# **PSYCHOLOGY**

Psychology is the scientific study of behavior and cognitive processes. Psychology is both a natural science, which stresses the cognitive and physiological causes of behavior, and a social science, which is directed at understanding how human behavior is affected by cultural and social factors. As a psychology major at Missouri S&T, you will be exposed to the many diverse areas of psychology.

Perception, memory, thinking, personality, emotion, motivation, stress and adjustment, abnormal behavior, social relations, and group dynamics are among the basic areas of research in psychology. The discipline also represents the application of these basic research areas to people, their work, and their environment. Clinical, counseling, educational, industrial/organizational, and human factors psychologists are among the professionals who apply basic research to the solution of human problems. Our department provides a broad education to Missouri S&T students in both the basic and applied areas of psychology.

The statistics and research methods courses required of our majors prepare you to engage in undergraduate research as early as your sophomore year. By collaborating with a faculty member on a research project, you will gain valuable experience for subsequent graduate studies in psychology and related fields or for employment. Supervised internship experience in applied psychological settings, such as human service agencies, is also available for qualified students.

The department offers a choice of two degrees for majors. The Bachelor of Science degree provides a solid foundation in mathematics, biological sciences, and physical sciences. The bachelor of arts degree provides a broad liberal arts foundation, including courses in western civilization and foreign languages. Supporting courses in the humanities and social sciences are offered in both degrees and the psychology requirements are the same in both. In addition to the traditional B.A.-B.S. degrees in psychology, the department also offers specialized B.A.-B.S. degrees in psychology that prepare the student for secondary education teaching certification in Missouri.

The department of psychological science offers eight minors: a general minor, industrial/organizational, psychology for health care, human factors psychology, psychology of leadership, cognitive neuroscience, psychometrics, and a minor in multiculturalism and diversity. The general psychology minor allows students to select from a variety of courses tailored to their needs. The minor in industrial/organizational psychology requires specific courses of benefit to engineering and science majors. The minor in the psychology of leadership is geared for those individuals who would like to become leaders and managers. The cognitive neuroscience minor is designed to give students a broad understanding of neuroscience principles. The minor in psychometrics helps students better understand the application of statistical methods to the measurement of human characteristics and individual differences. The multicultural and diversity minor allows students to select courses across three of four departments, including psychological science, to increase their awareness of multiculturalism and diversity.

# Bachelor of Arts Psychology

A minimum of 120 credit hours is required for a bachelor of arts degree in psychology and an average of at least two grade points per credit hour must be obtained. The psychology B.A. curriculum requires 6 hours of English Composition, 14 hours of math and science, 12 semester hours

in humanities, 12 semester hours is required in social sciences, 11-16 hours of foreign language and a minimum of 35 hours are required in psychology. Up to 12 credit hours of advanced ROTC may be credited toward the degree. Specific requirements for the bachelor of arts degree are outlined in the sample program listed below.

- ENGLISH 1120 and one additional three hour composition course (6 hours).
- 2. Western civilization (HISTORY 1100 and HISTORY 1200) (6 hours).
- 3. Foreign languages for at least 3 semesters of basic study in French, German, Russian, Spanish or an approved substitute; or one year of basic study in a foreign language in either French, German, Russian, Spanish, or an approved substitute, and a humanities or social sciences course taught in a foreign country and employing the language of that country; or one year of basic study in each of two of the foreign languages of French, German, Russian or Spanish or an approved substitute (11-16 hours).
- 4. Sciences. At least one course taken in biological (biological sciences) and physical (chemistry, geology and geophysics, physics) sciences. A laboratory course is required (and a lab offered in engineering also may count at the discretion of the student's major advisor) toward the total requirement. Stat 1115 is required, and an additional elective in Science or Math (14 hours).
- 5. Humanities and fine arts. Courses used to satisfy this requirement must include one course in each of the three areas of literature (English or American), philosophy, and fine arts (art, music or theater), but not to include studio and performance offerings (12 hours).
- 6. Social Sciences. At least two of the following social science areas are to be included: economics, political science, or history (6 hours).
- 7. Psychology Courses (35 hours)

Required:*		
General Skills Course	s:	
PSYCH 1100	Introduction to Psychology	1
PSYCH 1101	General Psychology	3
PSYCH 2200	Research Methods	4
Content Courses:		
PSYCH 3310	Developmental Psychology	3
PSYCH 4400	Cognitive Psychology	3
PSYCH 4501	Abnormal Psychology	3
PSYCH 4600	Social Psychology	3
And one of the follow	ing 2 courses:	
PSYCH 4410	Neuroscience	3
PSYCH 4411	Sensation and Perception	3
Capstone Course:		
Select three credit ho	urs from the Capstone courses:	
PSYCH 4010	Seminar	0-6
PSYCH 4099	Undergraduate Research	0-6
PSYCH 4590	Health Psychology	3
PSYCH 4992	Cross-Cultural Psychology	3
PSYCH 4993	Psychology of Gender	3
PSYCH 4990	Internship	0-6
*These required cour	ses total 26 hours.	
Elective Courses:		
Select an additional 9	hours of psychology electives to complete the 35 hour	

aegree requirement.

Major-field requirements: A cumulative grade point average of 2.0 must be earned in all course work taken in the major field. Upperclass (3000-4000-level) courses completed with grades of "D" may not be included in the course work for the major field without the approval of the chair of the department. At least nine hours of upperclass work in the major field must be completed in residence at Missouri S&T.

- 9. Minor: A minor will be selected from any discipline other than the major with the approval of the student's advisor. A total of at least 15 hours is required for the minor, but may include courses which also satisfy other requirements. At least nine hours must be beyond the introductory level. A cumulative grade point average of 2.0 must be earned in all course work required in the minor field. At least six hours of work in the minor field must be completed in residence at Missouri S&T
- 10. Basic ROTC may be elected in the freshman and sophomore years, but is not creditable toward a degree. Up to 12 credit hours of advanced ROTC may be credited toward a degree.
- Elective Credits: In consultation with his/her advisor, each student will elect sufficient additional courses to complete a minimum of 120 credit hours.

