Curriculum Committee Meeting Agenda

Voting Committee Members
Chair – Mimi Pentz (Nurs/Hlth Occ)
Vice Chair –

Kristen Booth (Pre-Coll/ESOL)
Jenn Kamrar (Art/Comm)
Andrea LoMonaco (Business)
Emilie Miller (Science)
Pam Morse (Math)
Rebecca Schwartz (Inst Dean)
Stephen Shwiff (Soc Sci & Ed)
Robert Wells-Clark (Tec/Trad)

Non-Voting Committee Members
Jarett Gilbert (VP Instructional Services)
Susan Lewis (Curriculum)
Mary Martin (Student Services/Registrar)

Support Staff
Sara Wade (Instructional Services)

Guests

September 21, 2023 10:00 am – 12:00 pm (CC Orientation)
The Dalles Campus, room 1.162 (Board Room next to café)

Welcome of incoming chair (Pam)

Old Business

1. Contact Hour Definitions – continued from 6.10.22, 9.9.22, 10.6.22, 11.3.22 (Kristen) (Added to New Business)
2. Transferability Requirements – continued from 3.16.23 (LDC transfer, Gen Ed requirements, number of universities required) (Susan/Rebecca) (Added to New Business)
3. Standard Prerequisites – continued from 2.9.23, 2.16.23 (Rebecca) (postponed until 10.6.23)

New Business (10:25 – 11:55 am)

1. Election of Vice-Chair for 2023-24 (Mimi)
2. Anticipated Submissions for 2023-24 (Susan)
3. Review of Submission Requirements [1] (Susan)
4. ILO Assessment Committee update on ILO Rubric revisions (Susan)
5. Transferability Requirements [2] – continued from 3.16.23 (LDC transfer, Gen Ed requirements, number of universities required) (Susan/Rebecca)
6. Contact Hour Definitions – continued from 6.10.22, 9.9.22, 10.6.22, 11.3.22 (Kristen) Does the committee intend to carry on with this work?

Discussion Items

none

Next Meeting: October 6, 2023

Attachments: [1] CCOG Development Template with CC Notations; [2] Transferability information

CGCC Course Content and Outcome Guide Development Template

With Notes for Curriculum Committee Members

All template sections will ultimately require a response on the New Course submission form unless noted as "optional." Approach each of the responses from a departmental perspective rather than an individual instructor's perspective. A CCOG is meant to be a guide for all faculty teaching the course, and as such, should reflect the minimum expectations/requirements the department and institution have regarding the instruction of the course. This template is a development tool, not a submission form. New Course submission forms may be found at http://www.cgcc.edu/curriculum/forms. If you need assistance with any part of this template or the completion of a New Course submission form, please contact Susan Lewis at slewis@cgcc.edu.

COURSE NUMBER: Not college level under 100; 1st year generally 100-198; 2nd year generally 200-298; 199 and 299 experimental courses. Does the number align with similar courses at other colleges and universities?

COURSE TITLE (maximum 75 characters, including spaces)**:** Is the title descriptive? Does it align with similar courses at other colleges and universities?

TOTAL CREDITS: Do credits align with hours listed below? Do they appear appropriate based on the breadth of the course outcomes and content? Do they align with similar courses at other colleges and universities?

LECTURE HOURS: (per 10-week term; 1 credit of lecture = 1 hour in the classroom and 2 hours of study outside the classroom)

LECTURE/LAB HOURS: (per 10-week term; 1 credit of Lec/lab = 2 hours in the classroom and 1 hour of study outside the classroom)

LAB HOURS: (per 10-week term; 1 credit of lab = 3 hours in the classroom and minimal to no study outside the classroom)

Does choice of credit hours align with content and described teaching mode? If there is a mix of Lec/Lab hours and either Lecture hours or Lab hours, does it make sense to have the mix or should the hours just be Lec/Lab?

GENERAL EDUCATION DESIGNATION: (yes/no – if yes, additional prep work required regarding alignment with Institutional Core Learning Outcomes and AAOT discipline area outcomes and criteria)

General Education Request Form

- Do course outcomes address Institutional Learning Outcomes (ILO #1 and 2 require a major designation and at least 1 additional ILO must have at least a minor designation)?
- Do course outcomes address AAOT discipline area outcomes and criteria? There are not separate response boxes for criteria. Criteria should be addressed within one or more of the responses to AAOT outcomes. This means you might have to look more diligently for the criteria but it is still important.
- Responses to ILOs and AAOT outcomes and criteria should speak to content of the course that every instructor of that course is responsible for rather than lesson plans/assignments that may be specific to an individual instructor. An assignment may be provided to help illustrate how content may be addressed; however, it should be clear that the lesson/assignment is addressing a specific area of the course content that can be found on the course submission form.

