

## Bachelor of Science Degree in Mathematics -- Mathematics Option

0. \_\_\_\_\_ APSU 1000 (1) Freshmen Seminar

### I. Communications -- 9 hours

\_\_\_\_\_ ENGL 1010 (3) English Comp. I  
\_\_\_\_\_ ENGL 1020 (3) English Comp. II  
\_\_\_\_\_ COMM 2045 (3) Public Speaking

### II. History -- 6 hours -- *Select any two courses below.*

\_\_\_\_\_ HIST 2010 (3) Early US Hist.  
\_\_\_\_\_ HIST 2020 (3) Modern US Hist.  
\_\_\_\_\_ HIST 2030 (3) Hist. of TN  
\_\_\_\_\_ HIST 2310 (3) Early World Hist.  
\_\_\_\_\_ HIST 2320 (3) Modern World Hist.

### III. Humanities and/or Fine Arts -- 9 hours

\_\_\_\_\_ ENGL 2330 (3) Topics in World Lit.  
*Select one course from each of two disciplines below.*  
\_\_\_\_\_ ART 1035 (3) Intro to Art  
\_\_\_\_\_ DANC 1200 (3) Intro to Dance  
\_\_\_\_\_ MUS 1030 (3) Intro to Music  
\_\_\_\_\_ MUS 2030 (3) World Music  
\_\_\_\_\_ MUS 2200 (3) Popular World Music  
\_\_\_\_\_ PHIL 1030 (3) Intro to Philosophy  
\_\_\_\_\_ PHIL 1040 (3) Intro to Ethics  
\_\_\_\_\_ PHIL 2200 (3) Religion and the World  
\_\_\_\_\_ THEA 1030 (3) Intro to Theatre

### IV. Natural Sciences -- 8 hours

*Select any two courses listed below.*  
\_\_\_\_\_ ASTR 1010/1011 (4) Planetary Astr.  
\_\_\_\_\_ ASTR 1020/1021 (4) Stellar Astr.  
\_\_\_\_\_ BIOL 1010/1011 (4) Intro to Bio.  
\_\_\_\_\_ BIOL 1020/1021 (4) Diversity of Life  
\_\_\_\_\_ BIOL 1040/1041 (4) Human Bio.  
\_\_\_\_\_ BIOL 1110/1111 (4) Gen. Bio. I  
\_\_\_\_\_ BIOL 1120/1121 (4) Gen. Bio. II  
\_\_\_\_\_ BIOL 2010/2011 (4) Hum. Anat. and Phys. I  
\_\_\_\_\_ BIOL 2020/2021 (4) Hum. Anat. and Phys. II  
\_\_\_\_\_ BIOL 2400 (4) Sustaining Biodiversity  
\_\_\_\_\_ CHEM 1010/1011 (4) Intro. Chem I  
\_\_\_\_\_ CHEM 1020/1021 (4) Intro. Chem. II  
\_\_\_\_\_ CHEM 1110/1111 (4) Gen. Chem. I  
\_\_\_\_\_ CHEM 1120/1121 (4) Gen. Chem. II  
\_\_\_\_\_ CHEM/PHYS 1710/1711 (4) Intro Chem. and Phys.  
\_\_\_\_\_ GEOL 1040/1041 (4) Physical Geo.  
\_\_\_\_\_ GEOL 1050/1051 (4) Historical Geo.  
\_\_\_\_\_ PHYS 1010/1011 (4) Phys. World  
\_\_\_\_\_ PHYS 1020/1021 (4) Phys. World II  
\_\_\_\_\_ PHYS 2010/2021 (4) Coll. Phys. I  
\_\_\_\_\_ PHYS 2020/2021 (4) Coll. Phys. II  
\_\_\_\_\_ PHYS 2110/2111 (4) Univ. Phys. I  
\_\_\_\_\_ PHYS 2120/2121 (4) Univ. Phys. II

