

# B.S. Natural Sciences Checklist

## Physics Concentration

2017–2018 Catalog

Name: \_\_\_\_\_ ID Number: \_\_\_\_\_

### General Education Program (40 hrs.)

#### English Composition (6 hrs.)

ENGL1101 Discourse & Comp (A) .....3\_\_\_  
or  
ENGL1102 Discourse & Comp (B) .....3\_\_\_  
ENGL1105 Comp and Argumentation .....3\_\_\_

#### Quantitative Reasoning (3 hrs. min.)

*The Quantitative Reasoning component of the GEP will be met within this degree program.*

#### Human Behavior (3 hrs. min.)

ANTH2250 Prin. of Cultural Anthro. ....3\_\_\_  
ANTH2350 Biological Anthropology ....3\_\_\_  
ANTH2530 World Prehistory and  
Archaeology .....3\_\_\_  
ECON2201 Prin. of Microeconomics .....3\_\_\_  
ECON2202 Prin. of Macroeconomics .....3\_\_\_  
POLS1010 Intro. to Political Science.....3\_\_\_  
PSYC1101 Intro. to Psychology .....3\_\_\_  
SOC11101 Intro. to Sociology.....3\_\_\_  
SOSC1110 Foundations of Soc. Sci. ....3\_\_\_

#### Fine & Performing Arts (3 hrs. min.)

ARTH1101 Intro. to Art .....3\_\_\_  
ENGL2275 American Film History .....3\_\_\_  
MUSI1201 Music Appreciation.....3\_\_\_  
MUSI2211 Music History 1.....3\_\_\_  
THAR1000 Intro. to Theater .....3\_\_\_

#### Oral Comm. (3 hrs. min.)

ARTH2212 Art History Survey 2 .....3\_\_\_  
BUMG2900 Prof. Comm./Dev. Skills  
(WI) .....3\_\_\_  
COMM1103 Public Spkg/Comm. ....3\_\_\_  
COMM2335 Interpersonal Comm. ....3\_\_\_  
EDUC1115 Intro to Teach. Prof. (WI).....3\_\_\_  
FREN1111 Elementary French 1.....5\_\_\_  
FREN1112 Elementary French 2.....3\_\_\_  
GRMN1111 Elementary German 1 .....5\_\_\_  
GRMN1112 Elementary German 2 .....3\_\_\_  
NTSC2900 Scientific Doc. and Comm. ....3\_\_\_  
POLS4420 International Relations:  
Model UN & Arab League .....3\_\_\_  
SPAN1111 Elementary Spanish 1.....5\_\_\_  
SPAN1112 Elementary Spanish 2.....3\_\_\_  
THAR2212 Acting 2 .....3\_\_\_

#### Engaged Citizenry (3 hrs. min.)

ARTH3454 History of American Art.....3\_\_\_  
ECON1103 Foundations of Pol. Econ. ....3\_\_\_  
EDUC2245 Understanding Cultural  
Diversity (WI) .....3\_\_\_  
HIST1330 Amer. History to 1865.....3\_\_\_

HIST1340 Amer. History since 1865.....3\_\_\_  
HUMA2226 Studies in American Cultural  
History & Lit. (WI) .....3\_\_\_  
PHIL3360 Social & Pol. Philosophy.....3\_\_\_  
POLS1110 National Government .....3\_\_\_  
POLS1310 Intro to Political Theory.....3\_\_\_  
SOSC2210 Intro to Asian Amer.  
Studies (WI) .....3\_\_\_

#### Global Perspectives (3 hrs. min.)

ARTH3456 20th Century Art.....3\_\_\_  
ENGL3334 Comparative Queer Theory  
and Lit. (WI) .....3\_\_\_  
ENGL3348 Comparative Feminist  
Lit. and Theory (WI).....3\_\_\_  
GEOG1125 World Geography .....3\_\_\_  
GEOG2201 Cultural Geography .....3\_\_\_  
HIST2440 World History II.....3\_\_\_  
HIST2540 Intro. to the Middle East:  
Hist., Peoples, and Culture.....3\_\_\_  
HIST3500 History of Southern  
Africa (WI) .....3\_\_\_  
HIST3550 Islam: Religion, Politics,  
& Soc. ....3\_\_\_  
HUMA2227 Influential Works in Global  
Transn. Cultures(WI) .....3\_\_\_  
POLS1210 Intro. to Comparative Pols. ....3\_\_\_  
POLS1410 Intro. to International  
Relations.....3\_\_\_  
POLS3410 International Pol.  
Economy (WI) .....3\_\_\_  
RELI3300 Judaism, Christianity,  
& Islam .....3\_\_\_  
SOSC3250 Asia: The Land and its  
Peoples(WI) .....3\_\_\_

#### Historical Perspectives (3 hrs. min.)

ARTH3366 Non-Western Arts Survey .....3\_\_\_  
ENGL2205 Intro to Women's Studies.....3\_\_\_  
HIST2102 Medieval and Renaissance  
Europe .....3\_\_\_  
HIST2103 Revolutionary Europe  
(AD1517-AD 1921) .....3\_\_\_  
HIST2223 Anc. Hist. of the Nr. East.....3\_\_\_  
HIST2430 World History I.....3\_\_\_  
HIST3140 Europe and the Rise of the  
Modern World System.....3\_\_\_  
HIST3300 Christianity in Early  
America (WI).....3\_\_\_  
HIST3355 Ohio River Valley Hist. WI .....3\_\_\_  
HIST3410 East Asian History.....3\_\_\_  
HIST3430 Anc. Indian Cult./Soci.....3\_\_\_  
HIST3510 History of Islam: 7th through  
the 15th Century (WI) .....3\_\_\_  
HIST3520 Hist. of the Crusades: The  
Crescent & the Cross (WI) .. 3\_\_\_  
HUMA2225 Foundational Texts in Western  
Cultural History (WI).....3\_\_\_

