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** | Prerequisite and course description changes |
| **Date** | 09/30/2024 |
| **Major or Minor** | Minor |
| **Proposer’s Name** | Neil Katz, Lin Zhou |
| **Department** | Mathematics |
| **Date of Departmental Meeting in which proposal was approved** | 4/4/2024 |
| **Department Chair Name** | Jonathan Natov |
| **Department Chair Signature and Date** | Jonathan Natov 11/26/2024 |
| **Academic Dean Name** | Justin Vazquez-Poritz |
| **Academic Dean Signature and Date** | 11/26/24 |
| **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. | 1. Change the course descriptions of MAT 1275 and MAT 1270CO to reflect a realignment of topics between these courses and MAT1375
2. Change the course description of MAT 1375 to reflect a realignment of this course with MAT1275 and MAT1275CO.
3. Update the prerequisites of MAT 2440 to include a programming course offered by the Entertainment Technology Department
4. Replace pre-/co-requisites in mathematics courses with pre-requisites only.
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| **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). | Changes to MAT 1275, MAT 1275CO and MAT 1375 are being put in place to better serve our students' needs. These courses were re-organized after the college stopped offering MAT 1175 and remedial math classes. These changes in turn have an effect on prerequisites for subsequent courses. In addition the Mathematics Department has determined that it is preferable to have prerequisites rather than pre-/co-requisites to ensure students have the proper background for its courses. |
| **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 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. | XX |
| Documentation of Advisory Commission views (if applicable). |  |
| Completed [Chancellor’s Report Form](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Chancellor_Report_Quick_Reference_Guide1.doc). | X |

**EXISTING PROGRAM MODIFICATION PROPOSALS**

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

EVIDENCE OF CONSULTATION

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

Sent: Sunday, April 7, 2024 10:05 PM

To: John McCullough <jmccullough@citytech.cuny.edu>

Cc: Jonathan Natov <jnatov@citytech.cuny.edu>

Subject: prerequisite change to MAT2440

Dear John,

I hope all is well with you.

I'm writing regarding a proposed prerequisite change to MAT 2440. If we were to add MTEC 1202 to the prerequisites as an alternative to CST 1201, CST 2403 or MAT 1630, then all students in your Emerging Media Technology BTech could take MAT 2440, not just the ones in the Media Computation concentration.

The Mathematics Department is hoping that this will better serve students in your program.

Best regards,

Neil

Date: Mon, 8 Apr 2024 09:02:17 -0400

From: John McCullough <JMcCullough@CityTech.Cuny.Edu>

To: Neil Katz <Neil.Katz47@citytech.cuny.edu>

CC: Jonathan Natov <jnatov@citytech.cuny.edu>

Subject: Re: prerequisite change to MAT2440

Neil,

That would be a great change, and a real boon to our students.

Thanks,

John

John McCullough

Associate Professor/Technical Supervisor

Entertainment Technology Department - Chair

New York City College of Technology

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Date: Fri, 11 Oct 2024 08:44:03 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: SBrandt@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Professor Brandt,

I hope this message finds you well.

I'm writing to regarding a change to the prerequisites for MAT2580 (An introduction to Linear Algebra). The Mathematics Department has determined that MAT1475 is sufficient as a prerequisite to this course and is proposing to change the MAT1575 pre-/co-requisite to a prerequisite of MAT1475.

The students in the Physical Computing Concentration who choose to satisfy an option with MAT2580 and now have more flexibility in scheduling the course.

Best regards,

Neil

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Date: Fri, 11 Oct 2024 08:44:52 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: IJovanovic@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Professor Jovanovic,

I hope this message finds you well.

I'm writing to you regarding a proposed curriculum change to the prerequisites of MAT2580 (An introduction to Linear Algebra) and MAT2675 (Calculus III).

