

Table 1. Relationship of Program Educational Outcomes (PEO) to the Mandate of UP as the National University

Program Educational Outcomes The BS Statistics Program aims to produce graduates who:	Mandate of UP as the National University ¹							
	a	b	c	d	e	f	g	h
1. provide emergent statistical leadership and expertise in government, academe, and industry;	✓	✓	✓	✓	✓	✓	✓	✓
2. contribute significantly towards the improvement of the Philippine Statistical System;	✓	✓	✓	✓		✓	✓	✓
3. provide training and sound technical advice on statistical matters;	✓	✓	✓	✓		✓		✓
4. institutionalize statistical practice as business enterprise through consulting firms;	✓			✓				✓
5. pursue graduate studies in statistics and allied fields;	✓	✓						✓
6. participate actively and competently in research and development activities towards development of new statistical methodologies;	✓		✓					✓
7. play a crucial and essential role in the global market; and	✓						✓	✓
8. adhere to the ethical standards of statistical practice specifically in data collection, presentation, and communication of results.	✓				✓			✓

¹The University of the Philippines shall (Section 3, R.A. 9500):

- a. Lead in setting academic standards and initiating innovations in teaching, research, and faculty development in philosophy, the arts and humanities, the social sciences, engineering, natural sciences, mathematics and technology, and maintain centers of excellence in these disciplines and professions.
- b. Serve as a graduate university by providing advanced studies and specialization for scholars, scientist, writers, artists and professionals especially those who serve on the faculty of state and private colleges and universities.
- c. Serve as a research university in various fields of expertise and specialization by conducting basic and applied research, promoting research and development, and contributing to the dissemination and application of knowledge.
- d. Lead as a public service university by providing various forms of community, public and volunteer service, as well as scholarly and technical assistance to the government, the private sector, and civil society while maintaining its standards of excellence.
- e. Protect and promote the professional and economic rights and welfare of its academic and non-academic personnel.
- f. Provide opportunities for training and learning in leadership, responsible citizenship, and the development of democratic values, institutions, and practice through academic and non-academic programs, including sports and enhancement of nationalism and national identity.
- g. Serve as a regional and global university in cooperation associations in the Asia Pacific Region and around the world.
- h. Provide democratic governance based on collegiality, representation, accountability, transparency, and active participation of its constituents, and promote the holding of freedom

for students, faculty, research, extension and professional staff (REPS), administrative staff, and alumni to discuss non-academic issues affecting the University.

II. Program Learning Outcomes²

Common to all programs

- A. Articulate and discuss the latest developments in their specific field of practice and engage in life-long learning (PQF level 6 descriptor)
- B. Effectively communicate orally and in writing using both English and Filipino languages
- C. Work effectively and independently in multi-disciplinary and multi-cultural teams (PQF level 6 descriptor)
- D. Demonstrate professional, social and ethical responsibility, especially in practicing intellectual property rights and sustainable development
- E. Preserve and promote "*Filipino historical and cultural heritage*" (based on RA 7722)

Common to the discipline (physical science)

- F. Formulate statistical problems from real world problem
- G. Plan, design, and implement appropriate research methods

Specific to the program

- H. Relate theories to statistical methods applied
- I. Apply computing technologies in data management and processing using reputable statistical software packages
- J. Understand the impact of statistics in both local and global contexts

Specific to the University of the Philippines

- K. Lead with honor and excellence in public service and in fields of practice

²Some of the listed program learning outcomes are based on the proposed CHED Memorandum Order (CMO) on the Policies, Standards, and Guidelines (PSG) for the Bachelor of Science in Statistics Program

Table 2. Relationship of Learning Outcomes to Program Educational Outcomes

Program Learning Outcomes		PEO							
		1	2	3	4	5	6	7	8
(A)	Articulate and discuss the latest developments in their specific field of practice and engage in life-long learning (PQF level 6 descriptor)	✓	✓	✓	✓	✓	✓	✓	✓
(B)	Effectively communicate orally and in writing using both English and Filipino languages			✓	✓	✓	✓	✓	✓

(C)	Work effectively and independently in multi-disciplinary and multi-cultural teams (PQF level 6 descriptor)	✓	✓	✓	✓	✓	✓	✓	
(D)	Demonstrate professional, social and ethical responsibility, especially in practicing intellectual property rights and sustainable development			✓	✓	✓	✓	✓	✓
(E)	Preserve and promote “ <i>Filipino historical and cultural heritage</i> ” (based on RA 7722)			✓	✓		✓		
(F)	Formulate statistical problems from real world problem	✓	✓		✓	✓	✓	✓	
(G)	Plan, design, and implement appropriate research methods	✓	✓	✓	✓	✓	✓	✓	✓
(H)	Relate theories to statistical methods applied	✓	✓	✓	✓	✓	✓	✓	
(I)	Apply computing technologies in data management and processing using reputable statistical software packages	✓	✓	✓	✓	✓	✓	✓	
(J)	Understand the impact of statistics in both local and global contexts	✓	✓	✓	✓	✓	✓	✓	
(K)	Lead with honor and excellence in public service and in fields of practice	✓		✓	✓		✓	✓	

