University Bulletin

Undergraduate Degree Programs

Primary Navigation

Penn State Harrisburg

Penn State Harrisburg is an undergraduate college and graduate school of the University. The Harrisburg campus enrolls about 2,400 undergraduate and 1,500 graduate students and offers two associate, 31 baccalaureate, 21 master's, and two doctoral degree programs as well as certificate and certification programs.

Penn State Harrisburg is located on a suburban campus in Middletown, Pennsylvania, eight miles east of Harrisburg. The campus is easily accessible via major interstate routes and the Pennsylvania Turnpike's Exit 247. Harrisburg International Airport is within one mile of the campus, public transportation serves the college, and rail service affords convenient access from locations throughout the nation.

Penn State Harrisburg offers all four years of study in 30 of its baccalaureate programs as well as the first two years of study leading to more than 160 baccalaureate majors offered throughout the University.

The college serves students from all campuses of Penn State and transfer students from community colleges and other accredited colleges and universities. Penn State students are encouraged to choose the Capital College Common-Year Major as their curriculum prior to attending Capital College.

The college has an extensive selection of graduate programs. Applications are welcomed from students who have completed a baccalaureate degree from a regionally accredited college or university and international students. Graduate programs are designed for the part-time student who can participate in an evening program.

A full range of services and cultural programming is offered for both resident and commuter students and the campus is equipped to provide educational opportunities to people with disabilities. New housing on campus was built in August 2002. A spacious, state-of-the-art library opened on the campus in January 2000.

Because specific requirements of particular programs vary, students should contact the Office of Enrollment Services, Penn State Harrisburg, 777 W. Harrisburg Pike, Middletown, PA 17057; 717-948-6250, or by e-mail at **hbgadmit@psu.edu**. Additional information regarding Penn State Harrisburg can be obtained through the campus Web site at **http://www.hbg.psu.edu/** .

Note: Concerning undergraduate programs, see **http://bulletins.psu.edu/bulletins/bluebook/ba_requirements.cfm** for courses that meet University-wide bachelor of arts degree requirements.

Note: Recommended academic plans for undergraduates provide, in table form, the courses students might schedule semester by semester as they pursue a specific undergraduate degree. Each college or campus maintains Recommended Academic Plans

for its own majors/degree programs. Links to these plans are on the Division of Undergraduate Studies website at: **http://www.dus.psu.edu/semplans.htm**. Questions concerning the Recommended Academic Plans should be directed to the college or campus involved or the Division of Undergraduate Studies.

CAPITAL COLLEGE

MUKUND S. KULKARNI, *Chancellor*

OMID ANSARY, *Interim Senior Associate Dean for Academic Affairs*

MARIAN R. WALTERS, *Associate Dean for Research and Graduate Studies*

COLLEGE ORGANIZATION

School of Behavioral Sciences and Education — CATHERINE SURRA, *Director*

School of Business Administration — STEPHEN P. SCHAPPE, *Director*

School of Humanities — KATHRYN D. ROBINSON, *Director*

School of Public Affairs — STEVEN A. PETERSON, *Director*

School of Science, Engineering, and Technology — JERRY F. SHOUP, *Interim Director*

4/7/11

Baccalaureate Degrees

Accounting

Capital College (ACCT)

JANE KOCHANOV, *Director of Undergraduate Studies, School of Business Administration*

This major helps students prepare for careers in auditing and public accounting, industrial and managerial accounting, and in governmental and not-for-profit accounting. It also provides a sound background for students who plan to pursue graduate studies in accounting or related fields. Students who complete the prescribed courses and earn a Bachelor of Science degree will satisfy the academic requirements to sit for the Certified Public Accountant (CPA) examination. Graduates may also elect to pursue other professional certifications, including Certified Management Accountant (CMA), Certified Internal Auditor (CIA), Certified Fraud Examiner (CFE), and Certified Government Financial Manager (CGFM). Because the Harrisburg area is the center of industry and economic development for south-central Pennsylvania, students are provided with many opportunities to experience the world of business.

For a B.S. in Accounting a minimum of 120 credits is required. At least 50 percent of the business credit hours required for the degree must be taken at the Capital College. No more than 60 credits should be from business and business-related courses. Students wishing to fulfill the 150 credit-hour education option to become a CPA in Pennsylvania (which reduces the experience requirement for certification) are encouraged to enter Capital College's Master of Business Administration program or the Master of Science in

Information Systems program subsequent to receiving their undergraduate accounting degree.

Entry to Major Requirements:
Entry to the Accounting major requires the completion of 8 entry-to-major courses: ACCTG 211(4)**[1]**; ECON 102 GS(3); ENGL 015 GWS(3)**[1]** or ENGL 030 GWS(3)**[1]**; FIN 301(3); MATH 110 GQ(4)**[1]** or MATH 140 GQ(4)**[1]**; MGMT 301(3); MKTG 301(3); SCM 200 GQ(4)**[1]** or STAT 200 GQ(4)**[1]**; and a 2.00 or higher cumulative grade-point average. Additional information about this major is available in the office of the Director of Undergraduate Studies, School of Business Administration at Penn State Harrisburg.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 8 credits of non-business courses

REQUIREMENTS FOR THE MAJOR: 79 credits
(This includes 12 credits of General Education Courses: 3 credits of GWS courses; 3 credits of GS courses; 6 credits of GQ courses)

PRESCRIBED COURSES (55 credits)
ACCTG 211(4)**[1]** (Sem: 1-4)
ECON 102 GS(3) (Sem: 1-4)
ENGL 202D GWS(3) (Sem: 1-4)
FIN 301(3), MKTG 301(3), MGMT 301(3) (Sem: 1-4)
B A 364Y US;IL(3), B A 462(3)**[1]**, MIS 390(3), SCM 301(3) (Sem: 5-8)
ECON 104 GS(3), MIS 204(3) (Sem: 5-8)
ACCTG 310(3)**[1]**, ACCTG 340(3)**[1]**, ACCTG 403(3)**[1]**, ACCTG 471(3)**[1]**, ACCTG 472(3)**[1]**, ACCTG 473(3)**[1]** (Sem: 5-8)

ADDITIONAL COURSES (18 credits)
Select 4 credits from MATH 110 GQ(4)**[1]** or MATH 140 GQ(4)**[1]** (Sem: 1-4)
Select 4 credits from SCM 200 GQ(4)**[1]** or STAT 200 GQ(4)**[1]** (Sem: 1-4)
B A 243(4) or B A 241(2) and B A 242(2) (Sem: 5-6)
Select 6 credits**[1]** from the following: ACCTG 410(3), ACCTG 431(3), ACCTG 432(3), ACCTG 440(3), ACCTG 461 IL(3), ACCTG 462(3), ACCTG 463(3), ACCTG 489(3), ACCTG 494(1-12), ACCTG 496(1-18), ACCTG 497(1-9) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (6 credits)
Select 6 credits from 200-400 level business courses from: ACCTG, B A, ECON, FIN, MGMT, MIS, MKTG, or SCM in consultation with an academic adviser and in support of the student's interests. (Sem: 3-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Reviewed by the Department: Summer Session 2011

Blue Sheet Item #:40-01-044

Review Date: 8/16/2011

UCA Revision #1: 8/2/06
UCA Revision #2: 7/26/07

CL

American Studies

Abington College (AMSAB)
Penn State Harrisburg (AMSCA)
University College (AMSCC): Penn State Brandywine, Penn State Worthington Scranton

This interdisciplinary major is designed to provide students with an integrated and critical knowledge of American culture, drawing on courses in American Studies and in the traditional disciplines and culminating in two senior seminars. A number of interests may be pursued within the major, including popular culture, art, technology, business, law, archives, museology, and conservation. The major helps prepare students for careers in business, teaching, government, and a number of other areas, and for enrollment in law and other professional programs.

For entrance into the major, the following must be met:
1. At the end of the sophomore year, any student in good standing may gain entrance into the major without having completed specific courses.
2. Any student seeking entrance during the fifth semester will be granted entrance at the discretion of the American Studies Committee and/or Director following evaluation of the student's record.
3. Any student seeking entrance during or after the sixth semester will be expected to have completed at least 12 credits, which may be counted toward the major in American Studies.

For the B.A. degree in American Studies, a minimum of 123 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 21 credits

BACHELOR OF ARTS DEGREE REQUIREMENTS: 24 credits
(3 of these 24 credits are included in the REQUIREMENTS FOR THE MAJOR, GENERAL EDUCATION, or ELECTIVES and 0-12 credits are included in ELECTIVES if foreign language proficiency is demonstrated by examination.)

(See description of Bachelor of Arts Degree Requirements in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 33 credits[1]

PRESCRIBED COURSES (6 credits)
AM ST 491W(6) (Sem: 5-8)

ADDITIONAL COURSES (3 credits)
AM ST 100 GH(3) or AM ST 100W GH(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (24 credits)
(Include 12 credits at the 400 level distributed in at least two of the areas.)
Select 9 credits in each of two of the following areas; select 6 credits in one other of the areas: (Sem: 3-8)
a. American literature
b. American history
c. American art, philosophy, and religion (humanities)
d. American social sciences

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 1995

Blue Sheet Item #: 23-05-120

Review Date: 4/23/04

UCA Revision #2: 7/26/07

AB

Applied Behavioral Science

Capital College (ABESC)

PROFESSOR KENNETH B. CUNNINGHAM, *Program Coordinator, School of Behavioral Sciences and Education*

The Applied Behavioral Science major is an interdisciplinary program that provides a base of theoretical and empirical knowledge from the social and behavioral sciences and the hands-on skills needed to apply that knowledge effectively in working with people. The major helps students prepare for careers that provide direct service to individuals in need of assistance. These careers are in a variety of human services both in the public and private sectors or in personnel-related positions such as human resources. The major is especially useful for adult learners who are interested in augmenting their professional skills and advancing their career positions through an academic program which combines course work from selected social and behavioral science fields.

