lecture/lab credit types to customize the course to meet the needs of different student populations. This minimum number of credits also reduces the cost to students, for those students that do not require a corequisite to be successful in this course, and requires no increase to program credit totals that require this course. OR CCs and OPUs are split on current use of 4 or 5 credits, but the 5-credit implementations exist solely at the CCs, emphasizing the significant differences in student populations and resources existing between CCs and OPUs. A Minority Report has been submitted alongside this recommendation report to provide an overview of the concerns and disagreements about this recommendation. 	<p>12 out of 16 members voted in favor of this recommendation. 2 voted not in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> Course Description: 	<p>14 out of 16 members voted in favor of this recommendation.</p>

<p>“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.”</p> <p>Rationale: This course description was written to represent the preparatory nature of this course for the study of calculus and to emphasize its focus on the topic of trigonometry and its application in related disciplines.</p>	<p>2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>
<ul style="list-style-type: none"> ● Course Outcomes: <p>At the end of this course, students will be able to:</p> <ol style="list-style-type: none"> 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 	<p>14 out of 16 members voted in favor of this recommendation. 2 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>

<p>models, find solutions, and communicate an interpretation of the results.</p> <p>9. Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.</p> <p>Rationale: These course outcomes were written to emphasize the major goals of the course being: the development of skills in the language and use of trigonometric functions and vectors in various applications and representations; in mathematical communication and reasoning; and in the use of symbols, techniques, structures, processes, habits of mind, and computations commonly found in calculus and related disciplines.</p>	
Review Cycle Recommendation	
<p>This Subcommittee recommends the following schedule, structure, and goals for the reflection, maintenance, and enhancement of the recommendations made in this report:</p> <ol style="list-style-type: none"> 1. Annual CCN Math Subcommittee Check-ins beginning in Winter 2025 to gather qualitative and/or quantitative data on faculty and student experiences, make requests for institutional and statewide data, discuss challenges, and raise concerns in an effort to review the transfer effectiveness of the CCN Math courses. The scope of annual check-ins will focus on the statewide and collaborative nature of this work in order to facilitate inclusive and equitable conversations and identify potential issues that may require future modifications of the CCN recommendations or framework. 2. Triennial CCN Math Subcommittee Workshops beginning in Winter 2027 with the purpose of analyzing qualitative and quantitative data, drafting and approving modifications to the CCN Math Recommendations, and problem-solving implementation issues to strive to improve the effectiveness, inclusiveness, equity, and implementation of the CCN 	<p>12 out of 16 members voted in favor of this recommendation. 4 members were not present to vote.</p> <p style="text-align: right;">PASSED</p>

recommendations and framework.

3. **Efforts and results in engaging statewide entities in supporting and facilitating the work of the CCN Math Subcommittee.**

Statewide and regional conferences, gatherings, and workgroups, such as the Oregon Mathematical Association of Two Years Colleges (ORMATYC) and Oregon Math Chairs (OMC), are opportunities for data collection, collaboration, and networking critical to the success of the mandates in SB 233. Additionally, the development and maintenance of a statewide working-state repository for sharing inter-institutional information on math pathways, course outlines and updates, math placement practices, prerequisites, curriculum, and other information needed for successful statewide collaborative efforts.

4. **Efforts and results in maintaining the continuity of the membership of the CCN Math Subcommittee and in improving equitable representation.** The significant impacts of the work produced by this subcommittee necessitate efforts to actively engage all ORCCs and OPUs in this work.

Action Items In-progress/Pending

The diligent and committed work of the CCN Math Subcommittee throughout this process enabled this subcommittee to complete all required action items within the ambitious timeline provided.

Questions for Transfer Council

- What are the long-term goals for this work? Is this defined by the Transfer Council or by the Subcommittees?
- What is meant by 'maintenance' in section VI of the Faculty Course Alignment Subcommittee Charge? Do subcommittees define what this is for their areas? How does assessment fit into this?
- What can be done to address issues of faculty workload and representation in this CCN process to strive for equity and inclusion?
- What role do prerequisites play in the CCN vision?

- What role do corequisites play in the CCN vision?
- How do public meeting laws prescribe the meeting structure for this subcommittee moving forward?
- How does the subcommittee 'evaluate the effectiveness of CCN'? Does the subcommittee determine the criteria? How does the subcommittee submit requests for data to support this 'evaluation'?

Other Notes

As prescribed by the legislation, courses in the CCN system will transfer seamlessly among the CCs and OPUs so, in that regard, this project will necessarily be successful. But unless other factors are confronted (e.g., the level of rigor and detail of topics covered, assessment methods, grading tendencies), students whose credits seamlessly transfer to another institution may find themselves in subsequent courses where they aren't equivalently prepared as students who took the previous course at that institution. So, because of CCN, these courses will certainly transfer seamlessly but there's no guarantee that students who transfer will be equivalently prepared for subsequent courses. For example, the topic of transformations is prescribed in MTH 111Z but without providing significant detail about the level of rigor, scope, and detail of coverage of transformations and combination of transformations, some institutions may not equivalently prepare students for the combination of horizontal and vertical transformations that will be assumed to be 'prerequisite' material for the subsequent course, MTH 112Z.

Signed by:

Name: [Nikki Gavin](#)

Signature



Name: [Celeste Petersen](#)

Signature



Date: [November 4, 2022](#)

Provide copies to:

CCN Math Subcommittee

Nikki Gavin

Celeste Petersen

Sara Clark
Curtis Feist
Doug Gardner
Peter Haberman
Elizabeth Jones
Beatriz Lafferriere
Vikki Maurer
Leanne Merrill
Pam Morse
Randall Paul
Mike Price
Rick Rieman
Steve Tanner
Alison Williams

Chair/Co-chairs

Nikki Gavin
Celeste Petersen

Transfer Council Co-chairs

Susan Jeffords
Teresa Rivenes

HECC

Donna Lewelling
Veronica Dujon
Jane Denison-Furness
Brittany Miles
Kyle Lee
Daniel Anderson
Jennifer Markey

— END OF REPORT—

CCN Subcommittee Minority Report Math

Subcommittee Members

Nikki Gavin, gavinn@lanecc.edu

Peter Haberman, phaberma@pcc.edu

Leanne Merrill, merrill@wou.edu

Alison Williams, alison.williams@oregoncoast.edu

Subcommittee Co-Chairs

Nikki Gavin, Lane Community College

Celeste Petersen, Clatsop Community College

November 3, 2022

Re: Recommendation from the subcommittee

Be it resolved that the following members

Nikki Gavin

Peter Haberman

Leanne Merrill

Alison Williams

Lane Community College

Portland Community College

Western Oregon University

Oregon Coast Community College

of the CCN Math Subcommittee would like to file a Minority Report to provide a record of their concern or disagreement with the following motions:

- I. In accordance with the mandates of SB 233, the Common Course Number Math Subcommittee recommends to the Transfer Council that:
MTH 111Z - Precalculus I: Functions be credited at **4 quarter credits**.
- II. In accordance with the mandates of SB 233, the Common Course Number Math Subcommittee recommends to the Transfer Council that:
MTH 112Z - Precalculus II: Trigonometry be credited at **4 quarter credits**.