These courses are electives for the BS in Applied Chemistry. The Mathematics Department has determined that MAT1475 is sufficient as a prerequisite for MAT2580 rather than the current requirement of MAT1575 as a pre-/co-requisite. Also MAT2580 will serve as a prerequisite for MAT2675 rather than the current pre-/co-requisite to ensure students have a sufficient familiarity with vector spaces to study calculus in that setting. Students will still be able to finish the calculus sequence in three semesters by taking MAT2580 at the same time as MAT1575.

Best regards,

Neil

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Date: Fri, 11 Oct 2024 08:45:50 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: GOssola@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Giovanni,

I hope this message finds you well.

I'm writing to you regarding a proposed curriculum change to the prerequisites of MAT1372 (Statistics with Probability), MAT2580 (An introduction to Linear Algebra) and MAT2675 (Calculus III).

Both MAT2580 and MAT2675 are required for the BS in Applied Computational Physics. The Mathematics Department has determined that MAT1475 is sufficient as a prerequisite for MAT2580 rather than the current requirement of MAT1575 as a pre-/co-requisite. Also MAT2580 will serve as a prerequisite for MAT2675 rather than the current pre-/co-requisite to ensure students have a sufficient familiarity with vector spaces to study calculus in that setting. Students will still be able to finish the calculus sequence in three semesters bytaking MAT2580 at the same time as MAT1575.

The prerequisite for MAT1372 has been changed to MAT1275 or MAT1275CO rather than a pre-/co-requisite of MAT1375 because of a re-arrangment of topics in these courses to adjust for the withdrawal of MAT1175. This will allow more flexibility for students who wish to take PHYS3600.

Best regards,

Neil

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Date: Fri, 11 Oct 2024 08:46:24 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: cmennella@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Connie,

I hope this message finds you well.

I'm writing about a proposed change to the prerequisites for MAT1372 (Statistics with Probability) that is an elective course for the AAS in Legal Assistant Studies. The Mathematics Department has changed the topics in MAT1275 so that it will be sufficient as a prerequisite to this course and is proposing to change the MAT1375 pre-/co-requisite to a prerequisite of MAT1275. This will allow more students to take MAT1372 including those in the Legal Assistant Studies program who opt to take MAT1372 as an elective.

Best regards,

Neil

Date: Fri, 11 Oct 2024 09:06:46 -0400

From: Concetta Mennella <CMennella@CityTech.Cuny.Edu>

To: Neil Katz <Neil.Katz47@citytech.cuny.edu>

Subject: Re: minor curriculum change

We offer two choices of statistics in our BS program students choose between 1272 and 1372 to satisfy the degree requirement

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Date: Fri, 11 Oct 2024 08:47:15 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: AZameer@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Andleeb,

I hope this message finds you well.

I'm writing regarding a proposed curriculum change to the prerequisites of MAT1372 (Statistics with Probability). The Mathematics Department has changed the curriculum covered in MAT1275 so it will be sufficient as a prerequisite to this course and is proposing to change the MAT1375 pre-/co-requisite to a prerequisite of MAT1275. This will give the students in the BS in Biomedical Informatics more flexibility in choosing courses.

Best regards,

Neil

Date: Fri, 11 Oct 2024 09:04:29 -0400

From: Andleeb Zameer <AZameer@CityTech.Cuny.Edu>

To: Neil Katz <Neil.Katz47@citytech.cuny.edu>

CC: Jonathan Natov <jnatov@citytech.cuny.edu>, Lin Zhou

 <lzhou@citytech.cuny.edu>

Subject: Re: minor curriculum change

Hello Neil,

Thank you for letting me know about the changes. I will go ahead and inform our program coordinators and student advisors of these changes. Please let me know if there is anything you need from me.

Thanks,

Andleeb

Andleeb Zameer, Ph.D.

Chair, Department of Biological Sciences, A301-C

New York City College of Technology, CUNY

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Date: Fri, 11 Oct 2024 08:48:00 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: LWestengard@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Professor Westengard,

I hope this message finds you well.

I'm writing to you regarding a proposed curriculum change to the prerequisites of MAT2580 (An introduction to Linear Algebra) and to MAT1372 (Statistics with Probability). These courses can be used to satisfy requirements for the LAS program.

