### Psychological Science, B.S.

### **Department Contact:**

Chairperson: Dr. Marnie Moist, mmoist@francis.edu

### **Program Description:**

The Psychology program at Saint Francis University is grounded in the Goals of Franciscan Higher Education and the learning goals identified by the American Psychological Association. This program is designed to introduce students to natural and social scientific investigations of behavior and mental processes preparing students for their futures as responsible global citizens. The psychology curriculum engages students in research and scholarly activities, while also encouraging them to apply coursework in internships, study abroad opportunities, and/or community service. Graduates of the psychology program are prepared for entry-level employment in the community and social service field and for advanced study in graduate or professional schools.

The Psychology department offers a Bachelor of Science degree, with various concentrations to align with the student's interest. Those students who wish to pursue a psychology degree without a concentration can choose the B.S. in Psychological Science, which requires the student to choose a minor or a second major unless they are undertaking a concentration.

Students who plan to seek admission to a graduate program in Psychology are STRONGLY urged to complete a research project that is suitable for presentation or publication.

### **Student Learning Outcomes:**

Upon successful completion of the program, students will be able to:

- Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles apply to behavioral problems.
- Demonstrate the skills involved in the development of scientific reasoning and problem solving, including effective research methods.
- Articulate and demonstrate the ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity.
- Demonstrate competence in writing and in oral and interpersonal communication skills.
- Demonstrate application of psychology-specific content and skills, effective self-reflection, project-management skills, teamwork skills, and career preparation.

### **Estimated Completion Time:**

Typically, 4 years of full-time study.

### **Capstone Requirement:**

The Senior capstone requirement is completed 3-credits by taking PSYC 398/399 (Internship) or PSYC 407 or PSYC 487 (Independent study).

### Total University Credits Required: 128 credits minimum.

General Education	48 credits
Psychology major	33 credits
Minor requirement	15-18 credits
Free electives	29-32 credits

### Course requirement for the Major: 33 credits

### **Psychology Major Core Requirements (12 credits):**

- PSYC 101 Introduction to Psychology
- PSYC 303 Learning
- PSYC 311 Research Methods and Statistics I\*
- PSYC 312 Research Methods and Statistics II\*

### Two of the following lower-level courses (6 credits):

- PSYC 204 Personality
- PSYC 205 Psychopathology
- PSYC 206 Health & Exercise Psychology
- PSYC 209 Developmental Psychology

### Two of the following upper-level courses (6 credits):

- PSYC 304 Social Psychology
- PSYC 317 Memory & Cognition
- PSYC 321 Sport Psychology
- PSYC 406 Clinical & Counseling Psychology
- PSYC 420 Canine Learning and Behavior

### One of the following diversity courses (3 credits):

- PSYC 322 Psychology of Women and Gender
- PSYC 323 Cultural Psychology

### One of the following Brain and Behavior courses (3 credits):

- PSYC 302 Sensation and Perception
- PSYC 314 Biopsychology
- PSYC 404 Psychopharmacology

### Psychology Capstone (One of the following courses; 3 credits) \*\*:

- PSYC 398/399 Internship (2-15 credits)<sup>1</sup>
- PSYC 407 Psychology CORE: Applied Topics in Psychology
- PSYC 487 Independent Study (1-8 credits)<sup>2</sup>

Students must choose a minor, a concentration or a second major.

\*Students may make the following substitutions for the required research methods sequence:

- STAT 101 or 205 and PSYC 310
- STAT 101 or 205 and PSYC 311

\*\*Students must complete a 3-credit internship or a 3-credit independent study or PSYC 407 to completely satisfy the degree requirements and EXAM 401.

<sup>&</sup>lt;sup>1</sup> While students may take PSYC 398/399 for variable credits (2-15), only 3 credits may count towards the psychology credit requirement.

<sup>&</sup>lt;sup>2</sup> While students may take PSYC 487 for variable credits (1-8), only 3 credits may count towards the psychology credit requirement.