Section A: Rationale & Alternative Recommendations

The above members are concerned or disagree with these recommendations for the following reasons:

- A. Our experience teaching these courses has shown us that some students are better served by more time each week spent on mathematics learning. This includes time in class spent on direct instruction, individual and group work, just-in-time remediation, and other teaching practices geared towards supporting students in STEM fields. It also increases time spent out of class; a 5-credit course not only offers one additional hour per week of class time than a 4-credit course, but it also expects an additional two hours per week of outside class engagement with the course materials. This time outside of class allows students to focus more on their mathematical learning; indeed it accurately and responsibly reflects the time needed to master the material.

Additionally, these courses are already 5 credits at the majority of Oregon community colleges (nine out of seventeen community colleges offer MTH 111 at 5 credits, and nine offer MTH 112 at 5 credits). The fact that a majority of the Oregon community colleges currently offer MTH 111 and MTH 112 as 5-credit courses while all of the Universities offer them as 4-credit courses (see Figures 1 and 2 below) is a sharp reflection of the significant differences in the student populations and resources of our different institutions. We believe that our

institutions should be empowered to determine the best credit-structure for these courses in order to meet the needs of our respective student populations and institutions.

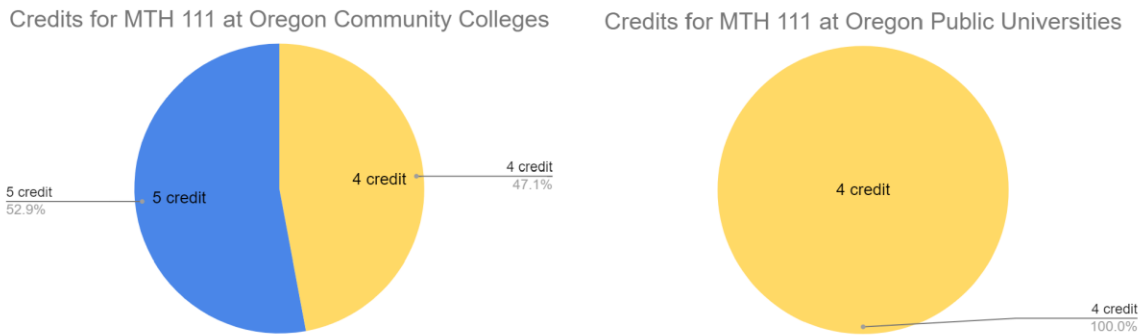


Fig. 1 MTH 111 - OR CCs (n=17) vs. OPUs (n=7) - Comparison of Credit Distribution

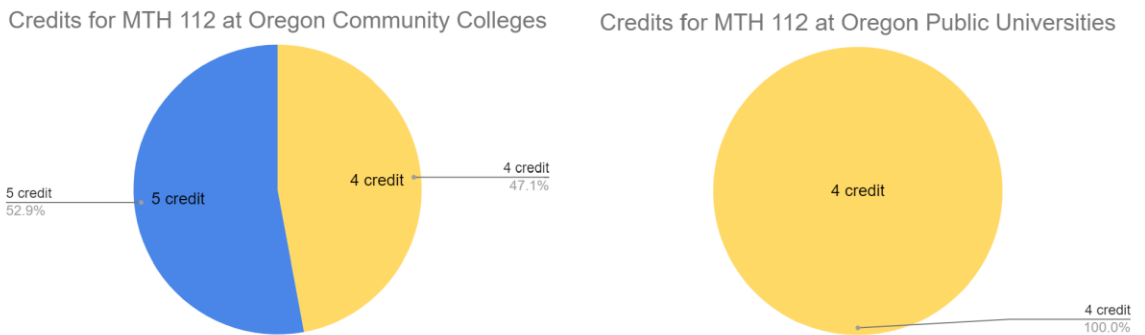


Fig. 2 MTH 112 - OR CCs (n=17) vs. OPUs (n=7) - Comparison of Credit Distribution

Finally, while we understand the value of corequisite remediation courses as well as lecture/lab courses, we worry about the unintended consequences of having students who are identified as requiring corequisite support pay extra money to enroll in courses that are not easily transferable to other institutions. These students tend to be from historically underserved minority demographics, first-generation, low-income, or adult learners; as such, there may be longer-term equity issues caused by corequisite requirements.

As noted above, there are already differences in the ways that these courses are taught and offered at the various Oregon institutions. However, we have agreed on a core set of learning outcomes that will be present in each offering of this course across the state. We do not see a reason why the number of credits must be equal, so long as the course transfers with the correct name

and number, and satisfies the same prerequisites as the institution accepting the transfer credit.

- i. Our alternate recommendation is to allow colleges to choose whether their offerings of MTH 111Z and MTH 112Z are 4 or 5 credits.

Section B: Considerations

In conclusion, we ask the Transfer Council to consider these issues carefully and to do/consider the following:

- A. Consider allowing institutions to have the flexibility to choose either 4 or 5 credits for these courses, with the understanding that the courses will still transfer seamlessly with the same course number and name between institutions. This allows different institutions to make choices based on the needs of their student populations, which differ between community colleges, technical and regional universities, and the larger public universities. In particular, several community colleges were not afforded representation on the subcommittee, whereas the four-year universities were overrepresented (8 seats for 7 universities). This disproportionate representation means that the needs of community colleges were not as highly prioritized and, from the graphs above, we see that the majority of community colleges already offer these courses at 5 credits. We see no reason why the number of credits must match.

