New York City College of Technology, CUNY

CURRICULUM MODIFICATION PROPOSAL FORM

This form is used for all curriculum modification proposals. See the [Proposal Classification Chart](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Proposal_Classification_Chart.pdf) for information about what types of modifications are major or minor. Completed proposals should be emailed to the Curriculum Committee chair.

|  |  |
| --- | --- |
| **Title of Proposal** | LAS Specialization in Math |
| **Date** | August 25, 2024 |
| **Major or Minor** | Major |
| **Proposers’ Names** | Laura WestengardSatyanand Singh |
| **Department** | LAS Program, School of Arts and Sciences  |
| **Date of Departmental Meeting in which proposal was approved** | 4/7/22 for Math Dept;5/5/22 for AFR, Biology, Chemistry, Humanities, Physics and Social Science Depts;12/1/22 for English Dept |
| **Department Chair Name** | Laura Westengard |
| **Department Chair Signature and Date** | A close up of a signature  Description automatically generated8/29/24 |
| **Academic Dean Name** | Justin Vazquez-Poritz |
| **Academic Dean Signature and Date** |  8/29/24 |
| **Brief Description of Proposal**(Describe the modifications contained within this proposal in a succinct summary. More detailed content will be provided in the proposal body. | This proposal creates a specialization for Mathematics within the AS degree program in Liberal Arts and Sciences (LAS). |
| **Brief Rationale for Proposal**(Provide a concise summary of why this proposed change is important to the department. More detailed content will be provided in the proposal body).  | The Associate in Science degree program for Liberal Arts and Sciences (LAS) is seeking to create a specialization in Mathematics, which will complement the already-existing specializations in Biology, Chemistry, Physics, and General Science. In addition to providing academic depth, this will serve as a pathway to the BS program in Applied Mathematics. In particular, the LAS specializations are designed so that upon completion of the LAS degree only 60 more credits are needed to complete the corresponding BS program. |
| **Proposal History**(Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list). | This is a new curriculum modification proposal. |

Please include all appropriate documentation as indicated in the Curriculum Modification Checklist.

For each new course, please also complete the New Course Proposal and submit in this document.

Please submit this document as a single .doc or .rtf format. If some documents are unable to be converted to .doc, then please provide all documents archived into a single .zip file.

**ALL PROPOSAL CHECK LIST**

|  |  |
| --- | --- |
| Completed CURRICULUM MODIFICATION FORM including: |  |
| * Brief description of proposal
 | X |
| * Rationale for proposal
 | X |
| * Date of department meeting approving the modification
 | X |
| * Chair’s Signature
 | X |
| * Dean’s Signature
 | X |
| Evidence of consultation with affected departmentsList of the programs that use this course as required or elective, and courses that use this as a prerequisite. | X |
| Documentation of Advisory Commission views (if applicable). | N/A |
| Completed [Chancellor’s Report Form](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Chancellor_Report_Quick_Reference_Guide1.doc). |  |

**EXISTING PROGRAM MODIFICATION PROPOSALS**

|  |  |
| --- | --- |
| Documentation indicating core curriculum requirements have been met for new programs/options or program changes.  | N/A |
| Detailed rationale for each modification (this includes minor modifications) |  X |

**Description of Proposal**

This proposal creates a specialization in Mathematics within the AS degree program in Liberal Arts and Sciences (LAS), which complements the specializations in Biology, Chemistry, Physics, and General Science. This will provide a primary mathematics and computational science focus for students. Moreover, this specialization is designed to be linked with the corresponding BS program in Applied Mathematics as a 2+2 structure. Namely, all classes taken within the LAS specialization in Mathematics can also be used to fulfill the BS in Applied Mathematics degree requirements. Therefore, upon completion of the LAS specialization, only 60 more credits will be needed in order to complete the bachelors degree. Students who prefer not to have a primary mathematics focus can opt for any of the science specializations, including General Science which provides the same flexibility as the pre-specialization version of the LAS program.

