

**CMPS 574
RESEARCH TECHNIQUES
FALL 2021**

2020 - 2022 Catalog Data: CMPS 574. RESEARCH TECHNIQUES (Credit, 3 hours). Students will learn how to conduct literature reviews of articles, journals, white papers using Internet, computerized databases and library resources. Students will learn to develop research questions, hypotheses, research topics, research designs and write research papers in standard format.

I. COURSE INFORMATION

Course Information:

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|--------------|---------------------|
| CRN | 10551 |
| Rubric No | CMPS 574 |
| Section | 1 |
| Title | Research Techniques |
| Credit Hours | 3 |
| Type | In Person |

Lectures: Day and Time: 12:30PM – 2:00PM MW
Class Location: Thurman Hall 132

II. TEXTBOOK AND MATERIALS

Main Textbook: N/A

References:

1. Doctoral Student Experience (DSE) “Chapter 1: Problem Statement, Purpose Statement, and Research Question,” <https://ncu.libguides.com/c.php?g=1006886&p=7294579>
2. Royal Roads University, “Thesis statements/Research questions/Problem statements,” <https://library.royalroads.ca/writing-centre/writing/structure/thesis-statements>
3. Kate L. Turabian: “A Manual for Writers of Term Papers, Theses, and Dissertations,” 8th Edition, March 2013, ISBN: 9780226816388.
4. Bruce Ballenger, “The Curious Researcher: A Guide to Writing Research Papers”, 8th Edition, July 2014, ISBN-13: 978-0321992963.
5. Thesis Guidelines Issued by The Office of Graduate Studies, Southern University and A&M College, Baton Rouge, Louisiana: <https://www.subr.edu/assets/subr/GradSchool/SampleThesisTitlePageSampleIllustrationGuidelinesPages2013.pdf>
6. ACM Digital Library: <http://dl.acm.org/>
7. IEEE Explore, <http://ieeexplore.ieee.org/Xplore/home.jsp>

III. INSTRUCTOR INFORMATION

Instructor(s): Name: Yaser Banadaki, Ph.D.
Office Location: 114E Henry Thurman Jr. Hall, Southern University Baton Rouge
Office Phone: 225-771-3941
Office Hours: MWF 11:00 AM – 12:00PM or by appointment and contact
E-mail: yaser_banadaki@subr.edu

IV. COURSE OBJECTIVES

Course Objectives:

The objectives of this course are to cover:

- How to conduct literature reviews of articles, find proper journals, develop white papers using Internet, computerized databases and library resources.
- How to develop research questions, hypotheses, research topics, research designs and write research papers in standard format.

Course Educational Strategies:

1. Provide clear lectures and discussions of major components of operating systems.
2. Provide students with the opportunity to learn course material through reading and homework assignments.
3. Allow students to demonstrate mastery of the course concepts through submitted exercises such as exams, quizzes, and homework problems.
4. Provide students with the opportunity to learn more about basic organization of computer systems and the related concepts through their applications to real world problems.

V. COURSE OUTLINE

Course Topics:

This course will cover the following concepts in this course:

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|---------|--|
| Week 1 | Introduction |
| Week 2 | Identifying problem statement |
| Week 3 | The nature of research problems |
| Week 4 | Formulating hypotheses in research |
| Week 5 | Function and characteristics of research hypotheses |
| Week 6 | Null Hypothesis |
| Week 7 | Directional hypothesis and Nondirectional hypothesis |
| Week 8 | Projects Assignments and Discussion |
| Week 9 | Research Plans and Variables |
| Week 10 | Importance of Academic Honesty - Plagiarism |
| Week 11 | Review Paper 1 Due/Presentations |
| Week 12 | Review Paper 1 Due/Presentations |
| Week 13 | MSc Thesis Template |
| Week 14 | Summary Statements and Take away |

VI. EVALUATION AND GRADING

Grading Distribution

A student's grade at the end of the semester will be determined by following percentages:

| | |
|-------------------------------------|-----|
| Class Participation and Discussions | 20% |
| Writing Assignments | 40% |
| Presentations | 40% |

Grading Scale

Course grades at the end of the semester will be given based upon performance using the standard grading scale:

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|-----------|---|
| 90– 100% | A |
| 80 – 89% | B |
| 70 – 79% | C |
| 60 – 69% | D |
| Below 60% | F |

Grades may be curved at the end of session at the instructor's discretion.