# **Emphasis Areas**

Note: The following areas identify courses from which a student may opt to develop an emphasis area. It is not required that students obtain an emphasis specialty within psychology. At least one class for each emphasis area is already required for all majors, so the remaining three may be taken as the additional 9 hours of required psychology electives. In this way, getting an emphasis requires no additional courses, just less flexibility in which courses you take.

# Industrial/Organizational Psychology

PSYCH 4600	Social Psychology	3
PSYCH 4700	Industrial Psychology	3
PSYCH 4602	Organizational Psychology	3
And 1 of the following 3	3:	
PSYCH 4601	Group Dynamics	3
PSYCH 4610	Psychology of Leadership in Organizations	3
PSYCH 4500	Personality Theory	3
Health Psychology		
PSYCH 4501	Abnormal Psychology	3
And 3 of the following	4:	
PSYCH 4510	Clinical Psychology	3
PSYCH 4990	Internship	0-6
PSYCH 4590	Health Psychology	3
PSYCH 3501	Drugs and Behavior	3
<b>Cognition and Neurosc</b>	ience	
PSYCH 4400	Cognitive Psychology	3
And 3 of the following	4:	
PSYCH 4411	Sensation and Perception	3
PSYCH 3400	Theories Of Learning	3
PSYCH 4410	Neuroscience	3
PSYCH 3501	Drugs and Behavior	3
Human Factors		
PSYCH 4400	Cognitive Psychology	3
PSYCH 4710	Human Factors	3
PSYCH 4720	Psychology of Social Technology	3
And 1 of the following 3	3:	
PSYCH 4411	Sensation and Perception	3
PSYCH 4700	Industrial Psychology	3
PSYCH 4602	Organizational Psychology	3
Diversity and Inclusion		
PSYCH 4600	Social Psychology	3

#### And 3 of the following 4:

PSYCH 4993	Psychology of Gender	3
PSYCH 4500	Personality Theory	3
PSYCH 4992	Cross-Cultural Psychology	3
PSYCH 4310	Psychology Of The Exceptional Child	3

# Bachelor of Arts Psychology (Secondary Education Emphasis Area)

You may earn a B.A. degree in psychology from Missouri S&T and certification to teach at the secondary level in the schools of Missouri with the secondary education emphasis area program.

In addition to maintaining a 3.0 content and professional requirement GPA, students must pass the appropriate content assessment to be eligible for student teaching. Missouri S&T allows students to choose their student teaching placement, if the district agrees and a qualified cooperating teacher is available. This program is approved by the Missouri Department of Elementary and Secondary Education for initial teacher certification. Students intending to teach in other states are responsible for investigating the reciprocity agreement of that state agency.

A degree with this emphasis area requires 121 credit hours. The required courses are provided below.

#### Communications Skills: 6 semester hours

ENGLISH 1120	Exposition And Argumentation	3
ENGLISH 1160	Writing And Research	3
Humanities: 12 semest	er hours	
Art, Music, or Theatre c	ourse	3
Philosophy course		3
Literature course		3
One additional humanit Etymology	ies from the above course groups, Foreign Language, or	3
Social Sciences: 21 ser	nester hours	
HISTORY 1300	American History To 1877	3
HISTORY 1310	American History Since 1877	3
POL SCI 1200	American Government	3
POL SCI 3211	American Political Parties	3
or POL SCI 3300	Principles Of Public Policy	
or POL SCI 3760	The American Presidency	
or POL SCI 3763	Contemporary Political Thought	
PSYCH 1101	General Psychology	3
ECON 1100	Principles Of Microeconomics	3
or ECON 1200	Principles Of Macroeconomics	
Geography		3
Natural Science/Mathe	matics: 12 semester hours	
One course in Physics,	Chemistry or Geology	3
Mathematics 1120, 110	03, 1140+	3
STAT 1115	Statistics For The Social Sciences I	3
BIO SCI 1113	General Biology	3
Professional Requirem	ents: 23 semester hours	
EDUC 1040	Perspectives In Education	2
EDUC 1174	School Organization and Administration For Teachers	2
EDUC 2251	Historical Foundation Of American Education	3
EDUC 3216	Instructional Literacy in the Content Area	3
EDUC 3280	Instructional Strategies in the Content Area	3
EDUC 4298	Student Teaching Seminar	1
PSYCH 2300	Educational Psychology	3
PSYCH 3311	Psychological & Educational Development Of The Adolescent	3
PSYCH 4310	Psychology Of The Exceptional Child	3
Clinical Experience: 15	semester hours	

EDUC 1104	Teacher Field Experience I	1
EDUC 1164	Teacher Field Experience II	2
EDUC 4299	Student Teaching	12
Psychology Degree Re	equirements: 17 semester hours	
PSYCH 1100	Introduction to Psychology	1
PSYCH 2200	Research Methods	4
PSYCH 3310	Developmental Psychology	3
PSYCH 4400	Cognitive Psychology	3
PSYCH 4501	Abnormal Psychology	3
PSYCH 4600	Social Psychology	3
Certification: 15 seme	ester hours	
6 hours of American H	listory from the following:	
HISTORY 3320	Colonial America	
HISTORY 3325	Revolutionary America, 1754-1789	
HISTORY 3340	Age Of Jefferson And Jackson	
HISTORY 3345	Civil War And Reconstruction	
HISTORY 3360	Recent United States History	
HISTORY 3425	History Of The Old South	
HISTORY 3426	History Of The Modern South	
HISTORY 3480	History Of Baseball	
HISTORY 3440	Grunts: 20th Century Americans In Combat	
HISTORY 3442	The United States in Vietnam	
HISTORY 3761	U.S. Diplomatic History to World War II	
HISTORY 4435	History of the American West	
9 hours of World Histo	ory from the following:	
HISTORY 1100	Early Western Civilization	
HISTORY 1200	Modern Western Civilization	
HISTORY 2220	Making Of Modern Britain	
HISTORY 2222	The Making Of Modern France	
HISTORY 2224	Making Of Modern Russia	
HISTORY 3130	Medieval History I	
HISTORY 3135	Medieval History II	
HISTORY 3140	History Of Renaissance Thought	
HISTORY 3230	Europe In The Age Of The French Revolution And Napoleon	
HISTORY 3235	Foundations Of Contemporary Europe 1815-1914	
HISTORY 3240	Contemporary Europe	
HISTORY 3660	Modern East Asia	

