HEALTHCARE SCIENCE MANAGEMENT - CLONED

HSCM400 — Healthcare Science Management, 3.0 hours

PROFESSOR

Gabrielle is an experienced nursing professional with a demonstrated history of working in the hospital, academics & health care industry. Skilled in Nursing Education, Medical-Surgical, Advanced Cardiac Life Support (ACLS), Acute Care, and Critical Care Nursing. Strong support professional with a Bachelor of Science (BS) focused in Registered Nursing/Registered Nurse from Slippery Rock University of Pennsylvania.

CONTACT INFORMATION

E-mail: gmarticek@lakewood.edu
Cell Phone: 800-517-0857 X 790

ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

All members of the Lakewood University community who use the University's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing info@lakewood.edu

BOOKS AND RESOURCES

Anderson R. David. An Introduction to Management Science: Quantitative Approach. 15th ed. Cengage, 2019

EVALUATION METHOD

Graded work will receive a numeric score reflecting the quality of performance.
Course Requirement Summary

- **Assignments - Total of 60 Points**
- **Weekly discussion forums-Total of 80 Points**
- **Final Exam - 50 Points**

GRADING SCALE

Graded work will receive a numeric score reflecting the quality of performance as given above in evaluation methods. The maximum number of points a student may earn is 190. To determine the final grade, the student's earned points are divided by 190.

Your overall course grade will be determined according to the following scale:

A = (90% -100%)
B = (80% - 89%)

C = (70% - 79%)
D = (60% - 69%)
F < (Below 60%)

ACADEMIC INTEGRITY/ PLAGIARISM:

Cheating (dishonestly taking the knowledge of another person whether on a test or an assignment and presenting it as your work) and plagiarism (to take and pass off as one's own the ideas or writing of another) are a serious issue. While it is legitimate to talk to others about your assignments and incorporate suggestions, do not let others "write" your assignments in the name of peer review or "borrow" sections or whole assignments written by others. We do get ideas from life experiences and what we read but be careful that you interpret these ideas and make them your own.

I am aware that many types of assignments are available on the internet and will check these sources when there is legitimate suspicion.

Penalty is a zero on the assignment. In cases where there is a major or continuous breach of trust, further discipline, such as an "F" in the course, may be necessary.

The major consequence of any form of cheating is damage to your character and the result of trust and respect.

DISABILITY ACCOMMODATIONS

Students who have a disability and wish to request an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. The student can request an accommodation at any time although it is encouraged to do so early in the enrollment process. The student should complete an accommodation request form which begins a conversation between the school and the student regarding the nature of their disability and an accommodation that would help the student succeed in their program. The school may request documentation regarding the disability to address the accommodation request effectively. The school will communicate to the student the type of accommodation arranged. This process typically follows a team approach, bringing together persons from the academic department (including the instructor) and personnel from other departments as necessary. Additional information on disability accommodations may be found in the Lakewood University Catalog.

Disability Services Email: disabilityservices@lakewood.edu

SUPPLEMENTAL TEXTS

You can use the following resources to assist you with proper source citation.

American Psychological Association Style Guide- https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf

The Purdue OWL website is also a helpful resource for students. Here is a link to the OWL website: https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html

LIBRARY

Mary O'Dell is the Librarian on staff at Lakewood University

She is available by appointment. You can make an appointment with her by emailing her at modell@lakewood.edu or call at 1-800-517-0857 X 730

You may also schedule a meeting at this link: https://my.setmore.com/calendar#monthly/r3a761583354923270/01032020

She can assist you with navigating LIRN, research, citations etc.

SUPPORT

Each student at Lakewood University is assigned a Success Coach. Your Success Coach exists to assist you with academic and supportive services as you navigate your program. They will reach out to you, often, to check-in. Please use the resources they offer.

Student Services is available to assist with technical questions regarding Lakewood University and all services available to you.

1-800-517-0857 option 2
info@lakewood.edu
studentservices@lakewood.edu

CAREER SERVICES

Students are offered Career Services at any point as they journey their academics at Lakewood University.

1-800-517-0857 option 2
careerservices@lakewood.edu

LESSONS

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE
Lesson #1	• Introduction • An Introduction to Linear Programming • Linear Programming: Sensitivity Analysis and Interpretation of Solution	Study Course Syllabus Read Chapters 1, 2, 3 Complete Assignment 1 Participate in the Discussion Forum Lesson Evaluation	Assignment 1 upon completion of the lesson
TITLE	**COURSE TOPIC**	**READINGS/ASSIGNMENTS**	**DUE**
Lesson #2	• Advanced Optimization Applications • Distribution and Network Models • Integer Linear Programming	Read Chapters 4, 5, 6 Participate in the Discussion Forum Lesson Evaluation	
TITLE	**COURSE TOPIC**	**READINGS/ASSIGNMENTS**	**DUE**
Lesson #3	• Nonlinear Optimization Models • Project Scheduling: PERT/CPM • Inventory Models	Read Chapters 7, 8, 9 Participate in the Discussion Forum Lesson Evaluation	
TITLE	**COURSE TOPIC**	**READINGS/ASSIGNMENTS**	**DUE**
Lesson #4	• Waiting Line Models • Simulation • Decision Analysis	Read Chapters 10, 11, 12 Participate in the Discussion Forum Lesson Evaluation	
TITLE	**COURSE TOPIC**	**READINGS/ASSIGNMENTS**	**DUE**
Lesson #5	• Multicriteria Decisions • Time Series Analysis and Forecasting • Markov Processes	Read Chapters 13, 14, 15 Participate in the Discussion Forum Lesson Evaluation	

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE
Lesson #6	• LP Simplex Method • Simplex-Based Sensitivity Analysis and Duality • Solution Procedures for Transportation and Assignment Problems	Read Chapters 16, 17, 18 Participate in the Discussion Forum Complete Assignment 2 Lesson Evaluation	Assignment 2 upon completion of the lesson
TITLE	**COURSE TOPIC**	**READINGS/ASSIGNMENTS**	**DUE**
Lesson #7	• Minimal Spanning Tree	Read Chapters 19 & 20 Participate in the Discussion Forum Lesson Evaluation	
TITLE	**COURSE TOPIC**	**READINGS/ASSIGNMENTS**	**DUE**
Lesson #8	• Dynamic Programming	Read Chapter 21 Participate in the Discussion Forum Complete Assignment 3 Complete the Final Exam Request the Next Course Lesson Evaluation THANKS FOR A GREAT CLASS	Assignment 3 and Final exam upon completion of the lesson

DESCRIPTION

This course provides the fundamentals of the organizational principles, practices, and pertinent management of health service organizations. The topics include quality improvement, risk management, strategic planning, financial planning and control, and medical ethics.

Program Objectives

1. **Through identified processes identify the difference between the actual and desired state using the appropriate problem-solving process**
2. **Explain the different types of linear programming and problem-solving methods**
3. **Explain and describe models related to supply chain problems—specifically, transportation and transshipment problems—as well as assignment, shortest-route, and maximal flow problems**
4. **Understand and identify nonlinear optimization models**
5. **Utilize PERT/CPM to plan, schedule, and control a wide variety of projects**
6. **Utilize and understand the simulation method for learning about a real system by experimenting with a model that represents the system**
7. **Use the method of decision analysis to identify the best decision alternative or the optimal decision strategy given information about the uncertain events and the possible consequences or payoffs**
8. **To understand and use the methods of time series analysis and forecasting**

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