The chart below details all of the specific requirements for each LAS specialization, so that one can compare the proposed Mathematics specialization with the others:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **General Science** | **Biology** | **Chemistry** | **Physics** | **Mathematics** |
| MAT 1475 | MAT 1475 | MAT 1475 | MAT 1475 | MAT 1475 |
| MAT 1575 orMAT 1372 and(MAT 1630 or CST 1101) | MAT 1372 CST 1101 | MAT 1575 | MAT 1575 | MAT 1575 |
| Science Sequence | BIO 1101 BIO 1201 | CHEM 1110 CHEM 1210 | PHYS 1441 PHYS 1442 | MAT 1630MAT 2440 |
| Capstone | BIO 2450 | CHEM 2323 | PHYS 2443/ID | MAT 2580 |
| Free Electives | Choose 2 Biology Specialization Electives | BIO 1101 CHEM 2223 | CST 1101 CST 1201 | Free Electives |

**Rationale for Proposal**

The LAS program is seeking to create a specialization in Mathematics, which will complement the already-existing specializations in Biology, Chemistry, Physics, and General Science. This will provide students the choice to have a mathematical and computational focus in their studies that could more effectively enable them to secure entry-level positions within applied mathematics and computational science sectors upon completion of the degree. Students graduating with the Mathematics specialization can pursue employment involving data analysis, data engineering, and data visualization.

Moreover, should students choose to continue onto the BS program in Applied Mathematics, they will have already completed the first 60 credits and would only need to take 60 more credits to complete the bachelors degree. The Mathematics specialization has been designed to closely overlap the first two years of the degree map for the Applied Mathematics bachelors degree program. This enables students to complete the LAS specialization and then continue onto the last two years of the bachelors program with minimal changes to the academic plan on the degree map for that program. To be explicit, on the following pages, we have included degree maps that show how students can earn the LAS specialization in Mathematics in two years and then complete the BS degree in Applied Mathematics in an additional two years. Note that any credit differentials are automatically accounted for in terms of the number of free elective credits needed to reach the required total of 120 credits for the BS degree. Also, these 2+2 versions of degree maps are consistent with the prerequisites needed for all courses required.

The purpose of this proposal is to encapsulate these course selections within a formalized specialization, since having them specified in the college catalog and in advisement materials will better enable advisors to provide guidance to students who are interested in focusing on mathematics. In addition, the specialization will appear on students’ degree audits on Degree Works. This will also enable the students to receive recognition on their official transcripts for having completed the Mathematics specialization.

One of the features of the LAS program is its flexibility, which we maintain by continuing to offer an LAS Specialization in General Science. Not only does this give students the choice not to specialize in a specific discipline, but it also provides the option for them to change their mind. Namely, should a student in the Mathematics specialization or any of the science discipline-specific specializations choose to opt out, all of their credits can still be used to fulfill the LAS Specialization in General Science.

Students will also be provided with flexibility within each specialization by being able to choose classes as free electives. Through the activation of double duty, science classes that satisfy the specific requirements of the specialization can also be used to satisfy the common core requirements of Life and Physical Sciences and Scientific World. This dual usage of courses serves to increase the number of free electives available for the students.

These specializations enable students to be more effectively matched with faculty advisors who represent these disciplines and would be able to continue to advise these students if/when they choose to transition to the corresponding BS programs. Throughout the course of a student’s academic journey through the LAS specialization and the bachelors degree program, a faculty advisor will be able to guide the student on undergraduate research opportunities, preparations for applying for internships, and on the consideration of various post-graduation career options. This could lead to a more rewarding advisement experience for both students and faculty members.

 **LAS SPECIALIZATION IN MATHEMATICS**

|  |  |  |
| --- | --- | --- |
| **COURSE** | **COURSE TITLE** | **CREDITS** |
| ENG 1101 | English Composition I | 3 |
| ENG 1121 | English Composition II | 3 |
| MQR | Math and Quantitative Reasoning(Recommended MAT 1275, 1375, 1475, 1575) | 3-4 |
| LPS | Life and Physical Sciences | 3-5 |
| WCGI | World Cultures and Global Issues | 3 |
| USED | US Experience in its Diversity | 3 |
| IS | Individual and Society | 3 |
| CE | Creative Expression | 3 |
| SW | Scientific World | 3-5 |
| Flex Core | Additional Flexible Common Core Course | 3 |
| MAT 1475 | Calculus I | 4 |
| MAT 1575 | Calculus II | 4 |
| MAT 1630 | Introduction to Computational Science | 3 |
| MAT 2440 | Discrete Structures and Algorithms I | 3 |
| MAT 2580 | Introduction to Linear Algebra (Capstone) | 3 |
|  | Free Electives to reach 60 credits | **60** |