# **Bachelor of Science Psychology**

A minimum of 120 credit hours is required for a bachelor of science degree in psychology and a cumulative grade point average of 2.0 must be obtained. These requirements for the B.S. degree are in addition to credit received for basic ROTC.

The psychology bachelor of science curriculum requires six hours of English composition; twenty hours of math, science and computer science; twelve semester hours in the humanities; and twelve semester hours in the social sciences. Specific requirements for the bachelor degree are outlined in the sample program listed below.

- 1. ENGLISH 1120 and ENGLISH 1160 (entering students will normally take ENGLISH 1120 either semester of the first year.) (6 hours)
- 2. A total of 20 hours in biological, physical, (chemistry, geology and geophysics, and physics), and mathematical (mathematics/statistics and computer science or information science & technology) sciences, to include at least one course taken in the biological and one in the physical sciences. Of the biological and physical science offerings, at least one must be a laboratory course. Stat 1115 is required. Engineering courses may, at the discretion of the student's major advisor, also count toward this total requirement. (20 hours)

- 3. 12 hours in humanities and fine arts (literature, philosophy, art, music, or theater). Foreign language courses may count toward fulfilling this requirement. Courses used to satisfy this requirement must be taken in at least two humanities areas. (12 hours)
- 4. 12 hours in at least two social sciences fields outside the major area (economics or history or political science). A course in Modern Western Civilization (HISTORY 1200), American History To 1877 (HISTORY 1300) or American History Since 1877 (HISTORY 1310), or American Government (POL SCI 1200) must be taken to satisfy the requirement of the state of Missouri (the "Williams Law"), and this course may count toward fulfilling the social sciences requirement. (12 hours)
- 5. Minor. A minor will be selected from any discipline other than the major with the approval of the student's advisor. A total of at least 15 hours is required for the minor, but may include courses which also satisfy other requirements. At least nine hours must be beyond the introductory level.
- 6. Basic ROTC may be elected in the freshman and sophomore years, but is not creditable toward a degree. Six credit hours of advanced ROTC may be credited toward a degree.
- 7. Elective Credits: In consultation with his/her advisor, each student will elect sufficient additional courses to complete a minimum of 120 credit hours which may include MATH 1160 and one of MATH 1120 or MATH 1140.
- 8. Psychology Courses (35 hours)

Required:*		
General Skills Cours	es:	
PSYCH 1100	Introduction to Psychology	1
PSYCH 1101	General Psychology	3
PSYCH 2200	Research Methods	4
Content Courses:		
PSYCH 3310	Developmental Psychology	3
PSYCH 4400	Cognitive Psychology	3
PSYCH 4501	Abnormal Psychology	3
PSYCH 4600	Social Psychology	3
And one of the follow	wing 2 courses:	
PSYCH 4410	Neuroscience	3
PSYCH 4411	Sensation and Perception	3
Capstone Course:		
Select three credit h	ours from the following Capstone courses:	
PSYCH 4010	Seminar	0-6
PSYCH 4099	Undergraduate Research	0-6
PSYCH 4590	Health Psychology	3
PSYCH 4992	Cross-Cultural Psychology	3
PSYCH 4993	Psychology of Gender	3
PSYCH 4990	Internship	0-6
*These required cou	rses total 26 hours.	
Elective Courses:		
Select an additional	9 hours of psychology electives to complete the 35 hour	

9. A cumulative grade point average of 2.0 must be earned in all course work taken in the major field. Upper class (3000-level and above) courses completed with grades of "D" may not be included in the course work for the major field without the approval of the advisor and the chair of the department concerned.

# **Emphasis Areas**

degree requirement.

Note: The following areas identify courses from which a student may opt to develop an emphasis area. It is not required that students obtain an emphasis specialty within psychology. At least one class for each

emphasis area is already required for all majors, so the remaining three may be taken as the additional 9 hours of required psychology electives. In this way, getting an emphasis requires no additional courses, just less flexibility in which courses you take.

Industrial/Organization	al Psychology	
PSYCH 4600	Social Psychology	3
PSYCH 4700	Industrial Psychology	3
PSYCH 4602	Organizational Psychology	3
And 1 of the following 3	3:	
PSYCH 4601	Group Dynamics	3
PSYCH 4500	Personality Theory	3
PSYCH 4610	Psychology of Leadership in Organizations	3
Health Psychology		
PSYCH 4501	Abnormal Psychology	3
And 3 of the following	4:	
PSYCH 4510	Clinical Psychology	3
PSYCH 3501	Drugs and Behavior	3
PSYCH 4590	Health Psychology	3
PSYCH 4990	Internship	0-6
<b>Cognition and Neurosc</b>	ience	
PSYCH 4400	Cognitive Psychology	3
PSYCH 4410	Neuroscience	3
PSYCH 4411	Sensation and Perception	3
And 1 of the following 2	2:	
PSYCH 3400	Theories Of Learning	3
PSYCH 3501	Drugs and Behavior	3
<b>Human Factors</b>		
PSYCH 4400	Cognitive Psychology	3
PSYCH 4710	Human Factors	3
PSYCH 4720	Psychology of Social Technology	3
And 1 of the following 3	3:	
PSYCH 4700	Industrial Psychology	3
PSYCH 4602	Organizational Psychology	3
PSYCH 4411	Sensation and Perception	3
Diversity and Inclusion		
PSYCH 4600	Social Psychology	3
And 3 of the following	4:	
PSYCH 4993	Psychology of Gender	3
PSYCH 4992	Cross-Cultural Psychology	3
PSYCH 4310	Psychology Of The Exceptional Child	3
PSYCH 4500	Personality Theory	3

# Bachelor of Science Psychology (Secondary Education Emphasis Area)

You may earn a B.S. degree in psychology from Missouri S&T and certification to teach at the secondary level in the schools of Missouri with the secondary education emphasis area program.

