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.

- Change/Delete Program Form – change acronym and prereqs of HEAL 395
- Course Form – Deactivate HEAL 395
- Course Form – Change course number of HEAL 395 to HEAL 456; change prereqs

B. APPROVAL AND SIGNATURES.

1. Signature of Department Chair or Program Director:

   Andrei H. Xevio Date: 11/30/15

2. Signature of Academic Dean:

   Date: 11/30/15

3. Signature of Provost:

   Date: 1/7/15

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

   Date: _________________

5. Signature of Curriculum Committee Chair:

   Date: _________________

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

   Date: _________________

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

   Date: _________________

8. Signature of Faculty Senate Secretary:

   Date: _________________

Date Approved by Faculty Senate: _______________
Course Change Proposals for Faculty Curriculum Committee

Submitted by the Department of Health and Human Performance

Academic Year, 2016-2017

<table>
<thead>
<tr>
<th>FORM</th>
<th>COURSE NUMBER/NAME OR DEGREE</th>
<th>PROPOSED CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Form</td>
<td>HEAL 395</td>
<td>Deactivate</td>
</tr>
<tr>
<td>Course Form</td>
<td>HEAL 456</td>
<td>Change Biostatistics in Health Sciences from a 300 level class to a 400 level class; Change prerequisites: MATH 104 or higher statistics and HEAL 215 to MATH 104 or MATH 250, HEAL 215 AND HEAL 350</td>
</tr>
<tr>
<td>Change Program</td>
<td>B.S. in Public Health</td>
<td>Change course number for Biostatistics in Health Sciences from HEAL 395 to HEAL 456</td>
</tr>
</tbody>
</table>

This form was unnecessary and has been removed.
To the Curriculum Committee:

The BA in Public Health program supports the shift of HEAL 395, Biostatistics, to HEAL 456, Biostatistics. We also support including HEAL 350, Epidemiology, as a prerequisite for Biostatistics. If you have any questions, please feel free to contact me.

Sincerely,

Deborah Socha McGee, PhD
Associate Professor, Dept. of Communication
Program Director, BA in Public Health
College of Charleston
9 College Way, Room 301

Email: mcgeed@cofc.edu
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: Susan Balinsky
Phone: 843-953-8242
Email: balinskys@cofc.edu

Department or Program: Health and Human Performance
School: Education, Health and Human Performance

Subject Acronym and Course Number: HEAL 456

Catalog Year in which changes will take effect: FALL 2016

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)
X ☐ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J)
XX ☐ 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.

Moving Biostatistics in Health Sciences from a 300 level class to a 400 level class will better reflect the academic rigor of the class. We are adding Epidemiology, HEAL 350, as a prerequisite for Biostatistics in Health Sciences and moving Biostatistics in Health Sciences to a 400 level class will make this sequencing more evident. This major is relatively new and, at its inception, it was felt that identifying this class as a 300 level class was appropriate. After teaching both Epidemiology and Biostatistics for several years, we believe that Biostatistics in Health Sciences should be classified as a 400 level class. These curricular changes will also better prepare students as they work toward their cumulating experience in Public Health which is an internship or independent study.

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.

Moving Biostatistics in Health Sciences to the 400 level will reflect the academic rigor of the class and the course expectations. This will help to balance the number of 200, 300 and 400 level classes required for the major and provide students with a better opportunity to develop the knowledge and skills required to compete for jobs upon graduation.

This form was last updated on 12/13/13 and replaces all others.
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: HEHP  School: EHHP  Subject Acronym: HEAL  Course Number: 395

Credit hours: 3  lecture  lab  seminar  independent study
Contact hours: 3  lecture  lab  seminar  independent study

Course title: Biostatistics in Health Sciences

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

This course introduces the theory of probability and statistics with practical applications using biological data. Subject matter includes fundamentals of probability, distribution theory, sampling models, data analysis, basics of experimental design, statistical inference, interval estimation and hypothesis testing.

Restrictions (pre-requisites, co-requisites, majors only, etc.): Prerequisites: MATH 104 or higher statistics, HEAL 215

Cross-listing, if any:

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: HEHP  School: EHHP  Subject Acronym: HEAL  Course Number: 456

Credit hours: 3  lecture  lab  seminar  independent study
Contact hours: 3  lecture  lab  seminar  independent study

Course title: Biostatistics in Health Sciences

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

This course introduces the theory of probability and statistics with practical applications using biological data. Subject matter includes fundamentals of probability, distribution theory, sampling models, data analysis, basics of experimental design, statistical inference, interval estimation and hypothesis testing.

