FACULTY CURRICULUM COMMITTEE
SIGNATURE PAGE

• In section A, list ALL of the forms covered by this signature page. If you submit a form that is not listed in A, your proposal will be held back until we receive a new, updated signature page.
• You must obtain the signature of your department chair and dean before submitting your proposal.

A. FORMS COVERED BY THIS SIGNATURE PAGE. List each form you are submitting—for instance, PSYC 383, Course Form; PSYC, Change of Major Form; PSYC, Change of Minor Form.

MATH 350 - CHANGE COURSE

B. APPROVAL AND SIGNATURES.

1. Signature of Department Chair or Program Director:
   
   [Signature]

   Date: Feb 1, 2016

2. Signature of Academic Dean:
   
   [Signature]

   Date: 2/17/16

3. Signature of Provost:
   
   [Signature]

   Date: 3/10/16

4. Signature of Business Affairs (only for course fees):

   [Signature]

   Date: [ ]

   □ fee approved on [ ]
   □ BOT approval pending

5. Signature of Curriculum Committee Chair:
   
   [Signature]

   Date: 3-23-16

6. Signature of Budget Committee Chair (only for new programs):

   [Signature]

   Date: [ ]

7. Signature of Academic Planning Committee Chair (only for new programs):

   [Signature]

   Date: [ ]

8. Signature of Faculty Senate Secretary:

   [Signature]

   Date: [ ]

Date Approved by Faculty Senate: [ ]
FACULTY CURRICULUM COMMITTEE  
COURSE FORM

Instructions:
- Please fill out one of these forms for each course you are adding, changing, deactivating, or reactivating.
- Fill out the parts of the form specified in part B. You must do this before your request can move forward!
- Remember that your changes will not be implemented until the next catalog year at the earliest.
- If you have questions, start by checking the instructions on the website. Please feel free to contact the committee chairs with any remaining questions you might have.

A. CONTACT/COURSE INFORMATION.

Name: Robert Mignon 
Phone: 5740 
Email: mignon@cofc.edu

Department or Program: Mathematics 
School: SSM

Subject Acronym and Course Number: MATH 350

Catalog Year in which changes will take effect: FALL 2017

B. TYPE OF REQUEST. Please check all that apply, then fill out the specified parts of the form.

☐ Add a New Course (complete parts C, D, F, G, H, I, J)
☐ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J)
☐ Course Number (you must submit a course deactivation request for the old course number)
☐ Course Name
☐ Course Description
☐ Credit/Contact Hours
☐ Restrictions (prerequisites, co-requisites, junior/senior standing, etc.)
☐ Deactivate an Existing Course (complete parts C, D, E, G, I, J)
☐ Reactivate a Previously-Deactivated Course (complete parts C, D, E, G, I, J)

C. RATIONALE AND EXPLANATION. Please describe your request and explain why you are making it.

Change the prerequisites for Math 350 From: Math 120 and Math 250 To: Math 250, or Math 120, or Math 105 with a C- or better; or permission of instructor. Rationale: We want to align the pre-requisites in MATH 350 with recently approved and implemented changes to the pre-requisites for MATH 250, the first course in the MATH 250/MaTh 350 sequence. We recently changed the prerequisites for Math 250 From Math 111, Math 120 or permission of instructor To Math 105 with a C- or better or Math 111 or Math 120 or permission of instructor. A student can get into Math 250 with Math 111, granted probably a harder course than Math 105, but without some of the calculus that is typically necessary for Math 350 and material that should be sufficiently provided by a reasonably successful completion of Math 105.

D. IMPACT ON EXISTING PROGRAMS AND COURSES. Please briefly describe the impact of your request on your own programs and courses as well other programs and courses. If another program requires the course, you must submit their written acknowledgement with this proposal. Also, the affected program must describe any change in the number of credit hours they require. Include a list of similar courses in other departments and explain any overlap. This will impact the Minor in Data Science. The Department of Mathematics and the Department of Computer Science, which share responsibility for the Data Science Minor, support the impact the change will have on the Data Science Minor. Note: the proposed change will not impact the Actuarial or Statistics tracks in the B.S. in Mathematics, since Math 120 is a requirement for the B.S.
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: Mathematics    School: SSM    Subject Acronym: MATH    Course Number: 350

Credit hours:   _3_ lecture __ lab __ seminar __ independent study
Contact hours:   _3_ lecture __ lab __ seminar __ independent study

Course title: Statistical Methods II

Course description (maximum 50 words, exactly as it appears in the catalog): Statistical methods with topics selected from regression, correlation, analysis of variance, nonparametric statistics, and other models.

Restrictions (pre-requisites, co-requisites, majors only, etc.): MATH 250, and MATH 120, or MATH 105 with a C- or better; or permission of instructor.

Cross-listing, if any: None

Is this course repeatable?    □ yes    x no    If yes, how many total credit hours may the student earn? ___

F. NEW COURSE INFORMATION. If you are deactivating a course, leave this blank. Otherwise, please fill out all fields. For changed courses, use boldface for the information that is changing.

Department: Mathematics    School: SSM    Subject Acronym: MATH    Course Number: 350

Credit hours:   __ lecture __ lab __ seminar __ independent study
Contact hours:   __ lecture __ lab __ seminar __ independent study

Course title:

Course description (maximum 50 words, exactly as it appears in the catalog):

Restrictions (pre-requisites, co-requisites, majors only, etc.): MATH 250; MATH 120 or MATH 105 with a C- or better; or permission of the instructor.