Signed by:

Name **Nikki Gavin**

Signature *Nikki Gavin*

Name **Peter Haberman**

Signature **PETE**

Name **Leanne Merrill**

Signature *Leanne Merrill*

Name **Alison Williams**

Signature **Aliso William**

Date: **November 3, 2022**

Provide copies to:

CCN Math Subcommittee

Nikki Gavin
Celeste Petersen
Sara Clark
Curtis Feist
Doug Gardner
Peter Haberman
Elizabeth Jones
Beatriz Lafferriere
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Jane Denison-Furness
Brittany Miles
Kyle Lee
Jennifer Markey

— END OF REPORT—



Summary of CCN Statistics Subcommittee Report

The following provides a summary of the Recommendation Report from the CCN Statistics Subcommittee.

Recommendation	Vote
Course Number: 243Z	Yes 10 No 0 Abstain 0
Course Title: Elementary Statistics I	Yes 10 No 1 Abstain 0
<p>Course Description:</p> <p>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.</p>	Yes 10 No 0 Abstain 0
<p>Learning Outcomes & Objectives:</p> <p>Students will be able to:</p> <ol style="list-style-type: none"> 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. <ol style="list-style-type: none"> 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. <ol style="list-style-type: none"> 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. <ol style="list-style-type: none"> a. Interpret point and interval estimates. 4) Identify, conduct, and interpret appropriate parametric hypothesis tests. <ol style="list-style-type: none"> 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. <ol style="list-style-type: none"> 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. 	Yes 10 No 1 Abstain 2

Course Credits: 4 credits	Yes 10 No 1 Abstain 1
Subject Code: ST or STAT or similar statistics prefix (not math)	Yes 13 No 0 Abstain 0
Time Frame for Revisiting Course: The STATs subcommittee will meet to review objectives for STAT 243 in Spring 2025	Yes 12 No 0 Abstain 0

Chart approved by CCN Statistics Chair Joseph Reid, October 27, 2022.

CCN Subcommittee Recommendation Report

Statistics Workgroup

Subcommittee Members

Joseph Reid (joseph.reid@oit.edu)

Sheeny Behamrd (sheeny.behmard@chemeketa.edu)

Tim Lackner (tlackner@clatsopcc.edu)

Goug Gardner (dgardner@roguecc.edu)

Kelly Mercer (kelly.mercer@clackamas.edu)

Jeff Crabill (crabilj@linnbenton.edu)

Gina Shankland (gina.shankland@mhcc.edu)

Steve Tanner (stanner@eou.edu)

Lisa Ganio (lisa.ganio@oregonstate.edu)

Bob Fountain (routair@pdx.edu)

Daniel Kim (kimd@sou.edu)

David Levin (dlevin@uoregon.edu)

*Emiliano Vega (emiliano.vega@pcc.edu)

*Sean Rule (srule@cocc.edu)

*Scott Beaver (beavers@wou.edu)

*Yuan Jiang (yuan.jiang@oregonstate.edu)

* Member was unable to be at final meeting to vet this report but was instrumental in its creation and voting throughout the process.

Chair: Joseph Reid (joseph.reid@oit.edu)

Oct. 26, 2022

Date of last meeting: 10/26/2022

Plans for next meeting

Pending transfer council approval, there is no future meeting scheduled. If one is needed, a follow-up meeting will occur at the availability of the faculty in the committee.

Overview

Our group worked to find a set of outcomes that would be able to make a course that is substantially the same between all campuses. Based on outcomes, the group found that there is enough variation in the topic of statistics so that courses would not be substantially similar (simply based on the nine outcomes we had, up to around 70% of the course could be substantially different in content by my estimate). This pressured us to determine a set of shared objectives under these outcomes that would align the course material up to 75% for the courses without restricting the realm of dictating which statistical framework (e.g., frequentist, Bayesian, or re-sampling) the courses are taught under.

A great deal of work went into finding agreement on these outcomes/objectives. Furthermore, the group is aware that assessment will have to be performed on all outcomes, thus we were able to condense the outcomes/objectives into five outcomes (supported by 14 objectives) that provide a sufficiently similar content so that universities and community colleges can all accept the course for transfer.

Furthermore, a discussion of subject code, course number, title, and number of credits took place with the group passing (by vote) all of them. Finally, a course description was written to support the course.

Action Items Completed

RECOMMENDATION	STATUS
Course Number: 243Z Rationale: This is the most used number associated with a first term of elementary statistics at the universities and community colleges. There was a discussion (and significant objection by several members) to considering a	Voted: 6/9/2022 Yes: 10 No: 0 Abstain: 0; Passed

<p>1xx course number, but 243 was widely supported.</p>	
<p>Course Title: Elementary Statistics I</p> <p>Rationale: This course is a first course in statistical thought and processes. As such, a designation of “elementary” is appropriate. The numeric identifier of “I” was the only sticky point in this case as many schools will not have a second course offered, so there was an objection by one member to this.</p>	<p>Voted: 6/9/2022 Yes: 10 No: 1 Abstain: 0; Passed</p>
<p>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.”</p> <p>Rationale: Course description was created on 6/9/2022 by the committee representatives together and includes the course outcomes in a brief statement.</p> <p>Statement was unanimously accepted among members that were present.</p>	<p>Voted: 6/9/2022</p> <p>(Amended) Voted: 10/26/2022 Yes: 10 No: 0 Abstain: 0; Passed</p>
<p>Learning Outcomes/Objectives</p> <p><i>(The following was passed as a group among the voting members that were present with the caveats that the “objectives” under each of the “outcomes” MUST be included within each institution in order to make the courses substantially similar.)</i></p> <p>Students will be able to:</p> <ol style="list-style-type: none"> 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. 	<p>Voted: 10/19/2022 Yes: 10 No: 1 Abstain: 2; Passed</p>

<ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> a. Interpret point and interval estimates. 4) Identify, conduct, and interpret appropriate parametric hypothesis tests. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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. 	
<p>Course Credits: 4 credits</p>	<p>Voted: 10/12/2022</p>