In addition to maintaining a 3.0 content and professional requirement GPA, students must pass the appropriate content assessment to be eligible for student teaching. Missouri S&T allows students to choose their student teaching placement, if the district agrees and a qualified cooperating teacher is available. This program is approved by the Missouri Department of Elementary and Secondary Education for initial teacher certification. Students intending to teach in other states are responsible for investigating the reciprocity agreement of that state agency.

A degree with this emphasis area requires 121 credit hours. The required courses are provided below.

Communications Skills:	3 semester hours	
ENGLISH 1120	Exposition And Argumentation	3
Humanities: 12 semeste		
Art, Music, or Theatre co	purse	3
Philosophy course		3
Literature course		3
	es from the above course groups, Foreign Language, or	3-4
Etymology Social Sciences: 21 sem	nector hours	
HISTORY 1300	American History To 1877	3
HISTORY 1310	American History Since 1877	3
POL SCI 1200	American Government	3
POL SCI 3211	American Political Parties	3
or POL SCI 3300	Principles Of Public Policy	_
or POL SCI 3760	The American Presidency	
or POL SCI 3763	Contemporary Political Thought	
PSYCH 1101	General Psychology	3
ECON 1100	Principles Of Microeconomics	3
or ECON 1200	Principles Of Macroeconomics	
HISTORY 2110	World Regional Geography	3
Natural Sciences/Mathe	ematics: 15 semester hours	
One course in Physics, (	Chemistry or Geology	3
Mathematics 1120, 113	0, 1140+	3
BIO SCI 1113	General Biology	3
STAT 1115	Statistics For The Social Sciences I	3
3 additional hours of Ma	ath &/or Science courses	3
Professional Requireme	nts: 23 semester hours	
EDUC 1040	Perspectives In Education	2
EDUC 1174	School Organization and Administration For Teachers	2
EDUC 2251	Historical Foundation Of American Education	3
EDUC 3216	Instructional Literacy in the Content Area	3
EDUC 3280	Instructional Strategies in the Content Area	3
EDUC 4298	Student Teaching Seminar	1
PSYCH 2300	Educational Psychology	3
PSYCH 3311	Psychological & Educational Development Of The Adolescent	3
PSYCH 4310	Psychology Of The Exceptional Child	3
Clinical Experience: 15		
EDUC 1104	Teacher Field Experience I	1
EDUC 1164	Teacher Field Experience II	2
EDUC 4299	Student Teaching	12
PSYCH 1100	uirements: 17 semester hours	1
PSYCH 1100 PSYCH 2200	Introduction to Psychology Research Methods	4
PSYCH 2200 PSYCH 3310	Developmental Psychology	3
PSYCH 4400	Cognitive Psychology	3
PSYCH 4501	Abnormal Psychology	3
PSYCH 4600	Social Psychology	3
Certification: 15 semest		Ü
6 hours of American His		
HISTORY 3320	Colonial America	
HISTORY 3325	Revolutionary America, 1754-1789	
HISTORY 3340	Age Of Jefferson And Jackson	
HISTORY 3345	Civil War And Reconstruction	
HISTORY 3360	Recent United States History	
HISTORY 3425	History Of The Old South	
HISTORY 3426	History Of The Modern South	
HISTORY 3480	History Of Baseball	
HISTORY 3440	Grunts: 20th Century Americans In Combat	
HISTORY 3442	The United States in Vietnam	
HISTORY 3761	U.S. Diplomatic History to World War II	
HISTORY 4435	History of the American West	
9 hours of World History	from the following:	

9 hours of World History from the following:

HISTORY 1100	Early Western Civilization
HISTORY 1200	Modern Western Civilization
HISTORY 2220	Making Of Modern Britain
HISTORY 2222	The Making Of Modern France
HISTORY 2224	Making Of Modern Russia
HISTORY 3130	Medieval History I
HISTORY 3135	Medieval History II
HISTORY 3140	History Of Renaissance Thought
HISTORY 3230	Europe In The Age Of The French Revolution And Napoleon
HISTORY 3235	Foundations Of Contemporary Europe 1815-1914
HISTORY 3240	Contemporary Europe
HISTORY 3660	Modern East Asia

The department of psychological science offers eight minors: a general minor, industrial/organizational, psychology for health care, human factors psychology, psychology of leadership, cognitive neuroscience, psychometrics, and a minor in multiculturalism and diversity. Nine (9) hours of work in any of these minors in psychology must be completed in residence at Missouri S&T. A student may only receive one of the eight minors.

# **Psychology Minor**

General psychology minor requires 15 hours of courses in psychology. At least nine of these hours must be at the 3000-level or above.

