COURSE SYLLABUS

COURSE NUMBER: PHC 6196

COURSE TITLE: Computer Applications in Public Health

PREREQUISITES OR COREQUISITES: None: Please see UWF Catalog.

COURSE INSTRUCTOR: Dr. Justice Mbizo

CONTACT INFORMATION: 850-474-2650 or jmbizo@uwf.edu
School of Allied Health and Life Sciences,
University of West Florida

ALL E-MAILS AND DISCUSSION POSTINGS WILL BE ANSWERED WITHIN 24 HOURS EXCEPT DURING WEEKENDS WHEREIN SUCH POSTINGS OR EMAILS WILL BE RESPONDED TO WITHIN 72 HOURS.

COURSE OVERVIEW:

This course is an overview of standard computer software packages and fundamentals of data collection, statistical analysis, interpretation and reporting. This course also covers standard epidemiological and statistical analysis procedures in the health sciences. Students are introduced to the most common software applications used in the analysis of public health data. The course is hands-on which allows students use of the computer to generate meaningful information about relationships between a set of independent variables and specified health outcomes for programmatic purposes. Upon completion of this course, a student will have acquired the skills necessary to serve as a liaison to public health officials, physicians, administrators, and other health care professionals in the use of current and emerging computer applications in public health, including health services research and epidemiology.

COURSE DESCRIPTION: Provides an overview of various computer applications in public health and introduces modern software systems for analyzing health-related data. Fundamentals of data collection, statistical analysis, interpretation, and reporting results are covered. Technology-based implications for legal and ethical issues are also addressed (including documentation, security, and regulatory requirements). A working knowledge of how to use personal computers, including knowledge of word-processing, spreadsheet packages and Internet searching is required.
COURSE OBJECTIVES AND STUDENT LEARNING OUTCOMES:
Upon completion of this course students will be able to:

1. Describe how the public health information infrastructure is used to collect, process, maintain, and disseminate data.
2. Perform raw data entry using SPSS for Windows.
3. Recode data variables in SPSS for Windows.
4. Transfer data from Microsoft Excel format to SPSS and SAS.
5. Analyze data using SPSS and SAS system.
6. Describe how societal, organizational, and individual factors influence and are influenced by public health communications.
7. Discuss the influences of social, organizational and individual factors on the use of information technology by end users.
8. Apply theory and strategy-based communication principles across different settings and audiences.
9. Apply legal and ethical principles to the use of information technology and resources in public health settings.
10. Collaborate with communication and informatics specialists in the process of design, implementation, and evaluation of public health programs.
11. Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities.
12. Use information technology to access, evaluate, and interpret public health data.
13. Use informatics methods and resources as strategic tools to promote public health.
14. Use informatics and communication methods to advocate for community public health programs and policies.
This course meets the following programmatic goals for the School of Allied Health and Life Sciences.

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<thead>
<tr>
<th><strong>Content/ Critical Thinking</strong></th>
<th><strong>Project Management /Integrity</strong></th>
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<td>• Apply techniques central to analysis of problems in public health.</td>
<td>• Design and execute a project that incorporates a reasonable time line to address a problem in public health.</td>
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<td>• Apply scientific method to solve problems in public health.</td>
<td>• Work effectively with others on public health projects.</td>
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<td>• Select and conduct appropriate statistical analyses.</td>
<td>• Draw and defend conclusions related to the results of the study.</td>
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<tr>
<td>• Analyze public health data.</td>
<td>• Critically apply ethical/legal safeguards in handling, analysis and reporting of public health data.</td>
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**Communication**

- Employ public health terminology accurately.
- Use language in written form effectively and professionally.
- Communicate public health information in oral form employing appropriate technology.

**REQUIRED TEXTS/MATERIALS:**

   ISBN 0-13-6061366

2. SPSS and SAS will be available through the University’s eDesktop virtual machine.

3. All assignments must be typed in Microsoft word. If a student does not have MS word, the software can be accessed through the University's eDesktop virtual machine.

