

**HCA 446 - Healthcare Informatics  
Spring 2019 (3 credit hour course)**

**Instructions for Individual Essay**

You will prepare a report on some topic related to Information Technology. Topics will be selected after the first class. See example topics below. You may use the most recent APA edition formatting style. Any other style should be approved prior to handing in your report. This report will be submitted electronically via Blackboard in a format that can be read in MS Word. I only need one copy of the report from each student.

Each Report will be expected to have the following:

1. Research and prepare 4-5 page report double spaced on your topic.
2. In addition, include a bibliography using the most recent APA edition formatting style
3. Include sections that introduce the topic, provide background material, analyze available data, provide your opinion and industry opinion, and make a conclusion.
4. Be sure and answer the questions who, what, where, how, and why
5. Definition of key concepts, models, steps in the process, etc.
6. Include at least one page on the impact of your topic to healthcare.

**Evaluation Criteria**

Evaluation for grade

1. Clear and accurate definitions of concepts
2. Appropriateness of bibliography
3. Organization of report

Example topics:

|                                 |                               |                               |
|---------------------------------|-------------------------------|-------------------------------|
| Machine Learning                | Assisted Transportation       | Waterfall Development         |
| 5G Mobile Technology            | Digital Currency              | IT Vendor Contracting         |
| Augmented and Virtual Reality   | Offshore Development          | Big Data Analytics            |
| Enterprise Data Warehouse       | Secure File Transfer Protocol | Internet of Things (IoT)      |
| Software as a Service (SaaS)    | Electronic Data Interchange   | Application Program Interface |
| IT Contingency Planning         | Cloud Computing               | Extensible Markup Language    |
| Voice Controlled Devices        | JavaScript Object Notation    | Clearinghouses                |
| Syntactic & Semantic Validation | Smart Cities                  | Data Encryption               |
| Bring Your Own Device (BYOD)    | Wireless Networking           | Data Storage Infrastructure   |
| Social Platforms                | IT Architecture               | Cybersecurity                 |
| Data Privacy                    | User Experience (UX)          | 3D Printing                   |
| Team Collaboration Software     | Data Science                  | Intellectual Property in IT   |
| Cost Benefit Analysis in IT     | Robotics                      | Artificial Intelligence       |
| Data Mining                     | Retail Genetic Testing        | Wearable Devices              |