# **Human Factors Psychology Minor**

PSYCH 1101	General Psychology	3
PSYCH 4710/	Human Factors	3
ENG MGT 4330		
PSYCH 4400	Cognitive Psychology	3
And two of the followin	g courses:	
PSYCH 4411	Sensation and Perception	3
PSYCH 4720	Psychology of Social Technology	3
PSYCH 4700	Industrial Psychology	3

# **Industrial/Organizational Psychology Minor**

Requirements include:

PSYCH 1101	General Psychology	3
PSYCH 4700	Industrial Psychology	3
PSYCH 4602	Organizational Psychology	3
and 2 of the following		
PSYCH 4600	Social Psychology	3
PSYCH 4500	Personality Theory	3
PSYCH 4601	Group Dynamics	3
PSYCH 4610	Psychology of Leadership in Organizations	3

# **Psychology for Health Care Minor**

Minor requires a minimum of 15 hours.

Required Courses:			
PSYCH 1101	General Psychology	3	
PSYCH 4590	Health Psychology	3	
Choose 3 of the Followi	ing Courses:		
PSYCH 4410	Neuroscience	3	
PSYCH 4501	Abnormal Psychology	3	
PSYCH 3501	Drugs and Behavior	3	
PSYCH 4510	Clinical Psychology	3	
PSYCH 4990	Internship	0-6	

# **Psychology of Leadership**

Requirements include the following:

PSYCH 1101	General Psychology	3
PSYCH 4610	Psychology of Leadership in Organizations	3
and 3 of the following 5	courses are required:	
PSYCH 4600	Social Psychology	3
PSYCH 4601	Group Dynamics	3
PSYCH 4602	Organizational Psychology	3
PSYCH 4992	Cross-Cultural Psychology	3
PSYCH 4993	Psychology of Gender	3

# **Cognitive Neuroscience Minor**

Requirements include:

PSYCH 1101	General Psychology	3		
PSYCH 4400	Cognitive Psychology	3		
PSYCH 4410	Neuroscience	3		
and two of the following courses:				
PSYCH 4411	Sensation and Perception	3		
PSYCH 4501	Abnormal Psychology	3		
PSYCH 3501	Drugs and Behavior	3		

# **Multiculturalism & Diversity Minor**

The Multiculturalism and Diversity Minor prepares students to function more effectively in a global society as well as enhances Missouri S&T graduates' employment options by providing knowledge, skills, and strategies for appreciating and understanding diverse cultural practices.

The minor requires 15 hours in a minimum of 3 of 4 humanities and social sciences (HSS) departments: the departments of arts, languages and philosophy; English and technical communication; history and political science; and psychological science. The academic home for this minor will be the arts, languages and philosophy department. Courses offered by these departments that can be included in the minor are listed below.

# Arts, Languages & Philosophy:

Arts, Languages & Philosophy:					
	e at the third semester or above in a foreign language (German, Russian) *				
	PHILOS 4340	From Activism to Zoos: Issues in Social Ethics			
	RUSSIAN 4360	Russian Civilization			
	SP&M S 3235	Intercultural Communication			
En	English and Technical Communication:				
	ENGLISH 1231	World Literature I: From The Beginnings To The Renaissance			
	ENGLISH 2242	Literature By Women			
	ENGLISH 2245	African American Literature			
	ENGLISH 3228	The American Experience			
History and Political Science:					
	HISTORY 3280	European Migrations and Nationalism Formation			
	HISTORY 3660	Modern East Asia			
	HISTORY 3665	History of Japan			
	POL SCI 2500	International Relations			
	POL SCI 4510	The Politics of the Global South			
Psychology:					
	PSYCH 4993	Psychology of Gender			
	PSYCH 4992	Cross-Cultural Psychology			
* Language Courses at the 3rd Semester or above that qualify for the minor.					
	FRENCH 1180	Intermediate French			
	FRENCH 2110	Basic French Conversation			
	FRENCH 2170	Masterpieces Of French Literature			
	FRENCH 2180	Basic French Composition			
	FRENCH 4311	Advanced French Conversation			
	FRENCH 4320	French and Francophone Cinema			
	FRENCH 4360	French Culture And Civilization			
	FRENCH 4370	Survey Of French Literature I (Early Period)			

Survey Of French Literature II (Modern Period)

	GERMAN 1180	Classical And Modern German Readings
	GERMAN 2110	Basic German Conversation
	GERMAN 2170	Masterpieces Of German Literature
	RUSSIAN 1180	Readings In Science And Literature
	RUSSIAN 2110	Basic Russian Conversation
	RUSSIAN 2170	Masterpieces Of Russian Literature
	RUSSIAN 4320	Russian Phonetics and Intonation
	RUSSIAN 4330	Business Russian
	RUSSIAN 4360	Russian Civilization
	RUSSIAN 4370	Survey Of Russian Literature I (Early Period)
	RUSSIAN 4375	Survey Of Russian Literature II(Modern Period)
	SPANISH 1180	Intermediate Spanish
	SPANISH 2110	Basic Spanish Conversation
	SPANISH 2160	Hispanic Culture
	SPANISH 2170	Masterpieces Of Hispanic Literature
	SPANISH 2180	Intermediate Spanish Composition
	SPANISH 4311	Advanced Spanish Conversation
	SPANISH 4377	Spanish-American Novel And Short Story
	SPANISH 4302	Phonetics and Phonology of Spanish

**Denise Baker**, Assistant Professor PHD Arizona State University

**Amy Belfi**, Assistant Professor PHD Univeristy of Iowa

**Devin Burns**, Associate Professor PHD Indiana University

**Jessica L. Cundiff**, Associate Professor PHD Pennsylvania State University

Amber M Henslee, Associate Professor PHD Auburn University Main Campus

**Merilee A. Krueger**, Teaching Professor EdD University of Missouri

**Clair Kueny**, Associate Professor and Interim Chair PHD Saint Louis University

**Robert Lew Montgomery**, Emeritus Professor PHD Oklahoma State University Main

**Frances H Montgomery**, Emeritus Professor PHD Florida State University

**Susan L Murray**, Professor and Chair<sup>1</sup> PHD Texas A&M University

Vahe Permzadian, Assistant Professor PHD University at Albany, State University of New York

**Daniel Shank**, Associate Professor PHD University of Georgia

**Ting Shen**, Assistant Professor PHD Michigan State University

Nancy J Stone, Professor Emerita PHD Texas Tech University

#### PSYCH 1100 Introduction to Psychology (LEC 1.0)

An introduction to the study of psychology at S&T. Students will learn about personal and professional opportunities associated with the different areas of psychology and become acquainted with the psychology faculty and campus facilities.