Restrictions (pre-requisites, co-requisites, majors only, etc.): Prerequisites: MATH 104 OR MATH 250, HEAL 215, HEAL 350

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

This form was last updated on 12/13/13 and replaces all others.
If so, which course? __HEAL 395_________

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.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.

There will be no additional costs based on this change.

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. Utilize probability concepts to evaluate measures of association between outcomes and exposures related to health and disease.</td>
<td>B.S. in Public Health majors will earn an average grade of 70% or higher on a problem set and exam questions covering this topic.</td>
</tr>
<tr>
<td>2. Interpret the results of linear and logistic regression, and hypothesis testing as applied to public health.</td>
<td>B.S. in Public Health majors will earn at least 70% on a problem set and exam covering this topic.</td>
</tr>
<tr>
<td>3. Identify and apply appropriate study designs to answer research questions related to public health.</td>
<td>B.S. in Public Health majors will earn an average grade of 70% or higher on a problem set and exam covering this topic.</td>
</tr>
<tr>
<td>4. Students will critically evaluate the research design and statistics used in a peer-reviewed publication from a Public Health journal.</td>
<td>B.S. in Public Health majors will earn an average grade of 70% or higher on a worksheet that will guide the students through the manuscript evaluation process. The worksheet will address epidemiological concepts such as study design, exposure and outcome identification, and measures of association, as well as biostatistical concepts including variable selection, model application, and interpretation of results.</td>
</tr>
</tbody>
</table>

This form was last updated on 12/13/13 and replaces all others.
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?

This course aligns with the Strategic Initiative by enhancing the undergraduate academic core. Biostatistics is a crucial component of the Public Health curriculum in being able to apply probability and statistics to biological data. Students are introduced to the existence and purpose of biostatistics in the Introduction to Public Health course.

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 ❑ no

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.

This form was last updated on 12/13/13 and replaces all others.
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: Susan Balinsky  
Phone: 843-953-8242  
Email: balinskys@cofc.edu

Department or Program: Health and Human Performance  
School: Education, Health and Human Performance

Subject Acronym and Course Number: HEAL 395

Catalog Year in which changes will take effect: FALL __2016________

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.)
- [X] 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.

We are requesting to change HEAL 395 to HEAL 456 (and change prerequisites). Moving Biostatistics in Health Sciences from a 300 level class to a 400 level class will better reflect the academic rigor of the class. This major is relatively new and, at its inception, it was felt that identifying this class as a 300 level class was appropriate. After teaching both Epidemiology and Biostatistics for several years, we believe that Biostatistics in Health Sciences should be classified as a 400 level class. These curricular changes will also better prepare students as they work toward their cumulating experience in Public Health which is an internship or independent study.

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.

Moving Biostatistics in Health Sciences to the 400 level will reflect the academic rigor of the class and the course expectations. This will help to balance the number of 200, 300 and 400 level classes required for the major and provide students with a better opportunity to develop the knowledge and skills required to compete for jobs upon graduation.
There will be no impact on other programs. BA in Public Health majors may choose to take Biostatistics in Health Sciences as their research course; however, Epidemiology is already a required course for that major. However, the Program of Study worksheet will have to be updated. HEAL 395, Biostatistics in Health Sciences, appears in two places. It is an option in the “Research Methods” section and in the “Select at least six additional credit hours from the following or any of the above 300* or 400* level listed courses not being used to fulfill any of the above specific requirements” section.

E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: HEHP  School: EHHP  Subject Acronym: HEAL  Course Number: 395

Credit hours: 3  lecture ___ lab ___ seminar ___ independent study
Contact hours: 3  lecture ___ lab ___ seminar ___ independent study

Course title: Biostatistics in Health Sciences

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

This course introduces the theory of probability and statistics with practical applications using biological data. Subject matter includes fundamentals of probability, distribution theory, sampling models, data analysis, basics of experimental design, statistical inference, interval estimation and hypothesis testing.

Restrictions (pre-requisites, co-requisites, majors only, etc.): Prerequisites: MATH 104 or higher statistics, HEAL 215

Cross-listing, if any:

Is this course repeatable? □ yes  □ 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:  School:  Subject Acronym:  Course Number:

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.):

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.*

This form was last updated on 12/13/13 and replaces all others.
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.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.

None.

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1. 

2. 

3. 

4. 

