

KINGSBOROUGH COMMUNITY COLLEGE
The City University of New York

CURRICULUM TRANSMITTAL COVER PAGE

Department: Department of Mathematics & Computer Science Date: 6/01/2026

Title Of Course/Degree/Concentration/Certificate: Web Page Development (CIS 2300)

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 Outcomes | |
| ☐ Other (please describe): _____ | |

PLEASE ATTACH MATERIAL TO ILLUSTRATE AND EXPLAIN ALL CHANGES

DEPARTMENTAL ACTION

Action by Department and/or Departmental Committee, if required:

Date Approved: 07/17/2026 Signature, Committee Chairperson: 

If submitted Curriculum Action affects another Department, signature of the affected Department(s) is required:

Date Approved: _____ Signature, Department Chairperson: _____

Date Approved: _____ Signature, Department Chairperson: _____

I have reviewed the attached material/proposal

Signature, Department Chairperson: 

TO: Fall 2026 Curriculum Committee

FROM: Prof. Yarmish, Chair, Department of Mathematics & Computer Science

DATE: 6/1/2026

RE: New Course: Web Page Development (CIS 2300)

The Department of Mathematics & Computer Science is proposing a new course as follows:

ADD:

Web Page Development (CIS 2300)

Rationale for Change:

This course will fill a need in the department's offerings by providing students in the Computer Information Systems program with a comprehensive introduction to modern web page development and client-side web technologies.

The course combines and updates material previously covered in Intro to Web Page Development and HTML Authoring and JavaScript into a single, integrated offering that reflects current industry practices and student needs. Students will develop foundational skills in web design, HTML, CSS, and JavaScript while gaining practical experience creating interactive and responsive web pages.

The course will strengthen the CIS curriculum by providing students with practical experience in the design, development, and implementation of web-based applications and user interfaces. Technical concepts will be introduced through hands-on projects that support both conceptual understanding and practical application in modern web development environments.



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:	Mathematics and Computer Science
Course Designation/Prefix:	CIS
*Course Number:	2300
Course Title:	Web Page Development
Course Description: (Description should include language similar to Course Learning Outcomes)	This course introduces the principles and practices of modern web design and development. Emphasis is placed on establishing consistent branding and visual identity, designing intuitive user interfaces, and developing responsive web pages using semantic HTML5 and Cascading Style Sheets (CSS). Students will integrate multimedia elements, including graphics, audio, and video, while applying best practices for web optimization and file management. The course also introduces basic JavaScript programming to add interactivity and dynamic functionality to web pages. Upon completion, students will be able to design, develop, and deploy professional-quality websites that balance usability, aesthetics, and technical performance.
Prerequisite(s):	CIS 100 or CIS 1200
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)	☒ Fall ☐ Winter ☒ Spring ☐ Summer
Suggested Class Limit:	25
Indicate if a special space, such as a lab, and/or special equipment will be required:	Computer Lab with all standard college lab software at each station and Internet/Web accessible on all.

Faculty Information:	
Are there currently faculty within the Department available to teach this course?	☒ Yes* ☐ No*
Does this course require the faculty member to have a specific credential?	☐ Yes* ☒ No
*If yes, please provide a Staffing Plan (see #13)	
Does this course provide an imbedded Microcredential or Industry Certification?	☐ Yes ☒ No
If yes, please include relevant information	

2. Credits and Hours based on MSCHE Guidelines for *College Credits Assigned for Instructional Hours* -*Hours are based on hours per week in a typical 12-week semester (Please check ONE box based on credits):

1-credit:	☐ 1 hour lecture ☐ 2 hours lab/field/gym
2-credits:	☐ 2 hours lecture ☐ 1 hour lecture, 2 hours lab/field ☐ 4 hours lab/field
3-credits:	☐ 3 hours lecture ☒ 2 hours lecture, 2 hours lab/field ☐ 1 hour lecture, 4 hours lab/field ☐ 6 hours lab/field
4-credits:	☐ 4 hours lecture ☐ 3 hours lecture, 2 hours lab/field ☐ 2 hours lecture, 4 hours lab/field ☐ 1 hour lecture, 6 hours lab/field ☐ 8 hours lab/field
More than 4-credits: ☐ Number of credits: ____ (explain mix lecture/lab below) ____ Lecture ____ Lab Explanation: _____	

3. **Where** does this course fit? Select from the following:

☒ Degree Program(s)/Certificate(s)*	List Degree Program(s)/Certificate(s): 1. Computer Information Systems, A.A.S. Major 2.
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☐ General Education/Pathways	Select ONE of the following: ☐ 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)
☐ 82XX Pilot/Experimental Course	If proposed as a “real” course, where will this course fit? Select from the following: List Degree Program(s)/Certificate(s): 1. 2. Select ONE of the following: ☐ 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 CANNOT 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. Understand and apply UX (User Experience methodologies -focusing on the computer-human interface), design principles and develop consistent and visually appealing user interfaces
2. Design the branding and style of a web site, with a consistent look-and-feel throughout.
3. Create structured web pages using semantic HTML5 elements and apply CSS to control layout, typography, and responsive design
4. Integrate within Web pages images, video, and audio effectively and efficiently
5. Use graphics in appropriate file formats, to create a unique and compelling website.
6. Write basic JavaScript to create interactivity

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)
1. Understand and apply UX (User Experience methodologies), design principles and develop consistent and computer-user interfaces	30%	Course Exams (Midterm and Final) Discussion Board Assignments
2. Design the branding and style of a web site, with a consistent look-and-feel throughout.	10%	Presentation of prototype of design project
3. Create structured web pages using semantic HTML5 elements and apply CSS to control layout, typography, and responsive design	30%	Course Exams (Midterm and Final) Project assignments developing Web pages and sites
4. Integrate within Web pages images, video, and audio effectively and efficiently	10%	Project assignments developing Web pages and sites

5. Use graphics in appropriate file formats, to create a unique and compelling website.	10%	Project assignments developing Web pages and sites
6. Write basic JavaScript to create interactivity	10%	Project assignments developing Web pages and sites

The breakdown is:

30% midterm, 30% final, 20% projects (which are application of design and proper coding), and 20% Discussion Board assignments

1. Discussion Boards refers to students' design assignment. Each student then has to critique another student's design. The design and critique are graded.
2. The midterm and final will test knowledge of syntax in HTML, CSS, and Javascript. It will also test their understanding of design concepts.

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.

Computer Information Systems, A.A.S. majors

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?

A Web Design and Development course is an essential component of a Computer Information Systems (CIS) major because modern organizations rely heavily on web-based technologies to manage business operations, communicate with customers, and deliver services. CIS professionals must understand not only information systems and databases but also how these systems are presented and accessed through web applications.

The course provides students with practical skills in website design, front-end development, and user experience (UX) principles (focusing on the computer-human interface). These skills enable graduates to create functional, secure, and user-friendly web solutions that support organizational goals. Since many business applications are now cloud-based and accessed through web browsers, knowledge of web technologies is critical for developing and maintaining information systems.

Additionally, web development coursework strengthens students' understanding of programming, database connectivity, and system integration.

From a career perspective, employers increasingly seek CIS graduates who can contribute to digital transformation initiatives and collaborate with both technical and business teams. A web design and

development course enhances employability by providing hands-on experience with widely used technologies and industry best practices.

8. **Transfer** – Provide a general explanation of the transferability of this course. Address all of the following in your explanation:
- Will this course meet a specific **degree requirement** in the equivalent baccalaureate program? Include the institution, degree program, and course equivalency.
 - Will this course serve as the equivalent of a freshman/sophomore course (100/200 level)?
 - Do we currently have an Articulation Agreement established (see current [Articulation Agreements](#)) 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.

Course may be equivalent to the following similar courses at four-year institutions:

Baruch: **CIS 3630 - Principles of Web Design (3 cr)**

CSI: **CSC 225 - Introduction to Web Development and the Internet (3 cr)**

City Tech: **COMD 2450 - Web Design I (1 cl hr 2 lab hr)**

Lehman: **CMP 128 Programming through Web Development (3 cr)**

9. Will adding the course potentially **conflict** with other courses – in content or subject matter – offered in either your Department or in *another* Department? If it will, please explain **how** and indicate **why** the course is still necessary.

This course is a replacement of the current **CIS 2100** and **CIS 2200** courses, which will be removed from the Computer Information Systems degree requirements. **CIS 2300** will focus on the fundamental principles and practices of web design and development, providing students with a strong foundation in the core concepts, technologies, and structures that underpin modern web systems. This course places emphasis on the crucial HTML and JavaScript coding.

