St. Petersburg College

SPC

APPROVED COURSE OUTLINE

Credit(s) 1.00
Contact Hours 36.00
Effective Term: Fall 2015 (505)

BME 2930C

Special Topics in Biomedical Engineering
Engineering and Building Arts Department

Requisites:
None

Course Description:
This course is an exploration of current and emerging technology and provides training from industry leaders in health care technology development.

Course Topics:

- **Patient Safety**
- New Patient Safety Efforts That Save Lives - This workshop would include safety-driven methods of reducing patient incidents that include medical devices and documented issues like infections from electro-surgical devices, pneumonia caused by ventilators and problems with patient's drugs administered using automated systems.
- **Future Medical Tech**
- The Future of Medical Devices - This workshop would focus on vendor presentations of emerging biomedical technology and medical devices that include use of smartphone-based apps, energy efficient technology and the impact of wireless sensors on patient monitoring.
- **Telemedicine**
- New Trends in Telemedicine - This workshop will include information on the impact of Telemedicine on clinical services, use of remote medical devices and increase in the use of wireless applications to support new medical technology.

Learning Outcomes and Objectives:
1. Students will increase their abilities to recognize, explain and apply emerging biomedical engineering technology trends by:
a. increasing awareness and recognizing application of new biomedical technological innovations presented by recognized health care technology manufacturers.
b. researching, documenting and discussing emerging technologies.
c. analyzing, documenting and comparing technologies presented in vendor-led workshops.

2. Students will improve their professional status and portfolios by completing workshops and obtaining web-based proprietary certificates by:
a. increasing comprehension and application of emerging technology through successful completion of online proprietary training.
b. demonstrating their knowledge of new technologies by obtaining at least two proprietary certificates.

3. Students will gain skills in recognizing, defining and discussing current and emerging technologies by:
a. summarizing the uses and application of emerging technologies.
b. observing and recognizing new technologies during tours of manufacturers and service companies.

Criteria Performance Standard:
Student must achieve a grade of a "C" or better.

Representative Textbooks:
None

Relevant Dates:

C&I Approval: , BOT Approval: , Effective Term: Fall 2015 (505)

History of Changes:

C&I Approval: , BOT Approval: , Effective Term: Fall 2015 (505)

Related Programs:

1. Biomedical Engineering Technology Associate in Science (BMET-AS) (510) (Pending)
2. Engineering Technology Associate in Science (ENG-AS) (505) (Active)
3. Engineering Technology Associate in Science (ENG-AS) (520) (Pending)

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