CURRICULUM MAP

COURSES	Relationship of Courses to Program Learning Outcomes										
	A	B	C	D	E	F	G	H	I	J	K
A. General Education Courses											
HIST 1/KAS 1. Kasaysayan ng Philippine/ Philippine History			D	R	D						R
ARTS 1. Critical Perspective in the Arts			D	R	D						R
COMM 10. Critical Perspective in Communication	D	D	D	R	R						R
ETHICS 1. Ethics and Moral Reasoning in Everyday Life	D	R	D	R	R	I					R
STS 1. Science, Technology and Society	D	R	D	R	D	I	R		I	R	R
WIKA 1. Wika, Kultura at Lipunan		D	D	R	D						R
SAS 1. Self and Society	D	R	D	R	D						R
MATH 10. Mathematics, Culture and Society			D	R	R		I	I			R
PHILARTS 1. Philippine Arts and Culture			D	R	D						R
SCI 10. Probing the Physical World	D		D	R	R						R
SCI 11. Living Systems: Concepts and Dynamics			D	R	R						R
PI 10. The Life, Works and Writings of Rizal			D	R	D						R
B. Foundation Courses											
MATH 27. Analytic Geometry and Calculus II	I		I			I		R			
MATH 28. Analytic Geometry and Calculus III	I		I			I		R			

MATH 182. Stochastic Processes	I		I			I		R			
BIO 30. Genetics	I				I	R	I	R	I		
CMSC 12. Fundamentals of Computer Science	I					I					
CMSC 21. Fundamentals of Programming	I					I			R		
CMSC 22. Object-Oriented Programming	I					R			R		I
CMSC 127. File Processing and Database Systems	R		I		I	R		I	D	I	I
ECON 11. General Economics		R	I		I	R	I	R			I
ABME 10. Foundations of Entrepreneurship		R	R	I	I	R	I	I			I
ENG 10. Writing of Scientific Papers		D	I	R	I	R	I	I			I
C. Core/Major Courses											
STAT 101. Statistical Methods	R	R	R	I	I	R	R	I	R	R	I
STAT 135. Logic and Matrix Algebra in Statistics				I				R	R		I
STAT 162. Experimental Designs	R	R	R	I	I	R	R	I	R	R	I
STAT 182. Statistical Packages	D			I					D		I
STAT 144. Introductory Statistical Theory I				I				D		R	I
STAT 168. Response Surface Methodology	R	R	R	I		R	D	I	R	R	I
STAT 145. Introductory Statistical Theory II				I				D		R	I
STAT 174. Introductory Biostatistics	R	R	I	I	I	R	R	I	R	R	I
STAT 192.1. Statistical Consulting Laboratory	R	D	D	D	R	D	D	D	R	D	R
STAT 146. Introductory Statistical Theory III				I				D		R	I
STAT 175. Analysis of Multivariate Data	R	R	R	I	I	R	R	I	R	R	I
STAT 181. Statistical Computing	D			I				R	D		I
STAT 147. Introductory to the Theory of Nonparametric Statistics				I				D		R	I
STAT 151. Applied Regression and Correlation	R	R	R	I	I	R	R	I	R	R	I
STAT 156. Introductory Time Series Analysis	R	R	R	I	I	R	R	I	R	R	I
STAT 163. Survey Designs	I	R		I		D	R	D		R	I
STAT 148. Introductory Bayesian Statistics	R					D	R	D	R	R	I
STAT 165. Categorical Data Analysis	R	R	R	I	I	R	R	I	R	R	I
STAT 173. Survey Operations	R	R	R	R	R	D	D	I	R	R	I
STAT 191. Special Topics	D	R	R	I	R	R	R	R	R	R	I
STAT 157. Financial Risk Modeling	R	R	R	I	I	D	R	I	D	R	I
STAT 167. Statistical Quality Control	R	R	R	I	I	R	R	I	R	R	I
STAT 183. Introductory Data Analytics	D	R	R	I	I	R	R	I	D	R	I
STAT 190. Special Problems	D	D	D	R	D	D	D	D	D	D	R
STAT 198. Practicum	D	D	D	D	D	D	D	D	D	D	R
D. Undergraduate Seminar											
STAT 199. Seminar	I	D	D	R	R	R	R	D	R	R	I

I-Introduced

R-Reinforced

D-Demonstrated