Graduates may also pursue advanced degrees in fields such as community psychology, social work, human resource management, gerontology, urban planning, and counseling. The strengths of the program include: internships directly related to the student's area of interest, flexibility in course selection that allows students to focus on particular interests, a solid foundation of knowledge on which to build skills, and skill development courses.

Entry to Major Requirements:
Entry to the Applied Behavioral Science major requires a 2.00 or higher cumulative grade-point average.

For a B.S. degree in Applied Behavioral Science, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(9 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 4-10 credits

REQUIREMENTS FOR THE MAJOR: 74-80 credits
(This includes 9 credits of General Education courses: 3 credits of GWS courses; 6 credits of GS courses.)

PRESCRIBED COURSES (23-29 credits)**[1]**
ENGL 202A GWS(3), PSYCH 100 GS(3) (Sem: 1-4)
SO SC 480W(4), SO SC 481(4), SO SC 492(3) (Sem: 5-8)
SOC 405(3) (Sem: 5-8)
BE SC 395(3-9) (Sem: 7-8)

ADDITIONAL COURSES (45 credits)**[1]**
Select 3 credits from: SOC 001 GS(3) or SOC 005 GS(3) (Sem: 1-4)
Select 3 credits from: ANTH 045 GS;US;IL(3), GEOG 020 GS(3), PL SC 001 GS(3), PL SC 003 GS;IL(3) (Sem: 1-4)
Select 30 credits (a minimum of 3 credits at the 400 level) in consultation with an adviser from the following: AFR 192 GH;IL(3) or AF AM 212 US(3) or any BE SC, HD FS, or SOC course.
--Take a minimum of 9 credits from BE SC
--Take a minimum of 9 credits from SOC
--Take a minimum of 6 credits from HD FS) (Sem: 5-8)

Select 9 credits (a minimum of 3 credits at the 400 level) in consultation with an adviser form PSYCH, PUBPL, PL SC, CRIMJ (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (6 credits)**[1]**
Select 6 credits from department list in consultation with an adviser (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2009

Blue Sheet Item #: 37-05-021

Review Date: 2/24/09

UCA Revision #1: 8/14/06
UCA Revision #2: 7/26/07

CL

Civil Engineering

Capital College (CE CA)

PROFESSOR Y. FRANK CHEN, *Program Coordinator, School of Sciences, Engineering, and Technology*

The program in Civil and Environmental Engineering is designed to provide the basic undergraduate education required for private practice and public service in civil engineering, and/or continue formal education. Emphasis is placed on the fundamentals of civil engineering principles and design techniques. Students utilize basic engineering science concepts in several of the different specialty areas (e.g., construction/management, environmental, materials/pavement design/geotechnical, structures, transportation, and water resources). Finally the students are able to choose an area of specialization for professional practice or graduate studies.

The objective of the Civil Engineering program is to prepare students for a wide range of career paths that use civil engineering principles and methodologies. A curriculum is provided that prepares our recent graduates to:

work in industries or state and federal government agencies such as departments of transportation and departments of environmental protection that design, implement, and maintain national and/or global infrastructure;

effectively work in and lead interdisciplinary teams needed to design sustainable transportation, water, energy, environmental, and structural infrastructure; and

stay current through continuing education opportunities, professional conferences, and other self-learning experiences; have the ability to obtain and maintain professional licensing; and have the ability to attend graduate school.

The program is broadened by courses in communication, arts, humanities, social and behavioral sciences, as well as other engineering disciplines. Students gain experience in working as members of a team and using interdisciplinary approaches to solve problems. These experiences, as well as those related to engineering principles and design, are provided through exercises in the classroom, laboratory, and field. The program culmination is a capstone design course wherein the students' knowledge and skills are applied to actual engineering problems.

ENTRANCE TO MAJOR -- In addition to the minimum grade point average (GPA) requirements* described in the University Policies, all College of Engineering entrance to major course requirements must also be completed with a minimum grade of C: CHEM 110 (GN), MATH 140 (GQ), MATH 141 (GQ) and PHYS 211 (GN). All of these courses must be completed by the end of the semester during which the admission to major process is carried out.

*In the event that the major is under enrollment control, a higher minimum cumulative grade-point average is likely to be needed and students must be enrolled in the College of Engineering or Division of Undergraduate Studies at the time of confirming their major

choice.

For the B.S. degree in Civil Engineering, a minimum of 130 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem:1-2)

GENERAL EDUCATION: 45 credits
(27 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in REQUIREMENTS FOR THE MAJOR)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 112 credits
(This includes 27 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses; 3 credits of GS courses; 9 credits of GWS courses.)

PRESCRIBED COURSES (71 credits)
CHEM 110 GN(3)**[1]**, CHEM 111 GN(1), E MCH 211(3)**[1]**, EDSGN 100(3), MATH 140 GQ(4)**[1]**, MATH 141 GQ(4)**[1]**, PHYS 211 GN(4)**[1]** (Sem: 1-2)
E MCH 212(3)**[1]**, E MCH 213(3)**[1]**, STAT 401(3), GEOSC 001(3), MATH 220 GQ(2), MATH 251(4), PHYS 212 GN(4) (Sem: 3-4)
C E 310(3)**[1]**, C E 321(3)**[1]**, C E 332(3)**[1]**, C E 335(3)**[1]**, C E 336(3)**[1]**, C E 340(3)**[1]**, C E 360(3)**[1]**, C E 370(3)**[1]**, ENGL 202C GWS(3) (Sem: 5-6)

ADDITIONAL COURSES (32-35 credits)
C E 100S(1) or 1 credit of First-Year Seminar or elective (Sem: 1-2)
ENGL 015 GWS(3) or ENGL 030 GWS(3) (Sem: 1-2)
CAS 100A GWS(3) or CAS 100B GWS(3) (Sem: 3-4)
CMPSC 200 GQ(3) or CMPSC 201 GQ(3) or CMPSC 202 GQ(3) (Sem: 3-4)
ECON 102 GS(3), ECON 104 GS(3), or ECON 014 GS(3) (Sem: 3-4)
M E 201(3) or CH E 220(3)**[30]** (Sem: 5-6)
C E 337(1) or C E 475(4) (Sem: 5-6)**[+]**
E E 211(3) or E E 212(3)**[30]** (Sem: 7-8)
Select 9 credits from C E 341(3), C E 342(3), , C E 371(3), C E 422(3), C E 423(3), C E 424(3), C E 432(3), C E 435(3), C E 436(3), C E 441(3), C E 447(3), C E 461(3), C E 462(3), C E 475(4), C E 476(3), C E 479(1) (Sem: 5-8)**[#]**
Select 3 credits of C E 410W(3), C E 421W(3), C E 438W(3), C E 448W(3), C E 465W(3), C E 472W(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS: (9 credits)
Select 9 credits of technical elective from C E 300-level courses, C E 400-level courses, or department list. (Sem: 7-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[30] Students may substitute 6 credits of ROTC for 3 credits of 400-level C E courses and 3 credits of M E or E E .
[+] If C E 475 is taken, one credit goes toward lab requirement and remaining three go towards C E or general technical electives.
[#] Those courses must be selected from at least 4 of the 5 technical areas in the Civil Engineering program--transportation (x20), construction (x30), structures (x40),

hydrosystems (x60), and environmental (x70).

Last Revised by the Department: Spring Semester 2010

Blue Sheet Item #: 38-06-105

Review Date: 4/13/10

UCA Revision #1: 8/3/06
UCA Revision #2: 7/27/07

EN

Communications

Capital College (COMCL)

ASSOCIATE PROFESSOR CATHERINE RIOS, *Program Coordinator, Communications, School of Humanities*

Communications is an interdisciplinary program that combines practical, professional instruction with critical and cultural examinations of mass media. Our interdisciplinary and theoretical approach enables our students to understand the contextual relationships between contemporary media and ethics, history, drama, and art, as well as the mechanics of emerging information technologies. We feature small classes, a multidisciplinary faculty with real-world professional experience, high-technology laboratories, and an excellent location for media internships. This major prepares students for careers in areas such as public relations, journalism, graphic design, photography, new media, advertising, media production, and telecommunications. Because of our analytical approach, students can use the major to prepare for postgraduate studies.

Entry to Major Requirements:
Entry to the Communications major requires a 2.00 or higher cumulative grade-point average.

For a B.Hum. degree in Communications, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 13-15 credits
(These elective credits may be applied to a minor in consultation with an academic adviser. The number of elective credits needed varies depending on whether the student participates in an internship.)

BACHELOR OF HUMANITIES DEGREE REQUIREMENTS: 18 credits

(See description of Bachelor of Humanities Degree Requirements in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 42-44 credits
At least 12 credits of Communications courses must be taken at the 400 level.