<p>Rationale: The majority of schools have this course as a 4 credit course. There was significant concern by many about the credit limits for degree programs were this course to be increased to 5 credits at their institutions. Similarly, there is concern about workload and being able to effectively teach this course within 4 credits by individuals who regularly teach the course as 5 credits.</p>	<p>Yes: 10 No: 1 Abstain: 1; Passed</p>
<p>Subject code: ST, STAT or similar statistics prefix (not math) for 243Z</p> <p>Rationale: Many faculty expressed excitement about this change (not a change at Oregon State as their math and statistics departments are already separated.) This proposal is supported because</p> <ul style="list-style-type: none"> • Statistics is not a subfield of mathematics • Students should recognize the difference between mathematical logic and thought when compared with statistical logic and thought <p>The concern associated with the specific naming is that schools will have to go through significant work to do so including changing many major and curriculum maps in the institution. Other concerns include who would “own” the new code in terms of departments, overlap in codes (“ST” is surgical-technology in at least one institution).</p>	<p>Voted: 10/5/2022 Yes: 13 No: 0 Abstain: 0; Passed</p>
<p>Review Cycle Recommendation: Committee will meet to review objectives for STAT 243 in spring 2025</p> <ul style="list-style-type: none"> • 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 in order to adjust the course 	<p>Voted: 10/19/2022 Yes: 12 No: 0 Abstain: 0; Passed</p>

Review of deferred topics will be addressed at the behest of transfer council at a later date.	
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Action Items In-progress/Pending

ACTIVITY	STATUS (include an estimate—hours/# of meetings—it will take to complete work)
<p>STAT 244 yet to be addressed. Institutions will need time to collect feedback from stake holders with regards to the implementation of changes to STAT 243, thus a review of STAT 244 should not be attempted prior to Spring term of 2024.</p>	<p>Deferred by transfer council vote 10/21/2022 pending implementation of STAT 243 adjusted curriculum.</p>
<p>STAT 243 co-requisite alignment: Institutions will need time to collect feedback from stake holders with regards to the implementation of changes to STAT 243, thus a review of co-requisite coursework should not be attempted prior to Spring term of 2024. The statistics workgroup should work in concert with a group that has domain over co-requisite topic alignment to support this goal. We would recommend that a meeting between all groups involved (mathematics, strong start, and statistics) be used to initiate the process effectively.</p>	<p>Deferred by transfer council vote 10/21/2022 pending implementation of STAT 243 adjusted curriculum.</p>

Questions for Transfer Council

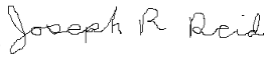
- No questions at this time. Thank you for your consideration and support of our work.

Other Notes

- None at this time.

Signed by:

Name Joseph R. Reid

Signature 

Date: June 10, 2022

Provide copies to:

CCN Statistics
Subcommittee

Chair: Joseph Reid

Transfer Council Co-chairs

Susan Jeffords
Teresa Rivenes

HECC

Jane Denison-Furness
Donna Lewelling
Veronica Dujon
Brittany Miles
Daniel Anderson
Kyle Lee
Jennifer Markey

— END OF REPORT—



Summary of CCN Writing Subcommittee Report

The following provides a summary of the Recommendation Report from the CCN Writing Subcommittee.

Recommendation	Vote
<p>Course Number and Prefix: WR121Z</p> <p>Course Credits: 4</p> <p>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.</p> <p>Course Title: Composition I</p> <p>Learning Outcomes:</p> <ol style="list-style-type: none"> 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. 	<p>Yes 12 No 0 Abstain 0; Passed</p> <p>Yes 11 No 0 Abstain 1; Passed</p> <p>Yes 12 No 0 Abstain 1; Passed</p> <p>Yes 12 No 0 Abstain 1; Passed</p> <p>Yes 12 No 0 Abstain 1; Passed</p>
<p>Course Number: 122Z</p> <p>Course Prefix: WR</p> <p>Course Credits: 4</p> <p>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.</p> <p>Course Title: Composition II</p> <p>Learning Outcomes:</p> <ol style="list-style-type: none"> 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 	<p>Yes 10 No 1 Abstain 1; Passed</p> <p>Yes 12 No 0 Abstain 0; Passed</p> <p>Yes 11 No 0 Abstain 1; Passed</p> <p>Yes 12 No 1 Abstain 0; Passed</p> <p>Yes 12 No 1 Abstain 0; Passed</p> <p>Yes 12 No 1 Abstain 0; Passed</p>

<p>5. Reflect on knowledge and skills developed in this and other courses and potential transfer to future contexts</p>	
<p>Course Number: 227Z Course Prefix: WR 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. Course Title: Technical Writing Learning Outcomes:</p> <ol style="list-style-type: none"> 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 	<p>Yes 11 No 0 Abstain 1; Passed Yes 12 No 0 Abstain 0; Passed Yes 12 No 0 Abstain 0; Passed Yes 12 No 1 Abstain 0; Passed</p> <p>Yes 12 No 1 Abstain 0; Passed Yes 12 No 1 Abstain 0; Passed</p>
<p>Review Cycle Recommendation</p> <ul style="list-style-type: none"> • Annual review, winter term following the Oregon Writing and English Advisory Committee (OWEAC) annual meeting • Every third year, alignment review 	<p>Yes 12 No 0 Abstain 0; Passed</p>

Chart approved by CCN WTG Co-chairs Leigh Graziano, Tristan Striker, and Tim Jensen; November 2, 2022.

CCN Subcommittee Recommendation Report

Writing

Subcommittee Members

Leigh Graziano, grazianol@wou.edu
Tim Jensen, tim.jensen@oregonstate.edu
Tristan Striker, striket@linnbenton.edu

Leigh Graziano, Tim Jensen, and Tristan Striker, Co-Chairs
November 2, 2022

Date of last meeting

Friday, October 28, 2022.

Plans for next meeting

This marks our final meeting. We will schedule a follow-up meeting in the event that the Transfer Council asks for revisions or more information on some aspect of our report.

