KINGSBOROUGH COMMUNITY COLLEGE The City University of New York

CURRICULUM TRANSMITTAL COVER PAGE

Department: English	Date: 9/4/25
Title Of Course/Degree/Concentration/Certif	icate: ENG 51 Writing for Technical and STEM Fields
Change(s) Initiated: (Please check)	
☐ Closing of Degree	☐ Change in Degree or Certificate
☐ Closing of Certificate	☐ Change in Degree: Adding Concentration
☐ New Certificate Proposal	☐ Change in Degree: Deleting Concentration
☐ New Degree Proposal	☐ Change in Prerequisite, Corequisite, and/or Pre/Co-requisite
New Course	☐ Change in Course Designation
☐ New 82 Course (Pilot Course)	☐ Change in Course Description
☐ Deletion of Course(s)	☐ Change in Course Title, Number, Credits and/or Hours
	☐ Change in Academic Policy
	☐ Pathways Submission:
	☐ Life and Physical Science
	☐ Math and Quantitative Reasoning
	☐ A. World Cultures and Global Issues
	☐ B. U.S. Experience in its Diversity
	☐ C. Creative Expression
	☐ D. Individual and Society
_	☐ E. Scientific World
Change in Program Learning Ou	
Other (please describe):	
PLEASE ATTACH MATERIAL TO ILLUS	TRATE AND EXPLAIN ALL CHANGES
I BEASE ATTACK WATERWAY TO BE SO	TAITE IN DEAL EARLY INDEPENDENCE OF THE PROPERTY OF THE PROPER
DEPARTMENTAL ACTION	
Action by Department and/or Depart	mental Committee, if required:
8/29/25	ature, Committee Chairperson:
Date Approved: Signa	ature, Committee Chairperson:
If submitted Curriculum Action affer required:	cts another Department, signature of the affected Department(s) is
Date Approved:Signa	ture, Department Chairperson:
Date Approved:Signa	ture, Department Chairperson:
I have reviewed the attached materia	
Signature, Department Chairperson:	Dr. Del Viscipe



New Course Proposal Form

1. Complete the requested course information in the table below. Indicate "NONE" where applicable. *For Assignment of New Course Number, contact **Academic Scheduling**.

Department:	English		
Course Designation/Prefix:	ENG		
*Course Number:	5100		
Course Title:	Writing for Technical and STEM Fields		
Course Description: (Description should include language similar to Course Learning Outcomes)	Writing for Technical and STEM Fields helps students learn the composing processes and genres of technical writing in STEM contexts. The course emphasizes rhetorical awareness, ethical communication, and research skills essential for success in technical workplaces and academic settings. It is designed for students in the sciences and healthcare fields as well as students who are interested in learning to write in genres connected with these areas. Students will write clear, purposeful, and audience-focused documents in various technical and workplace genres, including technical descriptions, instruction manuals, and recommendation or feasibility reports.		
Prerequisite(s):	English 1200 or English 12A0		
Corequisite(s):			
Pre-/Co-requisite(s):			
Indicate if: - Open ONLY to Select Student Population(s) OR - Specific Student Population(s) are RESTRICTED from enrollment in the course			
Specify Population			
Frequency course is to be offered (Select All that Apply)	母 Fall □ Winter X Spring □ Summer		
Suggested Class Limit:	27		
Indicate if a special space, such as a lab, and/or special equipment will be required:	Computer lab required		
Faculty Information:			

	within the D	rrently faculty epartment teach this course?	¥ Yes*	□ No*	
Micro	faculty mem specific cred *If yes, pleas Staffing Plan	se provide a n (see #13) vide an embedded	▼ Yes*	≯ No	
-	s, please include mation	e relevant			
2.				s for College Credits Assigned for Instructional Hours -*Hours semester (Please check ONE box based on credits):	
	1-credit:	☐ 1 hour lecture☐ 2 hours lab/field	d/gym		
	2-credits: 2 hours lecture 1 hour lecture, 2 hours lab/field 4 hours lab/field				
	3-credits:				
	4-credits:	□ 4 hours lecture □ 3 hours lecture, □ 2 hours lecture, □ 1 hour lecture, □ 8 hours lab/field	4 hours lab	b/field	
	More than 4-credits: Number of credits: (explain mix lecture/lab below)				
	Explanation:	Lectu		Lab	
3.	Where does th	nis course fit? Select t	from the foll	lowing:	
		List	Degree Pro	ogram(s)/Certificate(s):	
№ De	egree am(s)/Certificat	e(s)* 1. L	iberal Arts A	AA General "Literature & Writing"	