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?
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  □ no

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.
The College of Charleston
Biostatistics (HEAL 4XX-01)

Course No. HEAL 4XX
Section No. 01
Credits: 3
Semester: Fall 2016
Room: Section 01 – TBA
Meeting Time: Section 01 - TR 9:25 – 10:40 AM

Prerequisite: MATH 104 or MATH 250, and HEAL 215, and HEAL 350

Instructor: Dr. Leslie Hart
Email: hartlb@cofc.edu

Office Hours: Mondays and Wednesdays 10am – 12pm

COURSE CATALOG DESCRIPTION

This course introduces the basic theory of probability and statistics with practical applications using biological data. Subject matter includes fundamentals of probability, distribution theory, sampling models, data analysis, basics of experimental design, statistical inference, interval estimation and hypothesis testing.

LEARNING OBJECTIVES

1. Describe the distinct yet complementary roles of biostatistics and epidemiology.
2. Apply epidemiologic and biostatistical techniques to describe the distribution of the determinants of health and disease.
3. Utilize probability concepts to evaluate measures of association between outcomes and exposures related to health and disease.
4. Perform hypothesis testing to answer research questions related to public health.
5. Identify and apply appropriate study designs to answer research questions related to public health.
6. Interpret the results of linear and logistic regression as well as survival analyses as applied to public health.
7. Discuss causal theory and determine the difference between evidence of association and evidence of causation.
CEPH AND CHES COMPETENCIES COVERED

The Council on Education for Public Health (CEPH) publishes guidelines regarding the knowledge and skills that should be presented to students enrolled in public health courses. These guidelines focus on outcomes, or competencies, that are linked to workforce needs as defined by employers and the public health profession as a whole. Each course in the College of Charleston Public Health program covers one or more of these competencies. As courses advance from introductory to more advanced, the competencies covered by these courses must also progress. That is, what you learn in higher level courses should build on, and extend beyond, what you learned in lower level courses. The following CEPH competency is covered by HEAL 4XX:

3. Explain principles of epidemiology necessary to understand health and impairments of health including the uses of rates, the meaning of causation, and the evaluation of the effectiveness of interventions. Apply principles of epidemiology to reading research articles including casecontrol, cohort studies and randomized clinical trials.

For more information, please visit http://ceph.org/constituents/programs-baccalaureate-level/.

In addition to pursuing the general public health competencies set forth by CEPH, some students may be interested in pursuing certification as a Certified Health Education Specialist (CHES). This certification requires the individual to sit for – and pass – an exam offered by the National Commission for Health Education Credentialing, Inc. In order to qualify to sit for the CHES exam, the individual must complete coursework covering a variety of competencies and sub-competencies. The following competencies and sub-competencies are covered by HEAL 4XX:

1. Assess needs, assets, and capacity for health education (Competency 1)
   1.2 Access existing information and data related to health.
   1.2.1 Identify sources of data related to health.
   1.2.2 Critique sources of health information using theory and evidence from the literature.
   1.2.3 Select valid sources of information about health.
   1.2.6 Conduct searches of existing databases for specific health-related data.
   1.3 Collect quantitative and/or qualitative data related to health.
   1.3.1 Collect primary and/or secondary data.
   1.3.2 Integrate primary data with secondary data.
   1.3.3 Identify data collection instruments and methods.
   1.3.4 Develop data collection instruments and methods.
   1.3.5 Train personnel and stakeholders regarding data collection.
   1.3.6 Use data collection instruments and methods.
   1.3.7 Employ ethical standards when collecting data.

2. Implement health education (Competency 3)
   3.1 Implement a plan of action.
   3.1.2 Collect baseline data

3. Conduct evaluation and research related to health education (Competency 4)
   4.1 Develop evaluation/research plan.
4.1.13 Developing data analysis plan for research.
4.3 Collect and analyze evaluation/research data.
4.3.1 Collect data based on the evaluation/research plan.
4.3.2 Monitor data collection and management.
4.3.3 Analyze data using descriptive statistics.
4.3.4 Analyze data using inferential and/or other advanced statistical methods.
4.3.6 Apply ethical standards in collecting and analyzing data.

For more information, please visit http://www.nchec.org/.

**COURSE MATERIALS**

- Recommended Text: Intuitive Biostatistics, 3rd edition by Harvey Motulsky (2014)
- Other reading materials as assigned.