**BS IN APPLIED MATHEMATICS**

|  |  |  |
| --- | --- | --- |
| **COURSE CODE** | **COURSE TITLE** | **CREDITS** |
| COM 1330 orhigher | Speech/Oral Communication | 3 |
|  | Interdisciplinary Course | 3 |
|  | Liberal Arts Elective or World Language Sequence | 3 |
|  | Liberal Arts Elective or World Language Sequence | 3 |
| MAT 2572 | Probability & Mathematical Statistics I | 4 |
| MAT 2630 | Applied Mathematics Technology -- Numerical Methods | 3 |
| MAT 2675 | Calculus III | 4 |
| MAT 2680 | Differential Equations | 3 |
| MAT 3672 | Probability & Mathematical Statistics II | 4 |
| MAT 3770 | Math Modeling I -- Optimization | 3 |
| MAT 3772 | Stochastic Models | 3 |
| MAT 3880 | Introduction to Partial Differential Equations | 3 |
| MAT 4672 | Computational Statistics | 3 |
| MAT 4788 | Financial Risk Modeling | 3 |
| MAT 4880 | Math Modeling II | 3 |
| MAT 4800 | Topics in Applied Math | 3 |
| MAT 4900 | Internship I | 2 |
| MAT 4901 | Internship II | 2 |
|  | Free Electives to reach 120 credits | **120** |

**SAMPLE COURSE OF STUDY**

For Associate in Science in Liberal Arts and Sciences, starting with MAT 1375:

**SEMESTER 1 (**Total Credits 16**)**

|  |  |  |
| --- | --- | --- |
| MAT 1375 | Precalculus (MQR) | 4 credits |
| ENG 1101 | English Composition I | 3 credits |
| CE | Creative Expression | 3 credits |
| IS | Individual and Society | 3 credits |
| USED | US Experience in its Diversity | 3 credits |

**SEMESTER 2 (**Total Credits 14**)**

|  |  |  |
| --- | --- | --- |
| MAT 1475 | Calculus I | 4 credits |
| MAT 1630 | Introduction to Computational Science | 3 credits |
| ENG 1121 | English Composition II | 3 credits |
| LPS | Life and Physical Sciences | 4 credits |

**SEMESTER 3 (**Total Credits 14**)**

|  |  |  |
| --- | --- | --- |
| MAT 1575 | Calculus II | 4 credits |
| WCGI | World Cultures and Global Issues | 3 credits |
| SW | Scientific World | 4 credits |
| Flex Core | Additional Flexible Common Core Course | 3 credits |

**SEMESTER 4 (**Total Credits 16**)**

|  |  |  |
| --- | --- | --- |
| MAT 2440 | Discrete Structures and Algorithms I | 3 credits |
| MAT 2580 | Introduction to Linear Algebra (Capstone) | 3 credits |
| Free Elective |  | 4 credits |
| Free Elective |  | 3 credits |
| Free Elective |  | 3 credits |

Continuing in the BS in Applied Mathematics, upon completion of the Associate in Science in Liberal Arts and Sciences:

**SEMESTER 5 (**Total Credits 17**)**

|  |  |  |
| --- | --- | --- |
| MAT 2572 | Probability & Mathematical Statistics I | 4 credits |
| MAT 2675 | Calculus III | 4 credits |
| MAT 2680 | Differential Equations | 3 credits |
| COM 1330 orhigher | Speech/Oral Communication | 3 credits |
| LibArt | Liberal Arts Elective | 3 credits |

**SEMESTER 6 (**Total Credits 16**)**

|  |  |  |
| --- | --- | --- |
| MAT 2630 | Applied Mathematics Technology -- Numerical Methods | 3 credits |
| MAT 3672 | Probability & Mathematical Statistics II | 4 credits |
| MAT 3772 | Stochastic Models | 3 credits |
| MAT 3880 | Introduction to Partial Differential Equations | 3 credits |

|  |  |  |
| --- | --- | --- |
| AdvancedLibArt | Advanced Liberal Arts Elective | 3 credits |

**SEMESTER 7 (**Total Credits 14**)**

|  |  |  |
| --- | --- | --- |
| MAT 3770 | Math Modeling I -- Optimization | 3 credits |
| MAT 4672 | Computational Statistics | 3 credits |
| MAT 4800 | Topics in Applied Math | 3 credits |
| MAT 4900 | Internship I | 2 credits |
| ID | Interdisciplinary Course | 3 credits |

**SEMESTER 8 (**Total Credits 14**)**

|  |  |  |
| --- | --- | --- |
| MAT 4788 | Financial Risk Modeling | 3 credits |
| MAT 4880 | Math Modeling II | 3 credits |
| MAT 4901 | Internship II | 2 credits |
| Free Elective |  | 3 credits |
| Free Elective |  | 3 credits |