Bachelor of Science, Psychology: 2022-2023

Catalog	Science,	Psycho	logical	Science
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Course No. Description		Cr.
First Year	Fall	
□ LANG 102+	Language elective	3
□ PSYC 101	Introduction to Psychology	3
□ HIST xxx	History Elective 100-200 level	3
□ WRIT 102	Research Writing	3
□ CORE 103	Fall Comm. Enrich. Series	0
	Science elective with lab	3-4
İ		
Total Credits		15-16

Course No.	Description	Cr.
First Year	Spring	
□ PSYC	PSYC 204, 205, 206, 209*	3
□ MATH	Math elective 101, 105, or higher	3
□ SOC SCI	Social Science Elective I	3
□ FTAE 105	Franciscan Goals for Today	3
□ CORE 113	Gen Ed 1 <sup>st</sup> Year Seminar	3
□ CORE 104	Spring Comm. Enrich. Series	0
Total Credits		15

Second Year	Fall	
□ PSYC	PSYC 204, 205, 206, or 209*	3
□ PHIL 205	Discovering Philosophy	3
□ LIT 104, 201, 20	2, 204, 207, 270 Literature	3
	minor/concentra/dbl major course**	3
	free elective	3
	free elective	
		3
Total Credits		18

Second Year	Spring	
☐ Fine Arts	FNAR, ART, MUS, THTR	3
	minor/concentra/dbl major course**	3
FTAE/PHIL	FTAE/PHIL elective	3
	free elective	3
	free elective	3
	free elective	3
Total Credits		18

Third Year	Fall	
	MATH, STAT, CPSC, ENGR or any natural science	3
□ PSYC 311	Research Methods and Statistics I	3
	free elective	3
	minor/concentra/dbl major course**	3
□ SOC SCI	Social Science Elective II	3
□ EXAM 301	Writing Competency	0
Total Credits		15

Third Year	Spring	
□ PSYC	PSYC 302, 314, or 404*	3
□ PSYC 312 □ PSYC □ PSYC 303	Research Methods and Statistics II PSYC 304, 317, 321, 406, 420* Learning Free Elective	3 3 3
Total Credits		15

Fourth Year	Fall	
□ PSYC	PSYC 304, 317, 321, 406, 420*	3
	minor/concentra/dbl major course**	3
□ PSYC	PSYC 407 or 487 or 398/399***	3
	CORE 407 or Free Elective***	3
	Free Elective	5-6
Total Credits		17-18

Fourth Year	Spring	
□ PSYC	PSYC 322 or 323	3
	minor/concentra/dbl major course**	3
	Free Elective	3
	Free Elective	3
	Free Elective	3
□ EXAM	Dept. Comp. Exam	0
401	Dept. Comp. Exam	U
Total		15
Credits		15

Total Required

Credits: 128

### Notes:

Students not planning to attend graduate school may be advised to replace PSYC 311-312 with STAT 101 or 205 AND PSYC 310 instead.
be advised to replace PSYC 311-312 with STAT 101 or 205 AND PSYC 310 instead.

- \*interchangable as depends on semester offered
- \*\*All psychology majors must complete a 15-credit minor or 21 cr. concentration or a double major; latter options mean fewer free electives
- \*\*\*Psychology capstone must be completed for 3 credits but more credits possible to make 128 credits, depending on whether 3 or 4-cr. science elective completed; PSYC 407 only serves as CORE 407; all capstone options serve as Exam 401 with career research component
- \*\*\*Sequence of courses may be altered with consent of advisor.

## Psychological Sciences, BS, Pre-Med Paradigm

Course No.	Description	Cr.	Course No.	Description	Cr.
First Year	Fall		First Year	Spring	
□ PSYC 101	Intro to Psychology	3	PSYC	PSYC 204, 205, 206, or 209*	3
□ BIOL 110	Intro: Evol/Ecol/Pl.Bio	4	□ BIOL 111	Molec/Cell/Anim.Phys.	4
□ Chem 121	Chemistry Principles I	4	□ Chem 122	Chemistry Principles II	4
□ FTAE 105	Franciscan Goals for Today	3	Lit 104		3
□ WRIT 102	Research Writing	3	□ CORE 113	Gen Ed 1st Year Seminar	3
□ CORE 103	Fall Comm. Enrich. Series	0	□ CORE 104	Spring Comm. Enrich. Series	0
Total Credits		17	Total Credits		17

Second Year	Fall	
PSYC	PSYC 204, 205, 206, or 209*	3
Math 121	Calculus/Geom I or Calculus	3
□ CHEM 221	Organic Chemistry I	4
Hist xxx	Hist elective	3
Biol 200 & above	Elective**	4
<b>Total Credits</b>		17