2. Liberal Arts AA Professional Writing concentration

	Select ONE of the following:	
	☐ Life and Physical Science (LPS)	
	☐ Math and Quantitative Reasoning (MQR)	
	□ World Cultures and Global Issues (Group A)	
□ General Education/Pathways	□ U.S. Experience in its Diversity (Group B)	
	☐ Creative Expression (Group C)	
	☐ Individual and Society (Group D)	
	□ Scientific World (Group E)	
	If proposed as a "real" course, where will this course fit? Select from the following:	
	List Degree Program(s)/Certificate(s):	
	1.	
	2.	
92VV Dilat/Europimontal Course	Select ONE of the following:	
□ 82XX Pilot/Experimental Course	□ Life and Physical Science (LPS)	
	☐ Math and Quantitative Reasoning (MQR)	
	□ World Cultures and Global Issues (Group A)	
	□ U.S. Experience in its Diversity (Group B)	
	☐ Creative Expression (Group C)	
	☐ Individual and Society (Group D)	
	□ Scientific World (Group E)	

*If Degree Program/Certificate is Selected:

- Include an updated **Curricular** Map (Program Learning Outcomes) for each Degree Program/Certificate listed above.
- Include an updated Degree Map (semester-by-semester course sequence) for each Degree Program/Certificate listed above. For Degree Map template, contact Amanda Kalin, ext. 4611, Amanda.Kalin@kbcc.cuny.edu

The Following NYSED Guidelines must be adhered to for ALL Degree Programs:

45 credits of Liberal Arts (General Education) course work for an Associate of Arts Degree (AA) 30 credits of Liberal Arts (General Education) course work for an Associate of Science Degree (AS) 20 credits of Liberal Arts (General Education) course work for an Applied Associate of Science (AAS)

Additional Separate Submissions Required:

- 1. Curriculum Transmittal Cover Page indicating a "Change in Degree or Certificate"
- 2. Memo with rationale for inclusion of the course within the curriculum
- 3. "Current" Degree with all proposed deletions (strikeouts) and additions (bolded) clearly indicated

4. "Proposed" Degree, which displays the degree as it will appear in the College Catalog

For a copy of the most up-to-date Degree/Certificate requirements contact Amanda Kalin, ext. 4611, Amanda.Kalin@kbcc.cuny.edu

If General Education/Pathways is Selected:

- Please refer to NYSED Guidelines for courses that are considered Liberal Arts (General Education).
- Pilot/Experimental/82XX courses <u>CANNOT</u> be submitted for Pathways until they are submitted as a "real" course.

Additional Separate Submissions Required:

- 1. Curriculum Transmittal Cover Page indicating BOTH "New Course" and "Pathways"
- 2. CUNY Common Core Pathways Submission Form
- 4. List the Course Learning Outcomes: Course Learning Outcomes are measureable/demonstrable, containing "action verbs" (Blooms Taxonomy). If proposed to PATHWAYS, the Course Learning Outcomes should significantly align with the Pathways Learning Outcomes (refer to the Pathways Common Core Submission Form for Pathways Learning Outcomes). If proposed for a Degree program, the course should align with the Program Learning Outcomes (PLOs). REMINDER Course Learning Outcomes are consistent for ALL sections of the same course and MUST be included on the syllabus.

Course Learning Outcomes

- 1. Analyze technical rhetorical situations to tailor STEM genres for specific audiences, purposes, and settings
- 2. Write concise, audience-focused documents explaining complex processes, ideas, definitions, and information.
- 3. Compose technical and scientific documents through process-oriented writing, including planning, researching, collaborating, drafting, revising, and editing.
- 4. Use graphics such as tables, diagrams, and charts to improve the usability of technical and scientific documents.
- 5. Demonstrate ethical decision making while communicating to and for diverse audiences.

6.