Overview

Action Items Completed

RECOMMENDATION	STATUS (include the vote tally for each recommendation and whether the motion passed or failed)
WR 121Z Decisions	
Course Number and Prefix: WR 121Z Rationale: This course number and prefix was selected because the majority of community colleges and public universities use this number and prefix already.	12 yes, 0 no, 0 abstain – Passed
WR 121Z Course Credits: 4 Rationale: 4 credits was chosen because the majority of schools in the state already have the course at 4 credits.	11 yes, 0 no, 1 abstain – Passed
WR 121Z 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. Rationale: This course description was built from a survey of the descriptions currently used by community colleges and public universities; it represents the curriculum that we share and hold to be most important and best aligned with national standards.	12 yes, 0 no, 1 abstain – Passed
WR 121Z Course Title: Composition I Rationale: For many of the community colleges and public	12 yes, 0 no, 1 abstain – Passed

<p>universities, WR 121Z and WR 122Z are taken in sequence. Most called this course “College Writing I,” but we felt that Composition I better reflected the pedagogical approach that most programs take, which is richer than a crash course in how to write for college.</p>	
<p>WR 121Z Learning Outcomes:</p> <ol style="list-style-type: none"> 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. <p>Rationale: These learning outcomes align with those recommended by the Oregon English and Writing Advisory Committee (OWEAC) and by national organizations like the Council of Writing Program Administrators (CWPA); they also represent, for us, the most important content of the course that must be aligned.</p>	<p>12 yes, 0 no, 1 abstain – Passed</p>
<p>WR 122Z Decisions</p>	
<p>Course Number: WR 122Z</p> <p>Rationale: This course number and prefix was selected because the majority of community colleges and public universities use this number and prefix already.</p>	<p>10 yes, 1 no, 1 abstain – Passed</p> <p><i>The two dissenting votes may write a minority report arguing for renumbering the course to 222.</i></p>
<p>Course Prefix: WR</p> <p>Rationale: This prefix was chosen because the majority of community colleges and public universities use it, or something very similar, already.</p>	<p>12 Yes, 0 No, 0 Abstain – Passed</p>
<p>Course Credits for WR 122Z: 4</p> <p>Rationale: 4 credits was chosen because the majority of schools in the state already have the course at 4 credits.</p>	<p>11 Yes, 0 No, 1 Abstain – Passed</p>
<p>Course Description for WR 122Z: WR 122Z builds on concepts and processes emphasized in WR 121Z, engaging with inquiry, research, and argumentation in support of students’</p>	<p>12 Yes, 1 No, 0 Abstain – Passed</p>

<p>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.</p> <p>Rationale: This course description was built from a survey of the descriptions currently used by community colleges and public universities; it represents the curriculum that we share and hold to be most important and best aligned with national standards.</p>	
<p>Course Title: Composition II</p> <p>Rationale: For many of the community colleges and public universities, WR 121Z and WR 122Z are taken in sequence. Most called this course "College Writing II," but we felt that Composition II better reflected the pedagogical approach that most programs take, which is richer than a crash course in how to write for college.</p>	<p>12 Yes, 1 No, 0 Abstain – Passed</p>
<p>Course Learning Outcomes:</p> <ol style="list-style-type: none"> 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. <p>Rationale: These learning outcomes align with those recommended by OWEAC and by national organizations like CWPA; they also represent, for us, the most important content of the course that must be aligned.</p>	<p>12 Yes, 1 No, 0 Abstain – Passed</p>
<p>WR 227Z Decisions</p>	
<p>Course Number: 227Z</p> <p>Rationale: This number was chosen because it is the most common numbering used across the state; also, this course is primarily taught at community colleges who cannot offer 300-level coursework, so the consensus was public universities who have the course at the 300-level should make the change</p>	<p>11 Yes, 0 No, 1 Abstain – Passed</p>

to cause the least disruption.	
<p>Course Prefix: WR</p> <p>Rationale: This prefix was chosen because the majority of community colleges and public universities use it, or something very similar, already.</p>	12 Yes, 0 No, 0 Abstain – Passed
<p>Course Credits: 4</p> <p>Rationale: 4 credits was chosen because the majority of schools in the state already have the course at 4 credits.</p>	12 Yes, 0 No, 0 Abstain – Passed
<p>Course Title: Technical Writing</p> <p>Rationale: This is already the title in use at the majority of schools that offer WR 227Z.</p>	12 Yes, 1 No, 0 Abstain – Passed
<p>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.</p> <p>Rationale: This course description was built from a survey of the descriptions currently used by community colleges and public universities; it represents the curriculum that we share and hold to be most important and best aligned with national standards.</p>	12 Yes, 1 No, 0 Abstain – Passed
<p>Course Learning Outcomes:</p> <ol style="list-style-type: none"> 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 	12 Yes, 1 No, 0 Abstain – Passed

<p>ethical responsibilities across organizational contexts.</p> <p>Rationale: These learning outcomes align with those recommended by OWEAC and by national organizations like CWPA; they also represent, for us, the most important content of the course that must be aligned.</p>	
Review Cycle Recommendation	
<p>We propose that the annual review cycle of these courses have a twofold purpose: (1) to review the transfer effectiveness of the courses and (2) to gather information about challenges, concerns, changes needed from the 24 two- and four-year schools in the state.</p> <p>We propose that this review take place in winter term following the OWEAC meeting scheduled, so as to leverage our existing state committee that often gathers this exact kind of data and has representation from most of the schools in the state.</p> <p>Every third year, we recommend a deeper review of the alignment of these courses; this is the only time that the subcommittee will consider a vote to modify the aligned content of the course, using the previous two years of data. The choice in these third-year reviews will be to either affirm our existing alignment decisions or to revise a particular aspect to keep our curriculum based on the data gathered from the previous two years.</p> <p>We advise that as many members of the original subcommittee be invited to participate in these discussions as historical memory and original context will be useful in informing future decisions.</p>	<p>12 Yes, 0 No, 0 Abstain – Passed</p>

Action Items In-progress/Pending

ACTIVITY	STATUS (include an estimate—hours/# of meetings—it will take to complete work)
None	N/A

Questions for Transfer Council

- Are grade pre-requisites left to the institutions? For example, a C- is required across most of the state for WR 121 and WR 122, so a student that transfers in an aligned WR 121 CCN course with a D will still have to retake the course at their new institution.

Other Notes

- We do want to note, on behalf of our member who voted no on many of these recommendations, that some institutions felt that the interpretation of the legislation to require identical course descriptions and learning outcomes to be an inappropriate interpretation of legislation that only calls for alignment. Registrars routinely articulate courses, using faculty experts, without requiring any such identical language. A determination is made based on learning outcomes and course descriptions and schedules, when included, that the course is at least 75% aligned/similar to the university course. It is the argument of these stakeholders that these decisions should remain in the hands of institutions; that this legislation encroaches on academic freedom; and that the HECC has not adequately articulated how the state's jurisdiction reconciles with academic freedom and curricular decision-making. There is a precedent set by this legislation, which could be used in future scenarios to further shift curricular decisions from subject matter experts to politicians—a move that's occurring in other states right now. The more the HECC can do to clarify how CCN legislation will not impinge upon academic freedom and curriculum oversight would be wise and appreciated.

