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** | **MAT 3880 Minor Curriculum Change** |
| **Date** | **February 9, 2016** |
| **Major or Minor** | **Minor** |
| **Proposer’s Name** | **Laura Ghezzi and Huseyin Yuce** |
| **Department** | **Mathematics** |
| **Date of Departmental Meeting in which proposal was approved** | **March 5, 2015** |
| **Department Chair Name** | **Sandie Han** |
| **Department Chair Signature and Date** | **2/16/2016** |
| **Academic Dean Name** | **Justin Vazquez-Poritz** |
| **Academic Dean Signature and Date** | **2/21/16** |
| **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. | **Change the name of the course MAT 3880 from “An Introduction to Partial Differential Equations using Mathematical Models in Biology” to “An Introduction to Partial Differential Equations”. The course description and the course outline are modified accordingly.** |
| **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 course has been revised so that it can be taken by all Applied Mathematics students, not just those in the Science concentration. The mathematical content of the course leads to applications in different fields, not just in Biology.** |
| **Proposal History**  (Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list). | **First submission** |

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 departments  List 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). | 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) |  |

**Description of Proposal**

We propose to revise the course MAT 3880. We propose to change its name from “An Introduction to Partial Differential Equations using Mathematical Models in Biology” to “An Introduction to Partial Differential Equations”. In addition the course description will be changed to:

“This is an introduction to partial differential equations. Topics include: Fourier’s method, separation of variables, partial differential equations in higher dimensions: 2D heat and wave equations, and partial differential equations in other coordinate systems.”

The course outline will be revised accordingly.

**Rationale for Proposal**

The course has been revised so that it can be taken by all Applied Mathematics students, not just those in the Science concentration. The mathematical content of the course leads to applications in different fields, not just in Biology.

This course is required for the Applied Mathematics Science concentration (ASB); it is an elective for the Applied Mathematics Financial Science concentration (AFB) and it is an elective for the Applied Mathematics Information Science concentration (AIB). However, currently very few students from AFB and AIB enroll in this course. By making the course more general (without changing the mathematical content) we expect that it will attract more students from AFB and AIB.

**List of the programs that use this course as required or elective, and courses that use this as a prerequisite.**

This course is required for the Applied Mathematics Science concentration (ASB); it is an elective for the Applied Mathematics Financial Science concentration (AFB) and it is an elective for the Applied Mathematics Information Science concentration (AIB).

It is also an elective for the Bachelor of Science in Applied Chemistry.

No course uses MAT 3880 as a prerequisite.

**Consultation with affected departments (Chemistry)**

From: Diana Samaroo

To: Laura Ghezzi

CC: Randall Hannum

Date: 2/29/2016 3:51 PM

Subject: Re: Minor Curriculum change for MAT 3880

Dear Laura,

Thank you for informing the department about the minor change to MAT 3380. Once the change is approved, we will correct our advisement materials.

All the best,

Diana

>>> Laura Ghezzi 2/29/2016 3:29 PM >>>

Dear Diana,

How are you? I hope everything is going well. I just wanted to add to my email below that the revised MAT 3880 course is still of interest to students in Applied Chemistry, as many chemical reactions, advections, diffusions and transports are modeled by partial differential equations, like heat (diffusion) and wave equations.

Best regards,

Laura

>>> Laura Ghezzi 2/24/2016 4:48 PM >>>

Dear Diana,

I hope all is well. The math department approved the curriculum change for MAT 3880 described below. Since the course is an elective for the BS in Applied Chemistry, I am writing to consult with you and ask for your kind support for such a change.

Best wishes,

Laura

Description of Proposal

We propose to revise the course MAT 3880. We propose to change its name from “An Introduction to Partial Differential Equations using Mathematical Models in Biology” to “An Introduction to Partial Differential Equations”. In addition the course description will be changed to:

“This is an introduction to partial differential equations and some of its applications. Topics include: Fourier’s method, separation of variables, PDE’s in higher dimensions: 2D heat and wave equations, and PDE’s in other coordinate systems.”

The course outline will be revised accordingly.

Rationale for Proposal

The course has been revised so that it can be taken by all Applied Mathematics students, not just those in the Science concentration. The mathematical content of the course leads to applications in different fields, not just in Biology.

This course is required for the Applied Mathematics Science concentration (ASB); it is an elective for the Applied Mathematics Financial Science concentration (AFB) and it is an elective for the Applied Mathematics Information Science concentration (AIB). However, currently very few students from AFB and AIB enroll in this course. By making the course more general (without changing the mathematical content) we expect that it will attract more students fromAFB and AIB.

**AV.1. Changes to be offered in the Mathematics department**

**MAT 3880 An Introduction to Partial Differential Equations using Mathematical Models in Biology**

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | 117188 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** |  | **Department(s)** |  |
| **Course** | **~~An Introduction to Partial Differential Equations using Mathematical Models in Biology~~** | **Course** | **An Introduction to Partial Differential Equations** |
| **Prerequisite** |  | **Prerequisite** |  |
| **Corequisite** |  | **Corequisite** |  |
| **Pre- or corequisite** |  | **Pre- or corequisite** |  |
| **Hours** |  | **Hours** |  |
| **Credits** |  | **Credits** |  |
| **Description** | **~~Topics include functions of several variables, Conservation Equation, Convection, Diffusion, and Attraction, Population dispersion models, Steady States and Traveling Waves, Applications of partial differential equations.~~** | **Description** | **This is an introduction to partial differential equations. Topics include: Fourier’s method, separation of variables, partial differential equations in higher dimensions: 2D heat and wave equations, and partial differential equations in other coordinate systems** |
| **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** |  |  | **Fall 2016** |

**Rationale:** We propose to revise this course so that it can be taken by all Applied Mathematics students, not just those in the Science concentration. The mathematical content of the course leads to applications in different fields, not just in Biology.