5. Assessment of Course Learning Outcomes: The Course Learning Outcomes are measurable/demonstrable through the below listed sample assignments/activities. Include percentage breakdown for grading.
REMINDER - Assessment of Course Learning Outcomes are based on a Common Syllabus – to allow for any qualified instructor to teach the course.

	Course Learning Outcome	Percentage of Grade	Measurement of Learning Outcome (Artifact/Assignment/Activity)
t	1. Analyze technical rhetorical situations to tailor STEM genres for specific audiences, purposes, and settings.		Unit 1 White Paper and Unit 1 Incident Report
		25%	Unit 2 Instruction Set and Unit 2 Usability Summary
			Unit 3 Technical Recommendation Report
			Low Stakes Writing Studio Activities

			Unit 1 White Paper and Unit 1 Incident Report
	2. Write concise, audience-focused documents explaining complex processes, ideas,	25%	Unit 2 Instruction Set and Unit 2 Usability Summary
	definitions, and information.		Unit 3 Technical Recommendation Report
			Low Stakes Writing Studio Activities
			Unit 1 White Paper and Unit 1 Incident Report
3.	3. Compose technical and scientific documents through process-oriented writing, including	25%	Unit 2 Instruction Set and Unit 2 Usability Summary
	planning, researching, collaborating, drafting, revising, and editing.		Unit 3 Technical Recommendation Report
			Low Stakes Writing Studio Activities
4	4.Use graphics such as tables, diagrams, and		Unit 2 Instruction Set and Unit 2 Usability Summary
	charts to improve the usability of technical and scientific documents		Unit 3 Technical Recommendation Report
			Low Stakes Writing Studio Activities
5.	5.Demonstrate ethical decision making while communicating to and for diverse audiences.		Unit 1 White Paper and Unit 1 Incident Report
		15%	Unit 3 Technical Recommendation Report
			Low Stakes Writing Studio Activities

6.

6. **Who** is expected to enroll in this course? Please provide details for the student population(s), degree program(s)/certificate(s), and applicable concentration(s), this course is expected to address.

Both degree-seeking and non-degree-seeking students could select this English course. Degree-seeking students could apply it toward the Literature & Writing requirement for the A.A. degree in Liberal Arts. Non-degree-seeking students could choose to take "Writing for Technical and STEM Fields" to help them develop writing skills needed to succeed in future career contexts and workplaces.

This new course is being proposed as a requirement in a newly-proposed Liberal Arts concentration in Professional Writing. Students pursuing the Liberal Arts A.A. concentration in Professional Writing would be required to take this course.

7. Explain why this course is a necessary addition to the curriculum. REMINDER – Explain the course's role within the selected Pathways Group or Degree program – How does this course meet the Program Learning Outcomes (PLOs)? Was the course a recommendation from a recent Academic Program Review (APR), Advisory Board, Accrediting Body, etc.? How might this course help students upon transfer to a baccalaureate program or transition into a career/workforce after KCC?

Surveys of business leaders and hiring managers repeatedly stress the essential nature of strong written communication skills to workplace success. "Writing for Technical and STEM Fields" offers Liberal Arts students the opportunity to develop and hone the rhetorical skill and genre awareness necessary to communicate effectively in writing in a variety of technical workplace and STEM academic contexts. It is designed for students in the sciences and healthcare fields as well as students who are interested in learning to write in genres connected with these areas. Students are also asked to develop and employ strategies for communicating accessibly and ethically.

In conceiving of this course, we have worked closely with members of the English department at New York City College of Technology, where there is a robust B.S. program in Professional and Technical Writing. We have a memorandum of understanding from New York City College of Technology describing the transfer equivalent within their program.

ENG 5100 aligns with the PLOs for the Professional Writing concentration in the Liberal Arts AA.

- 8. **Transfer** Provide a general explanation of the transferability of this course. Address all of the following in your explanation:
 - a. Will this course meet a specific **degree requirement** in the equivalent baccalaureate program? Include the institution, degree program, and course equivalency.
 - b. Will this course serve as the equivalent of a freshman/sophomore course (100/200 level)?
 - c. Do we currently have an Articulation Agreement established (see current <u>Articulation Agreements</u>) with the transfer institution for the equivalent degree program? If you have a tentative Articulation Agreement/Communication with Chair at the transfer institution, please include.

