Washington State University
MAJOR CURRICULAR CHANGE FORM - COURSE
(Submit original signed form and ten copies to the Registrar’s Office, zip 1035.)

Future Effective Date: 08/16/2013 (effective date cannot be retroactive)
☒ New course ☐ Temporary course ☐ Drop service course
☐ There is a course fee associated with this course (see instructions)

☐ Variable credit
☐ Increase credit (former credit ___)
☐ Number (former number ___)
☐ Crosslisting (between WSU departments) (Must have both departmental signatures)
☑ Conjoint listing (400/500)
☐ Request to meet Writing in the Major [M] requirement (Must have All-University Writing Committee Approval)
☐ Request to meet GER in ___ (Must have GenEd Committee Approval)
☐ Professional course (Pharmacy & Vet Med only)
☐ Graduate credit (professional programs only)

Other (please list request) _______________________________________________________________________________________________________________________________________________________________

CrmJ course prefix 523 course no. Intermediate Quantitative Methods title

<table>
<thead>
<tr>
<th>3</th>
<th>3</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>credit lecture hrs per week</td>
<td>lab hrs per week</td>
<td>studio hrs per week</td>
<td></td>
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</table>

CRM_J 522 Intermediate-level quantitative methods including logistic regression, factor analysis, propensity scoring and model building.

Description (20 words or less) _______________________________________________________________________________________________________________________________________________________________

Instructor: Hamilton, Zachary Phone number: (509) 358-7961 Email: zachary.hamilton@wsu.edu
Contact: Mareinin, Otwin Phone number: (509) 335-8428 Email: otwin@wsu.edu
Campus Zip Code: 4872

- Please attach rationale for your request, a current and complete syllabus, and explain how this impacts other units in Pullman and other branches (if applicable).
- Secure all required signatures and provide 10 copies to the Registrar’s Office.

Chair/ date 9/1/12
Dean/ date 9-30-12
General Education Com/ date
Chair (if crosslisted/interdisciplinary)*
Dean (if crosslisted/interdisciplinary) *
Graduate Studies Com/ date

All-University Writing Com/ date Academic Affairs Com/ date Senate/ date

*If the proposed change impacts or involves collaboration with other units, use the additional signature lines provided for each impacted unit and college.

Note: Instructor has been asked to update disability statement with current information. CEI

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INTERMEDIATE QUANTITATIVE METHODS

CRMJ 523 Syllabus

Instructor: Zachary Hamilton, PhD
Office: 719 Johnson Tower
Phone: 509.335.2455
Office Hours: By appointment only
Email: zachary.hamilton@wsu.edu

Course Description

The intent of this course is to provide graduate students with a knowledge of the most common statistical methods utilized in Criminal Justice research. A prerequisite of Foundations of Quantitative Methods (522) will be necessary for comprehension of course content. Prerequisite expectations may be made if justification can be provided. Although there will be some overlap, it is anticipated that students enter with some prior knowledge of experimental and quantitative methods, including: uni- and bivariate computations, graphing and interpretation of findings. The structure of this course does not focus on the understanding of statistical formulas but instead examines the application of regression modeling through the use of statistical software. Students will be expected to manipulate and analyze data using SPSS, structure and create visual aids of analysis findings and become proficient academic writers of statistical findings. Skills acquired in this course will provide students sufficient proficiency in quantitative methods to attain a career as an analyst in the field of Criminal Justice, Criminology and related Social Sciences and is required for PhD completion. Content will focus on breadth of topics and model types rather than depth of understanding of any one model type. Students are encouraged to read and become learnt in statistical methods beyond the instruction of this course.

Course Objectives

After completion of this course, students should be able to:

- Perform bivariate and multivariate regression analysis
- Conduct survival analysis
- Manipulate and reduce data using statistical software
- Develop scales and conduct factor analysis

Course Materials


**Optional Text:**


**Attendance and Participation**

Students are expected to attend class and read course materials. Course material is comprehensive, in the sense that new material builds upon the understanding of previous lessons learned. Some, or all, of the material discussed will be difficult to grasp. Missing classes may result in a significant lack of understanding, and create difficulty in the comprehension of future class discussions.

Attendance and participation will not be factored into the final grade. With the exception of exam and assignment due dates, it is not necessary to provide any written or verbal notice for missing class. Although it is strongly suggested that one attends every class, the responsibility of attendance and attaining course materials (assignments and class notes) falls squarely on the student. Even if a valid excuse is presented, the instructor will not provide notes to any student who fails to attend any particular class session.