## PSYCH 1101 General Psychology (LEC 3.0)

An introduction to the science of the human mind and behavior. Topics include brain structure and function, human development, learning and memory, motivation, emotion, personality and psychological health, psychological disorders and their treatment, and social cognition and human relationships.

PSYCH 1101 - MOTR PSYC 100: General Psychology

#### PSYCH 2000 Special Problems (IND 0.0-6.0)

Problems or readings on specific subjects or projects in the department. Consent of instructor required.

## PSYCH 2001 Special Topics (LAB 0.0 and LEC 0.0)

This course is designed to give the department an opportunity to test a new course. Variable title.

# PSYCH 2200 Research Methods (LAB 1.0 and LEC 3.0)

An introduction to the content, models and methodologies of psychological research. This course covers the fundamental components of psychological research including the literature review, correlational and descriptive methods, experimental design, statistical analyses, interpretation, and ethics. Prerequisites: Psych 1101; Stat 1115, Stat 3113, or Stat 3115. Stat 1115 preferred.

## PSYCH 2300 Educational Psychology (LEC 3.0)

Principles of psychology relevant to the field of education. Course covers theoretical and applied information on such topics as human growth and development, and cognitive and behavioral views of learning and intelligence. The course also covers motivation, creation of learning environments, measurement and evaluation of learning. Prerequisite: Psych 1101. Must be a psychology major, or in the teacher education program. (Co-listed with Educ 2102).

# PSYCH 3000 Special Problems In Psychology (IND 0.0-6.0)

Problems or readings on specific subjects or projects in the department. Consent of instructor required.

# PSYCH 3001 Special Topics (LEC 0.0-6.0)

This course is designed to give the department an opportunity to test a new course. Variable title.

# PSYCH 3310 Developmental Psychology (LEC 3.0)

A study of human growth and development across the lifespan. The course emphasizes the interaction of physical, psychological, and social changes and their resulting impact on the developing person at all stages in life. Prerequisite: Psych 1101.

PSYCH 3310 - MOTR PSYC 200: Lifespan Human Development

# **PSYCH 3311 Psychological & Educational Development Of The Adolescent** (LEC 3.0)

An examination of the biological, social, and cognitive transitions that occur during adolescence. Other topics include the role of families, the role of peers, the adolescent identity, sexuality, the impact of schools, the role of achievement, how adolescents spend their time (work, leisure), the role of the media, and problems encountered by the adolescent. Prerequisite: Psych 1101.

## PSYCH 3400 Theories Of Learning (LEC 3.0)

An examination of basic learning processes and the behavioral phenomena that arise from them. Topics include non-associative learning, classical conditioning, operant conditioning, and vicarious learning. Prerequisite: Psych 1101.

# PSYCH 3501 Drugs and Behavior (LEC 3.0)

An introduction to the behavioral effects of drugs. A broad range of topics are covered including the 1) History of therapeutic and recreational drug use and abuse 2) Consequences of drug abuse and addiction 3) Behavioral, psychological, and physiological effects of drugs 4) Research methods used to study drugs 5) Effective treatments for drug problems. Prerequisites: Psych 1101.

**PSYCH 4000 Special Problems And Readings In Psychology** (IND 0.0-6.0) Problems or readings on specific subjects or projects in the department. Consent of instructor required.

## PSYCH 4001 Special Topics (LEC 0.0-6.0)

This course is designed to give the department an opportunity to test a new course. Variable title.

# **PSYCH 4010 Seminar (RSD 0.0-6.0)**

Prerequisite: Senior Standing.

# PSYCH 4099 Undergraduate Research (IND 0.0-6.0)

Designed for the undergraduate student who wishes to engage in research. Not for graduate credit. Not more than six credit hours allowed for graduation credit. Subject and credit to be arranged with the instructor. Prerequisite: Instructor consent.

# PSYCH 4200 Tests and Measurements (LEC 3.0)

Theoretical and statistical basis of psychological testing and measurement; test development and validation; examination of standardized tests of intelligence, aptitude, interest, personality, attitudes, and psychopathology; use of test and test batteries for diagnostics and prediction of criteria. Prerequisite: Psych 1101.

## PSYCH 4310 Psychology Of The Exceptional Child (LEC 3.0)

Study of the psychology of children on both ends of the educational spectrum. The course presents the fundamentals of providing services as well as understanding the abilities and disabilities of children classified as exceptional. Includes coverage of various disabilities, and the implications of dealing with personal, family and classroom issues. Prerequisite: Psych 1101.

#### PSYCH 4340 Assessment of Student Learning (LEC 3.0)

Students will learn to evaluate assessments for validity and reliability. Students will develop formative and summative assessments aligned with learning outcomes. Writing quality rubrics and universal design will be introduced. Students will analyze data to make instructional decisions and learn to evaluate vendor assessments. Prerequisites: Educ 1040. (Colisted with Educ 3340).

#### PSYCH 4400 Cognitive Psychology (LEC 3.0)

This course covers basic cognitive processes and their application. Theory and research are presented on attention, perception, memory, problem solving, decision making and language. Prerequisite: Psych 1101.

#### PSYCH 4410 Neuroscience (LEC 3.0)

The neurophysiological bases of behavior and cognition are examined. Topics covered include neuroanatomy, neurotransmission, neuropharmacology, brain systems, learning and memory, emotion, attention and consciousness, and neurologic/psychological disorders. Prerequisite: Psych 1101.

