Office of the Provost

**Proposed Change to an Existing Degree: Academic Component**

*Please answer all relevant questions below. Consultation with the appropriate Associate Provost on a draft of the proposal is recommended.*

*Using the relevant template, please submit a budget even if no additional resources are needed.*

**Title of Degree (e.g., Bachelor of Arts in History):**

MA in Biostatistics

1. **Please provide the name, title, email address, and phone number of the primary contact person for this academic program:**

   | Howard Cabral, PhD | Laura White, PhD |
   | Program Co-Director | Program Co-Director |
   | hjcab@bu.edu | lfwhite@bu.edu |
   | 8-5024 | 4-2833 |

2. **Please describe briefly the proposed change to the existing degree:**

   We propose to replace the course SPH EP713 Introduction to Epidemiology with SPH EP 770 Concepts and Methods in Epidemiology as a core course requirement for the MA program.

   As a result of this change, our MA program now requires 24 core credits rather than 23. This correspondingly reduces the number of elective credits required from 9 to 8.

3. **Please provide a rationale for the proposed change to the existing degree:**

   Replacing EP713 with EP770. The reason for this change is that SPH EP713 (3 credits) will no longer be offered in the Epidemiology Department. After consideration of the alternate courses available, our faculty determined that EP770 should take the place of EP713, as it is taught at the appropriate level for our graduate students.
4. Please describe how the proposed change(s) advances the Strategic Plans of the department, of the school/college, and of the University:

The Biostatistics Program regularly reassesses its curriculum in order to best prepare its graduates for success in their careers as biostatisticians. Also, given that the Program is based in two Schools at the University, it needs to adapt to curricular changes in both schools to ensure that our students have the best possible course-based training. This also helps the Program to continue our highly successful record in producing high caliber graduates within the framework of a joint program across both the Charles River and Medical Campuses.

5. Please list all the program requirements for the current and revised programs so that review committees can easily see the changes: (expand the table as needed and denote new courses in bold print)

<table>
<thead>
<tr>
<th>Current program (32 credits)</th>
<th>Revised program (32 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS MA575 Linear Models</td>
<td>same</td>
</tr>
<tr>
<td>CAS MA581 Probability</td>
<td>same</td>
</tr>
<tr>
<td>CAS MA582 Mathematical Statistics</td>
<td>same</td>
</tr>
<tr>
<td>SPH EP713 Introduction to Epidemiology (3 credits)</td>
<td>SPH EP770 Concepts and Methods in Epidemiology (4 credits)</td>
</tr>
<tr>
<td>SPH BS805 Intermediate Statistical Computing &amp; Applied Regression</td>
<td>same</td>
</tr>
<tr>
<td>SPH BS852 Statistical Methods in Epidemiology</td>
<td>same</td>
</tr>
<tr>
<td>9 credits from a list of electives</td>
<td>8 credits from a list of electives</td>
</tr>
</tbody>
</table>

6. Is this change a result of program learning outcomes assessment and/or academic program review? If yes, please describe:

These changes are the result of a review of the academic program by our faculty at a retreat last year. Recommendations from the full faculty were then reviewed and discussed by our Biostatistics Program Advisory Committee, who finalized the proposed changes as described above.
7. Please list learning outcomes for the revised program:

Same as previously.

A candidate for a Master of Arts degree in Biostatistics is expected to demonstrate mastery of knowledge in biostatistics by:

- Demonstrating mastery at a Master’s level of biostatistical theory and application through high achievement in course work and on written comprehensive examinations.
- Demonstrating commitment to advancing the values of scholarship by keeping abreast of current advances in the field of biostatistics and showing commitment to personal professional development through engagement in professional societies and publication.
- Conducting scholarly work in a professional and ethical manner guided by the principles of the profession.

8. How does the change place your program in the context of programs at peer institutions?

We feel that this change is appropriate and necessary within our program and serves to maintain our high status among our peer institutions, on the cutting edge of training in our field.

9. How does the change affect other academic units and existing programs at the University?

These changes do not significantly affect other academic units or programs at the University.

10. How will you notify current students of the proposed changes and implement the requirements? How will you assure that current students are able to complete their programs under the requirements that were in place at the time of their matriculation?

All current students were provided with their own individualized course schedule and program at the time of matriculation; those students will continue to follow those individual plans, which will not be impacted by these changes to the program for new students. They will be aware of the changes, as the changes will be published on our website and in our student handbook for next year, but the program changes will only apply to students starting in F17 and later.
11. Please document any implications that the change has on professional accreditation or licensure at the program or school/college level:

There are no implications for professional accreditation or licensure.

12. If the change includes a new course or courses, please indicate who will teach the course and how the rest of that faculty member’s course load will be affected (courses(s) redistributed to other faculty, taught less frequently, no longer taught, etc.). Please be specific about affected courses. This information should be reflected in the budget form that accompanies the proposal, e.g. the cost for a new faculty member to teach the new course or a redistributed course:

The new course, SPH EP770, is taught in the Epidemiology Department and has been approved as a new course in their curriculum following the changes to the Master of Public Health program. It will be taught at a level that appropriate for our Master’s and Doctoral students in the GRS Biostatistics Program.

13. Please list other resources needed including new staff, IT, technology enhanced classrooms, office space, and other facilities. This information should be reflected in the budget:

None.

14. Please describe the budgetary impact that the proposed change will have:

None.
15. Please provide the bulletin copy (exactly as it should appear) related to the proposed change, including all text connected to the program (requirements, description, learning outcomes)(NOTE: this bulletin copy is in a final form and cannot be changed):

**MA in Biostatistics**

The Master of Arts in Biostatistics program is aimed primarily at students with the equivalent of a bachelor’s degree who wish to pursue advanced study in the theory and methods of biostatistics. The program prepares students to function as collaborators on research projects in academia, industry, or government, and prepares students for doctoral programs in biostatistics or other quantitative areas of health research.

**Course Requirements**

Students must earn a minimum grade of B- in all courses that are to be applied to the degree.

Students in the MA program must complete a total of 32 credits. Course requirements are as follows:

- CAS MA 575 Linear Models
- CAS MA 581 Probability or MET MA 581 Probability
- CAS MA 582 Mathematical Statistics or MET MA 582 Mathematical Statistics
- SPH EP 770 Concepts and Methods in Epidemiology
- SPH BS 805 Intermediate Statistical Computing and Applied Regression Analysis
- SPH BS 852 Statistical Methods for Epidemiology
- A minimum of 8 credits selected from the list of electives on the [program website](https://example.com)

**Language Requirement**

There is no foreign language requirement for this degree.

**Comprehensive Examinations**

The MA candidate must satisfactorily pass two comprehensive written examinations upon completion of coursework. These will require proficiency in the material covered in the six core courses. Students are allowed two attempts to pass a qualifying exam. The Biostatistics Qualifying Exam Committee will evaluate requests by students to take an exam for the third time on a case-by-case basis.