Signed by:

Name: Leigh Graziano

Signature: *Leigh Graziano*

Name: Tim Jensen

Signature: *Tim Jensen*

Name: Tristan Striker

Signature: *Tristan Striker*

Date: November 2, 2022

Provide copies to:

CCN WTG Subcommittee Members

Leigh Graziano
Tim Jensen
Tristan Striker
Julie Brown
Amanda Coffey
Sydney Elliott
Paul Lask
Gina Szabady

Verne Underwood
Malinda Williams
Sheri Rysdam
Matt Schnackenberg
Kate Comer
Laura Jessup
Nick Reckentwald
Rachel Eccleston

Transfer Council Co-chairs

Susan Jeffords
Teresa Rivenes

HECC

Donna Lewelling
Veronica Dujon
Jane Denison-Furness
Brittany Miles
Kyle Lee
Daniel Anderson
Jennifer Markey

— END OF REPORT—



Summary of CCN Systems & Operations Recommendation Report (6/9/2022) and Memo (8/11/2022)

The following chart provides a summary of the framework for course numbers, titles, prefixes, and course descriptions for CCN. –CCN System Subcommittee Charge

Recommendation		Vote
Course Designator	There must be a course designator in the framework.	Approved 13 Y-3 N.
Subject Code (Prefix)	Schools are encouraged to align subject codes where feasible. If the subject matches, schools may retain their existing subject codes even if they are abbreviated differently (i.e., HIST and HST are both allowable). <i>*See the August 11, 2022 Memo for additional information.</i>	Approved 13 Y-3 N.
Course Number	Include a uniform designator in the course number suffix as part of all CCN course numbers. [For example, Math 111 <u>A</u> .] Change course numbers when necessary to align across all Oregon community colleges and universities.	Approved 13 Y-3 N.
Course Description	Individual institutional catalog course descriptions must match the baseline course description as approved by faculty subcommittees. Additions to course descriptions may include: <ul style="list-style-type: none"> • Stylistic nuances that do not change the meaning of the description, based on institutional guidelines • Course requisites • Other housekeeping items • Substantive (less than 25% of the course) additional statements that summarize any local course outcomes 	Approved 13 Y-3 N.
Course Title	Course titles should match among institutions. <ul style="list-style-type: none"> • Allowing for some institutional stylistic nuances (e.g., FUNDAMENTALS OF ELEMENTARY MATHEMATICS I, FUNDAMENTALS OF ELEMENTARY MATHEMATICS 1, FUNDAMENTALS OF ELEMENTARY MATH I) The course title will not be the required primary designator for the common course numbering system courses. Once the titles match, then institutions would be able to include institutional stylistic nuances, such as using Arabic or Roman numerals; abbreviating or not abbreviating words; adding or not adding additional elements, such as special characters or letters that designate university requirements. <i>*See the August 11, 2022 Memo for additional information.</i>	Approved 13 Y-3 N.

Chart approved by CCN Systems & Operations Co-chairs Julia Pomerenk and Chris Sweet, 9/16/2022.

Note: on p. 5 of the attached Memo, the HECC staff advises the first sentence after “Guidance for Faculty Subcommittee Related to Outcome” read as follows: *For courses identified as part of the Common Course Numbering System, institutions are expected to adopt course outcomes as written by faculty subcommittees, recommended by the Transfer Council, and approved by the Commission.* [emphasis added to the proposed revision]. This is consistent with language used in both legislation and Transfer Council concerning recommendations and approval of CCN.

MEMORANDUM

TO: Transfer Council

FROM: Chris Sweet and Julia Pomerenk, Co-Chairs,
Systems & Operations Subcommittee

DATE: August 11, 2022

SUBJECT: Additional Information Related to Recommended Framework
for Common Course Number Numbering (CCN)

On behalf of the Systems & Operations Subcommittee, we thank you for the time and attention that you have dedicated to your review of our subcommittee's recommendations for the framework for Common Course Numbering (CCN).

Based on the questions that were raised during our discussion of our recommended framework with the Transfer Council at its meeting on July 21, the subcommittee is pleased to provide additional information, as requested during the meeting. This additional information was discussed at our subcommittee meeting on July 28 and again at our subcommittee meeting on August 11 (today).

Below you will see the original recommendations regarding subject code and course title, along with our response to the request for additional information.

In addition, the subcommittee has provided guidance related to course outcomes that may be helpful for faculty subcommittees, as noted below.

Please let us know if there is any other information that would be useful as the Transfer Council continues to review our recommended framework and votes on the recommendation, which we anticipate will take place during the Transfer Council meeting on August 18.

Wishing us all the best as we work to implement successful Common Course Numbering for the students and citizens of the state of Oregon.

Copies: Donna Lewelling, HECC
Jane Denison-Furness, HECC
Jennifer Markey, HECC
Members of the Systems & Operations Subcommittee

**Subject Code Recommendation, from Systems & Operations Subcommittee
Report, dated June 9, 2022**

Subject Code

Schools are encouraged to align subject codes where feasible.

If the subject matches, schools may retain their existing subject codes even if they are abbreviated differently. i.e. HIST and HST are both allowable.

Definition:

Subject Code is defined as the element of a course that is an abbreviation of the Subject and that precedes the Course Number. Courses are most often referred to by the Subject Code and Course Number, such as MATH 121.

Rationale:

This recommendation aligns with Guiding Principles #2.

Based on Guideline #2, we view minor abbreviation differences as acceptable. Forcing full alignment could cause a lot of unnecessary work and create confusion for students. Slight variations such as MTH and. MATH and HST and HIST are not viewed as problematic.

NOTE:

The Sys Ops Subcommittee recognizes that there are broader discussions happening when subjects do not align.

Sys Ops Subcommittee will make recommendations after getting additional guidance.

Additional Information Related to the Subject Code Recommendation

(The subcommittee uses “subject code” in parallel to the term “prefix” as used in SB 233.)

Encouragement for Subject Codes to Align Where Feasible

Opportunities for alignment include:

- Selecting the subject code used most across the state, when an institution begins to offer courses in a new subject for that institution
- Selecting the subject code used most across the state, when an institution revises existing courses to align subjects for courses in the common course number system (such as Math courses being revised to Statistics courses)
- The Systems & Operations Subcommittee will make further recommendations after gaining further perspective from the Faculty Subcommittees about mismatched subjects.