**CAA FORM**

**Section AIII: Changes in Degree Programs**

**The following revisions are proposed for the AS in Liberal Arts and Sciences**

**Program: AS in Liberal Arts and Sciences**

**Program Code: 01336**

**Effective Date:**

|  |  |
| --- | --- |
| **FROM:**  | **TO:**  |
| **[GENERAL EDUCATION COMMON CORE 30 CREDITS****I – REQUIRED CORE****English (2 courses, 6 credits)**ENG 1101 English Composition I 3ENG 1121 English Composition II 3**Mathematical and Quantitative Reasoning1 3****Life and Physical Sciences 3****II – FLEXIBLE CORE (6 COURSES, 18 CREDITS)**Select one course from each of the following areas;plus one additional course from any of the five areas;no more than two courses may be selected from any discipline**World Cultures and Global Issues 3****US Experience in its Diversity 3****Individual and Society 3****Creative Expression 3****Scientific World 3****Additional Flexible Common Core Course 3****Writing Intensive Requirement2**Students at New York City College of Technology must complete two courses designated WI for the associate level, one from GenEd and one from the major; and two additional courses designated WI for the baccalaureate level, one from GenEd and one from the major.**PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN GENERAL SCIENCE 23-30 CREDITS****Science Sequence 8-10**In addition to the Life and Physical Sciences and Scientific World requirements above, a science sequence is required for the degree and may be selected from approved list. **Mathematics3 (7-10 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4  **or**MAT 1372 Statistics with Probability 3andMAT 1630 Introduction to Computational Science 3  **or**MAT 1372 Statistics with Probability 3andCST 1101 Computer Programming and Problem Solving 3 **Capstone (select from approved list) 3-5****PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN BIOLOGY 28-30 CREDITS****Mathematics3 (7 credits)**MAT 1475 Calculus I 4MAT 1372 Statistics with Probability 3**Computer Programming**CST 1101 Computer Programming and Problem Solving 3 **General Biology Sequence**BIO 1101 General Biology I 4 BIO 1201/ID General Biology II 4 **Capstone**BIO 2450 Genetics 4 **Two Biology Specialization Courses 6-8**Selected from the list below:CHEM 1110 General Chemistry I 4 BIO 1020 Artificial Intelligence and the Brain 3 BIO 2110 Programming for Biologists 4 BIO 2250 Evolution 3 BIO 2311 Human Anatomy and Physiology I 4 BIO 2312 Human Anatomy and Physiology II 4 BIO 3302 Microbiology 4 BIO 3350 Bioinformatics I 4 BIO 3620 Molecular and Cell Biology 4 **PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN CHEMISTRY 30 CREDITS****Mathematics3 (8 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4**General Chemistry Sequence**CHEM 1110 General Chemistry I 4 CHEM 1210 General Chemistry II 4 **Additional Science**BIO 1101 General Biology I 4 CHEM 2223 Organic Chemistry I 5 **Capstone**CHEM 2323 Organic Chemistry II 5 **PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN PHYSICS 30 CREDITS****Mathematics3 (8 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4**General Physics Sequence: Calculus Based**PHYS 1441 General Physics I: Calculus Based 5 PHYS 1442 General Physics II: Calculus Based 5 **Computer Programming**CST 1101 Computer Programming and Problem Solving 3 CST 1201 Programming Fundamentals 3 **Capstone**PHYS 2443/ID Modern Physics 4 **Free/unrestricted electives credits to bring total to 60****TOTAL PROGRAM-SPECIFIC REQUIRED AND ELECTIVE COURSES** **30****TOTAL NYSED LIBERAL ARTS/SCIENCE CREDITS**  **30****TOTAL CREDITS REQUIRED FOR THE DEGREE** **60***1 This is a STEM degree program requiring 4 credit courses in mathematics. Students may elect to use a required 4 credit mathematics course to meet the Common Core requirement in Mathematical and Quantitative Reasoning.**2 A semester-specific list of writing intensive courses is available online at the City Tech Pathways website.**3 Students who do not have sufficient background in mathematics to place into MAT 1475 can take MAT 1275 and MAT 1375 to satisfy the Mathematical and Quantitative Reasoning and Scientific World requirements in order to complete the degree with no more than 60 credits.