**EVALUATION MEASURES**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor for a Day</td>
<td>Throughout the semester</td>
<td>50</td>
</tr>
<tr>
<td>Problem Set (x5)</td>
<td>Various, see schedule below</td>
<td>100</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>TBD</td>
<td>100</td>
</tr>
<tr>
<td>Journal Review Project</td>
<td>TBD</td>
<td>50</td>
</tr>
<tr>
<td>Test Your Hypothesis</td>
<td>TBD</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam</td>
<td>TBD</td>
<td>150</td>
</tr>
</tbody>
</table>

**ASSIGNMENT DESCRIPTIONS (TOTAL POINT VALUE=550)**

**Instructor for a Day: 50 points**

There will be concepts presented throughout the semester that will be unfamiliar to each of you. Your task for this assignment is to take an unfamiliar topic from the textbook and figure out a way to teach it to the class. The goal is to use a variety of learning and teaching styles to help everyone better understand statistical concepts. Each student will be randomly assigned a date to present a concept (of your choice) from the textbook to the class. Please prepare a brief lesson (no more than 10 minutes in length) to help your fellow students better understand
a statistical concept presented in the associated chapter for your presentation date. These presentations will occur daily, with sometimes 2 students presenting on a given day. Please see the OAKS website for assignment date. Slides must be uploaded to OAKS before class on your presentation date. An unexcused absence or unpreparedness on your scheduled presentation date will result in a zero for this assignment. If you need to reschedule your presentation, please contact Dr. Hart ASAP.

**Problem Sets (5): 100 points total (20 each)**

The best way to learn Biostatistics is to practice, practice, practice. Five problem sets will be posted throughout the semester to help each of you understand and master concepts, as well as prepare you for the Midterm and Final Exams. Problems will be in the form of calculations, multiple choice, and short answer. If necessary, you are permitted to work with other students in the class on these problem sets; however, I encourage you try them on your own first. The Problem Sets will be posted to OAKS. Please bring your completed Problem Sets to class on the specified due date. If you will not be in class on the specified due date, please make arrangements with Dr. Hart to turn in the assignment PRIOR to the due date. Late submissions will result in 10% deduction per day. Remember to show your work for partial credit!

**Extra Credit Assignment (POST TO OAKS DISCUSSION BOARD)** – Find one health-related infographic that demonstrates the use of biostatistics to convey information on the distribution or determinants of a health-related state or event. There may NOT be any duplicate posts of the same infographic, so make sure you check out previous posts by your classmates to ensure that you are not duplicating a previous post. When you post the infographic or the link to the infographic, you must include a brief comment as to why you chose the particular infographic (i.e. what statistics it shows).

**Midterm Exam: 100 points**

The midterm exam will cover information presented through XXX. You will be allowed to use a non-cellular phone calculator and up to two sheets of paper (8.5x11” or smaller) on which you may write anything related to the course materials (front and back). Please write your name on the sheets as they will be turned in with your exam. No other materials will be allowed. **If you will be absent from class on XXX (excused absences only), please make arrangements with Dr. Hart (hartlb@cofc.edu) to take your midterm at an earlier date.**

**Journal Article Review Project: 50 points**

The objective of this assignment is to critically evaluate the statistics and epidemiological research methods used for public health research in a peer-reviewed publication selected by the instructor. Each individual will evaluate the statistical information presented in the article including research objectives and hypothesis, study sample selection, study design and variable description, assessment of covariates, exposure and outcome identification, evaluation of descriptive statistics, assessment of statistical significance, and interpretation of results.
Students are expected to work INDEPENDENTLY on this assignment and should only consult the notes and materials from class.

**Test Your Hypothesis: 100 points**

Students will be randomly divided into mini-research teams. Each team will develop a research question, define their independent and dependent variables, develop a hypothesis to test, determine the appropriate statistical test for the research question and calculate the sample size needed to test the hypothesis.

**Final Exam: 150 points**

The final exam will cover information presented over the entire semester. You will be allowed to use a non-cellular phone calculator and up to three sheets of paper (8.5x11” or smaller) on which you may write anything related to the course materials (front and back). No other materials will be allowed. The exam must be taken on the assigned date unless prior arrangements have been made with appropriate documentation stating the reason why the exam must be taken at a different time.

**ASSIGNMENT SUBMISSION POLICY**

You are expected to submit your work on time, which means by the beginning of class on the date listed in the syllabus. Late work will only be accepted on a case-by-case basis, subject to approval by Dr. Hart. If you have to miss class (due to an excused absence - e.g. planned college activity, religious observation, doctor’s appointment, or other planned event) on the date on which an assignment is due, please make every effort to submit the assignment prior to the missed class. If you have an unplanned absence on an assignment due date, please contact Dr. Hart regarding approval for the absence and arrangements for assignment submission.
CONTACTING DR. HART REGARDING QUESTIONS OR ASSIGNMENTS

I will be available for any questions or discussions in person during my office hours (Mondays and Wednesdays 10am-12pm). Otherwise, please make an appointment to meet with me. If you need to contact me outside those hours, please submit questions or comments by email (hartlb@cofc.edu). I will try to be available by email; however, I cannot promise that I will be able to answer questions about assignments or exams after 5pm on the day prior to the assignment due date or examination date.