4. Other notes will be provided.

**SPECIAL TECHNOLOGY UTILIZED BY STUDENTS:** (beyond baseline requirements of e-mail and word processing). *Software required in the course is available through the Univeristy e-Desktop virtual machine system. The latest versions of both SPSS and SAS. Also available is Microsoft Excel. Students can Access the tutorial through: [http://onlinecampus.uwf.edu/services/edesktop.cfm](http://onlinecampus.uwf.edu/services/edesktop.cfm)*

Students are encouraged to complete this course utilizing the equivalent of a cable-speed modem. Completing the course modules via a telephone dial-up connection will require significant download times for larger audio-visual content.
REFERENCES/BIBLIOGRAPHY (optional):


GRADING/EVALUATION:

Fulfillment of the programmatic goals described above will be assessed as follows:

- 25% Lab Assignments
- 10% Participation
- 25% Mid-Term Exam
- 40% Project

The following grading scale will be used to determine final grades:

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\begin{align*}
A &= 95 - 100 \\
B+ &= 85 - 90 \\
C+ &= 75 - 80 \\
A^- &= 91 - 94 \\
B^- &= 81 - 84 \\
C &= 70 - 74 \\
F &= < 70
\end{align*}
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Due to the distance learning nature of this course, all requirements must be completed within the time scheduled, unless prior arrangements are made with the instructor. Participation in online forum discussions will be graded using this Discussion Forum Grading Rubric. Your final grade will be determined by the points you accumulate within each category, divided by the total points available within that category. These scores will then be weighted based upon the percentages indicated above to determine your final grade. Online facilities will be provided so students can monitor their own progress.

EXPECTATIONS FOR ACADEMIC CONDUCT/PLAGIARISM POLICY:

- Academic Conduct Policy [Web]
- Plagiarism Policy [PDF]
- Student Handbook [PDF]

It is the philosophy of The University of West Florida that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

In addition, any behavior that interferes with the conduct of a class is classified as disruptive behavior and will not be tolerated. Although not exhaustive, examples of disruptive behavior would include: inappropriate or threatening online postings or e-mails, etc.

QUALITY ASSURANCE:
This course is reviewed during the semester and in an ongoing basis for quality by assessment personnel within the School of Allied Health and Life Sciences (SAHLS) to meet national standards established by the Southern Association of Colleges and Schools, the Council on Education for Public Health, and/or to address quality enhancement initiatives of SAHLS. Student feedback is also vital to this process. When reviewing our programs, our accrediting partners expect to see 100% participation in the State-of-Florida mandated SUSSAI (State University System Student Assessment of Instruction) evaluations. Thus, at the end of the semester, we need to hear from the folks that enjoyed the class and from the folks that have suggestions for improvement (ok, and from the folks that want to fill out the survey as quickly as possible with no comments to share!). BUT, we do need to hear from each and every student in this class, and we value your input.

When SUSSAI evaluations are ready for you to complete, you will see a News posting in the course. Please take a few minutes to complete this anonymous, brief web-based evaluation on this course, using these directions:

Need help? Contact Connie Works at (850) 474-3080 or cworks@uwf.edu for assistance!

Please be assured that all evaluations that are completed online are of a confidential matter. Your name, student number, and e-mail address will not be revealed to your instructor, department, or college. Only one evaluation per course per student can be submitted. Please do not delay completing the evaluation when the time approaches. Due to the significance of this information, I will not be able to pre-release grades in eLearning if we are not close to the 100% participation goal before finals week. Thank you!

ONLINE TEST TAKING GUIDELINES:

Please do not begin any timed, online exam in the course that may overlap with the eLearning maintenance window. The eLearning maintenance window runs 3:00-6:00 am CST (Central Standard Time) each day. If you initiate an exam that overlaps with this time and experience any technical errors, your recorded score is likely to be close to 0 for such an attempt. There are no exceptions to this policy.

If you experience any other technical problems or errors during any timed exam that does not overlap with the eLearning maintenance window, you are required to notify the Helpdesk immediately at helpdesk@uwf.edu or (850) 474-2075. Failure to contact the HelpDesk to report the problem will result in a grade of 0 automatically being assigned. If you are unable to get immediate assistance from the HelpDesk during the exam, but have documented the problem in an email or voice mail, you may attempt to restart the exam using the same browser, or attempt to re-enter the exam with another browser. If you are still unable to restart the exam and continue with saving, please note that for your final submitted score to be recorded, you MUST still prove that you documented the original technical problem with the HelpDesk via helpdesk@uwf.edu or (850) 474-2075. Failure to do so will result in an automatic grade of 0 being assigned.

ASSISTANCE:

Students with special needs who require specific examination-related or other course-related accommodations should contact Disabled Student Services (DSS), dss@uwf.edu, (850) 474-2387. DSS will provide the student with a letter for the instructor that will specify any recommended accommodations.

Every effort will be made to accommodate the special needs of disabled students. Please inform the instructor privately during the first week of class to indicate your
particular needs. All such accommodations are officially arranged through the Office for Disabled Student Services and a letter from this office must accompany your request.