HSPM 7337 - A – Integrative Health Enterprise Analytics and Decision Making

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Georgia Southern University  
Jiann-Ping Hsu College of Public Health  
HSPM 7337 - A – Integrative Health Enterprise Analytics and Decision Making  
Spring 2018

**Instructor:** Jeff Jones, PhD.  
**Office:** Hendricks Hall, Room 2005  
**Phone:** (912) 478-7422  
**E-mail Address:** jajones@georgiasouthern.edu  
**Office Hours:** Mondays/Wednesdays, 1pm-3:30pm  
**Class Meets:** Mondays/Wednesdays, 3:30pm-4:45pm, January 8, 2017 to May 4, 2017 in Information Technology Building Room #2201

Course Catalog available at:  
[http://students.georgiasouthern.edu/registrar/pdf/catalogs/GraduateCatalog/index.htm](http://students.georgiasouthern.edu/registrar/pdf/catalogs/GraduateCatalog/index.htm)  
under Jiann-Ping Hsu College of Public Health Programs

**Prerequisites:** N/A

**FOLIO address:** [http://my.georgiasouthern.edu](http://my.georgiasouthern.edu)

**Catalog Description**  
Given the integration of data, community needs and regulation and policy, this course incorporates the elements of healthcare, public health, health information technology and the health insurance sub-industries to develop a framework and analytic methods to improve efficiency, effectiveness and efficacy of the health industry as a whole. The course will establish an analytic framework, based on data from patients, populations, processes and profitability (4 P's of Health Analytics) utilizing industry, healthcare enterprise and community health data with appropriate tools, methods and approaches to answer community health needs and status, operational, financial and healthcare delivery outcomes questions to support leadership decisions. The course will also include an integrated platform of appropriate analytical and predictive/estimation methods, tools and techniques for enhanced decision making at the strategic and operational levels of the health enterprise for enhanced health status and improved health outcomes of communities served.

**Required Textbook:**

none

**Additional Readings:**

See syllabus & website for additional assigned articles.
**Required Resource:**

Microsoft Office Professional (available in computer labs)
SPSS (available in computer labs)

**MHA Core Competencies in Health Policy & Management**

**COMPETENCY DOMAINS**

A. **Measurement and Analysis**  
   Measurement: Identify information needs, and gather and understand relevant data information in order to define a problem, to assess a situation, or to implement a set of metrics.  
   Analysis: Organize, manipulate and use information to assess performance, to identify alternative courses of action, to investigate hypotheses, or to accomplish other strategic goals.

B. **Communication**  
   Receive and convey information in ways that encourage continued dialogue among stakeholders. Effective communication involves strong written and oral transmission skills, responsive listening, and use of creative strategies for exchanging information.

C. **Leadership**  
   Influence others to reach their highest level of effectiveness in achieving common goals, both as individuals and in teams. Establish direction and engage various constituencies to produce a shared vision of the future, motivating and committing them to action, and making them responsible for their performance.

D. **Law and Ethics**  
   Establish high ethical standards, create a culture of shared ethical values and legal understanding, and transform those ideals into visions and expected behaviors.

E. **Professional Development**  
   Required to excel professionally throughout one’s career and to make meaningful contributions to the field.

**Course Learning Objectives**  
1. Be able to explain the regulatory requirements around public health data and private healthcare data.
2. Show proficiency in evaluating the validity and reliability of research articles and their methodologies.
3. Show basic skills in using software to analyze data.
### Overview of the content to be covered the semester:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Assignments are due by 3:30pm on the Thursday of the week listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jan. 8-10, 2018</td>
<td>Introduction to Informatics, Data Science, and Analytics</td>
<td></td>
</tr>
<tr>
<td>2 Jan. 17</td>
<td>Jan 15 is the MLK Holiday (no class) Review &amp; Update of Informatics Regulations</td>
<td></td>
</tr>
<tr>
<td>3 Jan. 22-24</td>
<td>Big Data: Sources of Data and Judging the Reliability of Data</td>
<td>Assignment 1</td>
</tr>
<tr>
<td>4 Jan. 29-31</td>
<td>The Ethics and Regulations of Health Data</td>
<td>Assignment 2</td>
</tr>
<tr>
<td>5 Feb. 5-7</td>
<td></td>
<td><strong>Exam 1</strong></td>
</tr>
<tr>
<td>6 Feb. 12-14</td>
<td>Sampling: The Scoop &amp; SPSS Primer</td>
<td></td>
</tr>
<tr>
<td>7 Feb. 19-21</td>
<td>Basic Stats: Univariate &amp; Chi Square</td>
<td>Assignment 3</td>
</tr>
<tr>
<td>8 Feb. 26-28</td>
<td>Basic Stats: Bivariate &amp; Crosstabs</td>
<td>Assignment 4</td>
</tr>
<tr>
<td>9 Mar. 5-7</td>
<td>Basic Stats: Bivariate &amp; T-tests</td>
<td>Assignment 5</td>
</tr>
<tr>
<td>Mar. 12-14</td>
<td>Holiday, Spring Break</td>
<td></td>
</tr>
<tr>
<td>Mar. 19-21</td>
<td>Basic Stats: Multivariate &amp; ANOVAs</td>
<td>Assignment 6</td>
</tr>
<tr>
<td>Mar. 26-28</td>
<td></td>
<td><strong>Exam 2</strong></td>
</tr>
<tr>
<td>Apr. 2-4</td>
<td>Basic Stats: Odds Ratios</td>
<td>Assignment 7</td>
</tr>
<tr>
<td>Apr. 9-11</td>
<td>Basic Stats: Simple Linear Regression</td>
<td>Assignment 8</td>
</tr>
<tr>
<td>Apr. 16-18</td>
<td>Basic Stats: Multiple Regression</td>
<td>Assignment 9</td>
</tr>
<tr>
<td>Apr. 23-25</td>
<td>Synthesis of the Course</td>
<td>Assignment 10</td>
</tr>
<tr>
<td>Thursday, May 3, 3:00 pm - 5:00 pm</td>
<td>Final Exam, 3pm-5pm, in our regular classroom</td>
<td></td>
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</tbody>
</table>
Instructional Methods:
Class meetings will be a combination of lecture, class discussion, and active participation.