PRESCRIBED COURSES (6 credits)**[1]**
COMM 251(3), COMM 456(3) (Sem: 5-8)

ADDITIONAL COURSES (18-20 credits)**[1]**
COMM 230W(3) or COMM 260W(3) (Sem: 3-8)
Select two courses (6-8 credits) in visual communication from the following: COMM 215(3), COMM 241(3), COMM 363(3), COMM 371(4), COMM 415(3), COMM 441(3), COMM 482(4) (Sem: 3-8)
Select 9 credits in Communications from the following: COMM 215(3), COMM 241(3), COMM 250(3), COMM 320(3), COMM 332(3), COMM 346(3), COMM 350(3), COMM 360(3), COMM 363(3), COMM 370(3), COMM 374(3), COMM 414(3), COMM 415(3), COMM 430(3), COMM 457(3), COMM 458(3), COMM 459(3), COMM 462(3), COMM 474(3), COMM 488(3), COMM 495(1-6) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
Select 6 additional credits in Communications (Sem: 5-8)
Select 12 credits from the School of Humanities approved list in consultation with an academic adviser. These credits may be applied to a minor in support of the student's interests (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2007

Blue Sheet Item #: 35-07-130

Review Date: 6/12/07

CL

Computer Science

Capital College (COMP)

PROFESSOR THANG N. BUI, *Program Chair, School of Science, Engineering, and Technology*

This program is designed to prepare students for employment as computer scientists in engineering, scientific, industrial, and business environments as software developers, programmers, and systems analysts. While most students will enter the job market directly upon graduation, graduate school in computer science or related areas is also an option. Selection of electives can be tailored for students pursuing this path.

The Computer Science major provides a solid foundation in the areas of systems programming, algorithm design, artificial intelligence, and engineering large software systems using state-of-the-art methodologies and programming languages.

Students may expect to: develop a solid foundation in mathematical studies relevant to computer science; master skills in computer science; enjoy possibilities for internships and part-time employment with local companies; and become problem solvers. These goals are consistent with the goals outlined by the Association of Computing Machinery.

For a B.S. degree in Computer Science, a minimum of 120 credits is required.

Entry to Major Requirements:
Entry to the Computer Science major requires that the student has earned a C or better in the following courses: MATH 140 GQ(4), MATH 141 GQ(4), CMPSC 121(3), and CMPSC 122(3).

Scheduling Recommendation by Semester Standing given like (Sem:1-2).

GENERAL EDUCATION: 45 credits
(13 of these 45 credits are included in REQUIREMENTS FOR THE MAJOR.)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
Incoming first-year students are required to complete a course with the suffix S, T, or X, or the PSU abbreviation.

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 88 credits
(This includes 13 credits of General Education courses: 3 credits of GWS courses, 6 credits of GQ courses, and 4 credits in GN courses.)

PRESCRIBED COURSES (59 credits) **[2]**
MATH 140 GQ(4)**[1]**, MATH 141 GQ(4)**[1]** (Sem: 1-2)
CMPSC 121 GQ(3)**[1], ** PHYS 211 GN(4**)** (Sem: 2)
CMPSC 122(3)**[1], ** CMPSC 360(3) (Sem: 3)
CMPSC 221(3), CMPSC 312(3)**[1]**, MATH 220(2) (Sem: 4)
CMPSC 430(3), CMPSC 460(3), CMPSC 462(3), CMPSC 463(3), CMPSC 469(3), CMPSC 470(3), CMPSC 472(3), CMPSC 487W(3), CMPSC 488(3), ENGL 202C GWS(3) (Sem: 5-8)

ADDITIONAL COURSES (18 credits)
MATH 318(3), STAT 301 GQ(3), or STAT 318(3) (Sem: 5-8)
Select 15 credits from the following (9 of which must have a CMPSC prefix): CMPSC 313(3), CMPSC 412(1.5), CMPSC 413(1.5), CMPSC 426(3), CMPSC 428(3), CMPSC 438(3), CMPSC 441(3), CMPSC 444(3), CMPSC 455(3), CMPSC 457(3), CMPSC 475(3), CMPSC 496(1-9), CMPSC 497(1-9), MATH 401(3), MATH 411(3), MATH 412(3), MATH 425(3), MATH 430(3), MATH 431(3), MATH 435(3), MATH 449(3), MATH 450(3), MATH 455(3), MATH 465(3), MATH 468(3), MATH 496(1-9), MATH 497(1-9) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (11 credits)
Select 6 credits of 300-400 level courses in consultation with an academic adviser and in support of the student's interests. (Sem: 5-8)
Select 5 credits of 100-400 level courses (Sem: 5-8)

Integrated B.S./M.S. Program in Computer Science

The Computer Science program offers a limited number of academically superior Bachelor of Science candidates the opportunity to enroll in an integrated, continuous program of study leading to both the Bachelor of Science and the Master of Science in Computer Science. The ability to coordinate as well as concurrently pursue the two degree programs enables the student to earn the two degrees in five years.

Students in the IUG program must satisfy the degree requirements for both Bachelor of

Science and Master of Science degrees. However, the total course load is reduced due to the maximum of 12 credits that can count towards both degrees. A minimum of 6 credits proposed to count for both degrees must be at the 500 level. Thesis credits may not be double counted. The first two years of the IUG program are identical to the first two years of the Bachelor of Science program. The third and fourth years of the IUG program differ from those of the Bachelor of Science program due to the courses that count toward the Master of Science degree requirements. Student performance will be monitored on an on-going basis. In addition, a formal evaluation of student academic performance will be performed when the student has completed 100 to 105 credits, which is at the end of the first semester of the senior year for a typical student in the program.

Students who have not maintained a 3.5 GPA in their Math and Computer Science courses will be put on probationary status with respect to the IUG program. Their ability to continue in the IUG program will be based on their academic performance in the last semester of their senior year. As part of the review in the senior year, students will be advised about the paper option and thesis option in the graduate program. Students intending to pursue the thesis option would be advised to do so only if they have been doing very well in the program and are in no danger of not being able to continue into the fifth year. A minimum grade point average of 3.5 must be earned in all math and computer science course work that is applied toward the graduate degree. This includes any courses that count toward both the undergraduate and graduate degrees, as well as all courses taken during the fifth year.

Students have the choice of receiving the B.S. degree at the end of the fourth year or waiting until the end of the fifth year to receive both degrees. Students who elect to receive the B.S. degree at the end of the fourth year will pay graduate tuition for courses taken in the fifth year; students opting to receive both degrees at the end of the fifth year will pay undergraduate tuition for all five years. Note that students who are awarded a graduate assistantship must elect to receive the B.S. degree at the end of the fourth year. If for any reason a student admitted to the IUG program is unable to complete the requirements for the Master of Science degree, the student will be permitted to receive the Bachelor of Science degree assuming all the undergraduate degree requirements have been satisfactorily completed. Students who successfully complete the courses listed in the recommended schedule will satisfy the requirements for the Bachelor of Science degree by the end of their fourth year.

Admission Requirements

To initiate the application process, students must submit an Integrated Undergraduate-Graduate (IUG) Degree in Computer Science Application Form, a transcript, and a faculty recommendation, in addition to applying for admission to the Graduate School. A faculty adviser will help undergraduate candidates determine a sequence of courses that will prepare them for acceptance into the Integrated Undergraduate-Graduate (IUG) degree program. In order to apply for the IUG program, students must have completed a minimum of 45 credits. A typical student would apply after completing between 45 to 60 credits, that is, after the fourth semester and before the end of the fifth semester. For consideration for acceptance into the program, students must have completed and earned a minimum grade point average of 3.0 in the following Computer Science and Mathematics courses: MATH 140, MATH 141, MATH 220, CMPSC 121, CMPSC 122, and CMPSC 360. Student applications will be evaluated based on their overall academic performance, in addition to the above requirements. In all cases, admission to the program will be at the discretion of the Graduate Admissions Committee in Computer Science.

Degree Requirements

Students in the IUG program must satisfy the degree requirements for both Bachelor of Science and Master of Science degrees. The total course load is reduced due to the maximum of 12 credits that can count towards both degrees. The minimum of 6 credits double-counted must be at the 500 level. Thesis credits may not be double counted.

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[2] Students must earn a 2.5 or higher grade point average in the following courses: CMPSC 221, CMPSC 312, CMPSC 360, CMPSC 430, CMPSC 460, CMPSC 462, CMPSC 463, CMPSC 469, CMPSC 470, CMPSC 472, CMPSC 487W, and CMPSC 488.

Last Revised by the Department: Spring Semester 2013

Blue Sheet Item #: 41-06-032

Review Date: 04/09/2013

Retention and Transfer # 236 updated 5/22/13

UCA Revision #1: 8/3/06
UCA Revision #2: 7/27/07

CL

Criminal Justice

Capital College (CRIMJ): Penn State Harrisburg
World Campus

PROFESSOR SHAUN GABBIDON, *Program Chair, School of Public Affairs*

The Bachelor of Science degree program in Criminal Justice helps provide its graduates with the communications and analytical skills critical to succeed in criminal justice and related careers. Through an interdisciplinary approach to the problems of crime and society, the program also equips students to pursue graduate study in criminal justice or related disciplines, and educates students to become effective problem-solvers as professionals in the field of criminal justice.

The study of criminal justice is approached as an applied interdisciplinary science, teaching students both the theoretical and the practical aspects of crime control and the administration of justice. The Criminal Justice curriculum provides students with the opportunity and assistance to acquire knowledge of the roles of policing, courts, laws, and corrections as they relate to both the adult and juvenile justice system. Students also gain knowledge of the history, concepts, and critical issues related to the role of gender and race/ethnicity in the criminal justice system, victimology, and ethics in criminal justice. The curriculum further provides a theoretical foundation of the discipline, combined with a thorough understanding of the scientific method as it applies to criminal justice. This combination is expected to sharpen the students' talents of reasoning and judgment, qualities imperative to rational functioning in criminal justice and related professions.