The Mathematics Department has determined that MAT1475 is sufficient as a prerequisite for MAT2580 rather than the current requirement of MAT1575 as a pre-/co-requisite. It also is changing the curriculum in MAT1275/MAT1275CO so that they are sufficient prerequisites for MAT1372. These changes will allow LAS students to progress faster towards obtaining required or optional mathematics courses for their degree.

Best regards,

Neil

Date: Tue, 15 Oct 2024 16:12:22 -0400

From: Laura Westengard <LWestengard@CityTech.Cuny.Edu>

To: Neil Katz <Neil.Katz47@citytech.cuny.edu>

Subject: Re: minor curriculum change

Thank you for letting me know, Neil. These are proposed curriculum changes, correct?

Should we wait until College Council approves them before adjusting our advising information, or are you telling us now so we begin passing this information along to students and faculty advisors immediately?

Thanks,

Laura

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Date: Fri, 11 Oct 2024 08:48:41 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: sjang@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Sunghoon,

I hope this message finds you well.

I'm writing regarding a proposed change to the prerequisites of MAT2580 (An introduction to Linear Algebra), which is a required course for the BTech in Computer Engineering Technology. The Mathematics Department has determined that MAT1475 is sufficient as a prerequisite to this course and is proposing to change the MAT1575 pre-/co-requisite to a prerequisite of MAT1475. This will allow your students to more flexibility in choosing courses and also let them incorporate the understanding gained from MAT2580 earlier into their educational program.

Best regards,

Neil

Date: Fri, 11 Oct 2024 10:32:29 -0400

From: Sunghoon Jang <SJang@CityTech.Cuny.Edu>

To: Neil Katz <Neil.Katz47@citytech.cuny.edu>

CC: Jonathan Natov <jnatov@citytech.cuny.edu>, Lin Zhou

 <lzhou@citytech.cuny.edu>, Yu Wang <YWang@CityTech.Cuny.Edu>, Ohbong

 Kwon <OKwon@CityTech.Cuny.Edu>, Farrukh Zia <FZia@CityTech.Cuny.Edu>

Subject: Re: minor curriculum change

Dear Neil,

We support your department's plan regarding the change in the prerequisites of the MAT2580 course.

Regards,

Sunghoon Jang, PhD

Professor & Chair

Dept of Computer Engineering Tech

NY City College of Technology, CUNY

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Date: Fri, 11 Oct 2024 08:50:49 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: ERodriguez@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Eric,

I hope this message finds you well.

I'm writing to you about a proposed change to the prerequisites of MAT1372 (Statistics with Probability), to MAT2580 (An introduction to Linear Algebra) and to MAT2675 (Calculus III).

The Mathematics Department has changed the topics in MAT1375 and MAT1275/CO and so MAT1275/CO is sufficient to take MAT1372 so is proposing to change the pre-/co-requisite of MAT1375 to a prerequisite of MAT1275. This might give some students in the BS in Data Analytics/Economics more flexibility in their schedules.

The Mathematics Department has also determined that MAT1475 is sufficient as a prerequisite for MAT2580 and is proposing to change the MAT1575 pre-/co-requisite to a prerequisite of MAT1475. This will also give students more flexibility in gathering the necessary prerequisites.

Finally the proposal includes a change for MAT2675 from a pre-/co-requisite of MAT2580 to a prerequisite of MAT2580 so that students are familiar with vector spaces before taking a course about calculus of functions on vector spaces. Students will still be able to take MAT2675 in the semester after taking MAT1575 if they take MAT2580 at the same time as MAT1575.

Best regards,

Neil

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Date: Fri, 11 Oct 2024 08:52:20 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: MRazani@citytech.cuny.edu

Cc: jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Professor Razani,

I hope this message finds you well.

I'm writing concerning proposed changes to the prerequisites of MAT1372 (Statistics with Probability) and to MAT2580 (An introduction to Linear Algebra).