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:

- Web Style Guide (available on-line at <http://www.webstyleguide.com>)

Web Programming with HTML, CSS, and JavaScript

- Second Edition , John Dean, ISBN:9781284278309, | 2025

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:

Web Development and Design Foundations with HTML5 – Terry Felke-Morris, 10th ed., Pearson, ISBN-13: 9780136681540

Learning Web Design – Jennifer Robbins, 6th ed., O'Reilly Media, ISBN: 978-1098137687

HTML and CSS: Design and Build Websites – Jon Duckett, Published by John Wiley & Sons, Inc. ISBN: 978-1-118-00818-8

CSS: The Definitive Guide” – Eric Meyer & Estelle Weyl, Published by O'Reilly Media; ISBN -10: 109811761

Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics (5th Ed.), Jennifer Robbins, O'Reilly Media, ISBN: 9781491960202

Murach's HTML and CSS (5th Ed.), Zak Ruvalcaba, Anne Boehm, Mike Murach & Associates, ISBN: 9781943872862

Web Programming with HTML, CSS, and JavaScript (2nd Ed.), John Dean, Jones & Bartlett Learning, ISBN: 9781284278330

New Perspectives on HTML5, CSS3, and JavaScript (6th Ed.), Patrick M. Carey, Cengage Learning, ISBN: 9781305503922

Responsive Web Design with HTML 5 & CSS (9th Ed.), Jessica Minnick, Cengage Learning, ISBN: 9781305578166

Basics of Web Design: HTML5 & CSS (6th Ed.), Terry Felke-Morris, Pearson, ISBN: 9780137313211
Web Development and Design Foundations with HTML5 (9th Ed.), Terry Felke-Morris, Pearson, ISBN: 9780134801148

Modern Web Development with HTML5, CSS, and JavaScript, Ethan Brown, O'Reilly Media, ISBN: 9781491968871

HTML5 and CSS: Complete (8th Ed., .), Jessica Minnick, Cengage Learning, ISBN: 9781305578173
Web Design with HTML5 and CSS3: Introductory (8th Ed.), Jessica Minnick, Lisa Friedrichsen, Cengage Learning, ISBN: 9781305585768

Head First HTML and CSS (2nd Ed.), Elisabeth Robson, Eric Freeman, O'Reilly Media, ISBN: 9780596159900

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.

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Topical Outline:

Week	Session (L=Lab)	Topic	Course Learning Outcomes *	Lecture Hours	Lab Hours
1	1 2 3L - 4L	Introduction of Web Page Design Web Editor and Basic language structure HTML coding for basic page constructs	1,2,3	2	2
2	5-6 7L-8L	Interface Design Basic interface design Access issues Navigation Concepts in Design Links and navigation applications Hypertext links web, mail, phone, image bullet lists	1,2,3,4,5	2	2
3	9-10 11L- 12L	Site Design Site structure Site elements Intranet design Site covers Style Sheets, Fonts and Styles	1,2,3,4,5	2	2
4	13-14 15L - 16L	Graphic design basics Balanced pages Design grid for pages Graphic safe areas Page headers Background Images Page Layout floating Images Boarder Design Text and Image Positioning Text and Box Shadows Page Length	1,2,3,4,5	2	2
5	17-18 19L- 20L	Table Design Creating Tables Captions Headers Spanning Rows and Columns	1,2,3	2	2

6	21	midterm	1,2	2	2
	22-23 24L-25L	Editorial Style and Frames Column Arrangements and Frames			
7	26-27 28L-29L	Bookmarks, Hotspots, and Navigation Bars Bookmark Applications and Hotspots	1,2,3,4,5	2	2
8	30-31 32L-33L	Designing for Different Media Platforms Desktop, Tablet, and Mobile Web Design	1,2,4,5	2	2
9	34-35 36L-37L	Forms Design Form Constructs Text Boxes and Labels Selection, Radio, Spinner, and Range options Command, Submit, Reset, and Custom Buttons	1,2,3,	2	2
10	38-39 40L-41L	Web Graphics and Multimedia Graphic Formats and Colors Graphic scaling and Transformation Multimedia Formats Graphic Color Palette Color Gradients and Hue Including Multi-media within Web Pages	1,2,3,4,5	2	2
11	42-44	JavaScript Applications to Web Page Construction	6	3	
12	45L-47L 48	Using JavaScript to Dynamically Control Web Pages Review	6	1	3

* numbers corresponding to Course Learning Outcomes (item 4)