If this is a newly-created course, is it intended to be the equivalent of an existing course?    □ yes    □ no
If so, which course? __________________________

If equivalent, will the newly-created course replace the existing course?    □ yes    □ no
Note: If yes, you must deactivate that course by submitting an additional Course Form.

Cross-listing, if any (submit approval from relevant department): __________________________
Note: Cross-listed courses are equivalent.

Is this course repeatable?    □ yes    □ no    If yes, how many total credit hours may the student earn? ___

Is there an activity, lab, or other fee associated with this course?    □ yes    □ no    What is the fee? $_____
Note: The Senate cannot approve new fees; Business Affairs will submit any such request to the Board of Trustees. The course can still be created, but the fee will not be attached until the Board has approved it.

This form was last updated on 12/13/13 and replaces all others.
G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request. None.

H. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Assessment Method and Performance Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will students know and be able to do when they complete the course?</td>
<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be able to do on the assessment?</td>
</tr>
<tr>
<td>1. Understand and conduct statistical modeling by using appropriate procedures.</td>
<td>Assessed through exams given to all students each semester and will be assessed by the instructor of record. A score equivalent to 75% or better will be considered acceptable.</td>
</tr>
<tr>
<td>2. Understand the capabilities and limitations of statistical methods.</td>
<td>Assessed through exams and projects given to all students each semester and will be assessed by the instructor of record. A score equivalent to 75% or better will be considered acceptable.</td>
</tr>
<tr>
<td>3. Use appropriate technology, such as Minitab, to perform various statistical procedures.</td>
<td>Class project(s) will be assigned to all students each semester and will be assessed by the instructor of record. A score equivalent to 75% or better will be considered acceptable.</td>
</tr>
<tr>
<td>4. Interpret results and draw conclusions from statistical analysis.</td>
<td>Assessed through exams given to all students each semester and will be assessed by the instructor of record. A score equivalent to 75% or better will be considered acceptable.</td>
</tr>
</tbody>
</table>

How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

Statistical Methods II involves modeling using statistical methods in order to infer aspects of population parameters from properly chosen samples. This addresses SLO 1 (Model phenomena in mathematical terms.) and SLO 2 (Derive correct answers to challenging questions by applying the models of SLO 1) of the Mathematics Program Assessment. Interpreting and drawing conclusions from statistical analysis addresses SLO 3 (Write complete, grammatically correct arguments to prove their conclusions) of the Mathematics Program Assessment.

I. PROGRAM CHANGES. Will this course be added to the existing degree requirements or list of approved electives of a major, minor, or concentration? □ yes x no, no already there
If yes, please attach a Change Minor and/or Change Major/Program Form as appropriate.

J. CHECKLIST.

☐ I have completed all relevant parts of the form.

☐ I have attached a cover letter that describes my request and lists all the documents I am submitting.

☐ (For new courses only) I have attached a syllabus.

☐ (For courses used in any way by other departments, including cross-listing) I have attached an acknowledgement from the relevant department.

☐ (For courses intended to fulfill a Gen Ed requirement) I have submitted the proposal to the Gen Ed committee.

☐ I have submitted one Signature Form that lists all of the different forms I am submitting.
From: "<van Delden>", Sebastian A <vandeldensa@cofc.edu>
Date: Thursday, February 11, 2016 at 9:39 AM
To: Robert Mignone <Mignoner@cofc.edu>
Cc: "Anderson, Paul E" <andersonpe2@cofc.edu>
Subject: RE: Math 350 changes

Dear Bob,

The Computer Science Department supports the pre-requisite changes to MATH 350. Attached please find the new version of the Data Science Minor program which will now include "MATH 105 or MATH 120" instead of "MATH 111". Please let me know if the Math department approves of this change so that I can add this email to the paperwork.

Thanks!

Sebastian

Sebastian van Delden, Ph.D.
Department Chair and Professor

The College of Charleston
Computer Science Department
Harbor Walk East, Room 321
Charleston, SC 29424
Office: (843) 953-9615
vandeldensa@cofc.edu

Home of the 2015 ACM ICPC (Division II) Champs! [READ MORE]
Hi Sebastian,

Here are the proposed changes to Math 350 prereqs we discussed. Once CS approves, I’ll need an email of support from you.

Thanks,

Bob

P.S. Since prerequisite changes need to be proposed in December for the following fall, this change, if approved, would not go into effect until Fall 2017.
Cover Letter to Accompany Changes To Course Form for Changes to Pre-requisites for Math 350

The Department of Mathematics is proposing a change to the pre-requisites to MATH 350 Statistical Methods II

Change the prerequisites for Math 350 Statistical Methods II:

Change the prerequisites for Math 350

From: *Math 120 and Math 250*

To: *Math 250; and Math 120, or Math 105 with a C- or better; or permission of instructor.*

Rationale: We want to align the pre-requisites in MATH 350 with recently approved and implemented changes to the pre-requisites for MATH 250, the first course in the MATH 250/MaTh 350 sequence.

We recently changed the prerequisites for Math 250 Statistical Methods I

From *Math 111, Math 120 or permission of instructor*

To *Math 105 with a C- or better or Math 111 or Math 120 or permission of instructor.* A student can get into Math 250 with Math 111, granted probably a harder course than Math 105, but without some of the calculus that is typically necessary for Math 350 and material that should be sufficiently provided by a reasonably successful completion of Math 105.