Limitations for Characters in Subject Code Fields in Student Information Systems

Please note that Student Information Systems (SIS) have character limits to the fields for subject codes.

Anthology subject code character limit (field includes subject code and course number) = 12

Anthology is used by 2 of the 19 institutions that have provided SIS information to the subcommittee.

Banner subject code character limit = 4.

Banner is used by 13 of the 19 institutions that have provided SIS information to the subcommittee. Banner is used by all public four-year institutions in Oregon. Ellucian Colleague character limit = 7

Ellucian Colleague is used by 1 of the 19 institutions that have provided SIS information to the subcommittee

Rogue CC system character limit (field includes subject code and course number) = 8

This homegrown system is used by 1 of the 19 institutions that have provided SIS information to the subcommittee.

Jenzabar character limit = not yet reported to the subcommittee

Jenzabar is used by 2 of the 19 institutions that have provided SIS information to the subcommittee

Course Title Recommendation, from Systems & Operations Subcommittee
Report dated June 9, 2022

Course Title

Course titles should match among institutions
Allowing for some institutional stylistic nuances

The course title will not be the required primary designator for the common course numbering system courses.

Rationale

This recommendation aligns with Guiding Principles #1, 2, and 5.

Because courses in the common course numbering system will primarily identified by the common designator of a suffix following the course number, exact matches among course titles are not necessary.

With other alignment among the CCN courses, course title alignment is expected.

NOTE:

Institutions need to be able to include stylistic elements that follow course title protocols at the institution.

Course titles, as abbreviated on transcripts, are limited by the number of characters in that data field.

Additional Information Related to the Course Title Recommendation

Course Titles Should Match Among Institutions

Faculty Subcommittees are encouraged to work toward course titles that match, as much as possible. Institutions will use the full title, as determined by faculty subcommittees and faculty at their institutions, to enter titles into their Student Information Systems, in fields such as short title (to appear on transcripts and other documents) and long title (to appear in other locations).

Noting that the short title field is limited across all institutions and that 13 of the 19 institutions use Banner with a 30-character short title field, Faculty Subcommittees are strongly encouraged to agree on a common 30-character abbreviation for the Common Course Numbering courses. Short titles that match exactly will help convey that the courses (which will share a common number) are the same.

Limitations for Characters in Course Title Fields in Student Information Systems Note that Student Information Systems (SIS) have character limits to the fields for course titles.

Anthology character limit = 75 for title field (there is only one title field in Anthology) Anthology is used by 2 of the 19 institutions that have provided SIS information to the subcommittee.

Banner character limit = 30 for short title field
= 100 for long title field

Banner is used by 13 of the 19 institutions that have provided SIS information to the subcommittee. Banner is used by all public four-year institutions in Oregon. Ellucian Colleague character limit = 30 for short title; Nearly unlimited for long title

Ellucian Colleague is used by 1 of the 19 institutions that have provided SIS information to the subcommittee

Rogue CC system character limit = 50

This homegrown system is used by 1 of the 19 institutions that have provided SIS information to the subcommittee.

Jenzabar character limit = not yet reported to the subcommittee

Jenzabar is used by 2 of the 19 institutions that have provided SIS information to the subcommittee

Guidance for Faculty Subcommittee Related to Course Outcomes

For courses identified as part of the Common Course Numbering System, institutions are expected to adopt course outcomes as written by faculty subcommittees and approved by the Transfer Council. Variations in outcomes are only allowed to account for stylistic nuance requirements of individual institutions. The intent of the outcome must remain the same. Measurability does not represent a stylistic nuance.

The following is an example of how an outcome may be written differently without changing the intent:

- Students will be able to apply biological principles and generalizations to novel problems.
- Apply biological principles and generalizations to novel problems.
- Application of biological principles and generalizations to novel problems.

If an institution chooses to add course outcomes beyond the adopted statewide outcomes, they should follow the same design as the outcomes adopted by the Faculty Subcommittees.

CCN Subcommittee Progress Report & Recommendations Systems & Operations Subcommittee

Subcommittee Chairs

Julia Pomerenk

jpom@uoregon.edu

Chris Sweet

Chris.sweet@clackamas.edu

June 9, 2022

Link to [8/10/2022 memo](#), in the report

Date of last meeting

June 2, 2022

Plans for next meeting

Next meetings are expected to be set for late June or July. Members of the Systems & Operations Subcommittee do plan to meet over the summer.

Overview

Beginning with a meeting on April 12, 2022, the members of the Systems & Operations Subcommittee (Sys Ops Subcom) have met five times to date and have logged 12 meeting hours. The 16 voting members have demonstrated commitment to student success and the success of the Common Course Numbering (CCN) work. Their collegiality runs as strongly as their expertise. They are to be commended for constructing a framework within a tight timeline.

The perceived need to provide the framework as soon as possible prompted the subcommittee to hold a marathon meeting on June 2, 2022, so that our recommended framework could be forwarded to the Transfer Council for consideration at its meeting on June 17, 2022. The Systems & Operations Subcommittee met the challenge to build a sturdy framework, while the concurrent work of the faculty subcommittees had already begun, without the benefit of an approved framework for their work.

The subcommittee will also move forward with further Subject Code Recommendations in cases where the subject itself does not align (for example, Statistics and Math), following additional guidance from the Transfer Council.

The subcommittee will move forward to gather information from individual institutions to support ongoing discussion and additional decisions regarding implementing the framework, as approved by the subcommittee on June 2, 2022.

The subcommittee remains willing and able to serve as a resource for the Transfer Council and the faculty subcommittees as the work to implement common course numbering continues.

Action Items Completed

See the [8/10/2022 memo](#) for revisions/additional clarification (by TC) to this report.

ACTIVITY	STATUS
<p>Establish Guiding Principles for Subcommittee’s Work</p>	<p>APPROVED (unanimously) May 27, 2022</p> <p>Guiding Principles</p> <ol style="list-style-type: none"> 1. Do the most good for the most students. 2. Make the most meaningful changes, and create the fewest negative impacts. 3. Courses in the CCN (Common Course Numbering) framework are clearly identifiable. 4. Meet minimum requirements of the legislation. 5. The framework should be sustainable.
<p>Recommend Framework for CCN (Common Course Numbering)</p>	<p>APPROVED (13 to 3) June 2, 2022</p> <p>CCN Framework</p> <p>There must be a common designator in the framework.</p> <p>[The subcommittee uses “designator” to note some element added to the course so that it is clearly identified as one of the Common Course Number courses. The common designator recommended (below) is a suffix added to the course number, such as MATH 111*. The chosen suffix has not been identified, yet.]</p> <p>Schools have the ability to have the designator in additional locations as desired.</p>

[The subcommittee uses “additional locations” to note the fields in Student Information Systems and/or the places in a course title or course description that an institution may use to identify a Common Course Number course, in addition to using the common designator.]