- The responses in the Gen Ed Request form are not printed/published anywhere; therefore, it is not necessary to correct the responses for grammar, punctuation, or poor organization. If you understand what is being expressed and are satisfied that the ILO or AAOT outcomes and criteria are sufficiently addressed, there is no need to correct or revise text. If the written response is unclear to you, you have the opportunity to question the submitter during the meeting and rely on their verbal response. If the submitter is not in attendance, you may vote to postpone the submission requesting clarification. The submitter should then revise the written submission and attend the next meeting when the submission may be rescheduled and respond verbally.

CULTURAL LITERACY DESIGNATION: (yes/no – if yes, additional prep work required regarding alignment with AAOT cultural literacy outcome and criteria)

Cultural Literacy Designation Request form

- Similar to the Gen Ed Request form asking submitters to respond to how course outcomes and content address the AAOT outcomes and criteria for Cultural Literacy. Same directions/suggestions apply.

REQUISITES: (prerequisites, corequisites, prerequisite/concurrent [pre/co], recommended) Do the prerequisites provide the necessary background so that students will have the best chance for success in the course? Are they reasonable? Do they align with other courses and their prerequisites? Do they result in "hidden requirements" in any degrees or certificates? If so, how is that being addressed? Do they impact courses from other departments/discipline areas? If so, how is that being addressed? Required prerequisites should be considered as necessary and not something that can be waived when they are inconvenient. If they are not necessary and it is expected that an instructor may choose to waive them regularly, then they are probably "recommended" rather than "required." The standard prerequisites (Placement into MTH 65 or MTH 98 or equivalent placement. Prerequisite/concurrent: WR 121) are required for all Gen Ed courses unless an Opt-out Form has been submitted and approved. In the Opt-out Form, the submitter explains why a lower prerequisite package is sufficient for a particular Gen Ed course. If the submitter is requesting higher prerequisites than the standard prereqs, no extra submission form is required.

GRADING OPTIONS: (A-F letter grade, Pass/No pass, Audit in consultation with faculty) Check that a default option has been checked. If an option is not checked, it is not unreasonable to ask why. Generally, most courses allow all three options; however, there are courses where one or the other does not make sense. For example, you wouldn't probably have audit available in a practicum course.

REPEATABILITY FOR CREDIT: (Most courses are not eligible to be repeated for credit that counts towards degree or certificate completion. Currently at CGCC, examples of courses eligible for repeat are limited to studio art and PE courses. This does not restrict repeatability options related to grade improvement. There are financial aid restrictions related to repeatability.)

COURSE DESCRIPTION: (Course descriptions are meant to: 1) Briefly inform the student of the course content and requisites; and 2) provide sufficient information for registrars to determine transferability. Begin each sentence in the course description with an active verb such as provides, explores, introduces, covers, presents, continues, etc. (See Suggested Verbs for Outcomes and Descriptions.) Avoid using the phrases: "This course will…" and/or "Students will…" Include course requisites in the description. Try to keep descriptions to 100 words or less. Guidelines for writing concise descriptions can be found at Writing Course Descriptions.) Refer to the Writing Course Descriptions guide on the CO website for format. Descriptions include requisites and availability for audit.

STUDENT LEARNING OUTCOMES: (Describe what the student will be able to do "out there" (in their life roles as worker, family member, community citizen, global citizen or lifelong learners) upon completion of the course. Begin each outcome with an active verb. (See Suggested Verbs for Outcomes and Descriptions.) The outcome should be written so that it completes the starter, "Upon completion of this course, students will be able to …." Three to six outcomes are recommended. Guidelines for writing concise and assessable student learning outcomes can be found at Writing Learning Outcomes.) Refer to the Writing Learning Outcomes guide on the CO website for format. Outcomes should reflect significant and essential learning that students can reliably demonstrate at the end of the course. Are the outcomes assessable?

(Items above this line require approval by CGCC Curriculum Committee. Items below the line are available for revision by faculty as determined by the relevant department.)

These sections from here to "Related Instruction" may be revised by faculty/departments without CC approval. However, these are published responses in the CCOG. If you find grammatical, spelling, etc. errors, feel free to point these out so that we may avoid publishing a document with errors. I do try to clean these up as I see them. These types of changes do not require an "amendment" vote. Just point them out, and I will fix them.