This course will transfer to New York City College of Technology as their ENG 2700: Introduction to Professional and Technical Writing. Please see attached memorandum of understanding with New York City College of Technology regarding how this course will fit into their B.S. program in Professional and Technical Writing.

9.	Will adding the course potentially conflict with other courses – in content or subject matter – offered in either your Department or in <i>another</i> Department? If it will, please explain how and indicate why the course is still necessary.
This c	ourse will not conflict or overlap with another course in any other department.
10.	Proposed textbook(s) and/or other required instructional material(s), including open educational resources (OER)—Please include any supplemental/recommended materials/texts to allow for any qualified instructor to teach the course:
The fo	ollowing recommended instructional materials are all OER.
	Atkinson, D. & Corbitt, S. (2020). <i>Mindful Technical Writing: An Introduction to the Fundamentals</i> . Montana University System. (Open Access). https://oer.pressbooks.pub/opentrailstechnicalwriting/
	Beilfus, M. Bettes, S., & Peterson, K. (2019). <i>Technical and Professional Writing Genres: A Study in Theory and Practice</i> . Oklahoma State University Libraries. (Open Access). https://open.library.okstate.edu/technicalandprofessionalwriting/
	St.Amant, K., & Zemliansky, P. (Eds.). (2024). <i>Technical Writing Spaces: Readings on Writing, Volume 6</i> . WritingSpaces.org; Parlor Press; The WAC Clearinghouse. (Open Access.) https://wac.colostate.edu/books/writingspaces/writingspaces//
11.	Attach a Common Syllabus that includes the Topical Course Outline for the 12-week semester. This should be specific and explicit regarding the topics covered and should contain the detailed sample assignments/activities being used to measure the Course Learning Outcomes. REMINDER – be mindful to focus on the Course Learning Outcomes, Course Content, and Assessment.
12.	Selected Bibliography and Source materials:
13.	Staffing Plan – please provide a staffing plan if there are currently no faculty within the Department available to teach this course or who do not have the required credential to teach this course.

n/a

There are already faculty in the English department with the appropriate credentials and experience to teach this course.

Writing for Technical and STEM Fields

Department of English Kingsborough Community College, CUNY

English 5100, section, and CUNY first number Class meeting days, times, and location (*computer lab classroom*) Course Instructor: Contact Information: Office hours:

Course Description

Writing for Technical and STEM Fields helps students learn the composing processes and genres of technical writing in STEM contexts. The course emphasizes rhetorical awareness, ethical communication, problem solving, and research skills essential for success in technical workplaces and academic settings. It is designed for students in the sciences and healthcare fields as well as students who are interested in learning to write in genres connected with these areas. Students will write clear, purposeful, and audience-focused documents in various technical and workplace genres, including technical descriptions, instruction manuals, and recommendation or feasibility reports.

Course Learning Outcomes

- Analyze technical rhetorical situations to tailor STEM genres for specific audiences, purposes, and settings.
- 2. Write concise, audience-focused documents explaining complex processes, ideas, definitions, and information.
- Compose solution-focused technical and scientific documents through
 process-oriented writing, including planning, researching, collaborating, drafting,
 revising, and editing.
- 4. Use graphics such as tables, diagrams, and charts to improve the usability of technical and scientific documents.
- 5. Demonstrate ethical decision making while communicating to and for diverse audiences.

Required texts

Atkinson, D. & Corbitt, S. (2020). *Mindful Technical Writing: An Introduction to the Fundamentals*. Montana University System. (Open Access). https://oer.pressbooks.pub/opentrailstechnicalwriting/

Beilfus, M. Bettes, S., & Peterson, K. (2019). *Technical and Professional Writing Genres: A Study in Theory and Practice*. Oklahoma State University Libraries. (Open Access). https://open.library.okstate.edu/technicalandprofessionalwriting/

St.Amant, K., & Zemliansky, P. (Eds.). (2024). *Technical Writing Spaces: Readings on Writing, Volume 6*. WritingSpaces.org; Parlor Press; The WAC Clearinghouse. (Open Access.) https://wac.colostate.edu/books/writingspaces/writingspaces/

Additional texts provided as PDFs or links on Brightspace.