* | **[GENERAL EDUCATION COMMON CORE 30 CREDITS****I – REQUIRED CORE****English (2 courses, 6 credits)**ENG 1101 English Composition I 3ENG 1121 English Composition II 3**Mathematical and Quantitative Reasoning1 3****Life and Physical Sciences 3****II – FLEXIBLE CORE (6 COURSES, 18 CREDITS)**Select one course from each of the following areas;plus one additional course from any of the five areas;no more than two courses may be selected from any discipline**World Cultures and Global Issues 3****US Experience in its Diversity 3****Individual and Society 3****Creative Expression 3****Scientific World 3****Additional Flexible Common Core Course 3****Writing Intensive Requirement2**Students at New York City College of Technology must complete two courses designated WI for the associate level, one from GenEd and one from the major; and two additional courses designated WI for the baccalaureate level, one from GenEd and one from the major.**PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN GENERAL SCIENCE 23-30 CREDITS****Science Sequence 8-10**In addition to the Life and Physical Sciences and Scientific World requirements above, a science sequence is required for the degree and may be selected from approved list. **Mathematics3 (7-10 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4  **or**MAT 1372 Statistics with Probability 3andMAT 1630 Introduction to Computational Science 3  **or**MAT 1372 Statistics with Probability 3andCST 1101 Computer Programming and Problem Solving 3 **Capstone (select from approved list) 3-5****PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN BIOLOGY 28-30 CREDITS****Mathematics3 (7 credits)**MAT 1475 Calculus I 4MAT 1372 Statistics with Probability 3**Computer Programming**CST 1101 Computer Programming and Problem Solving 3 **General Biology Sequence**BIO 1101 General Biology I 4 BIO 1201/ID General Biology II 4 **Capstone**BIO 2450 Genetics 4 **Two Biology Specialization Courses 6-8**Selected from the list below:CHEM 1110 General Chemistry I 4 BIO 1020 Artificial Intelligence and the Brain 3 BIO 2110 Programming for Biologists 4 BIO 2250 Evolution 3 BIO 2311 Human Anatomy and Physiology I 4 BIO 2312 Human Anatomy and Physiology II 4 BIO 3302 Microbiology 4 BIO 3350 Bioinformatics I 4 BIO 3620 Molecular and Cell Biology 4 **PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN CHEMISTRY 30 CREDITS****Mathematics3 (8 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4**General Chemistry Sequence**CHEM 1110 General Chemistry I 4 CHEM 1210 General Chemistry II 4 **Additional Science**BIO 1101 General Biology I 4 CHEM 2223 Organic Chemistry I 5 **Capstone**CHEM 2323 Organic Chemistry II 5 **PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN PHYSICS 30 CREDITS****Mathematics3 (8 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4**General Physics Sequence: Calculus Based**PHYS 1441 General Physics I: Calculus Based 5 PHYS 1442 General Physics II: Calculus Based 5 **Computer Programming**CST 1101 Computer Programming and Problem Solving 3 CST 1201 Programming Fundamentals 3 **Capstone**PHYS 2443/ID Modern Physics 4 **PROGRAM-SPECIFIC DEGREE REQUIREMENTS FOR THE SPECIALIZATION IN MATHEMATICS 30 CREDITS****Mathematics3 (8 credits)**MAT 1475 Calculus I 4MAT 1575 Calculus II 4**Computational Science**MAT 1630 Introduction to Computational Science 3 MAT 2440 Discrete Structures and Algorithms I 3 **Capstone**MAT 2580 Introduction to Linear Algebra 3 **Free/unrestricted electives credits to bring total to 60****TOTAL PROGRAM-SPECIFIC REQUIRED AND ELECTIVE COURSES** **30****TOTAL NYSED LIBERAL ARTS/SCIENCE CREDITS**  **30****TOTAL CREDITS REQUIRED FOR THE DEGREE** **60***1 This is a STEM degree program requiring 4 credit courses in mathematics. Students may elect to use a required 4 credit mathematics course to meet the Common Core requirement in Mathematical and Quantitative Reasoning.**2 A semester-specific list of writing intensive courses is available online at the City Tech Pathways website.**3 Students who do not have sufficient background in mathematics to place into MAT 1475 can take MAT 1275 and MAT 1375 to satisfy the Mathematical and Quantitative Reasoning and Scientific World requirements in order to complete the degree with no more than 60 credits.* |