**Instructor Availability**

Regular office hours will not be provided. It has been the experience of the instructor that making appointments tends to be the most efficient way of assisting student outside of class. Most weeks the instructor conducts a regular (9-5) workweek. Appointments may be made anytime within this period and appointments outside of this time period are also available when deemed necessary. The best way to arrange an appointment is to send an email with suggested dates and times of availability. It is the student’s responsibility to make the appropriate arrangements to gain outside assistance. The Instructor will not track students down if they are failing or having difficulty grasping course content. To repeat, if a student is having difficulties, it is the student’s responsibility to make an appointment with the Instructor to attain the appropriate assistance.

It is not the Instructor’s intention to give “C’s”, “D’s” or “F’s” and will make every attempt to assist students who require additional attention. However, one should not confuse empathy with sympathy. If an individual fails to complete any of the requirements listed, they will be graded appropriately and exceptions will not be provided.

**Academic Integrity**

Washington State University is committed to principles of truth and academic honesty. Students are to pursue their academic careers in a manner consistent with the standards of academic integrity adopted by the University. The University will not tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. Washington State University reserves the right and the power to discipline or to exclude students who engage in academic dishonesty.

**Plagiarism Policy**

Plagiarism is the unacknowledged use of someone else's words or ideas. Evidence of plagiarism may result in a score of 0 for the exam or assignment and/or suspension from the University. For a first offense, any paper plagiarized in whole or in part will receive an "F" (0 points), and the incident must be reported to the WSU Office of Student Conduct. Students will NOT be allowed to rewrite the plagiarized paper for a better grade.
Examinations

Two examinations (a midterm and a final) will be given. Test dates are announced in the syllabus, but the instructor reserves the right to move test dates according to the progress made in class. The tests will cover textbook and lecture materials.

Grade Distribution

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments (10)</td>
<td>30%</td>
</tr>
<tr>
<td>Midterm</td>
<td>35%</td>
</tr>
<tr>
<td>Final</td>
<td>35%</td>
</tr>
</tbody>
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Assignment Format

Course assignments are completed each week and are designed to apply what you have learned in the previous week. Most assignments will require an analysis of data in SPSS, the creation of visual aids (tables and figures) and written interpretation of findings. It is expected that the final format of assignments will be completed in MS Word. Tables are to be created in either MS Word or Excel and inserted into the assignment text and are not to be copied and pasted from SPSS (rare exceptions may apply). Graphs and figures can be completed in Excel or SPSS but should be of journal quality with all necessary labels, legends and notations included. Assignments are assigned on the week the course material is presented and are due at the beginning of the following week’s class. If a student is unable to attend class they must make arrangements to submit their assignment early to the Instructor. Late assignments will only be allowed with valid documentation (i.e. Physician’s note of illness).

Make-up Examination and Late Work

Both of the examinations are to be taken at their scheduled dates and times. There will be no make-up examinations, with the exception of documented medical and/or family emergency. If available, prior notification of said emergencies is required. Late assignments will be deducted a full letter grade for day they are late. The clock for late assignments begins at the conclusion of the lecture in which they are due.

Students with Disabilities

WSU and the Criminal Justice and Criminology Department is committed to providing assistance to help students complete this course successfully. Reasonable accommodations are available for students with a documented disability. Please visit the Disability Resource Center (DRC) during the first two weeks of every semester to seek information or to qualify for accommodations. All accommodations must be approved through the DRC (Admin. Annex Bldg., Room 205). Call 335-3417 for an appointment with a disability counselor.

Campus Safety Issue

All students should be familiar with the Campus Safety Plan and the University Emergency Management system. Details can be found at http://safetyplan.wsu.edu and http://oem.wsu.edu/emergencies, respectively. Students are encouraged to go to http://my.wsu.edu and, under the Emergency Notification box, enter their emergency contact information.
Course Schedule