For a B.S. degree in Criminal Justice, a minimum of 120 credits is required.

Admission Requirements for Transfer Students:
Transfer applicants must have at least a 2.0 cumulative grade-point average (4.0 scale). The evaluation of prior college work is conducted on an individual basis by the Office of Enrollment Services at both campuses.

Entry to Major Requirements:
The student must have a 2.00 cumulative grade-point average and an average of C (2.00) or better in any course already taken in the major.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(0-4 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of *Bulletin.)*

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 13-17 credits

REQUIREMENTS FOR THE MAJOR: 62 credits
(This includes 0-4 credits of General Education courses: 0-4 credits of GQ courses.)

PRESCRIBED COURSES (25 credits)**[1]**
CRIMJ 012 GS(3), CRIMJ 100 GS(3), CRIMJ 113 US(3), CRIMJ 210(3), CRIMJ 230(3), CRIMJ 250W(3), CRIMJ 450W(4), CRIMJ 465(3) (Sem: 5-8)

(At least 9 credits in Additional Courses and/or Supporting Courses must be at the 400 level.)

ADDITIONAL COURSES (16 credits)
Select 4 credits from CRIMJ 260(3)/PUBPL 320(4) or STAT 200 GQ(4) (Sem: 5-8)
Select 6 credits from the following: CRIMJ 201(3), CRIMJ 220(3), CRIMJ 221(3), CRIMJ 234(3), CRIMJ 241(3) (Sem 5-8)
Select 6 credits from the following: CRIMJ 300H(3-6), CRIMJ 301H(3-6), CRIMJ 304(3), CRIMJ 389(3), CRIMJ 406(3), CRIMJ 407 US(3), CRIMJ 408(3), CRIMJ 410(3), CRIMJ 413(3), CRIMJ 414(3), CRIMJ 415(3), CRIMJ 421(3), CRIMJ 423 US(3), CRIMJ 425(3), CRIMJ 426(3-6), CRIMJ 430(3), CRIMJ 431(3), CRIMJ 441 US(3), CRIMJ 453 US(3), CRIMJ 460(3), CRIMJ 462(3), CRIMJ 489W(3), CRIMJ 495(3-12), CRIMJ 496(1-18), CRIMJ 497(1-9) (Sem: 5-8)
Or Select 12 credits from the following: CRIMJ 300H(3-6), CRIMJ 301H(3-6), CRIMJ 304(3), CRIMJ 389(3), CRIMJ 406(3), CRIMJ 407 US(3), CRIMJ 408(3), CRIMJ 410(3), CRIMJ 413(3), CRIMJ 414(3), CRIMJ 415(3), CRIMJ 421(3), CRIMJ 423 US(3), CRIMJ 425(3), CRIMJ 426(3-6), CRIMJ 430(3), CRIMJ 431(3), CRIMJ 441 US(3), CRIMJ 453 US(3), CRIMJ 460(3), CRIMJ 462(3), CRIMJ 489W(3), CRIMJ 495(3-12), CRIMJ 496(1-18), CRIMJ 497(1-9) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (21 credits)
Select 6 credits: 3 credits at the 200 level and 3 credits at the 300 and 400 level or 6 credits at the 300 and 400 level from the following: AFRAS, BE SC, PL SC, PUBPL, PSYCH, SOC (Sem: 5-8)
Select 15 credits in consultation with an academic adviser and in support of the student's interests. For information about specific courses in this area, contact the School of Public Affairs. (Sem: 5-8)

[1]A student enrolled in this major must receive a grade of C or better, as specified in

Senate Policy 82-44.

Last Revised by the Department: Summer Session 2008

Blue Sheet Item #: 36-04-024

Review Date: 1/15/08

UCA Revision #1: 8/20/06
UCA Revision #2: 7/27/07

Change in program coordinator input by Publications: 9/29/06

CL

Electrical Engineering

Capital College (E ENG)

AB SHAFAYE, *Program Chair, School of Science, Engineering, and Technology*

The Bachelor of Science degree in Electrical Engineering provides a solid background in electrical engineering sciences. It also provides an opportunity for students to pursue interests in electrical and electronic circuits, including digital circuits and VLSI and its fabrication, microprocessors and their applications, electromagnetics, communications, control systems, and digital image processing and computer vision. Through participation in a senior capstone design, the curriculum emphasizes written as well as verbal communication and teamwork approach among the students to attain a common goal.

This program helps its graduates develop capabilities to analyze and design a variety of electrical and electronic systems found in many industrial and government settings as well as provide a foundation for further graduate studies. A strong background in the fundamentals is built through a broad base core in basic sciences (physics and chemistry) and mathematics as well as engineering sciences.

For a B.S. degree in Electrical Engineering a minimum of 134 credits is required.

Entry to Major Requirements:
Entry to the Electrical Engineering major requires that the student has completed: MATH 140 GQ(4), MATH 141 GQ(4), PHYS 211 GN(4), and CHEM 110 GN(3), CHEM 111 GN(1). A 2.00 or higher cumulative grade-point average is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(21 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 0-4 credits

REQUIREMENTS FOR THE MAJOR: 110-113 credits
(This includes 21 credits of General Education courses: 3 credits of GWS courses; 3 credits of GS courses; 9 credits of GN courses; 6 credits of GQ courses.)

PRESCRIBED COURSES (87 credits)
CHEM 110 GN(3), CHEM 111 GN(1), EDSGN 100(3) (Sem: 1-2)
SSET 295(1) (Sem: 4)
MATH 140 GQ(4), MATH 141 GQ(4), MATH 220 GQ(2-3), MATH 230(4), MATH 250(3), PHYS 211 GN(4), PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2) (Sem: 1-4)
CMPEN 271(3)**[1]**, CMPEN 275(1)**[1]**, E MCH 211(3), ENGL 202C GWS(3) (Sem: 3-4)
CMPEH 472(4), E E 310(4)**[1]**, E E 330(4), E E 341(3), E E 352(4)**[1]**, E E 485(3) (Sem: 5-6)
CMPSC 436(3), E E 311(3), E E 405(1), E E 406W(3)**[1]**, E E 461(4), E E 481(4) (Sem: 7-8)

ADDITIONAL COURSES (14-17 credits)
Select 3 credits from: ECON 102 GS(3) or ECON 104 GS(3) or ECON 014 GS(3) (Sem: 1-4)
Select 3 credits from: CMPSC 201 GQ(3), or CMPSC 121 GQ(3), or CMPSC 202 GQ(3) (Sem: 3-4)
Select 3-4 credits from MATH 444(3)**[1]** or MATH 446(3)**[1]** or STAT 200 GQ(4)**[1]** (Sem: 4-6)
Select 5-7 credits from E E 315(5)**[1]**; or E E 210(4)**[1]** and E E 314(3)**[1]** (Sem: 4-5)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 9 credits in consultation with an academic adviser and in support of the student's interests. (Sem: 7-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2007

Blue Sheet Item #: 35-06-216

Review Date: 4/10/07

UCA Revision #1: 8/3/06
UCA Revision #2: 7/27/07

CA

Electrical Engineering Technology

Capital College (E E T)
University College, Penn State Wilkes-Barre

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

AB SHAFAYE, *Program Chair, School of Science, Engineering, and Technology*

The Bachelor of Science graduate with a major in Electrical Engineering Technology (E E T) is an engineering technologist who can bridge the gap between scientific advancement and practical electrical devices and systems. Research in all fields of electrical engineering has produced an abundance of new knowledge in recent years. Many of these advanced scientific achievements have been unused due to the shortage of engineering technologists specifically educated to convert scientific information into practical devices and systems.

The E E T major helps equip students with the various skills necessary to adapt new scientific knowledge to new products. Technical selections are offered in the senior year to provide some degree of specialization, but all graduates receive a well-rounded basic education in electrical and electronic design principles. The strengths of the program include: an applied hands-on program; extensive laboratory experience; promising job placement; and accreditation by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700, Web at **www.abet.org** .

E E T graduates who wish to continue their professional development can take the Fundamentals of Engineering examination in Pennsylvania, a prerequisite for taking the Professional Engineering examination.

For a B.S. degree in Electrical Engineering Technology, a minimum of 128 credits is required.

Admission Requirements for Transfer Students:
Applicants must have earned a high school diploma or equivalent and have attempted at least 18 semester credits at a regionally accredited college or university with at least a 2.0 cumulative grade-point average (4.0 scale). The evaluation of prior college work is done on an individual basis by the Office of Enrollment Services at Penn State Harrisburg.

Entry to Major Requirements:
Entry to the Electrical Engineering Technology major requires a 2.00 or higher cumulative grade-point average.

Re-enrollment:
Associate degree students should file a re-enrollment form during the final semester of their associate degree. Students re-enrolling from an associate's degree into the bachelor's degree should run a degree audit from eLion, using the E E T major code, to determine their curriculum requirements. Similar considerations apply to students changing majors from programs in science or engineering.