## PSYCH 4411 Sensation and Perception (LEC 3.0)

An in-depth examination of the human senses, with special emphasis on vision and hearing. Topics include the anatomy and physiology of the eye and ear, neural transduction, the organization and interpretation of sensory signals by the brain, selective attention, and the neural basis of the perception of color, form, space, depth, motion, music, and language. Prerequisite: Psych 1101.

# PSYCH 4500 Personality Theory (LEC 3.0)

An examination of the ways in which personality traits develop and the sources of differences among people in the traits they exhibit. The emphasis is on major theories of personality development, as well as recent research in the field. Prerequisite: Psych 1101.

# PSYCH 4501 Abnormal Psychology (LEC 3.0)

An introductory study of various forms of personality and behavioral disorders. Consideration will be given to neurosis, psychosis, mental deficiency and other deviations, with emphasis on etiology and treatment. Prerequisite: Psych 1101.

#### PSYCH 4510 Clinical Psychology (LEC 3.0)

Comprehensive survey of the field of clinical psychology. Course will cover a variety of assessment and treatment procedures relevant to psychology and other professionals who treat human adjustment problems; techniques based on experimental outcome research and psychological testing will be emphasized. Prerequisites: Psych 1101 and Psych 4501.

## PSYCH 4590 Health Psychology (LEC 3.0)

This course examines Health Psychology. Topics include basic behavioral pharmacology (involving alcohol and other drugs), illusions of invulnerability to risk, stress and coping, and the science of persuading people to protect their health. Students learn how to construct a public service announcement towards a societal problem as part of the course. Prerequisite: Psych 1101.

# PSYCH 4600 Social Psychology (LEC 3.0)

An exploration of the phenomena involved in human social behavior and the theories that explain them. Topics typically include social thinking, attitudes and attitude change, conformity, persuasion, interpersonal attraction, and more. Prerequisite: Psych 1101.

## PSYCH 4601 Group Dynamics (LEC 3.0)

A review of the concepts and theories related to group dynamics. Topics include group goals, communication within groups, group structure, norms, leadership, decision making, controversy, conflict resolution, power, diversity issues, and team development. Prerequisite: Psych 1101.

## PSYCH 4602 Organizational Psychology (LEC 3.0)

Analysis, comprehension, and prediction of human behavior in organizational settings through the scientific study of individual processes, group processes, and organizational structure and function. Prerequisite: Psych 1101.

## **PSYCH 4603 Social Influence: Science and Practice (LEC 3.0)**

Principles and procedures that affect the process of social influence, with consideration given to attitudinal, compliance inducing, and perceptual influences. Prerequisite: Psych 1101.

# PSYCH 4610 Psychology of Leadership in Organizations (LEC 3.0)

Examination of conceptual and empirical research on determinants of effective vs. ineffective leadership. Topics include leadership measurement, traits, skills, leader-member exchange, charismatic and transformational leadership, change management, team leadership, and ethical leadership. Practical guidelines for developing leadership skills are discussed. Prerequisite: Psych 1101.

# PSYCH 4700 Industrial Psychology (LEC 3.0)

An overview of the field of industrial psychology including topics such as criterion development, job analysis, selection, training, performance assessment, and some human factors concerns. Prerequisite: Psych 1101.

#### PSYCH 4710 Human Factors (LEC 3.0)

An examination of human-machine systems and the characteristics of people that affect system performance. Topics include applied research methods, systems analysis, and the perceptual, cognitive, physical and social strengths and limitations of human beings. The focus is on user-centered design of technology, particularly in manufacturing environments. Prerequisite: Psych 1101. (Co-listed with Eng Mgt 4330).

# PSYCH 4720 Psychology of Social Technology (LEC 3.0)

This course covers research, theory, and practice from psychology and other social science disciplines for understanding the use of, interactions with, and interactions through computers and other technology. This course introduces students to the psychological and social issues involving personal, work, and societal use of technology. Prerequisite: Psych 1101.

## PSYCH 4730 Environmental Psychology (LEC 3.0)

An examination of the psychological effects of various environmental designs and ways to design environments effectively. Topics include: environmental attitudes, perception, and cognition; environmental influences, crowding, and the application of environmental design principles to living, educational, work, and recreational settings. Prerequisite: Psych 1101.

#### **PSYCH 4990 Internship** (IND 0.0-6.0)

Internship will involve students applying critical thinking skills and discipline specific knowledge in a work setting based on a project designed by the advisor and employee. Activities will vary depending on the student's background and the setting. Prerequisite: Junior or Senior Psychology major; consent of instructor; must have completed 9 hours in major.

#### PSYCH 4992 Cross-Cultural Psychology (LEC 3.0)

Study of the impact of ethnic and national culture on psychological processes and behaviors. Topics include the effects of individualism and collectivism on patterns of socialization, personality, motivation, emotion and cognition; cultural differences in diagnosis and treatment of mental and physical health; and group and organizational behavior. Prerequisite: Psych 1101.

## PSYCH 4993 Psychology of Gender (LEC 3.0)

Overview of current research and theory on the psychology of gender. The course explores gender as a psychological and social construct that influences women's and men's lives across a variety of contexts including work, family, relationships, self-perceptions, and health. Considers how gender intersects with other social categories to shape experience. Prerequisite: Psych 1101.

# PSYCH 4995 Rationality (LEC 3.0)

This course will discuss the various ways our natural thinking style can lead us to make reasoning errors and how we can try to do better. Our focus will be on using results from Cognitive Psychology to improve our everyday lives, doing various hands-on projects throughout the semester.

# PSYCH 5000 Special Problems (IND 0.0-6.0)

Problems or readings on specific subjects or projects in the department. Consent of instructor required.

# PSYCH 5001 Special Topics (LEC 0.0-6.0)

This course is designed to give the department an opportunity to test a new graduate level course. Variable title.