OUTCOME ASSESSMENT STRATEGIES: (The determination of strategies used in assessing student achievement of learning outcomes is generally left to the discretion of the instructor. Listed assessment strategies are normally considered to be guidance and not restrictive. If a department **requires** faculty to use a specific assessment, the requirement should be clearly stated. Gen Ed courses must include examples of assessments for which the appropriate ILO Outcome Rubrics can be applied.)

Standard statement entered for all courses:

"The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios."

Outcomes Assessment Strategies are entered only if there are specific "required" assessments that all instructors are expected to integrate into their course assessment processes. If no required assessment is expected (which would be the norm), nothing is entered in this box. It is an information item only, showing what is included in every CCOG to encourage faculty to think beyond a single assessment method.

TEXTS & MATERIALS: (Include suggested texts and materials. Listed texts and materials are normally considered to be guidance and not restrictive. If a department **requires** faculty to use a specific text or material, the requirement should be clearly stated.)

COURSE ACTIVITIES AND DESIGN: (The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required [specify in "department required course activities" box on submission form.] For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and, so, the individuality and creativity of each instructor.)

Standard statement entered for all courses:

"The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation

scenarios, group projects, service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry-based instruction, differentiated instruction (learning centers), graphic organizers, etc."

Course Activities are entered only if there are specific "required" activities that all instructors are expected to include in their delivery of the course. If no required activity is expected (which would be the norm), nothing is entered in this box. The standard statement is an information item only, and included in every CCOG to encourage faculty to think beyond a single delivery method.

COURSE CONTENT (Themes, Concepts, Issues and Skills): (Course Content is to be organized by outcomes [list each outcome followed by an outline of the related content.] Describe general themes, concepts, issues and skills that are expected to be taught. The description should contain sufficient detail that a new faculty member would be able to develop the course with confidence based on what is detailed in the CCOG. A CCOG may sometimes be the only information a new faculty member has to guide/support them in the development of the course.) Is the content sufficient to cover the intended outcomes of the course? Is it informative so that a new faculty member could prepare their course without significant guidance? Does the content section relate what is expected/required of any instructor teaching this course? Is it sufficiently robust?

DEPARTMENT NOTES (OPTIONAL): (Any additional notes or directions that did not seem appropriate to mention in the above sections.)

RELATED INSTRUCTION: Applies only to CTE courses used for Related Instruction in certificates of 45 credits or more. Revisions in the activities listed may be made without Curriculum Committee approval; revision in the number of hours of related instruction supplied <u>requires</u> Curriculum Committee approval.

Stand-alone course for RI Area (check one): communication ☐ computation ☐ human relations ☐

(For Embedded Related Instruction, use the following tables. List course outcomes that specifically address one or more of the areas of related instruction: communication, computation, human relations. List activities, contact hours and type of instruction [lecture, lecture/lab, or lab]. Compute number of related instruction hours represented by listed activities. 1 hour of lecture equals 3 hours of related instruction. 1 hour of lecture/lab equals 1.5 hours of related instruction. 1 hour of lab equals 1 hour of related instruction. Please complete a separate table for each RI Area.) (When reviewing certificate revisions, be alert to credit changes that may result in a credit total shifting above or below 45 credits.)

Transfer/Articulation of Individual CGCC Courses

Directions:
Complete this form with all applicable information and as much detail as possible. Include any communication (letters, email strings, phone transcripts) you've had with faculty/staff at the Oregon universities. When you have finished, e-mail this as an attachment to the Curriculum Office at: curriculum@cgcc.edu or slewis@cgcc.edu.

In order to obtain a General Education designation, at least three Oregon universities must confirm the course will transfer and one of the schools must approve the transfer as General Education. While it is not mandatory, we highly recommend that the three universities that you contact are Portland State University (PSU), Oregon State University (OSU), and Eastern Oregon University (EOU) as these are the most common transfer destinations of CGCC students.