VII. COURSE RULES AND PROCEDURES

Exam policy: Exams will emphasize concepts developed in the course. Exams will be closed book and notes unless stated otherwise (if formulas, tables, etc. are needed, the instructor will supply them). Students will not be able to pause the exams. There must be no sharing of any materials during exams. Communicating to one another is not permitted while taking an exam. If there are questions, they should be directed to the instructor.

Attendance policy and class participation: Students are expected to be present and on time and participate in class (whether virtual or in-person attendance) from the beginning throughout the end of the class period. Though attendance is strongly encouraged, merely attending classes does not guarantee a passing grade. It is every student responsibility to make sure that he/she signs the roll during class (Hybrid: you need to login to the Moodle and sign the roll).

Makeup test or exam: No makeup test or exam will be given except in the case of emergency such as the student being sick, or he/she is unable to come to class due to some unforeseen event. An official proof **MUST** be presented to the instructor and student is required to take the makeup test/exam as soon he/she returns to class in the following class session. Failure to comply will result in the grade of zero (0) for the test/exam.

Use of electronic devices while in class: Students are not allowed to use the computers for other purpose unrelated to the course content during the lectures unless authorized by the instructor of this course for the purpose of the course. Please turn off (or place on silence) your cellular phones before the lecture starts. The Hybrid classes will be through Microsoft Teams. Make sure to mute your microphone during the remote delivery of the lectures.

Missing or late assignments/quizzes/exams: At the instructor's discretion, students may be given opportunity for late submission of an assignment or retake of a quiz or exam upon presentation of a valid excuse.

Academic honesty and plagiarism: Please review the Southern University – Baton Rouge Student Handbook for information regarding the university's academic conduct policy and what constitutes plagiarism. Academic dishonesty and plagiarism will **NOT** be tolerated. The remote attendees must specially stick to these guidelines.

Assignment policy: Students are **NOT** allowed to share their assignments or to communicate during the tests or exam. No late assignment will be accepted and no make up for assignments and quizzes.

Change to syllabus: Any aspects of this syllabus may be subject to change. However, any substantive changes affecting distribution of grades for various components of the course will be accompanied with prior notice given to students via class announcement and Blackboard announcement or email.

Livertext Access: Each student is required to have access to LiveText. Southern University and A&M College-Baton Rouge has entered into partnership with LiveText, Inc. to provide online academic resources for student collaboration and learning outcomes assessment. Therefore, all students enrolled in this course are required to purchase a subscription from LiveText, Inc. through the Southern University Bookstore. LiveText, Inc. provides students with the electronic tools and services needed to serve them in their courses and in their career or academic pursuits beyond graduation.

Moodle Access: Southern University and A&M College at Baton Rouge will used Moodle extensively in this course. Moodle is a learning management system designed to help teachers and students communicate effectively online. The course syllabus, class materials (e.g., handouts, PowerPoint slides, journal articles, assignments, readings, etc.) will be placed on Moodle. The student should check Moodle **DAILY** for all assignments submitted via Moodle. All course communications will be primarily via SUBR email or Moodle. Students are responsible for regularly checking their emails and Moodle. If the student has problems with his Moodle account, he/she should contact Ms. Chrisena Williams-Brown in the Division of Information Technology via email at chrisena_williams@subr.edu or via phone at (225) 771-5017.

Academic Dishonesty: The University defines academic dishonesty as premeditated and un-premeditated fraudulent behavior. Premeditated fraud is defined as conscious, pre-planned, deliberate cheating with materials prepared in advance. Unpremeditated fraud is defined as cheating without the benefit of materials prepared in advance. See the Southern University and A & M College Catalog for a more detailed definition of academic dishonesty. In addition, administrative

regulations governing the conduct of students enrolled at the University are contained in the Code of Student Conduct. A copy of the Code of Student Conduct may be obtained from the Office for Student Affairs.

ADA Compliance: Students with documented disabilities who believe that they may need accommodations in this class are encouraged to contact the Disability Services Coordinator in the Office of Disability services, 234 A.C. Blanks Hall, 225-771-3950 (Voice/TTD), 225-771-5652 (Fax), as soon as possible to ensure that such accommodations are implemented in a timely fashion. Students who need accommodations must be registered with the Office of Disability Services. Students are responsible for informing the instructor of any instructional accommodations and/or special learning needs at the beginning of the semester. All discussions will remain confidential.