**PSYCH 5010 Seminar for Industrial / Organizational Psychology** (RSD 3.0) A seminar course for general overviews of the most recent research in Industrial-Organizational Psychology. Prerequisite: Graduate standing.

# PSYCH 5012 Ethics and Professional Responsibilities (LEC 1.0)

Case studies examining the ethical practice of psychology in organizations will be discussed. This will include covering both the legal and ethical standards surrounding the consulting and practice of I-O psychology and personnel management in organizations. Prerequisite: Graduate standing.

# PSYCH 5020 Introduction to Industrial-Organizational Psychology (LEC 3.0)

Review of the most recent theoretical and applied research in advanced personnel and organizational psychology. Topics will include personnel selection, training and performance appraisal, job attitudes, motivation, work groups and teams, leadership, organizational culture, and organizational development. Prerequisites: Graduate Standing.

## PSYCH 5040 Oral Examination (IND 0.0)

(Variable) After completion of all other program requirements, oral examinations for on-campus M.S./PH.D students may be processed during intersession. Off-campus M.S. students must be enrolled in oral examination and must have paid an oral examination fee at the time of the defense/comprehensive examination (oral/written). All other students must enroll for credit commensurate with uses made of facilities and/or faculties. In no case shall this be for less than three (3) semester hours for resident students.

#### PSYCH 5200 Theories and Practice of Psychological Measurement (LEC 3.0)

An overview of psychological tests and batteries used in a variety of disciplines. An emphasis is placed on the proper development and use of these tests and test batteries. Tests examined will include tests of intelligence, aptitude, personality, and psychopathology. Prerequisite: Psych 4200 or graduate standing.

## PSYCH 5201 Psychometrics (LEC 3.0)

An examination of statistical methods used to develop and refine measures of human performance, aptitudes, and personality. Topics include reliability and validity, data reduction, measuring interrelationships among variables (e.g., factor analysis, multiple regression), and testing group differences. Prerequisite: Psych 5202.

# PSYCH 5202 Applied Psychological Data Analysis (LEC 3.0)

This course will focus on those statistical methods most useful for advanced research in psychology. We will learn to use R, a powerful, open-source statistical programming platform, and work through examples with psychological data sets including such techniques as correlation, ANOVAs, regression, and chi-squared. Prerequisite: Graduate standing.

## PSYCH 5210 Advanced Research Methods (LEC 3.0)

Research methods and techniques, with an emphasis on conducting psychological research in organizational settings. Topics discussed include: ethics, reliability and validity in measurement and application, proper uses of experimental, quasi-experimental, and survey methodologies, as well as advanced methodologies IRT, SEM, HLM, and Meta-Analyses. Prerequisite: Graduate standing.

# PSYCH 5600 Advanced Social Psychology (LEC 3.0)

An advanced study of the behavior of individuals in interaction within groups. Consideration will also be given to the experimental literature dealing with the formal properties of groups, conformity and deviation, intergroup relations, and attitude formation and attitude change. Prerequisite: Psych 4600 or graduate standing.

# PSYCH 5601 Small Group Dynamics (LEC 3.0)

This course covers group perception, identification, leadership, structure, conflict, cohesion, commitment, performance, norms, roles, influence, and decisions, and groups' relations, networks, and work teams. Students consider both theory and applications to their lives and organizations through observational, research, team and applied assignments. Prerequisite: Psych 4601 or graduate standing.

#### PSYCH 5602 Organizational Development (LEC 3.0)

Examination of the field of organizational development theories and interventions. An emphasis is placed on research methods and application of practices related to individual processes, group processes, and organizational structures and functions that impact change and development strategies and interventions. Prerequisite: Psych 4602 or graduate standing.

#### PSYCH 5603 Advanced Social Influence (LEC 3.0)

An in-depth review of the principles and procedures that affect the process of social influence, with consideration given to attitudinal, compliance inducing, and perceptual influences. Students will consider the theoretical implications and practical applications of topics in social influence in the form of independent reading, research proposals and/or projects, and observational assignments. Prerequisite: Psych 4603 or graduate standing.

# **PSYCH 5700 Job Analysis and Performance Management (LEC 3.0)**

A focus on the scientific measurement of job performance. An indepth discussion of the science and methods of appropriate job and task analysis will be discussed. Additionally, students will focus on current issues in performance management and appraisal including scientific findings related to both objective and subjective measures of performance. Prerequisite: Psych 4700 or graduate standing.

# PSYCH 5710 Advanced Human Factors (LEC 3.0)

An in-depth review of the foundations of human factors, focusing on the interaction of people with various forms of technology in a variety of environments. Topics include research and evaluation methods, displays (e.g., visual, auditory), attention and information processing, decision making, motor skills, anthropometry, and biomechanics. (Co-listed with ENG MGT 5330).

## PSYCH 5720 Advanced Psychology of Social Technology (LEC 3.0)

This course covers research, theory, and practice from psychology and other social sciences for understanding the psychological and social effects of interactions with and through technology including personal, work, organizational, and societal use of technology. Topics includes social media, artificial intelligence, ethical algorithms, and cyberpsychology. Prerequisite: Psych 1101 or graduate standing.

# PSYCH 5730 Environmental Psychology: Research and Practice (LEC 3.0)

An in-depth review of the theoretical perspectives in environmental psychology and the psychological effects of various environments. An emphasis is placed on the review and integration of the research to explain the psychological issues related to various environments as well as to understand ways to effectively design living, educational, work, and recreational environments. Prerequisite: Psych 4730 or graduate standing.

# PSYCH 5740 Occupational Health and Safety (LEC 3.0)

This course will cover the ethical, legislative, technical, behavioral and management aspects of health and safety practices in human resources. Topics include workplace safety, ergonomics, accident investigation, occupational stress, government regulatory agencies, employee assistance programs, wellness programs, and behavioral based safety. Prerequisites: Graduate standing.