GRADING SCALE

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Total Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>450+</td>
<td>90-100%</td>
</tr>
<tr>
<td>A-</td>
<td>440–449</td>
<td>88-89%</td>
</tr>
<tr>
<td>B+</td>
<td>425–439</td>
<td>85-87%</td>
</tr>
<tr>
<td>B</td>
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</tr>
<tr>
<td>B-</td>
<td>390–399</td>
<td>78-79%</td>
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<tr>
<td>C+</td>
<td>375–389</td>
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<td>350–374</td>
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<td>C-</td>
<td>340–349</td>
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<tr>
<td>D+</td>
<td>330–339</td>
<td>66-67%</td>
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<td>D</td>
<td>320–329</td>
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<tr>
<td>D-</td>
<td>310–319</td>
<td>62-63%</td>
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<tr>
<td>F</td>
<td>309 or fewer</td>
<td>61% and below</td>
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TENTATIVE CLASS SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Course</td>
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<tr>
<td></td>
<td>Biostatistics &amp; Epidemiology for Public Health Practices</td>
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<tr>
<td>1</td>
<td>Types of Data</td>
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<td>2</td>
<td>Summarizing &amp; Describing Data</td>
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<td>2</td>
<td>Presenting &amp; Graphing Data</td>
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<td>3</td>
<td>Standardizing Rates – Why and How</td>
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<td>Direct vs. Indirect Rate Standardization</td>
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<td>Probability II</td>
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<td>Probability III</td>
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<td>Probability Distributions III</td>
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<td>Review Epidemiological Study Designs</td>
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<td>8</td>
<td>MIDTERM EXAM REVIEW</td>
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<td>Topic</td>
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<td>8</td>
<td>Midterm Exam</td>
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<td>9</td>
<td>Estimation &amp; Hypothesis Testing I</td>
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<td>Estimation &amp; Hypothesis Testing IV</td>
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<td>Sample Size II</td>
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<td>Logistic Regression I</td>
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<td>Survival Analysis II</td>
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<td>Happy Thanksgiving</td>
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<td>15</td>
<td>Causation vs. Association</td>
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<td>15</td>
<td>Final Exam Review</td>
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<td>4XX-01 Final Exam</td>
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**STATEMENT REGARDING DISABILITIES**

Students with a documented disability are encouraged to contact the College’s Center for Disability’s SNAP program (http://disabilityservices.cofc.edu/) for appropriate accommodations for the course. Please let Dr. Hart know if you require these accommodations.

**COLLEGE OF CHARLESTON HONOR SYSTEM (FROM THE COFC HANDBOOK)**

The Honor Code specifically forbids lying, cheating, attempted cheating, stealing, attempted stealing and plagiarism. Students at the College are bound by honor and by their acceptance of admission to the College to abide by the code and to report violations. The Honor System of the College of Charleston is intended to promote and protect an atmosphere of trust and fairness in the classroom and in the conduct of daily life. The Honor System is composed of two major components: The Honor Code and the Code of Conduct. Any violations of the honor system will be reported to the Dean of Students.
PLAGIARISM

Plagiarism, or the use of another’s thoughts, data, or information as your own, is prohibited in this class. If these types of information are used in assignments, proper citation of the source is expected.

Plagiarism definitions according to the CofC Handbook:
   6.1. The verbatim repetition, without acknowledgement, of the writings of another author. All significant phrases, clauses, or passages, taken directly from source material must be enclosed in quotation marks and acknowledged in the text itself and/or in footnotes/endnotes.
   6.2. Borrowing without acknowledging the source.
   6.3. Paraphrasing the thoughts of another writer without acknowledgement.
   6.4. Allowing any other person or organization to prepare work which one then submits as his/her own.

TECHNOLOGY IN THE CLASSROOM

The use of laptops and tablets are encouraged to take notes; however, the use of smartphones and other cellular devices is prohibited as they can be disruptive to the lecturer and your classmates. Use of these electronic devices will result in being asked to put the device away or dismissal from class.

CHANGES TO SYLLABUS

Class lectures, assignment due dates, and other policies listed in this syllabus are subject to change at Dr. Hart’s discretion, with fair notice provided to students.