Course #: _____ Title: _____

Credits: _____ Total Contact Hours: Lec: _____ Lab: _____ Lec-Lab: _____

Course Description:

Course Prerequisites:

This course will be accepted in transfer as counting towards:(please check all that apply, identify receiving university, and provide details)

- ☐ Gen Ed/Distribution req. in: (Arts & Letters, Social Science, Science/Computer Science, Math)_____
- ☐ Requirement in major: (list major)_____
- ☐ Elective for major: (list major)_____
- ☐ Course Equivalency: (list comparable courses; identify univ.)_____
- ☐ Other: _____
- ☐ Elective only

Rationale, college/university departments contacted, etc., in support of requested transfer status (**include contact names and titles, times and dates of conversations/emails, and be specific documenting agreements/understandings; include attachments to verify documentation as needed**):

Based on my conversations with faculty and/or staff at Oregon universities, I verify that to the best of my knowledge, this course will transfer as noted above.

Signature: _____ Date: _____

Printed Name: _____ Title: _____

Department: _____ E-mail: _____

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL & COURSE INFORMATION:			
Department		Submitter Name: Phone: Email:	
Course Prefix and Number:		Course Title:	
Course Credits:		Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☐ Science, Comp. Sci., and Math
Course Description:			
Course Outcomes:			

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least three Oregon universities must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Institutional Learning Outcomes (ILO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
   2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
   3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
   4. Use an understanding of cultural differences to constructively address issues that arise in the workplace and community. (*Cultural Awareness*)
   5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that ILOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed as having a "major designation," and at least one additional ILO is addressed as having a "minor designation."

Major Designation:

1. The outcome is addressed recurrently in the curriculum, regularly enough to establish a thorough understanding.
2. Students can demonstrate and are assessed on a thorough understanding of the outcome.
    - The course includes at least one assignment that can be assessed by applying the appropriate ILO rubric.

Minor Designation:

1. The outcome is addressed adequately in the curriculum, establishing fundamental understanding.
2. Students can demonstrate and are assessed on a fundamental understanding of the outcome.
    - The course includes at least one assignment that can be assessed by applying the appropriate ILO rubric.

To establish an intentional learning environment, Core Learning Outcomes (CLOs) require a clear definition of instructional strategies, evidence of recurrent instruction, and employment of several assessment modes.

SECTION #2 ADDRESS CGCC INSTITUTIONAL LEARNING OUTCOMES:	
For each ILO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the ILO; 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the ILO; and 3) describe at least one assessment strategy that can be assessed by applying the appropriate ILO rubric.	
Gen Ed designated courses are required to address ILOs 1 and 2 as having a "major designation."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ major designation **REQUIRED**	Course Outcomes: Course Content: Outcome Assessment Strategies:
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ major designation **REQUIRED**	Course Outcomes: Course Content: Outcome Assessment Strategies:
Provide a response for each of the following three ILOs that your course addresses. At a minimum, Gen Ed designated courses are required to address one of these three as at least a "minor designation". While the Gen Ed designation only requires one additional ILO, please provide a response for all applicable ILOs, "minor" or "major."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) Check one: ☐ major ☐ minor ☐ not addressed significantly	Course Outcomes: Course Content: Outcome Assessment Strategies:

4. Use an understanding of cultural differences to constructively address issues that arise in the workplace and community. (*Cultural Awareness*) Check one: ☐ major ☐ minor ☐ not addressed significantly	Course Outcomes: Course Content: Outcome Assessment Strategies:
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) Check one: ☐ major ☐ minor ☐ not addressed significantly	Course Outcomes: Course Content: Outcome Assessment Strategies:

SECTION #3 ADDRESS THE AAOT DISCIPLINE STUDIES OUTCOMES AND CRITERIA:

Complete only the questions regarding outcomes and criteria for the category to which your course belongs - Art and Letters; Social Sciences; Science and Computer Science; or Mathematics.

Arts and Letters

Outcomes:

As a result of taking General Education Arts & Letters courses, a student should be able to:

- Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life; and
- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

Criteria:

A course in Arts & Letters should:

1. Introduce the fundamental ideas and practices of the discipline and allow students to apply them.
2. Elicit analytical and critical responses to historical and/or cultural works, such as literature, music, language, philosophy, religion, and the visual and performing arts.
3. Explore the conventions and techniques of significant forms of human expression.
4. Place the discipline in a historical and cultural context and demonstrate its relationship with other discipline.

And each course should also do at least one of the following:

1. Foster creative individual expression via analysis, synthesis, and critical evaluation;
2. Compare/contrast attitudes and values of specific historical periods or world cultures; and
3. Examine the origins and influences of ethical or aesthetic traditions.

List the course outcome(s) from the course's CCOG that clearly reflect the above outcomes and criteria.*	

***Note:** It must be clearly evident that the above outcomes are addressed within the course's outcomes. Between your answers to the two outcomes questions below, you also need to address all of the first four criteria as well as at least one of the criteria listed in the second set of three.