Students are directed to http://www.psu.edu/bulletins/bluebook/gened/ for an explanation of the Penn State General Education requirements.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(18 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 5-16 credits

REQUIREMENTS FOR THE MAJOR: 85-96 credits
(This includes 18 credits of General Education courses: 3 credits of GWS courses; 9 credits of GN courses; 6 credits of GQ courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 59-70 credits

PRESCRIBED COURSES (27 credits)
CHEM 110 GN(3), CHEM 111 GN(1), MATH 140 GQ(4), MATH 141 GQ(4) (Sem: 1-6)
EET 312(4)**[1]**, EET 331(4)**[1]**, ENGL 202C GWS(3) (Sem: 5-6)
EET 419(1), EET 420W(3)**[1]** (Sem: 7-8)

ADDITIONAL COURSES (32-43 credits)
Select 2*-3 credits from: EG T 101(1) and EG T 102(1) or EDSGN 100(3) (Sem: 1-2)
Select 3 credits from: CMPSC 101 GQ(3), CMPSC 121 GQ(3) or CMPSC 201 GQ(3) (Sem: 1-5)
Select 6*-8 credits from sequence a or b:
a.) PHYS 150 GN(3) and PHYS 151 GN(3) (Sem: 3-4)
b.) PHYS 211 GN(4) and PHYS 212 GN(4) (Sem: 1-4)
Select 3-4 credits from MATH 230(4), MATH 250(3), MATH 336(3), MATH 408(3), MATH 411(3), MATH 444(3), MATH 446(3), or STAT 200 GQ(4) (Sem: 5-6)
Select 5-8* credits from course sequence a, b, or c:
a.) EET 114(4) and EET 311(4)**[1]** (Sem: 1-6)
b.) E E 210(4)**[1]** and E E 314(3)**[1]** (Sem: 3-6)
c.) E E 315(5)**[1]** (Sem: 5-6)
Select 4* credits from: CMPEN 271(3) and CMPEN 275(1) or CMPET 117(3) and CMPET 120(1) (Sem: 1-4)
Select 3*-4 credits from: CMPEH 472(4) or CMPET 211(3) (Sem: 3-6)
Select 3*-4 credits from: EET 205(1) and EET 210(2) or E E 310(4) (Sem: 3-6)
Select 3-5* credits from: EET 213W(5) or E E 485(3) (Sem: 3-6)
**Courses required by PSU 2 EET programs*

REQUIREMENTS FOR THE OPTION: 26 credits

COMPUTER ENGINEERING TECHNOLOGY OPTION: (26 credits)

PRESCRIBED COURSES (11 credits)
CMPEN 431(3) , CMPET 403(4), CMPET 401(3), CMPET 402(1) (Sem: 5-8)

ADDITIONAL COURSES (15 credits)
2nd Programming Elective: Select 3 credits from: CMPSC 305(3), CMPSC 402(3), CMPSC 422(3), CMPSC 122(3) (Sem: 7-8)
Applications Elective: Select 4 credits of technical electives from: CMPET 412(4), EET 423(4), EET 456(4) (Sem: 7-8)
CMPET Technical Electives: Select 8 credits from CMPEH 449(3), E E 341(3), E E 418(3), E E 453(3), EET 402(4), EET 408(4), EET 413(4), EET 414(4), EET 431(4), EET 433(4), EET 478(4), ET 496(1) (Sem: 7-8)

GENERAL ELECTRICAL ENGINEERING TECHNOLOGY OPTION: (26 credits)

ADDITIONAL COURSES (26 credits)
System Elective: Select 8 credits of technical electives from: EET 408(4), EET 409(4), EET 433(4) (Sem: 7-8)
Electronics Elective: Select 4 credits from: EET 402(4), EET 423(4), EET 431(4) (Sem: 7-8)
GEET Technical Electives: Select 8 credits of GEET technical electives from: CMPEH 449(3), CMPET 401(3), CMPET 402(1), CMPEN 431(3), E E 418(3), E E 453(3), E E 458(3), EET 401(4), CMPET 403(3), EET 410(4), CMPET 412(4), EET 413(4), EET 414(4), EET 456(4), EET 478(4), ET 496(1) (Sem: 7-8)
Select 6 credits from any previous elective list plus CMPSC 452(3), E MCH 211(3), E MCH 212(3), M E 201(3) (Sem: 6-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2007

Blue Sheet Item #: 35-06-217

Review Date: 2/20/08

UCA Revision #1: 8/3/06
UCA Revision #2: 7/27/07

CL

Elementary Education

Capital College (ELEM)

PROFESSOR JANE KEAT, *Elementary Education Coordinator, School of Behavioral Sciences and Education*

The Elementary Education program at Penn State Harrisburg embodies the four tenets of our conceptual framework: constructivism, authenticity, reflectivity, and standards-based curriculum. Constructivism entails a student-centered approach in which teachers help learners build their own understandings. Authenticity refers to developing professional and pedagogical skills in authentic classroom settings; for example, in the junior and senior years prior to student teaching, the program offers extensive field experiences in a variety of settings enrolling students with diverse backgrounds and needs. Reflectivity relates to consciously analyzing course content and one's own learning for the purpose of deeper understanding and self-improvement. Standards-based curriculum means that our candidates are steeped in Pennsylvania Academic Standards as well as the standards of relevant professional organizations. Taken together, these tenets enable our candidates to become *lifelong reflective professionals committed to the learning of all students*.

Students will choose one of four options for the degree: PK-4 Early Childhood Education, Grades 4- 8 English/Language Arts and Reading, Grades 4-8 Mathematics, and Grades 4-8 Social Studies. Upon successful completion of this major, students will have met all of the requirements for either the Grades PK-4, Grades 4-8 English/Language Arts and Reading, Grades 4-8 Mathematics, or Grades 4-8 Social Studies Instructional I certification issued by the Pennsylvania Department of Education. Students must apply for admission to the major.

Prior to the full-time student teaching experience in the senior year, candidates are expected to complete all other courses required for certification, including two field placements. On-campus courses are scheduled three or four days a week, while field experiences in nearby schools are scheduled part-time, three or four days per week.

For a B. ELED. degree in Elementary Education, PK-4 Early Childhood Option a minimum of 129 credits are required; Grade 4-8 English/Language Arts and Reading Option a minimum of 129 credits are required; Grade 4-8 Mathematics Option a minimum of 129 credits are required; and Grade 4-8 Social Studies Option a minimum of 129 credits are required.

Admission Requirements:
Applicants should have completed most of their first two years of college as well as the Entry to Major Requirements listed below with at least a 3.0 cumulative GPA (4.0 scale). The evaluation of prior college work is done on an individual basis by the Office of Enrollment Services at Penn State Harrisburg. Students admitted to the program must have the appropriate clearances. These include FBI fingerprint check, Act 151 child abuse

history clearance, and Act 34 criminal record check.

Entry to Major Requirements:
Entry to the Elementary Education major requires the completion of 57 or more credits in required courses and the state's minimum cumulative GPA criteria of 3.0. Candidates must complete, with a grade of "C" or better, six (6) credits of college-level mathematics (MATH prefix), three (3) credits of college-level English literature and three (3) credits of college-level English composition. Candidates must submit scores on the PAPA (Pre-Service Academic Performance Assessment) for Reading, Writing, and Mathematics. Candidates thinking seriously about education should plan their freshman and sophomore years carefully. Semesters 5 through 8 are very structured.

Selective Retention:
Monitoring candidate progress in the elementary education program will occur each semester while the candidate is participating in the elementary education program. Candidates will be evaluated for retention in the program based on (1) maintaining a cumulative GPA of 3.0 or higher; (2) performance on the Praxis I tests; (3) satisfactory completion of required courses, including the field experience component; (4) adequate writing and speaking skills as demonstrated in various classroom assignments; and (5) a positive rating on the Penn State Harrisburg Professional Dispositions for Teacher Education Programs monitoring form. Candidates must pass the PRAXIS I examination prior to student teaching.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(33 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in front of *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in GENERAL EDUCATION course selection or REQUIREMENTS FOR THE MAJOR)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 117 credits**[1]**
(This includes 33 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses; 3-6 credits of GH courses; 6 credits of GS courses; 6 credits of GWS)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 93 credits

PRESCRIBED COURSES (75 credits)
GEOG 040 GS;IL(3), C I 280(3), C I 295(2), EDPSY 014(3), EDTHP 115 US(3), ENGL 202A GWS(3), MATH 200 GQ(3) (Sem: 1-4)
EDMTH 301(3), EDSCI 454(3), EDUC 302(3), EDUC 304(3), EDUC 305(3), EDUC 315 US(3), EDUC 320(3), EDUC 352(3), EDUC 495A(1) (Sem: 5-6)
EDMTH 302(3), EDUC 303(3), EDUC 371(3), EDUC 385(3), EDUC 490(12), EDUC 495B(1), HLTH 306(2), SS ED 430W(3) (Sem: 7-8)

ADDITIONAL COURSES (6 credits)
Select 3 credits from: ENGL 015 GWS(3) or ENGL 030 GWS(3) (Sem: 1-2)
Select 3 credits from: ECON 102 GS(3), ECON 104 GS(3), or ECON 014 GS(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 9 credits from GN courses from approved list: 3 credits each (including one with a

lab) from biological science, earth science, and physical science. (Sem: 1-4)
Select 3 credits from any MATH (GQ) (Sem:1-4)

REQUIREMENTS FOR THE OPTION: 24 credits

PK-4 EARLY CHILDHOOD EDUCATION OPTION: (24 credits)