The Mathematics Department has changed the topics in MAT1375 and MAT1275/CO so that MAT1275 or MAT1275CO will be sufficient to take MAT1372. The proposal is to change the pre-/co-requisite of MAT1375 to a prerequisite of MAT1275. This might give some students in the BTech in EET more flexibility in their schedules.

The Mathematics Department has also determined that MAT1475 is sufficient as a prerequisite for MAT2580 and is proposing to change the MAT1575 pre-/co-requisite to a prerequisite of MAT1475. This will also give students who wish to take EET4242 more flexibility in gathering the necessary prerequisites.

Best regards,

Neil

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Date: Wed, 16 Oct 2024 21:41:47 -0400

From: Neil Katz <Neil.Katz47@citytech.cuny.edu>

To: Elena Filatova <EFilatova@citytech.cuny.edu>

Cc: ASatyanarayana@citytech.cuny.edu, jnatov@citytech.cuny.edu, lzhou@citytech.cuny.edu

Subject: minor curriculum change

Dear Professor Filatova,

I hope this message finds you well.

I'm writing to you regarding a proposed curriculum change to the prerequisites of MAT2580 (An introduction to Linear Algebra) and MAT2675 (Calculus III).

Since MAT2580 is required for the BS in Data Science, and Calculus III is not explicitly required but it is a prerequisite to MAT3672, an elective I wanted to contact you about these changes.

The Mathematics Department has determined that MAT1475 is sufficient as a prerequisite for MAT2580 rather than the current requirement of MAT1575 as a pre-/co-requisite. This will give students in Data Science more flexibility as to when they take MAT2580.

Also, MAT2580 will serve as a prerequisite for MAT2675 rather than the current pre-/co-requisite to ensure students have a sufficient familiarity with vector spaces to study calculus in that setting. Students will still be able to finish the calculus sequence in three semesters by taking MAT2580 at the same time as MAT1575.

Best regards,

Neil

Date: Sun, 20 Oct 2024 19:40:29 -0400

From: Elena Filatova <EFilatova@CityTech.Cuny.Edu>

To: Neil Katz <Neil.Katz47@citytech.cuny.edu>

CC: Ashwin Satyanarayana <ASatyanarayana@citytech.cuny.edu>, Jonathan Natov

 <jnatov@citytech.cuny.edu>, Lin Zhou <lzhou@citytech.cuny.edu>

Subject: Re: minor curriculum change

Dear Neil.

Thank you very much for the update. I will put it on our DS course map.

Regards,

Elena

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Elena Filatova, PhD

Associate Professor

Computer Systems Technology,

New York City College of Technology

City University of New York

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Programs that require courses to be modified

| Department | Program | Course | serves as |
| --- | --- | --- | --- |
| Biological Sciences | Biomedical Informatics | MAT 1372 | required course |
| Chemistry | Applied Chemistry | MAT 2580 | elective course |
| Chemistry | Applied Chemistry | MAT 2675 | elective course |
| Computer Eng. Tech. | Computer Eng. Tech. BTech | MAT 2580 | required course |
| Computer Systems Tech | Data Science | MAT 2440 | required course |
| Computer Systems Tech | Data Science | MAT 2580 | required course |
| ETET | EET BTech | MAT 1372 | required course |
| Entertainment Tech | Emerging Media Tech. (Physical Computing Concentration) | MAT 2580 | optional course |
| Entertainment Tech | Emerging Media Tech., (Media Computation Concentration) | MAT 2440 | required course |
| Physics | Applied Computational Physics | MAT 1372 | prerequisite for PHYS 3600 |
| Physics | Applied Computational Physics | MAT 2580 | required course |
| Physics | Applied Computational Physics | MAT 2675 | required course |
| SAS | LAS | MAT 1372 | optional course |
| SAS | LAS | MAT 2580 | optional course |

