Syllabus for HCA 715 Healthcare Technology, Data Analytics, and Information Governance

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

This course covers tech- and data-related topics in healthcare including electronic health records, health IT privacy and security, health information exchanges, IT for revenue cycle management, healthcare data analytics, technologies for diagnosis and treatment, and big data applications in healthcare.

Prerequisite(s)

None

Course Outcomes

Upon completing this course, you will be able to do the following:

- Evaluate processes in healthcare facilities using technological tools.
 - Apply project management principles to a healthcare IT project
 - Develop strategies to implement EHR systems
- Prepare a HIPAA compliance plan from an IT perspective
- Apply statistical methods to analyze healthcare data
- Analyze healthcare data using technological tools such as spreadsheets and Tabeau.
- Evaluate healthcare quality improvement processes and quality measures.

Course Requirements/Components

- Discussions
- Integrative Projects
- Assignments

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

| Grade | Percentage |
|-------|--------------|
| | Range |
| Α | 94% - 100% |
| A- | 92% - 93.99% |
| B+ | 89%-91.99% |
| В | 85%-88.99% |
| B- | 83%-85.99% |
| C+ | 81%-82.99% |
| С | 75%-80.99% |
| C- | 70%-74.99% |
| D | 65%-69.99% |
| F | Below 64.99% |

| Assignment | Points |
|---|--------|
| Introduce Yourself Discussion | 5 |
| Integrative Project #1: Processes and Process Diagrams | 55 |
| Integrative Project #1: Feasibility Analysis and Cost-Benefit Analysis | 55 |
| Integrative Project #1: RFP Response Evaluation; Vendor Contracts; Maintenance Plan | 55 |
| Integrative Project #1: HIPAA Compliance | 55 |
| Integrative Project #1: HIEs – Benefits, Risks & Issues; Patient Matching | 55 |
| Discussion #1 on Integrative Project: Reflection | 25 |
| Assignment #1: Working with Healthcare Financial Data | 75 |
| Assignment #2: CDM Processes and Statistical Analysis of Hospital Revenue Data | 75 |
| Assignment #3: Statistical Tests (t-Test and ANOVA) | 75 |
| Assignment #4: Analyzing Healthcare Data Using Correlation and Regression | 75 |
| Assignment #5: Application of Data Analysis to Healthcare Scenarios | 100 |
| Assignment #6: Healthcare Data Analysis | 40 |

| Integrative Project #2: Quality Measures for Patient Health and ACOs | 60 |
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| Integrative Project #2: Quality Measures Data Analysis Related to Medication Errors, etc. and Process Improvement | 60 |
| Integrative Project #2: Quality Measures Data Analysis Related to Hospital Acquired Conditions, etc. and Process Improvement | 55 |
| Integrative Project #2: Quality Measures Data Analysis Related to Hospital Acquired Conditions, etc. and Process Improvement | 55 |
| Discussion 2: Reflection of Integrative Project #2 | 25 |
| Total Points | 1000 |