PRESCRIBED COURSES (18 credits)
HD FS 229 GS(3) (Sem:1-4)
EDUC 402(3), EDUC 403(3), EDUC 404(3), EDUC 410(3), EDUC 421(3) (Sem: 5-7)

ADDITIONAL COURSES (6 credits)
Select 3 credits from: HIST 003 GH(3), HIST 012 GH;US(3), HIST 020 GH;US(3), or HIST 021 GH;US(3) (Sem: 1-4)
Select 3 credits of literature from: CMLIT 001 GH;IL(3), CMLIT 002 GH;IL(3), CMLIT 003 GH;IL(3), CMLIT 004 GH;IL(3), CMLIT 005 GH;US;IL(3), CMLIT 006 GH;IL(3), CMLIT 010 GH;IL(3), CMLIT 011 GH;IL(3), CMLIT 100 GH;IL(3), CMLIT 101 GH;US;IL(3), CMLIT 105 GH;IL(3), CMLIT 106 GH;IL(3), CMLIT 107 GH;IL(3), CMLIT 108 GH;IL(3), CMLIT 110 GH;US;IL(3), CMLIT 111 GH;IL(3), CMLIT 141 GH;US;IL(3), CMLIT 184 GH;IL(3), CMLIT 185 GH;IL(3), CMLIT 189 GH;IL(3), ENGL 001 GH(3), ENGL 001W GH(3), ENGL 002 GH(3), ENGL 003 GH(3), ENGL 104 GH(3), ENGL 129 GH(3), ENGL 133 GH(3), ENGL 134 GH(3), ENGL 135 GH;US(3), ENGL 135S GH;US(3), ENGL 139 GH;US(3), ENGL 140 GH(3), ENGL 180 GH(3), ENGL 182A GH;US;IL(3), ENGL 182C GH;IL(3), ENGL 184 GH;IL(3), ENGL 184S GH(3), ENGL 185 GH;IL(3), ENGL 189 GH;IL(3), ENGL 191 GH(3), ENGL 194 GH;US;IL(3), ENGL 262 GH(3), ENGL 263 GH(3), ENGL 265 GH(3), ENGL 268 GH(3) (Sem: 1-4)

ENGLISH/LANGUAGE ARTS AND READING (4-8) OPTION: (24 credits)

PRESCRIBED COURSES (15 credits)
HD FS 239 GS(3) (Sem:1-4)
EDUC 321(3), EDUC 322(3), EDUC 416(3), ENGL 470(3) (Sem: 5-7)

ADDITIONAL COURSES (9 credits)
Select 3 credits of British Literature: ENGL 221(3), ENGL 222(3), ENGL 440(3), ENGL 441(3), ENGL 442(3), ENGL 443(3), ENGL 444(3), ENGL 445(3), ENGL 446(3), ENGL 447(3), ENGL 448(3), ENGL 449 US;IL(3), ENGL 450(3), ENGL 451(3), ENGL 452(3), ENGL 453(3), ENGL 454(3), ENGL 455(3), ENGL 456(3), ENGL 457(3), or ENGL 458(3) (Sem: 1-6)
Select 3 credits of American Literature: ENGL 231(3), ENGL 232(3), ENGL 432(3), ENGL 433(3), ENGL 434(3), ENGL 435(3), ENGL 436(3), ENGL 437(3), ENGL 438(3), or ENGL 439(3) (Sem: 1-6)
Select 3 credits from: HIST 003 GH(3), HIST 012 GH;US(3), HIST 020 GH;US(3), or HIST 021 GH;US(3) (Sem: 1-4)

MATHEMATICS (4-8) OPTION: (24 credits)

PRESCRIBED COURSES (18 credits)
HD FS 239 GS(3), MATH 022 GQ(3), MATH 026 GQ(3), MATH 140 GQ(4), MATH 220 GQ(2) (Sem: 1-4)
EDUC 417(3) (Sem: 6-7)

ADDITIONAL COURSES (6 credits)
Select 3 credits from: HIST 003 GH(3), HIST 012 GH;US(3), HIST 020 GH;US(3), or HIST 021 GH;US(3) (Sem: 1-4)
Select 3 credits of literature from: CMLIT 001 GH;IL(3), CMLIT 001H GH;IL(3), CMLIT 002 GH;IL(3), CMLIT 003 GH;IL(3), CMLIT 004 GH;IL(3), CMLIT 004H GH;IL(3), CMLIT 005 GH;US;IL(3), CMLIT 006 GH;IL(3), CMLIT 010 GH;IL(3), CMLIT 011 GH;IL(3), CMLIT 100 GH;IL(3), CMLIT 101 GH;US;IL(3), CMLIT 105 GH;IL(3), CMLIT 106 GH;IL(3), CMLIT 107 GH;IL(3), CMLIT 108 GH;IL(3), CMLIT 110 GH;US;IL(3), CMLIT 111 GH;IL(3), CMLIT 141

GH;US;IL(3), CMLIT 184 GH;IL(3), CMLIT 185 GH;IL(3), CMLIT 189 GH;IL(3), ENGL 001 GH(3), ENGL 001W GH(3), ENGL 002 GH(3), ENGL 003 GH(3), ENGL 104 GH(3), ENGL 129 GH(3), ENGL 129H GH(3), ENGL 133 GH(3), ENGL 134 GH(3), ENGL 135 GH;US(3), ENGL 135S GH;US(3), ENGL 139 GH;US(3), ENGL 140 GH(3), ENGL 180 GH(3), ENGL 182A GH;US;IL(3), ENGL 182C GH;IL(3), ENGL 184 GH;IL(3), ENGL 184S GH(3), ENGL 185 GH;IL(3), ENGL 189 GH;IL(3), ENGL 191 GH(3), ENGL 194 GH;US;IL(3), ENGL 194H GH;US;IL(3), ENGL 262 GH(3), ENGL 263 GH(3), ENGL 265 GH(3), ENGL 268 GH(3) (Sem: 1-4)

SOCIAL STUDIES (4-8) OPTION: (24 credits)

PRESCRIBED COURSES (21credits)
HD FS 239 GS(3), HIST 003 GH(3), HIST 012 GH;US(3), HIST 020 GH;US(3), HIST 320(3), PL SC 001 GS(3) (Sem:1-4)
EDUC 415(3) (Sem: 6-7)

ADDITIONAL COURSES (3 credits)
Select 3 credits of literature from: CMLIT 001 GH;IL(3), CMLIT 001H GH;IL(3), CMLIT 002 GH;IL(3), CMLIT 003 GH;IL(3), CMLIT 004 GH;IL(3), CMLIT 004H GH;IL(3), CMLIT 005 GH;US;IL(3), CMLIT 006 GH;IL(3), CMLIT 010 GH;IL(3), CMLIT 011 GH;IL(3), CMLIT 100 GH;IL(3), CMLIT 101 GH;US;IL(3), CMLIT 105 GH;IL(3), CMLIT 106 GH;IL(3), CMLIT 107 GH;IL(3), CMLIT 108 GH;IL(3), CMLIT 110 GH;US;IL(3), CMLIT 111 GH;IL(3), CMLIT 141 GH;US;IL(3), CMLIT 184 GH;IL(3), CMLIT 185 GH;IL(3), CMLIT 189 GH;IL(3), ENGL 001 GH(3), ENGL 001W GH(3), ENGL 002 GH(3), ENGL 003 GH(3), ENGL 104 GH(3), ENGL 129 GH(3), ENGL 129H GH(3), ENGL 133 GH(3), ENGL 134 GH(3), ENGL 135 GH;US(3), ENGL 135S GH;US(3), ENGL 139 GH;US(3), ENGL 140 GH(3), ENGL 180 GH(3), ENGL 182A GH;US;IL(3), ENGL 182C GH;IL(3), ENGL 184 GH;IL(3), ENGL 184S GH(3), ENGL 185 GH;IL(3), ENGL 189 GH;IL(3), ENGL 191 GH(3), ENGL 194 GH;US;IL(3), ENGL 194H GH;US;IL(3), ENGL 262 GH(3), ENGL 263 GH(3), ENGL 265 GH(3), ENGL 268 GH(3) (Sem: 1-4)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2009

Blue Sheet Item #: 37-07-004

Review Date: 6/16/09

UCA Revision #1: 8/3/06

PRAXIS revision: 5/13/2013

Comments

CL

English

Capital College (ENGCL)

PROFESSOR PATRICIA E. JOHNSON, *Program Coordinator, School of Humanities*

This English major, with its two options, offers students the unique opportunity to study literature in an interdisciplinary context where the relationships among literature and art, history, music, philosophy, media, and American Studies can be investigated. The major

offers courses in American, British, and world literatures, emphasizing their cultural and historical contexts as well as teaching students to interpret them from a variety of critical perspectives. Small classes in both creative and expository writing encourage students to develop their writing skills by working closely with faculty.

For a B. HUM. degree in English, a minimum of 120 credits is required. For the B. HUM. degree in English with Secondary Education Option, a minimum of 122 credits is required.

GENERAL ENGLISH OPTION: With its emphases on interpretive skills, creativity, and writing, the General English Option provides a foundation for careers in such fields as publishing, public relations, communication, government and law, as well as a strong basis for graduate education.

Entry to Major Requirements:
Entry to the English major requires a 2.00 or higher cumulative grade-point average.

SECONDARY EDUCATION OPTION: The Secondary Education Option enables the graduate to meet all the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education.