Second Year	Spring	
□ PSYC 303	Learning	3
Math 122	Calculus/Geom I or Calculus	3
□ CHEM 222	Organic Chemistry II	4
Biol 200 & above	Elective**	4
□ PHIL 205	Discovering Philosophy	3
<b>Total Credits</b>		17

Third Year	Fall	
□ PSYC 311	Research Methods and Statistics I	3
PSYC	PSYC 304, 317, 321, 406, 420*	3
□ PHYS 104 or 121	Intro to Physics I or Gen. Physics I	4
□ BIOL 405	Biochemistry I	4
PMED 331	Premed seminar	0
FTAE/PHIL	FTAE/PHIL Elective	3
□ EXAM 301	Writing Competency	0
Total Credits		17

Third Year	Spring	
□ PSYC 312	Research Methods and Statistics II	3
PSYC	PSYC 314, 302, 404*	3
		3
Free elective		3
□ PHYS 105 or 122	Intro to Physics II or Gen. Physics II	4
Biol 200 & above	Elective**	4
Total Credits		17

Fourth Year	Fall	
PSYC	PSYC 304, 317, 321, 406, 420*	3
☐ Fine Arts	FNAR, ART, MUS, THTR	3
□ PSYC	Psychology captsone; 398/399, 407 or 487***	3
□ LANG xxx	Forgeign Lan. (102 or higher)	3
CORE	CORE 407***	3
Total Credits		15

Fourth Year	Spring	
□ SOC SCI	Social Science Elective II	3
□ PSYC	PSYC 322 or PSYC 323	3
Free elective Free elective Free elective		3 1 1
□ EXAM 401 Total Credits	Dept. Comp. Exam	0 <b>11</b>

**Total Required** 

Credits: 128

\*interchangable as depends on semester offered

\*\*All Biol 200 & above are strongly recommended

to be taken as 4 credits; however 3-credit options

can be discussed with advisor

\*\*\*Psychology capstone must be completed for 3 credits but more credits possible to make 128 credits; PSYC 407 only serves as CORE 407; all capstone options serve as Exam 401;

PSYC 487 strongly recommended for med school Has a bio minor, can easily add a neuro minor

**17** 

**Bachelor of Science, Biology: Neuroscience Concentration, 2022-2023 Catalog** 

**Bachelor of Science, Psychology: Neuroscience concentration, 2022-2023 Catalog** 

Important note: this degree requires students to complete degrees in both Psychology and Biology, both with a

neuroscience concentration. Students & advisors should consult the University Catalog for the requirements of each program.

Credits

Credits

Course No.	Description	Cr.
First Year	Fall	
□ PSYC 101	Intro to Psychology (soc sci i)	3
□ BIOL 110	Intro: Evol/Ecol/Pl.Bio	4
□ Chem 121	Chemistry Principles I	4
□ FTAE 105	Franciscan Goals for Today	3
□ WRIT 102	Research Writing	3
□ BIOL 131	Biology First Year Seminar	0
□ CORE 103	Fall Comm. Enrich. Series	0

Total	l Credits		17

Second Year	Fall	
□ BIOL 406	Vertebrate Physiology	4
□ PSYC	PSYC 204, 205, 206, or 209	3
□ CHEM 221	Organic Chemistry I	4
□ PHIL 205	Discovering Philosophy	3
☐ LIT 104, 201, 2	202, 204, 207, 270	3

Total Credits	47
Total Credits	1/

Course No.	Description	Cr.
First Year	Spring	
□ BIOL 111	Molec/Cell/Anim.Phys.	4
□ Chem 122	Chemistry Principles II	4
□ MATH 112	Calculus	3
or 121	or Calculus/Geom I	
□ PSYC	PSYC 204, 205, 206, or 209	3
□ CORE 113	Gen Ed 1 <sup>st</sup> Year Seminar	3
□ CORE 104	Spring Comm. Enrich. Series	0
Total		17

Second Year	Spring	
□ BIOL 211	Comparative Anatomy	4
□ PSYC	PSYC 322 or 323 (diversity)	3
□ CHEM 222	Organic Chemistry II	4
□ PSYC 303	Learning	3
□ BIOL 231	Biology Sophomore Seminar	0
Total		14