PHIL2200 Intro to Philosophy .....3\_\_\_  
PHIL2284 Asian Philosophy (WI) .....3\_\_\_  
RELI2230 Hist. of Christian Thought .....3\_\_\_

#### Literature (3 hrs. min.)

ENGL2200 Intro. to Lit. (WI).....3\_\_\_  
ENGL2211 Survey of Engl. Lit. 1 (WI) ..3\_\_\_  
ENGL2212 Survey of Engl. Lit. 2 (WI) ..3\_\_\_  
ENGL2247 World Lit. (WI).....3\_\_\_  
ENGL2251 Survey of Amer. Lit. 1 (WI).....3\_\_\_  
ENGL2252 Survey of Amer. Lit. 2 (WI).....3\_\_\_

#### Ethical Insight & Reasoning (3 hrs. min.)

PHIL2320 Ethics (WI) .....3\_\_\_  
HIST2474 Peace & Justice: Hist., Theory &  
Practice of Non-Violence .....3\_\_\_  
HIST3432 Gandhi & Mod. India (WI).....3\_\_\_

#### Natural Sciences (7 hrs.)

*The Natural Sciences component of the GEP will be met within this degree program.*

#### Writing Intensive (WI)

**Two Courses Required**  
(can also include WI GEP courses)

BIOL3860 Field Methods.....4\_\_\_  
GEOL2204 Sedimentary Rocks/Strat. ....4\_\_\_  
GEOL4310 Geomorphology .....4\_\_\_  
HIST3540 Arab-Israeli Conflict.....3\_\_\_  
HIST4420 Middle East in Mod. Times.....3\_\_\_  
POLS3130 National Policy Issue.....3\_\_\_  
PSYC2121 Experimental Psychology .....3\_\_\_  
PSYC3110 Psych. Tests & Measures .....3\_\_\_  
PSYC3111 Learning and Memory .....3\_\_\_  
PSYC3145 Positive Psychology.....3\_\_\_  
PSYC3170 History of Psychology.....3\_\_\_  
PSYC4151 Evolutionary Psychology .....3\_\_\_  
PSYC4160 Behav. Prob. in Children.....3\_\_\_  
SOCI2205 Current Social Problems .....3\_\_\_  
SOCI4410 Social Stratification .....3\_\_\_  
SOCI4444 Social Deviance .....3\_\_\_

#### Capstone (3 hrs. min.)

IDST4490 Senior Seminar .....3\_\_\_

#### First Year Experience (1 hr. min.)

UNIV1100 First Year Experience,  
Univ. Fds. ....1\_\_\_  
HONR1101 Introduction to Honors .....2\_\_\_

*Checklist continued on  
reverse side*

## Natural Sciences Curriculum

### Physics Requirements (26 hrs.)

PHYS2211	Calculus-Based Physics 1.....	4	___
PHYS2212	Calculus-Based Physics 2.....	4	___
PHYS2250	Modern Physics.....	4	___
PHYS3000	Intermediate Lab.....	2	___
PHYS3010	Thermodynamics.....	3	___
PHYS3020	Mechanics.....	3	___
PHYS4000	Electricity & Magnetism.....	3	___
PHYS4010	Quantum Mechanics.....	3	___

### Second Science Area (12 hrs.)

Twelve hours of courses in any one area of science other than the primary concentration. Students may choose BIOL, CHEM, GEOL, or MATH. Math courses must be numbered 1200 or above.

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### Third Science Area (8 hrs.)

Eight hours of courses in any one area of science other than the primary concentration or secondary science area. Students may choose BIOL, CHEM, GEOL, or MATH. Math courses must be numbered 1200 or above.

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### Additional Science/Math (4 hrs.)

Any course in BIOL, CHEM, GEOL, NTSC, PHYS, or MATH not used above. Math courses must be numbered 1200 or above.

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## General Electives

Additional coursework in any area. A minimum of 120 total earned credit hours (GEP/FYE + Natural Sciences Curriculum + Capstone + electives) is required for graduation.

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### Math Proficiency Requirement

Proficiency in MATH1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e. MATH2110 Calculus), is required for all BS-Natural Sciences concentrations.

### Additional Minimum Graduation Requirements

- ☐ TWO courses flagged as Writing Intensive (WI) - may be satisfied by courses already counted in the GEP
- ☐ 120 earned semester credit hours
- ☐ 2.00 overall, cumulative GPA
- ☐ 60 semester credit hours at the 2000 level or above

### Special Minimum Requirements for Transfer Students

- ☐ 30 semester credit hours completed at SSU, of which 21 must be upper division courses (3000-4000 level)
- ☐ 12 semester credit hours in the Natural Sciences completed at SSU at the 3000-4000 level, of which 8 must be in Physics
- First year experience course is waived for transfer students with more than 30 earned hours

## Other Information

- Major code: NTSC, Conc code: PHYS
- Our CAS academic advisors can help you with general questions and concerns. You can reach them as follows:
  - Heather Cantrell, [hcantrell@shawnee.edu](mailto:hcantrell@shawnee.edu)  
(740) 351-4555 (office)  
(740) 908-1227 (text)
  - Hannah Ledford, [hledford@shawnee.edu](mailto:hledford@shawnee.edu)  
(740) 351-3712 (office)  
(740) 562-4717 (text)

- This checklist should only be used for students who declare their major during the 2017-2018 academic year. Checklists for earlier years are available on our website:  
<http://www.shawnee.edu/science>  
Look under the "Checklists" link on the sidebar.