### V. Social and Behavioral Science -- 6 hours

*Select one course from each of two disciplines below.*  
\_\_\_\_\_ AAST 2200 (3) Intro African-American Studies  
\_\_\_\_\_ COMM 2020 (3) Media, Society, and Individual  
\_\_\_\_\_ ECON 2010 (3) Princ. Of Macroeconomics  
\_\_\_\_\_ GEOG 1010 (3) Physical Geography  
\_\_\_\_\_ GEOG 1035 (3) World Regional Geo. I  
\_\_\_\_\_ GEOG 1045 (3) World Regional Geo. II  
\_\_\_\_\_ HHP 1250 (3) Wellness Concepts

\_\_\_\_\_ LDSP 2100 (3) Found. Of Leadership  
\_\_\_\_\_ POLS 2000 (3) Intro to Politics  
\_\_\_\_\_ POLS 2010 (3) American Nat. Gov.  
\_\_\_\_\_ POLS 2040 (3) Intro Public Policy  
\_\_\_\_\_ POLS 2070 (3) Interntnl. Politics  
\_\_\_\_\_ PSY 1010 (3) Gen Psychology  
\_\_\_\_\_ PSY 1050 (3) Psycho. of Mod Culture  
\_\_\_\_\_ SOC 1010 (3) Intro to Sociology  
\_\_\_\_\_ SOC 1040 (3) Social Problems  
\_\_\_\_\_ SOC 2900 (3) Marriage and Family  
\_\_\_\_\_ WS 2050 (3) Intro W&G Study

### VI. Computer Science

\_\_\_\_\_ CSCI 2000 (4) Programming

### VII. Mathematics Core

\_\_\_\_\_ MATH 1910 (4) Calc. and An. Geom.  
\_\_\_\_\_ MATH 1920 (4) Calc. and An. Geom.  
\_\_\_\_\_ MATH 2110 (4) Calculus  
\_\_\_\_\_ MATH 3010 (3) Intro Math Reasoning  
\_\_\_\_\_ MATH 3450 (3) Linear Algebra  
\_\_\_\_\_ MATH 4240 (3) Probability  
\_\_\_\_\_ MATH 4450 (3) Mathematical Models  
\_\_\_\_\_ MATH 4810 (1) Senior Seminar

### VIII. Mathematics Specialization

\_\_\_\_\_ MATH 3120 (3) Differential Eqs. I

*Select five courses listed below, including all of either the \* classes or the \*\* classes*

\_\_\_\_\_ MATH 3000 (3) Discrete Mathematics  
\* \_\_\_\_\_ MATH 3130 (3) Differential Eqs. II  
\_\_\_\_\_ MATH 4010 (3) History of Math  
\*\* \_\_\_\_\_ MATH 4110 (3) Number Theory  
\_\_\_\_\_ MATH 4160 (3) Complex Analysis  
\_\_\_\_\_ MATH 4210 (3) Topology  
\_\_\_\_\_ MATH/STAT 4260 (3) Stochastic Proc.  
\_\_\_\_\_ MATH 4310 (3) Machine Learning  
\* \_\_\_\_\_ MATH 4460 (3) Applied Mathematics  
\*\* \_\_\_\_\_ MATH 4500 (3) Modern Algebra  
\* \_\_\_\_\_ MATH 4670 (3) Numerical Analysis  
\*\* \_\_\_\_\_ MATH 4710 (3) Real Analysis  
\_\_\_\_\_ STAT 3250 (3) Statistical Methods  
\_\_\_\_\_ STAT 4120 (3) Regression Analysis  
\_\_\_\_\_ STAT 4130 (3) Experimental Design  
\* \_\_\_\_\_ STAT 4250 (3) Mathematical Statistics  
\_\_\_\_\_ STAT 4270 (3) Nonparametric Stats

\* Required as Major Guided Electives  
for the Applied Mathematics track

\*\* Required as Major Guided Electives  
for the Pure Mathematics track

Revised 3/7/2019