Week 1 – Introduction and Techniques

January

10th
Course Introduction

12th
SPSS environment: Coding, syntax, and data management

Week 2 – Introduction Stats Review

Required Reading: Field Ch. 6, 9, 10 and 18

17th
Univariate Statistics
Assignment: 1 due

19th
Bivariate Statistics

Week 3 – Linear Regression

Required Reading: Field Ch. 7

24th
Conceptualization and Model Application
Assignment: 2 due

26th
Linear Modeling Assumptions

Week 4 – Model Building and Complex Coefficients

31st
Complex Coefficients
Assignment: 3 due

February

2nd
Model Building

Week 5 – Binary Logistic Regression

Required Reading: Field Ch. 8 (p. 264-299)

Optional Reading: Long Ch. 3 and Ch. 9 (p.251-258)

7th
Conceptualization and Model Application
Assignment: 4 due

*February*

9th
Logistic Modeling Assumptions and Generalized Linear Model

*Week 6 – Other Distributions 1*

Required Reading: Field Ch. 8 (p. 300-312)
Optional Reading: Long Ch. 5 and 6
14th
Multinomial Logistic Regression
Assignment: 5 due
16th
Ordinal Regression
Required Reading: Field Ch. 6

*Week 7 – Other Distributions 2*

Optional Reading: Long Ch. 7 and 8
21st
Tobit Regression
Assignment: 6 due
23rd
Poisson and Negative Binomial

*Week 8 – Midterm exam*

28th
Midterm Exam Review

*March*

1st
Midterm Exam

*Week 9 – Propensity Score Matching*

Optional Reading: Gou and Fraser
6th
Propensity Score Matching - 1
8th
Propensity Score Matching - 2

*Week 10 – Spring Break*

13th
No Class: ACJS/Spring Break
15th  No Class: ACJS/Spring Break

*Week 11 - Survival Analysis Part I*

20th  No Class: ACJS/Spring Break

Optional Reading: Mills

22nd  Survival Analysis - 1

Assignment: 7 due

*Week 12 - Survival Analysis Part II*

27th  Survival Analysis - 2

29th  Survival Analysis - 3

*Week 13 - Scale Development*

*April*

Required Reading: Field Ch. 17

Optional Reading: DeVellis

3rd  Scale Development – 1

Assignment: 8 due

5th  Scale Development - 2

*Week 14 - Factor Analysis*

Required Reading: Field Ch. 17

10th  Factor Analysis – 1

Assignment: 9 due

12th  Factor Analysis - 2

*Week 15 - Missing Data Analysis*

Optional Reading: Enders

17th  Missing Data Analysis – 1

Assignment: 10 due

19th  Missing Data Analysis - 2

*Note: The syllabus/course calendar is subject to change; any changes will be announced in class.*
CRMJ 523

Corrected Grading Scale and Disability Statement

Your final course grade will be based upon the total of weighted scores earned across all course requirements. The following grading scheme, based on percent of points earned on each component will determine your course grade:

\[
\begin{align*}
94 - 100 &= A \\
90 - 93 &= A\text{-} \\
87 - 89 &= B+ \\
84 - 86 &= B \\
80 - 83 &= B\text{-} \\
77 - 79 &= C+ \\
74 - 76 &= C \\
70 - 73 &= C\text{-} \\
67 - 69 &= D+ \\
60 - 66 &= D \\
0 - 59 &= F
\end{align*}
\]

Students with Disabilities: Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.
Hi Barb,

Yes, that was an oversight. The prerequisite for intermediate statistics should be foundations. Let me know if you need anything else.

Zachary Hamilton, PhD
Assistant Professor
Department of Criminal Justice & Criminology
Washington State University
Pullman, WA 99164

Sent from my iPhone

On Oct 10, 2012, at 5:07 PM, "Schmidtlein, Barb" <bschmidtlein@wsu.edu> wrote:

Hi Zachary,

This question has to do with the CRM J 523 Intermediate Quantitative Methods course. The Major curricular paperwork for this new course did not list a prerequisite. I am wondering if that was an oversight; if it should have been CRM J 522 Foundations in Quantitative Methods. I see that the CRM J 524 has a prerequisite of CRM J 523 the intermediate course. So it would stand to reason that the intermediate course might have a prerequisite of the foundations course CRM J 522.

As it stand now, 523 is being entered into the system without a prereq. Let me know. Thanks for your help.

Sincerely,

Barb

"We could learn a lot from crayons. Some are sharp, some are pretty and some are dull. Some have weird names and all are different colors, but they all have to live in the same box."

BarbSchmidtlein
Catalog Assistant
Office of the Registrar
Washington State University
Phone: 509-335-5583