Courses that have courses to be modified as requisites

| Department | Course | Requisite Course |
| --- | --- | --- |
| Biological Sciences | BIO 3352 | MAT 1372 (or MAT 2572) |
| Computer Eng Tech | CET 4864 | MAT 2580 |
| Computer Eng Tech | CET 4952 | MAT 2580 |
| ETET | EET 3202 | MAT 1372 (or MAT 2572) |
| ETET | TCET 4132 | MAT 1372 (or MAT 2572) |
| ETET | EET 4242 | MAT 2580 |
| Entertainment Tech | MTEC 4030 | MAT 2440 |
| Physics | PHYS 3600/ID | MAT 1372 (or MAT 2572) |
|  |  |  |
| Computer Eng Tech |  | MAT 2580 |

**Changes to be offered in the Mathematics department**

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | 39898 |  |  |
| **Course Number and Title** | MAT 1275 College Algebra and Trigonometry |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** |  | **Prerequisite** |  |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** |  | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** | ~~An intermediate and advanced algebra course.  Topics include quadratic equations, systems of linear equations, exponential and logarithmic functions; topics from trigonometry including identities, equations and solutions of triangles.~~ | **Description** | This course includes polynomial, rational, radical, trigonometric, logarithmic, and exponential expressions. Equations with one variable, linear and quadratic equations with two variables and their graphs, and systems of two such equations are covered. |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 |
| **Effective Term** |  |  |  |

**Rationale:** After the removal of remedial math and MAT 1175, the topics of MAT 1275/1275CO and MAT 1375 were reorganized to reflect this change. The old course description of MAT 1275 was as a continuation of MAT 1175. The current course description of MAT 1275/MAT 1275CO reflects the material of a standard college algebra and trigonometry course. Some topics in trigonometry have been moved to MAT 1375, while the Binomial Theorem has been moved from MAT 1375 to MAT 1275/1275CO as an example of polynomial expressions.

**Changes to be offered in the Mathematics department**

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| --- | --- | --- | --- |
| **CUNYFirst Course ID** | 146591 |  |  |
| **Course Number and Title** | MAT 1275CO College Algebra and Trigonometry Corequisite |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** |  | **Prerequisite** |  |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** |  | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** | ~~Guided hands-on problem-solving and practice for students in MAT 1275. Topics include quadratic equations, the distance and midpoint formula, graphing parabolas and circles, systems of linear and quadratic equations, an introduction to exponential and logarithmic functions. Topics from trigonometry include basic trigonometric functions, identities, equations and solutions of triangles.~~ | **Description** | Guided hands-on problem-solving and practice for students in MAT 1275. This course includes polynomial, rational, radical, trigonometric, logarithmic, and exponential expressions. Equations with one variable, linear and quadratic equations with two variables and their graphs, and systems of two such equations are covered. |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

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| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 |
| **Effective Term** |  |  |  |

**Rationale:** After the removal of remedial math and MAT 1175, the topics of MAT 1275/1275CO and MAT 1375 were reorganized to reflect this change. The old course description of MAT 1275 was as a continuation of MAT 1175. The current course description of MAT 1275/MAT 1275CO reflects the material of a standard college algebra and trigonometry course. Some topics in trigonometry have been moved to MAT 1375, while the Binomial Theorem has been moved from MAT 1375 to MAT 1275/1275CO as an example of polynomial expressions.

**Changes to be offered in the Mathematics department**

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | 39901 |  |  |
| **Course Number and Title** | MAT 1372 Statistics with Probability |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** |  | **Prerequisite** | MAT 1275CO OR MAT 1275 OR HIGHER. MUST NOT HAVE TAKEN MAT 2572 |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** | ~~MAT 1375 MUST NOT HAVE TAKEN MAT 2572~~ | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** |  | **Description** |  |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 |
| **Effective Term** |  |  |  |

**Rationale:** Changes made to the topics covered in MAT 1275 and MAT 1275CO allow either of those courses to act as a prerequisite to MAT 1372. Prerequisites are preferable to pre-/co-requisites to simplify the registration and advisement process and lead to faster graduation. This change will also open the way for more students to take MAT 1372 as an elective or program option.