Students admitted to the program must have the appropriate clearances. These include FBI fingerprint check, Act 151 child abuse history clearance, and Act 34 criminal record check.

Students thinking seriously about entering the education program should plan their freshman and sophomore years carefully. Semesters 5 through 8 are very structured.

Entry to English Major, Secondary Education option requires the following additional requirements:

1. A minimum grade point average of 3.0.
2. Completion of ENGL 015 GWS(3) or ENGL 030 GWS(3) and three credits of literature from approved list with a C or higher grade.
3. Completion of six credits of college-level mathematics (MATH or STAT prefixes) with a C or higher grade.

Selective Retention (Secondary Education Option):

Following entrance to the major, STUDENTS will be evaluated for retention in the program based on:

1. maintaining a cumulative GPA of 3.0 or higher;
2. completion of required courses with a C or higher grade;
3. an acceptable or above rating on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

To be eligible to student teach, STUDENTS must:

1. maintain a cumulative GPA of 3.0 or higher;
2. complete with a C or higher grade all required Content and Education Courses;
3. submit passing scores from the PAPA (Pre-Service Academic Performance Assessment) for Reading, Writing and Mathematics;*
4. submit and pass the Writing Proficiency Portfolio that demonstrates their proficiency as writers (see English Program Coordinator for specific instructions and deadlines);
5. be rated acceptable or above on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

In order to successfully complete the Secondary Education option, STUDENTS must:

1. complete EDUC 490 with a grade of C or higher;
2. maintain a cumulative GPA of 3.0 or higher;
3. complete with a grade of C or higher, all required Content and Education Courses;
4. complete a presentation portfolio; and
5. be rated acceptable or above on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

*FOR MORE DETAILED INFORMATION SEE THE SECONDARY EDUCATION HANDBOOK.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(6-15 of these credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 0-18 credits

BACHELOR OF HUMANITIES DEGREE REQUIREMENTS: 18 credits
(See description of Bachelor of Humanities Degree Requirements in *Bulletin*.)

REQUIREMENTS FOR THE MAJOR: 45-65 credits
(This includes 6-15 of General Education courses: General English Option, 6 credits of General Education Arts (GA) and/or Social and Behavioral Science (GS) courses; Secondary Education Option, 6 credits of General Education Quantification (GQ) courses, 3 credits of General Education Social Sciences (GS) courses, and 6 credits of General Humanities (GH) courses.

At least 15 credits of Prescribed, Additional, and/or Supporting courses must be taken at the 400 level.

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 21 credits

PRESCRIBED COURSES (6 credits)**[1]**
ENGL 200W(3) (Sem: 5-6)
ENGL 444(3) (Sem: 7-8)

ADDITIONAL COURSES (3 credits)
Select 3 credits from the following: ENGL 221(3), ENGL 221W(3), ENGL 222(3), ENGL 222W(3), ENGL 231(3), ENGL 231W(3), ENGL 232(3), ENGL 232W(3) (Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits) (At least 9 credits must be at the 300-400 level)
Select 3 credits in American ethnic literature or African-American literature from department list (Sem: 3-8)
Select 3 credits in world literature or comparative literature from department list (Sem: 3-8)
Select 3 credits in American literature at the 300 or 400 level from department list (Sem: 5-8)**[1]**

Select 3 credits in British literature at the 300 or 400 level from department list (Sem: 5-8)**[1]**

REQUIREMENTS FOR THE OPTION: 24-53 credits

GENERAL ENGLISH OPTION: (24 credits)

ADDITIONAL COURSES (6 credits)
Select 3 credits from the following: ENGL 050 GA(3), ENGL 210(3), ENGL 212(3), ENGL 213(3), ENGL 215(3), ENGL 250(3), ENGL 412(3), ENGL 413(3), ENGL 415(3), ENGL 416(3), ENGL 417(3), ENGL 418(3), ENGL 419(3), ENGL 420(3), ENGL 421(3), ENGL 422(3), ENGL 423(3), ENGL 425(3), ENGL 470(3), ENGL 491(3) (Sem: 3-8)**[1]**
Select 3 credits from the following ENGL 100(3), ENGL 191 GH(3), ENGL 196 GH:US:IL(3), ENGL 261(3), ENGL 262 GH(3), ENGL 263 GH(3), ENGL 265 GH(3), ENGL 268 GH(3), ENGL 400(3), ENGL 401(3), ENGL 407(3), ENGL 458(3), ENGL 482(3) (Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
Select 12 credits in Literature, Writing, and/or Rhetoric (Sem: 3-8)
Select 6 credits from General Education Arts (GA) and/or Social and Behavioral Sciences (GS) (Sem: 3-8)

SECONDARY EDUCATION OPTION: (53 credits)

PRESCRIBED COURSES (44 credits)
HD FS 239 GS(3) (Sem: 1-2)
EDPSY 014(3) (Sem: 1-3)
C I 280 GH(3) (Sem: 3-4)
EDUC 313(2), EDUC 314(3), EDUC 315W US(3), EDUC 322(3), EDUC 416(3), EDUC 458(3), EDUC 490(12) (Sem: 5-8)
EDUC 459(3), ENGL 470W(3) (Sem: 6-7)**[1]**

ADDITIONAL COURSES (9 credits)
Select 6 credits of General Education Quantification courses (GQ) with a MATH or STAT prefix (Sem: 1-4)
Select 3 credits of GH literature from department list (Sem: 1-4)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2013

Blue Sheet Item #: 41-06-032A

Review Date: 04/09/2013

Program coordinator updated by Publications: 9/29/06

CL

The Environmental Engineering major at Penn State Harrisburg is under review for possible changes. Students interested in this program are encouraged to contact the School of Science, Engineering, and Technology at Penn State Harrisburg to learn about appropriate alternatives.

Environmental Engineering

Capital College (ENVE)

PROFESSOR THOMAS H. EBERLEIN, *Program Chair, School of Science, Engineering, and Technology*

The Environmental Engineering major helps graduates obtain the skills necessary to analyze, design, and manage air pollution control, water supply, waste water treatment, solid waste handling, and hazardous waste systems. A thorough background in engineering fundamentals is provided by a broad core of courses in basic science and mathematics emphasizing sciences such as chemistry and microbiology.

A sequence of environmental engineering design courses distinguishes the undergraduate program. In the senior year, a majority of the environmental engineering courses, such as Solid Waste Management, Treatment Plant Design, Hydraulic Design, and Hazardous Waste Management, utilize a team approach to meet project design objectives. These courses also emphasize written and oral communication of engineering concepts and project results. There is a considerable emphasis on conservation, reuse, and pollution prevention as pollution control strategies in these courses.

Environmental Engineering students are qualified to take the Fundamentals of Engineering (FE) examination leading to certification as an Engineer-in-Training (EIT) and, with appropriate experience after graduation, sit for the Principles and Practice of Engineering (PE) examination leading to registration as a Professional Engineer. They are also qualified to pursue graduate education in Environmental Engineering or other related majors such as Environmental Pollution Control. ENVE graduates are qualified to work at the entry level in a variety of jobs related to environmental protection and management in government and private industry.

For a B.S. degree in Environmental Engineering, a minimum of 131 credits is required.

Entry to Major Requirements:
A 2.00 or higher cumulative grade-point average is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(21 of the 45 credits are included among the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 1-4 credits

REQUIREMENTS FOR THE MAJOR: 103-106 credits
(This includes 21 credits of General Education courses: 3 credits of GWS courses; 9 credits of GN courses; 3 credits of GS courses; 6 credits of GQ courses.)

PRESCRIBED COURSES (76 credits)
CHEM 110 GN(3), CHEM 111 GN(1), CHEM 112 GN(3), CHEM 113 GN(1), EDSGN 100(3) (Sem: 1-2)
MATH 140 GQ(4), MATH 141 GQ(4), PHYS 211 GN(4) (Sem: 1-2)
ENGL 202C GWS(3) (Sem: 1-4)
PHYS 212 GN(4), SSET 295(1) (Sem: 3-4)
E MCH 211(3), E MCH 212(3) (Sem: 3-6)

CHEM 301(3)[1], ENVE 301W(3), GEOSC 303(3), I ENG 302(2), M ENG 322(3) (Sem: 5-6)
ENVE 401(1), ENVE 411(3)[1], ENVE 413W(3)[1], ENVE 415(3), ENVE 416(3)[1], ENVE 417(3), ENVE 424(3)[1], ENVE 425(3), ENVE 470(3)[1] (Sem: 7-8)

ADDITIONAL COURSES (24-27 credits)
Select 3-4 credits from CMPSC 101 GQ(3) or CMPSC 121 GQ(3) or CMPSC 201 GQ(3) or CMPSC 202(3) (Sem: 1-2)
Select 3 credits from ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-2)
Select 3 credits from C ENG 322(3) or E MCH 213(3) (Sem: 2-6)
Select 3 credits from CHEM 202(3) or CHEM 210(3) (Sem: 3-4)
Select 3-4 credits from E E 220(3) or EET 320(4) (Sem: 4-5)
Select 3 credits form MATH 250(3) or MA SC 440(3) (Sem: 3-5)
Select 3-4 credits from MA SC 422(3) or STAT 200 GQ(4) (Sem: 5-6)
Select 3 credits from C E 360(3) or C ENG 361(3)[1] (Sem: 5-6)

SUPPORTING COURSES AND RELATED AREAS (3 credits)
Select 3 credits from the following areas: C E, C E T, E E, EET, ENVE, M E, MET, I E, C ENG, I ENG, M ENG, MATH, CMPSC, STAT (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2006

Blue Sheet Item #: 34-07-185

Review Date: 6/13/06

Program coordinator updated by Publications: 9/29/06

UCA Revision #1: 8/4/06
UCA Revision #2: 7/30/07

CL

Finance

Capital College (FINCE)

JANE S. KOCHANOV, *Director of Undergraduate Studies, School of Business Administration*

The finance major emphasizes analytic, problem solving, and computer skills which are necessary for finance and investment industry. The major prepares students for careers in corporate finance, investment and portfolio management, banking, public finance, and international finance. The major also prepares students who want to pursue graduate study in finance. Depending on their interests, graduates may then seek financial services credentials such as Certified Financial Planner (CFP) and Chartered Financial Analyst (CFA).

