

University of Florida
College of Health and Human Performance
Applied Physiology and Kinesiology Department

Clinical Research Coordinator
On-line course: Research Methods and Experimental Design

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Required Text

Cauraugh, J. H. (2013). *Research Methods: Functional Skills*. ISBN: 978-1-939337-34-4 (eBook).

The eBook is available at the four electronic sources below.

1. Smashwords:

<http://www.smashwords.com/books/search?query=cauraugh>

2. Apple iBooks; For Apple iPad/iPhone/iPod Touch, download the free Apple iBooks app

<http://www.apple.com/apps/ibooks/> and buy on your iTunes account.

<https://itunes.apple.com/us/book/research-methods-functional/id591138108?mt=11&ign-mpt=uo%3D4>

3. Amazon – Kindle or Kindle Fire:

<http://www.amazon.com/dp/B00AUZPSSY>

4. Barnes and Noble (Pubit) – Nook:

<http://www.barnesandnoble.com/s/cauraugh/cauraugh?store=allproducts&keyword=cauraugh>

Course Description

The purpose of this course is to explore and discuss established rules for conducting science. Scientific problem solving serves as a basis for asking important questions, generating hypotheses, writing clearly, understanding experimental design and statistics, and accepting the responsibilities of "playing the game that scientists play." Clinical Research Coordinators (CRC) must be aware and well versed in all phases of research.

Course Concentration

A CRC should have highly developed capabilities in critical thinking, complex reasoning, and determining scientifically sound findings. This course concentrates on increasing your

knowledge base and providing multiple practice situations involved in the research process. The eBook covers a broad spectrum of topics relevant to CRC. When your understanding of the reading is combined with the video lectures then you will be well prepared to address CRC responsibilities.

Course Requirements

1. Read the eBook titled *Research Methods: Functional Skills*.
2. Listen to seven on-line video lectures (modules) and pass a quiz for each one.
3. Write and submit six research journal or notebook entries. What are your ideas or thoughts concerning research methods, experiments, or roles for a clinical research coordinator?
4. Complete and submit two problem-solving tasks. The tasks are in Modules 1 and 4.
5. Practice writing a brief Informed Consent on a form provided.

Course Materials: Video Lectures in Modules

1. Clinical Research Coordinator Overview: James Cauraugh
2. Philosophy of Science and Ethical Considerations: Thomas Clanton
3. Research Integrity and Responsible Conduct of Research: Robert Kolb
4. Rudimentary Statistics and Experimental Design: James Cauraugh
5. Obtaining Informed Consent: Wajeeh Bajwa
6. Research Approaches: Bench to Bedside: James Cauraugh
7. Roles of the Clinical Research Coordinator: Teresa d'Angelo

Evaluation of Course Requirements

	<u>Points</u>
Journal Entries	9
Seven Quizzes (Ebook reading and lectures)	63
Problem Solving Tasks	8
Informed Consent	20
Total	<hr/> 100

A Brief Motivational Perspective

Your research methods readings and experiences will be meaningful given that you actively use the information presented and discussed. Enjoy this exposure to the scientific arena. Keep your eBook available as a reference, practice speaking about scientific concepts, and supporting your statements with logical thinking and empirical evidence. The information for this course is readily learned when clinical research coordinators give sincere efforts. Thank you.