How does the course enable a student to "interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life"?	
How does the course enable a student to "critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues"?	

Social Sciences	
Outcomes:	
As a result of taking General Education Social Science courses, a student should be able to: • Apply analytical skills to social phenomena in order to understand human behavior; and • Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.	
Criteria:	
An introductory course in the Social Sciences should be broad in scope. Courses may focus on specialized or interdisciplinary subjects, but there must be substantial course content locating the subject in the broader context of the discipline(s). Approved courses will help students to: 1. Understand the role of individuals and institutions within the context of society. 2. Assess different theories and concepts and understand the distinctions between empirical and other methods of inquiry. 3. Utilize appropriate information literacy skills in written and oral communication. 4. Understand the diversity of human experience and thought, individually and collectively. 5. Apply knowledge and skills to contemporary problems and issues.	
List the course outcome(s) from the course's CCOG that clearly reflect the above outcomes and criteria.*	
***Note:** It must be clearly evident that the above AAOT outcomes are addressed within the course outcomes. Between your answers to the two outcomes questions below, you also need to address all five criteria.	
How does the course enable a student to "apply analytical skills to social phenomena in order to understand human behavior"?	
How does the course enable a student to "apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live"?	

Science or Computer Science	
Outcomes:	
As a result of taking General Education Science or Computer Science courses, a student should be able to: • Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions; • Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; and • Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.	
Criteria:	
A General Education course in either Science or Computer Science should: 1. Analyze the development, scope, and limitations of fundamental scientific concepts, models, theories, and methods. 2. Engage students in problem-solving and investigation, through the application of scientific and mathematical methods and concepts, and by using evidence to create and test models and draw conclusions. The goal should be to develop analytical thinking that includes evaluation, synthesis, and creative insight. 3. Examine relationships with other subject areas, including the ethical application of science in human society and the relevance of science to everyday life. In addition: 4a. A General Education course in Science should engage students in collaborative, hands-on and/or real-life activities that develop scientific reasoning and the capacity to apply mathematics and that allow students to experience the exhilaration of discovery. 4b. A General Education course in Computer Science should engage students in the design of algorithms and computer programs that solve problems.	
List the course outcome(s) from the course's CCOG that clearly reflect the above outcomes and criteria.*	
***Note:** It must be clearly evident that the above outcomes are addressed within the course's outcomes. Between your answers to the three outcomes questions below, you also need to address all of the first three criteria as well as the appropriate fourth criterion.	
How does the course enable a student to "gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions"?	
How does the course enable a student to "apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-	

based decisions in an ethical manner"?	
How does the course enable a student to "assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment"?	

Mathematics	
Outcomes:	
As a result of taking General Education Mathematics courses, a student should be able to: • Use appropriate mathematics to solve problems; and • Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.	
Criteria:	
A collegiate level Mathematics course should require students to: 1. Use the tools of arithmetic and algebra to work with more complex mathematical concepts. 2. Design and follow a multi-step mathematical process through to a logical conclusion and judge the reasonableness of the results. 3. Create mathematical models, analyze these models, and, when appropriate, find and interpret solutions. 4. Compare a variety of mathematical tools, including technology, to determine an effective method of analysis. 5. Analyze and communicate both problems and solutions in ways that are useful to themselves and to others. 6. Use mathematical terminology, notation and symbolic processes appropriately and correctly. 7. Make mathematical connections to, and solve problems from, other disciplines.	
List the course outcome(s) from the course's CCOG that clearly reflect the above outcomes and criteria.*	
***Note:** It must be clearly evident that the above outcomes are addressed within the course's outcomes. Between your answers to the two outcomes questions below, you also need to address all seven criteria.	
How does the course enable a student to "use appropriate mathematics to solve problems"?	
How does the course enable a student to "recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results"?	

SECTION #4 DEPARTMENT REVIEW		
"I vouch that this submission has been reviewed by the affiliated department chair and department dean and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean."		
Submitter	Email	Date
Department Chair (enter name of department chair):		
Department Dean (enter name of department dean):		

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Course submissions will be placed on the next agenda with available time slots. You will be notified of your submission's time for review, and you will be sent a signature page that may be completed electronically or manually by your department chair and department dean. It is the submitter's responsibility to ensure that completed signature pages are delivered to the Curriculum Office the day before the Curriculum Committee meeting for which the submission is scheduled. Submissions without signed signature pages will be postponed.
4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.