□ PSYC 311  Research Meth. &  Statistics I  BIOL 405  Biochemistry I  4
Statistics I
PIOLAGE Biochomistral
□ BIOL 405 Biochemistry I 4
□ PHYS 104 Intro to Physics I or
or 121 Gen. Physics I 4
□ SOC SCI Social Science Elective II 3
☐ Fine Arts FNAR, ART, MUS, THTR 3
□ BIOL 331 Biology Junior Seminar 0
☐ EXAM 301 Writing Competency 0

□ PSYC 312	Research Meth. & Statistics II	3
□ BIOL 301	Genetics	4
□ PHYS 105	Intro to Physics II	
or 122	or Gen. Physics II	4
□ PSYC 314	Biopsychology	3
□ NEUR 279	Introduction to Neuroscience	3
Total		

**Spring** 

**Third Year** 

<b>Total Credits</b>	17

Total	17
Credits	1/

Fourth Year	Fall	
	Neurobiology	
□ BIOL xxx	Elective(s)	4
□ PSYC	PSYC 302 or 404	3
□ PSYC	Psychology capstone;	
	398/399, 407 or 487	3
□ LANG xxx	Forgeign Lan. (102 or higher)	3
□ PHIL/FTAE	300+ PHIL/FTAE	
xxx	Elective	3

Fourth Year	Spring	
□ HIST xxx	History Elective 100-200 level	3
□ PSYC 317	Memory and Cognition	3
□ BIOL 402	Evolution	3
□ BIOL 431	Senior Seminar	1
□ NEUR 450	Neuroscience Seminar	1
□ BIOL 401	Cell & Molecular Biol	4
□ EXAM 401	Dept. Comp. Exam	0

Total Credits 16

Total Credits: 130

### **Neurobiology Elective Courses**

F = Fall; S = Spring; Su = Summer; AN = As Needed

4 credits of the following:

BIOL 208 Animal Behavior (F; 4 cr)

BIOL 212 Developmental Biology (AN; 4 cr)

BIOL 305 Immunology (F; 3 cr)

BIOL 430 Advanced Lab Methods (AN; 2 cr) BIOL 194/294/394/494 Biological Research

### Notes:

### Suggestions:

Consider undergraduate research

Job Shadow during summer

If pursuing graduate school, prepare for

graduate school entrance exams during

summer after junior year.

Total Credits 15

<sup>\*\*\*</sup>Sequence of courses may be altered with consent of advisor.

# Bachelor of Science, Psychology: 4+3 with open minor leading to DPT: 2022-2023 Catalog Course No. Description Cr. Course No. Description C

Course No.	Description	Cr.
First Year	Fall	
□ LANG 102+	Language elecitive	3
□ PSYC 101	Introduction to Psychology	3
□ HIST xxx	History Elective 100-200 level	3
□ WRIT 102	Research Writing	3
□ CORE 103	Fall Comm. Enrich. Series	0
CHEM 113	Human Chemistry I with lab	4
Total Credits		16

Course No.	Description	Cr.
First Year	Spring	
	PSYC 204, 205, 206,	
□ PSYC	209	3
□ MATH 110	Pre-Calculus or higher	3
□ FTAE 105	Franciscan Goals for Today	3
□ CORE 113	Gen Ed 1 <sup>st</sup> Year Seminar	3
□ CORE 104	Spring Comm. Enrich. Series	0
CHEM 114	Human Chemsitry II with lab	4
Total Credits		16

Second Year	Fall	
□ PSYC	PSYC 204, 205, 206, or 209	3
□ PHIL 205	Discovering Philosophy	3
□ LIT 104, 201, 2 Literature	202, 204, 207, 270	3
□ BIOL 205	Anatomy and Phsyiology I with lab	4
□ PHYS 104	Physics I with lab	4
Total Credits		17

Second Year	Spring	
☐ Fine Arts	FNAR, ART, MUS, THTR	3
□ EXPH 305	Exercise Phsyiology with lab	4
□ BIOL 206	Anatomy and Phsyiology II with lab	4
□ PHYS 105	Physics II with lab	4
□ SOC SCI	Social Science Elective	3
Total Credits		18

Third Year	Fall	
	MATH, STAT, CPSC, ENGR or any nautral science	4
□ PSYC 311	Research Methods and Statistics I	3
	free elective	3
	minor course	3
□ SOC SCI	Social Science Elective II	3
□ EXAM 301	Writing Competency	0
PT 101	Physical Therapy Seminar I	1
Total Credits		17