**Changes to be offered in the Mathematics department**

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| --- | --- | --- | --- |
| **CUNYFirst Course ID** | 39902 |  |  |
| **Course Number and Title** | MAT 1375 Precalculus |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** |  | **Prerequisite** |  |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** |  | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** | ~~A pre-calculus functions course including topics from advanced algebra and theory of equations such as solutions of polynomial equations, DeMoivre's Theorem, Binomial Theorem, vectors, lines, conic sections and progressions.~~ | **Description** | A pre-calculus functions course including topics from advanced algebra and theory of equations such as solutions of polynomial equations, DeMoivre's Theorem, vectors, lines, conic sections and progressions. |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

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| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

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| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

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| **Effective Term** |  |  |  |

**Rationale:** After the removal of remedial math and MAT 1175, the topics of MAT 1275/1275CO and MAT 1375 were reorganized to reflect this change. The old course description of MAT 1275 was as a continuation of MAT 1175. The current course description of MAT 1275/MAT 1275CO reflects the material of a standard college algebra and trigonometry course. Some topics in trigonometry have been moved to MAT 1375, while the Binomial Theorem has been moved from MAT 1375 to MAT 1275/1275CO as an example of polynomial expressions.

**Changes to be offered in the Mathematics department**

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| **CUNYFirst Course ID** | 39912 |  |  |
| **Course Number and Title** | MAT 2440 Data Structures and Algorithms |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** |  ~~MAT 1375 or higher and CST 1201 or CST 2403 or MAT 1630~~ | **Prerequisite** | MAT 1375 or higher and (CST 1201 or CST 2403 or MAT 1630 or MTEC 1202) |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** |  | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** |  | **Description** |  |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

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| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

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| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

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| **Effective Term** |  |  |  |

**Rationale:** This change is being made to allow students to take the course with an additional option of programming prerequisite: MTEC 1202. This change will make the course accessible to more students.

**Changes to be offered in the Mathematics department**

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| **CUNYFirst Course ID** | 39915 |  |  |
| **Course Number and Title** | MAT 2580 Introduction to Linear Algebra |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** |  | **Prerequisite** | MAT 1475 |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** | ~~MAT 1575~~ | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** |  | **Description** |  |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

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| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

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| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

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| **Effective Term** |  |  |  |

**Rationale:** The Mathematics Department has determined that a prerequisite of MAT1475 is sufficient for this course. It does not alter the suggested sequence of courses. Students would continue to take this course in their second semester or later. Prerequisites are preferable to pre-/co-requisites to simplify the registration and advisement process and lead to faster graduation.

**Changes to be offered in the Mathematics department**

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| --- | --- | --- | --- |
| **CUNYFirst Course ID** | 39919 |  |  |
| **Course Number and Title** | MAT 2675 Calculus III |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course Number** |  | **Course Number** |  |
| **Course Title** |  | **Course Title** |  |
| **Prerequisite** | ~~MAT 1575~~ | **Prerequisite** | MAT 1575 and MAT 2580 |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** | ~~MAT 2580~~ | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** |  | **Description** |  |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 | Course Applicability |

|  |
| --- |
| [ ] Major |
| [ ] Gen Ed Required |
| [ ] English Composition |
| [ ] Mathematics |
| [ ] Science |
| [ ] Gen Ed - Flexible |
| [ ] World Cultures |
| [ ] US Experience in its Diversity |
| [ ] Creative Expression |
| [ ] Individual and Society |
| [ ] Scientific World |
| [ ] Gen Ed - College Option |
| [ ] Speech |
| [ ] Interdisciplinary |
| [ ] Advanced Liberal Arts |

 |
| **Effective Term** |  |  |  |

**Rationale:** The pre-/co-requisite of MAT 2580 is being changed to a prerequisite of MAT 2580 so that students are better prepared to study multi-variable calculus in a setting of vector spaces. This change goes hand-in-hand with the prerequisite change to MAT 2580 so that students can still take MAT 2675 in their third semester.