Course Assignments:
Exams (60%): The exam will be based on the required readings, lectures, and classroom discussions and will be include multiple choice / open response questions as well as short answer / paragraph length responses. The exams will be closed book and in class. The final will be the third exam.

Assignments (40%): The course includes 10 short assignments to involve students actively in that module’s content. Assignments will generally be submitted via Folio and are due on the assigned date at 3:30pm Eastern.

Grading:

<table>
<thead>
<tr>
<th>Basis</th>
<th>Percentage of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 examinations</td>
<td>60% (3 exams x 100 points possible = 300 points possible)</td>
</tr>
<tr>
<td>10 assignments</td>
<td>40% (10 assignments x 20 points possible = 200 points possible)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100</td>
<td>A</td>
</tr>
<tr>
<td>80 - 89</td>
<td>B</td>
</tr>
<tr>
<td>70 - 79</td>
<td>C</td>
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<tr>
<td>60 - 69</td>
<td>D</td>
</tr>
<tr>
<td>0 - 59</td>
<td>F</td>
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</tbody>
</table>

Expectations:
All assignments must be delivered to the instructor on the specified due date and time. Late assignments will not be accepted. Extensions will not be offered. Missed quizzes and exams may not be made up. Extenuating circumstances will be considered on a case-by-case basis.

Please turn off all cell phones during any class meetings, since ringtones are disruptive to others.
Laptops, cell phones, calculators, PDA, tablets, or other devices will not be allowed during testing unless stipulated previously by the professor.

**Class Attendance and Participation Policy**

Federal regulations require attendance be verified prior to distribution of financial aid allotments. Regular attendance is expected. However, attendance will not be officially recorded after the first class period.

Attendance at all scheduled classes is required by Health Policy and Management policy. Unexcused absences will incur deduction of one letter grade per day late for any assignments. To request an excused absence, please contact Dr. Jones via email and arrange to make up any missed work. Requests are preferably made two weeks in advance, but Dr. Jones understands that certain emergencies do not allow for such advanced arrangements.

**Plagiarism:**

"According to the Academic Dishonesty Policy of GSU, Plagiarism includes (but is not limited to):

A. Directly quoting the words of others without using quotation marks or indented format to identify them.
B. Using published or unpublished sources of information without identifying them.
C. Paraphrasing material or ideas without identifying the source.
D. Unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic material.

If you are accused of plagiarism by a JPHCOPH, the following policy, as per the Judicial Affairs website (http://students.georgiasouthern.edu/judicial/faculty.htm) will be enforced:

**PROCEDURES FOR ADJUDICATING ACADEMIC DISHONESTY CASES**

**First Offense - In Violation Plea**

1. If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is a first violation of academic dishonesty. The incident will be reported via the following website: http://students.georgiasouthern.edu/judicial/faculty.htm
2. If it is a first violation, the professor should talk with the student about the violation.
   **If the student accepts responsibility in writing and the professor decides to adjudicate the case, the following procedures will be followed:**
   a. The student will be placed on disciplinary probation for a minimum of one semester by the Office of Judicial Affairs.
   b. The student will be subject to any academic sanctions imposed by the professor (from receiving a 0 on the assignment to receiving a failing grade in the class).
   c. A copy of all the material involved in the case (Academic Dishonesty Report Form and the Request For Instructor to Adjudicate Form) and a brief statement from the professor concerning the facts of the case and the course syllabus should be mailed to the Office of
Judicial Affairs for inclusion in the student’s discipline record.

**First Offense - Not In Violation Plea (student does not admit the violation)**
If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is the first or second violation of academic dishonesty. The student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case. If the student is found responsible, the following penalty will normally be imposed:

a. The student will be placed on Disciplinary Probation for a minimum of one semester by the Office of Judicial Affairs.

b. The student will be subject to any academic sanctions imposed by the professor.

**Second Violation of Academic Dishonesty**
If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, and if it is determined this is the second violation, the student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case.

**If the student is found responsible, the following penalty will normally be imposed:**

a. Suspension for a minimum of one semester or expulsion.

b. The student will be subject to any academic sanctions imposed by the professor.

**NOT RESPONSIBLE FINDING**
When a student is found not responsible of academic dishonesty, the work in question (assignment, paper, test, etc.) would be forwarded to the Department Chair. It is the responsibility of the Department Chair to ensure that the work is evaluated by a faculty member other than the individual who brought the charge and, if necessary, submit a final grade to the Registrar. For the protection of the faculty member and the student, the work in question should not be referred back to the faculty member who charged the student with academic dishonesty.

In the case of a Department Chair bringing charges against a student, an administrator at the Dean’s level will ensure that the student’s work is evaluated in an appropriate manner.

**CONFIDENTIALITY**
In accordance with provisions of the Family Educational Rights and Privacy Act of 1974 and the Georgia Open Records Act, any information related to a violation of academic dishonesty or the outcome of a judicial hearing regarding academic dishonesty, is prohibited and must be treated as confidential by members of the faculty.

**University Calendar for the Semester**
The University Calendar is located with the semester schedule and can be found at:
http://em.georgiasouthern.edu/registrar