Fourth Year	Fall	
□ PSYC	PSYC 321, 406, or 420	3
	Minor course	3
□ PSYC	Psychology capstone	3
□FTAE/PHIL	FTAE/PHIL Elective Free Elective	3 1
Total Credits		13

Total Required
Credits: 128

Third Year	Spring	
□ PSYC	PSYC 322 or 323	3
□ PSYC 312	Research Methods and Statistics II	3
□ PSYC	PSYC 304, 317, 406	3
□ PSYC 303	Learning	3
	minor course	3
PT 102	Physical Therapy Seminar 2	1
Total Credits		16

Fourth Year	Spring	
□ PSYC	PSYC 302, 314, or 404	3
	minor course	3
	Free Elective	3
	Free Elective	3
	Free Elective	3
□ EXAM 401	Dept. Comp. Exam	0
Total Credits		15

<sup>\*\*\*</sup>Sequence of courses may be altered with consent of advisor.

### Animal-Assisted Health and Education Minor+Certificate /Certificate (Total = 18 cr.)

Important note: students can enroll into the minor and will receive an automatic certificate upon completion, or opt to complete the program as a certificate only neuroscience concentration. Students & advisors should consult the University Catalog for the requirements of each program.

Course No.	Description	Cr.	Cours e No.	Description	Cr.	Cours e No.	Description	Cr.
First Year	Fall		First Year	Spring		First Year	Summer	
□ PSYC 101	Intro to Psychology (soc sci i)	3	AAHE 201	Introduction to AAHE	3	AAHE 301	The Animal Partner	3
Total Credits		3	Total Credits		3	Total Credit s		3
Second Year	Fall		Second Year	Spring				
□ AAHE 302	The Human Partner	3	AAHE 401	Best Practices in AAHE	3			
Total Credits		3	Total Credits		3			

Third Year	Fall		_
□ AAHE 402	Scientific Assessment of AAHE+Capstone*	3	
			* May be relocated to the summer of the 2nd Year
Total = 3 cr.			

### Course requirements for the O.T./Psychology Double Major:

**Psychology** = 33 total credits

Total University Credits Required: 128 credits minimum.

### Psychology Major Core Requirements (12 credits):

- PSYC 101 Introduction to Psychology
- PSYC 303 Learning
- PSYC 311 Research Methods and Statistics I\*
- PSYC 312 Research Methods and Statistics II\*

### Two of the following lower-level courses (6 credits):

- PSYC 204 Personality
- PSYC 205 Psychopathology
- PSYC 206 Health & Exercise Psychology
- PSYC 209 Developmental Psychology

### Two of the following upper-level courses (6 credits):

- PSYC 304 Social Psychology
- PSYC 317 Memory & Cognition
- PSYC 321 Sport Psychology
- PSYC 406 Clinical & Counseling Psychology
- PSYC 420 Canine Learning and Behavior

### One of the following Diversity courses (3 credits):

- PSYC 322 Psychology of Women and Gender
- PSYC 323 Cultural Psychology

### One of the following Brain and Behavior courses (3 credits):

- PSYC 302 Sensation and Perception
- PSYC 314 Biopsychology
- PSYC 404 Psychopharmacology

### Psychology Capstone (One of the following courses; 3 credits) \*\*:

- PSYC 398/399 Internship (2-15 credits)<sup>3</sup> or OT 403 Master's phase
- PSYC 407 Psychology CORE: Applied Topics in Psychology
- PSYC 487 Independent Study (1-8 credits)<sup>4</sup>

Students must choose a minor, a concentration or a second major like Occupational Therapy

Red font courses are already required for the Occupational Therapy (O.T.) major Only 9 credits extra are required for O.T. majors to double major in Psychology!

• A 2<sup>nd</sup> 300/400-level psychology, a diversity course (PSYC 322 or 323), and PSYC 303 Learning \*\*Students must complete a 3-credit internship (OT 403 serves this purpose) or a 3-credit independent study or PSYC 407 to completely satisfy the degree requirements and EXAM 401.

<sup>&</sup>lt;sup>3</sup> While students may take PSYC 398/399 for variable credits (2-15), only 3 credits may count towards the psychology credit requirement. OT 403 automatically double-counts as the psychology capstone.

<sup>&</sup>lt;sup>4</sup> While students may take PSYC 487 for variable credits (1-8), only 3 credits may count towards the psychology credit requirement.