**Rationale:** This creates a specialization in Mathematics in the AS program in Liberal Arts and Sciences. In addition to providing academic depth, this will serve as a pathway to the BS program in Applied Mathematics.

**EVIDENCE OF CONSULTATION AND DEPARTMENTAL VOTES**

**AFRICAN AMERICAN STUDIES:**

**From:** Renata Ferdinand <RFerdinand@citytech.cuny.edu>
**Sent:** Thursday, May 5, 2022 3:00 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Re: Proposed LAS Specialization in Math

Hi Justin,

Unanimous vote from AFR regarding Math specialization.

Thanks!

Renata Ferdinand, Ph.D.

Acting Chair, Department of African American Studies

New York City College of Technology (CUNY)

300 Jay Street, L634

Brooklyn, NY 11201

rferdinand@citytech.cuny.edu

**BIOLOGY:**

**From:** Andleeb Zameer <AZameer@citytech.cuny.edu>
**Sent:** Saturday, May 7, 2022 6:31 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>; Robert Leston <RLeston@citytech.cuny.edu>; Ann Delilkan <ADelilkan@citytech.cuny.edu>
**Subject:** Re: Proposed LAS Specialization in Math

Hi Justin,

Our vote in Biology was 15-0-0. It was approved unanimously.

Best,
Andleeb

Andleeb Zameer, Ph.D.
Chair, Department of Biological Sciences
New York City College of Technology, CUNY
Brooklyn, NY 11201
Phone: 718-260-5193

**CHEMISTRY:**

**From:** Ivana Jovanovic <IJovanovic@citytech.cuny.edu>
**Sent:** Thursday, May 5, 2022 3:32 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Re: Proposed LAS Specialization in Math

Hi Justin,

7 approved the proposed specialization.

Best,

Ivana

Ivana Jovanovic

Assistant Professor, Interim Chair

Chemistry Department

New York City College of Technology

City University of New York

285 Jay St, Brooklyn, NY 11201

Phone: 718-260-5856

**ENGLISH:**

**From:** Suzanne Maynard Miller <SMMiller@citytech.cuny.edu>
**Sent:** Wednesday, December 7, 2022 5:38 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Math specialization approved

Hi Justin,

The English Dept. approved the Math Specialization with a vote of 30-0-0 at the dept. meeting on Thursday, Dec. 1, 2022.

Best,

Suzanne

Suzanne Maynard Miller

English Department Chair

Associate Professor of English

New York City College of Technology

The City University of New York

300 Jay Street, Namm 512

Brooklyn, NY 11201

**HUMANITIES:**

**From:** Ann Delilkan <ADelilkan@citytech.cuny.edu>
**Sent:** Saturday, May 7, 2022 6:32 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Re: Proposed LAS Specialization in Math

Sorry. All 11 present voted ‘yes’, Justin. Was planning to send you the outcome together with the HSI proposals—coming up next.
Best,
Ann

Ann Delilkan, Ph.D.
Chair and Associate Professor, Department of Humanities
New York City College of Technology, City University of New York
300 Jay Street, Room L630 (formerly A630)
Brooklyn NY 11201
Tel: (718) 260-5018

**MATHEMATICS:**

**From:** Jonathan Natov <JNatov@citytech.cuny.edu>
**Sent:** Friday, April 29, 2022 7:07 AM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Re: Minor Curriculum - Mathematics Education and LAS-Specialization Applied Mathematics

Good morning Justin,

How are you?

The vote totals at the April 7, 2022 Mathematics Department meeting for the LAS specialization in Applied Mathematics: 27 yes, 0 no, 2 abstain.

Please ask if you have questions.

Thank you for your help,

Jonathan

Professor Jonathan Natov

Mathematics Department Chair, N711

New York City College of Technology

300 Jay Street, Brooklyn NY 11201

**PHYSICS:**

**From:** German Kolmakov <GKolmakov@citytech.cuny.edu>
**Sent:** Thursday, May 5, 2022 2:28 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Math spec voting - physics

Dear Justin ,

The physics dept voting for the math specialization at the dept meeting  is:

YES- 7

No-0

Abstain -0

Thanks!
German

**SOCIAL SCIENCE:**

**From:** Randall Hannum <RHannum@citytech.cuny.edu>
**Sent:** Thursday, May 5, 2022 3:29 PM
**To:** Justin Vazquez-Poritz <JVazquez-Poritz@citytech.cuny.edu>
**Subject:** Social Science Vote on Proposed LAS Specialization in Math

Dean Vazquez-Poritz,

The Social Science department voted at today's department meeting to support the Math Specialization for the LAS program.  The vote was 18-0-0.

If there are any questions, please let me know.

Thank you.

All the best,

Randy

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Randall Hannum
Assistant Professor of Economics

Chair, Department of Social Science
New York City College of Technology, CUNY

Phone: 718.260.5080

Email: RHannum@citytech.cuny.edu