

ACADEMIC YEAR	Fall 2020-21		
Course Code & Title	APSC301 Research Skills		
Credit hours	3	Level of study	Bachelor of Science
College / Centre	College of Applied& Health Sciences		
Co-requisites	STAT201	Pre-requisites	STAT201

1. COURSE OUTLINE

The course is designed to provide students with the essential knowledge of research related concepts and its importance in today's world. The goal is to acquire diverse skills set for an independent academic research career and/or be able to choose between other research related career options affecting public health[]

2. AIMS

[.At the completion of the course, the goal is to have a pool of knowledgeable and trained students with a good and thorough understanding of research in basic, and behavioral sciences research. The course will prepare students for careers in research and research-associated as well as in science and public health policy related fields]

3. LEARNING OUTCOMES (Definitive) and TEACHING, LEARNING and ASSESSMENT METHODS

Learning Outcomes (Definitive)	Teaching and Learning methods (Indicative)	Assessment (Indicative)
Upon successful completion of this course, students will be able to:		
1. Distinguish and understand the types and settings of various research and their application	Lectures and class discussion	Quizzes/Assignment/Exams
2. Understand the basic research skills required for this purpose.	Lectures and class discussion	Quizzes/Assignment/Exams
3. Understand the components needed to write a good quality research paper and process involved in publication of their scientific work.	Lectures and class discussion	Quizzes/Assignment/Exams
4. Evaluate essential features of a grant application including: identification of solicitations; assessment of the need and	Lectures and class discussion	Quizzes/Assignment/Exams

formulation of research questions; specific aims and goals.		
5. Understand the basic knowledge of methods used to analyze and interpret data.	Lectures and class discussion	Quizzes/Assignment/Exams
6. Assemble the elements required for ethical approaches in research including, review process, handling reviewer's comments, publishing process.	Lectures and class discussion	Quizzes/Assignment/Exams

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Quiz1,2	20
Online discussion & Participation	5
Assignment	15
Mid Exam	20
Final Exam	40
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve **03** credit hours for this course by passing **ALL** of the course assessments] and achieving a **minimum overall score of 50%**

NB *Ensure that ALL learning outcomes are taken into account

6. Course Delivery Plan

Week	Lecture Topics	Learning outcomes
1	Introduction to good research Overview, good research, basics about "good" source (books, e-books, journals, websites), primary research (qualitative and quantitative).	1
2	Research design, research methods (lab experiments, field experiments). Questionnaire, surveys, interviews, observational methods, sampling, data analysis.	1
3	Research skills Skills type, qualitative and quantitative research.	2

6. Course Delivery Plan		
Week	Lecture Topics	Learning outcomes
4	Writing a scientific manuscript Types of Scientific Writings (articles, reports, thesis), criteria of good research publication.	2,3
5	Structure of scientific papers, parts of manuscripts (importance and application of each part of the manuscript).	2,3
6	How to Write a Project Proposal	4
7	Material and method, result, discussion, conclusion, reflection and criticism.	4
8	Evaluating sources Evaluating websites, CRAAP Test, purpose of the source, website domain extension.	2, 4
9	Research Ethics Principles and procedures Ethical codes, ethical factors, importance of research ethics, projects in need of ethical approval, key ethical issues.	2,4
10	Informed consent, institutional review board (rights and actions).	3,4
11	Plagiarism, incorporating ideas from research, crediting sources.	3,4
12	Conflict of interest Solution to overcome conflict of interest. Overview, definition, examples and properties, classification of conflict of interest.	2,3,4
13	Basic Stats in Research Basic knowledge about Methods to obtain and analyze raw data	5
14	Writing & Publishing Your Research Purpose and reason for writing or not writing a manuscript, building your manuscript (planning strategies).	6
15	Contents and format of a paper, useful sources for authors, finding publishing avenues, criteria to select right journal, review process, handling reviewer's comments, publishing process.	6

7. RECOMMENDED READING

Core text/s:

Johnson, Christensen (2007) "*Educational Research*" Sage Pub. Inc.

- Leedy, PD and Ormrod, JE (2004) "*Practical Research Planning and Design*", 8th Ed, Macmillan Publishing.

Library + online resources:

Related Research Articles

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