Rationale:

This recommendation aligns strongly with Guiding Principles # 1, 2, 3, 4, and 5.

A common designator placed in a common location supports students as they take courses and transfer among schools.

With the common designator in place for similarity across schools, then schools may identify the CCN courses in additional ways, as well, to meet their needs.

Subject Code

Schools are encouraged to align subject codes where feasible.

If the subject matches, schools may retain their existing subject codes even if they are abbreviated differently. i.e., HIST and HST are both allowable.

Definition:

Subject Code is defined as the element of a course that is an abbreviation of the Subject and that precedes the Course Number. Courses are most often referred to by the Subject Code and Course Number, such as MATH 121.

Rationale:

This recommendation aligns with Guiding Principle #2.

Based on Guideline #2, we view minor abbreviation differences as acceptable. Forcing full alignment could cause a lot of unnecessary work and create confusion for students. Slight variations such as MTH and. MATH and HST and HIST are not viewed as problematic.

NOTE:

The Sys Ops Subcom recognizes that there are broader discussions happening when subjects do not align.

Sys Ops Subcom will make recommendations after getting additional guidance.

Course Number

(can include prefixes and suffixes)

Include a uniform designator in the course number suffix as part of all CCN course numbers.

Change course numbers when necessary to align across all Oregon community colleges and universities.

Rationale:

This recommendation aligns with Guiding Principles #1, 2, 3, 4, and 5.

Placing the designator in the course number is the most readily seen location for students and advisors, within registration systems and degree audit systems.

Using the course number is more reliable and trustworthy in terms of systems use and data reporting because the course number field in Student

Information Systems (SIS) is a validated field and not a 'free' format field which would be subject to error.

[The subcommittee uses validated fields to refer to elements in Student Information Systems that are double-checked automatically against tables of allowable entries. In contrast, 'free' format fields are open to whatever a user may type into that field and are not double-checked against allowable entries. More user errors can be introduced in "free' format fields. Validated fields provide more dependability.]

This recommendation supports a more sustainable, long-term solution than alternatives considered.

Course Description

Individual institutional catalog course descriptions must match the baseline course description as approved by faculty subcommittees.

Additions to course descriptions may include:

- **Stylistic nuances that do not change the meaning of the description, based on institutional guidelines**
- **Course requisites**
- **Other housekeeping items**
- **Substantive (less than 25% of the course) additional statements that summarize any local course outcomes**

[The subcommittee uses the term "housekeeping items, above, to note the individual items that an institution may add to course descriptions, such as how often the course it taught or whether the course fulfills an

institutional requirement.]

Rationale

This recommendation aligns with Guiding Principles #1, 2, 3, and 4.

Following the work of the faculty subcommittees and the alignment of learning outcomes, the courses in the common course numbering system will be equivalent at their core, so a baseline course description will reflect that equivalency.

In addition to the baseline description, institutions may add elements that are particular to the needs and/or protocol of the institution as described, above.

Course Title

Course titles should match among institutions

- **Allowing for some institutional stylistic nuances**

The course title will not be the required primary designator for the common course numbering system courses.

Rationale

This recommendation aligns with Guiding Principles #1, 2, and 5.

Because courses in the common course numbering system will primarily be identified by the common designator of a suffix following the course number, exact matches among course titles are not necessary.

With other alignment among the CCN courses, course title alignment is expected.

	<p>NOTE: Institutions need to be able to include stylistic elements that follow course title protocols at the institution.</p> <p>Course titles, as abbreviated on transcripts, are limited by the number of characters in that data field.</p>

Action Items In-progress/Pending

ACTIVITY	STATUS
Recommend Framework for Subject Code when subjects do not align	<p>Pending Additional guidance from the Transfer Council is needed.</p> <p>Subcommittee members will discuss further and make a further recommendation, after receiving additional guidance from the Transfer Council.</p>
Required Research prior to the next Sys Ops Subcom meeting	<p>In Progress Subcommittee members will gather information from their institutions (and peer institutions) to support ongoing discussion and additional decisions regarding implementing the framework, as approved.</p> <p>This research includes:</p> <ul style="list-style-type: none"> • Determine if a “+”, other character

	<p>or other letter is problematic for the software your institution uses</p> <ul style="list-style-type: none"> ● Determine if the 4th or 5th character following the number is best for your institution. ● Determine if a delimiter [a character to note the boundary between two regions in text] is needed to interface with external systems (e.g. Fed, VA, etc) and if that will be feasible in combination with other items like honors courses (101-C and 101H-C). ● Determine if local guidelines/outcomes currently exceed the 25% rule (e.g. GenEd information, course outcomes). ● Define parameters of course outcomes as was done for course description. ● Be prepared to discuss pros/cons.

Questions for Transfer Council

- What guidance can the Transfer Council provide regarding subject codes when the subjects do not align, such as Math and Statistics?
- What communication protocols are appropriate among the subcommittees? For example, should the subcommittee chairs/co-chairs connect directly with each other? Or should the subcommittee chairs/co-chairs connect directly with the co-chairs of the Transfer Council?
- How will elements of the CCN system be recorded and stored, for reference over time?

- How will the process to introduce change for any CCN course be monitored over time?

Other Notes

- Members of the Sys Ops Subcomm referred to the Guiding Principles (unanimously approved by the subcommittee) as they developed the framework. Members established Subject Code as the term for the abbreviation used by institutions for Subjects, for example HIST or HST for History. Members did note that our charge uses the word “prefix” for this term.

Signed (via email transmission) by Julia Pomerenk and Chris Sweet Date:
June 9, 2022

Copies provided to:

CCN Systems & Operations Co-chairs: Julia Pomerenk and Chris Sweet

Transfer Council Co-chairs: Susan Jeffords and Teresa Rivenes

HECC Support Staff: Jane Denison-Furness and Jennifer Markey

— END OF REPORT—