Overview of Units & Major Assignments

Unit 1: Ethics in Technical Communication Analysis

In this unit, students will explore the principles of ethical communication in technical writing through the lens of crisis response. Examples of such crises include the 2009-2010 Toyota vehicle recalls, the BP Deepwater Horizon Oil Spill, and the 2018-2019 Boeing 737 Max crashes. By reading and analyzing real-world documents together, including public statements, press releases, and internal communications, students will develop a shared understanding of rhetorical strategies, audience awareness, and ethical consideration in technical messaging. Students will conduct rhetorical analysis of case studies and participate in class discussions to evaluate the clarity, tone, transparency, and ethical effectiveness of technical communications. The unit emphasizes the importance of situational awareness and ethical decision-making in technical writing, with a focus on responding to technological and systemic failures or flaws.

White Paper (individual assignment): Students will write a white paper analyzing a case study of a technical communication crisis. The paper should identify the context and exigence that prompted the communication, describe the audience(s) being addressed, and evaluate the rhetorical strategies used. Students will assess the ethical implications of these choices and discuss both the communication's successes and shortcomings. (600 words, 15% of course final grade).

Incident Report *(team assignment):* Students will draft a formal report focusing on objective, internal reporting of ethical breaches or communications failures. The report will emphasize accuracy, clarity, and attention to detail in ethical reporting **(300 words, 10% of course final grade)**.

Unit 2: Instruction Set

In this unit, students will explore how effective technical communication depends on clarity, design, and an awareness of user needs within a specific rhetorical situation. Students will work in teams to plan, write, and design an original instruction set, and then test the usability of another group's instructions through peer testing. Throughout the unit, we will focus on the principles of collaborative authorship, document design, and usability testing, while developing strategies for ensuring consistency, clarity, and accessibility. Emphasis will be placed on how layout, language, and visual elements work together to meet user expectations and support comprehension.

Instruction Set (team assignment):

Working in small teams, students will collaboratively produce a professional-quality instruction set. The final document should include written steps, visual elements (e.g., diagrams, screenshots), and formatting choices that support ease of use.

(800-1000 words, 15% of course final grade)

Usability Summary (individual assignment):

After participating in peer usability testing, each student will write an individual summary assessing the usability of another team's instruction set. The summary should describe the testing process, identify strengths and weaknesses in the document's design and clarity, and offer constructive feedback grounded in usability principles and rhetorical awareness.

(500 words, 15% of course final grade

Unit 3: Technical Recommendation Report

In this unit, students will produce a discipline-specific technical recommendation report that demonstrates their ability to research, analyze, and propose solutions to a real-world problem. Drawing on instructor-developed case studies tailored to various fields (e.g., healthcare, engineering, environmental science, computer science), students will select a scenario relevant to their area of study and develop a formal report that draws on the methods and processes of the field to address a clearly defined problem and recommend a viable course of action. Examples of such projects might include:

- Healthcare: Improving patient communications using emerging technologies
- Engineering: Upgrading a building for sustainability
- Environmental science: Reducing storm vulnerabilities for cities
- Tech: Enhancing data security for a company

Technical Recommendation Report (individual assignment):

Students will plan, draft, and revise a formal technical report. The final report will include the following components:

- Executive Summary: A concise overview of the report's purpose, findings, and recommendations for busy stakeholders.
- Problem Statement: A focused explanation of the issue at hand, including its scope, context, and significance within the field.
- Technical Definitions and Research: A synthesis of credible sources that informs the reader about existing research, practices, or precedents related to the problem, including the etymology and context of related technical terms
- Recommendations Section: A well-reasoned and evidence-based proposal for action that responds directly to the problem and the needs of the intended audience.

(800-1000 words, 25% of course final grade)

Low-Stakes Writing Studio Activities

In this class we will be analyzing and composing in different STEM and Health genres and practicing different writing techniques. In order to best prepare you for the larger technical writing assignments, you will complete weekly low stakes studio activities. These activities include in-class group and individual work, homework, drafting and peer reviews, and reflective writing. Taken together, these weekly low-stakes activities comprise 20% of your course final grade.

Weekly Schedule

Unit	Week	Focus	Writing Studio Activities & Assignments	Major Assignments
Ethics in Technical Communication Analysis	1	Introducing technical communication	Analyzing technical communications	Read TPWG Chapter 1: Introduction
	2	Ethical choices in technical communication Who are technical audiences?	Analyzing ethical decisions in technical documents	Read TPWG: Chapter 4: Ethics Read TPWG: Chapter 2: Audience
	3	Creating White Papers	Analyzing the audience for a white paper Applying the writing	Read Purdue OWL: White Paper: Purpose and Audience and

			process to a white paper	White Paper: Organization and Tips
				Write White Paper
	4	Creating incident reports	Working in teams to compose an incident report	Read Stacey Corbitt, "Writing Incident Reports"
				Write Incident Report
Instruction Sets	5	What is Usability?	Analyzing the audience to increase usability Comparing different documents to analyze their document design features	Read Felicia Chong and Tammy Rice-Bailey, "Introduction to Usability and Usability Testing" Read TPWG: Chapter 5: Document Design
	6	Writing instructions	Analyzing examples of instruction sets	Read TPWG: Chapter 8: Technical Instructions
	7	Collaboration in technical writing	Collaborating in teams to compose instruction sets	Read Laurence José, "Stronger Together: Collaborative Work in the Technical Writing Classroom" Write Instruction Set
	8	Writing usability summaries	Engaging in peer usability testing activity Composing internal usability	Read TPWG: Chapter 6.9: Memo Introduction Write Usability summary
			documentation	
Technical Recommendation Report	9	What are recommendation reports?	Examining technical report types and examples Closely reading technical recommendation report	Read TPWG: Chapter 11: Analytical Reports

10	Problem statements	Composing the problem statement	Write the problem statement and establish the context of the report
11	Review of existing solutions/ background research	Analyzing genre conventions of writing about research and technical definitions Composing the technical definitions and research section for the technical report	Read Daniel P. Richards, "Let's Party: Composing a Review of the Literature on a Technical Topic" Quan Zhou, "Drafting technical Definitions and Descriptions." Write Review of research and technical definition analysis
12	Recommendations and Executive summaries	Analyzing executive summaries Composing the recommendations section and the executive summary of the technical recommendation report	Read K. Alex Ilyasova, "Last to Be Written, First to Be Read: Writing Memos, Abstracts and Executive Summaries" Write the Recommendations section and Executive Summary
13	Finals Week		Finalize and submit Recommendation Report

Course Policies

Absence Policy: Attendance in college is critical for students' learning. Regular attendance ensures that you will have the opportunity to learn from your professor, learn from your peers, participate in class discussions, keep up to date with in-class work (both individual and collaborative), and take in-class quizzes and assessments that will occur throughout the semester. If at any point during the semester you simply stop attending class, you will be assigned a WU for this course.

Academic Integrity policy: Plagiarism is "the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work" (www.dictionary.com). Please note that this includes language, text, or material taken (without

acknowledgement) from AI text-generators. If you plagiarize in any of the work you submit, you may receive a grade of 0 for the assignment. Please see Kingsborough's website page on Academic Integrity for more information on plagiarism.

https://www.kbcc.cuny.edu/studentaffairs/student conduct/academic integrity.html

Classroom Etiquette: Obviously, it is rude to come to class late and/or unprepared and to fail to give the class your full attention. I expect you to treat your teacher and your classmates the way you would want to be treated, by being respectful and thoughtful in your interactions with others in class. Failure to come to class prepared and failure to participate will result in a lower course work grade.

Statement on Accessibility: It is college policy to provide reasonable accommodations to individuals with disabilities. Any student with a documented disability who may need accommodations for this course is requested to contact AAS as early in the semester as possible. AAS can be reached by phone at 718-368-5175 or by email at AAS@kbcc.cuny.edu. The office is in room D205. All discussions will remain confidential. For more information, please click on the link to the Access-Ability Services webpage in the Quick Links menu of the KCC homepage or at the bottom of every page on the KCC website. The AAS webpage also provides access to the AAS Student Handbook, which is a valuable introduction to the services and programs that are available.

Statement on Preferred Pronouns: I affirm all forms of gender expressions and identities. If you prefer to be called a different name than what is on the class roster, please let me know. Feel free to inform me on your preferred gender pronoun or if you do not have a pronoun. The gender-neutral bathrooms are located in the following places on campus: A117, A119, L303, L504, M436, T4 154, T8 108B, V211, and V212. If you have any questions or concerns, please do not hesitate to contact me.