The requirements in the major complement basic business instruction in accounting, management, marketing, and information systems. With business and non-business electives, the program is designed to develop necessary skills to be an effective financial manager. Because the Harrisburg area is the center of industry and economic development for south-central Pennsylvania, students are provided with many opportunities to experience the world of business.

For a B.S. degree in Finance, a minimum of 120 credits is required. At least 50 percent of

the business credit hours required for the degree must be taken at Capital College. No more than 60 credits should be from business and business-related courses.

Entry to Major Requirements:
Entry to the Finance major requires the completion of 8 entry-to-major courses: ACCTG 211(4)**[1]**; ECON 102 GS(3)**[1]**; ENGL 015 GWS(3) or ENGL 030 GWS(3); FIN 301(3)**[1]**; MATH 110 GQ(4)**[1]** or MATH 140 GQ(4)**[1]**; MGMT 301(3); MKTG 301(3); SCM 200 GQ(4)**[1]** or STAT 200 GQ(4)**[1]**; and a 2.00 or higher cumulative grade-point average. Additional information about this major is available in the office of the Director of Undergraduate Studies, School of Business at Penn State Harrisburg.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in front of *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: Select 8 credits of non-business courses.

REQUIREMENTS FOR THE MAJOR: 79 credits
(This includes 12 credits of General Education Courses: 3 credits of GWS courses; 3 credits of GS courses; 6 credits of GQ courses)

PRESCRIBED COURSES (49 credits)
ACCTG 211(4)**[1]**; ECON 102 GS(3)**[1]**, ENGL 202D GWS(3), FIN 301(3)**[1]**, MGMT 301(3), MKTG 301(3) (Sem: 1-4)
ECON 104 GS(3)**[1]**, ECON 351(3)**[1]**, FIN 302(3)**[1]**, MIS 204(3), MIS 390(3) (Sem: 5-6)
B A 364Y US;IL(3), FIN 420(3)**[1]**, SCM 301(3) (Sem: 6-7)
B A 462(3)**[1]**, FIN 475(3)**[1]** (Sem: 8)

ADDITIONAL COURSES (21 credits)
Select 4 credits from MATH 110 GQ(4)**[1]** or MATH 140 GQ(4)**[1]** (Sem: 1-4)
Select 4 credits from SCM 200 GQ(4)**[1]** or STAT 200 GQ(4)**[1]** (Sem: 1-4)
Select 4 credits from B A 243(4) or B A 241(2) and B A 242(2) (Sem: 5-6)
Select 9 credits**[1]** from the following: ACCTG 481(3), FIN 305(3), FIN 306W(3), FIN 407(3), FIN 408(3), FIN 409(3), FIN 413(3), FIN 427(3) FIN 456 IL(3), FIN 461(3), FIN 489(3), FIN 496(3), or other finance courses approved by the Program (Sem: 6-8)
(For students considering CFA exam, FIN 407, FIN 427 and FIN 461 are recommended.)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 9 credits from 200-400 level business courses from: ACCTG, B A, ECON, FIN, MGMT, MIS, MKTG, or SCM in consultation with an academic adviser and in support of the student's interests. (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Reviewed by the Department: Spring Semester 2012

Blue Sheet Item #:40-06-060

Review Date: 04/10/2012

UCA Revision #1: 8/4/06
UCA Revision #2: 7/27/07

Comments

CL

Human Development and Family Studies

Penn State Altoona (HFSAL)
Penn State Harrisburg (HFSCA)
University College (HFSCC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Mont Alto, Penn State Shenango, Penn State Worthington-Scranton, Penn State York
College of Health and Human Development (HD FS)
World Campus

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

PROFESSOR STEVEN H. ZARIT, *Head of the Department*

This major is a multidisciplinary program that examines the development of individuals and families across the life span. It enables students to prepare for professional, managerial, or scientific roles in health and human services professions, in public and nonprofit agencies, and in business and industry, as well as for advanced professional or graduate study. Students obtain a broad background in individual and family development across the life span. Courses emphasize biological, psychological, social/cultural, and economic aspects of development. Through course work and undergraduate internships or research projects, students develop skills relevant to career objectives, such as counseling, human assessment, program planning and evaluation, and research.

Two options are available within the major: (1) Life Span Human Services option and (2) Life Span Developmental Science option. The introductory paragraph to each of the options includes a brief list of career opportunities. More extensive descriptions of career opportunities in both public and private sectors are available for the program.

LIFE SPAN HUMAN SERVICES OPTION: This option focuses on the acquisition and application of scientific knowledge about development and family functioning across the life span for the purposes of enhancing personal and family development. Courses emphasize: (1) understanding the biological, psychological, and social development across the life span, and the structuring and functioning of families; (2) understanding basic theoretical and methodological issues; and (3) the development of applied skills in intervention and evaluation, prevention, and in the formulation of social policy. An approved field experience in a setting that serves children, youth, adults, or the aged is required for this option. Typical employment settings include preschools, daycare centers, hospital programs for children, youth, and families, institutional and community mental health programs for individuals and families, programs for abused or neglected children and adolescents, women's resource centers, human resources programs, employee assistance programs, nursing homes, area agencies on aging and other community settings for older adults, and public welfare and family service agencies. Typical postgraduate pursuits of students completing this option include graduate study in human development, family studies, psychology, or sociology, or advanced professional training in psychology, law, behavioral health, counseling or social work.

LIFE SPAN DEVELOPMENTAL SCIENCE OPTION: This option focuses on the understanding of contemporary methodological approaches to the acquisition of scientific knowledge about individual development over the life span and about family development. This option provides preparation for advanced training in careers in developmental or family research, teaching at a college or university, or for professional careers that require graduate training. Courses within this option emphasize a thorough understanding of the theory and methods of developmental and family theory and research. An approved, multi-semester research practicum is an integral component of this option. Typical postgraduate pursuits of students completing this option include graduate study in human development, family studies, psychology, or sociology, or advanced professional training in psychology, law, behavioral health, social work, or in other programs related to services for individuals and families.

For the B.S. degree in Human Development and Family Studies, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(3-4 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selections, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 3-5 credits

REQUIREMENTS FOR THE MAJOR: 73-76 credits
(This includes 3-4 credits of General Education GQ courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 30-31 credits

PRESCRIBED COURSES (18 credits)**[1]**
HD FS 129 GS(3), HD FS 301(3), HD FS 311(3), HD FS 312W(3), HD FS 315 US(3)**[93]**, HD FS 418(3) (Sem: 3-6)

ADDITIONAL COURSES (12-13 credits)**[1]**
Select 6 credits from HD FS 229 GS(3), HD FS 239 GS(3), HD FS 249 GS(3) (Sem: 1-4)
STAT 200 GQ(4) or EDPSY 101 GQ(3) (Sem: 1-4)
Select 3 credits of United States Cultures (US)**[92]** (Sem: 4-8)

REQUIREMENTS FOR THE OPTION: 43-45 credits

LIFE SPAN HUMAN SERVICES OPTION: (43-45 credits)

PRESCRIBED COURSES (9 credits)**[1]**
HD FS 411(3), HD FS 414(3), HD FS 455(3) (Sem: 5-8)

ADDITIONAL COURSES (22-24 credits)**[1]**
Select 3 credits from HD FS 428(3), HD FS 429(3), HD FS 433(3) or HD FS 445(3) (Sem: 5-8)
Select 6 credits from 300- or 400-level HD FS courses (Sem: 5-8)

Select 13-15 credits from (a) or (b)
(a) Approved field practice in a human service setting: HD FS 490(2), HD FS 495A(9), HD FS 495B(3) (Sem: 5-8)
(b) Approved group project or field practice in human service setting: HD FS 401(3), HD FS 402(4), HD FS 495C(6-8) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits (minimum of 6 credits at the 400 level) in consultation with adviser from University-wide offerings that develop competency in the option (a grade of C or better is required in any HD FS course taken to satisfy this requirement) (Sem: 5-8)

LIFE SPAN DEVELOPMENTAL SCIENCE OPTION: 45 credits

PRESCRIBED COURSES (6 credits)**[1]**
HD FS 494(6) or HD FS 494H(6) (Sem: 5-8)

ADDITIONAL COURSES (21 credits)**[1]**
Select 6 credits from HD FS 428(3), HD FS 429(3), HD FS 433(3), HD FS 445(3) (Sem: 5-8)
Select 15 credits (minimum of 9 credits at the 400-level) from HD FS courses (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
Select 18 credits (minimum of 9 credits at the 400 level) in consultation with adviser from University-wide offerings that develop competency in option (a grade of C or better is required in any HD FS course taken to satisfy this requirement) (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[92] This course is in addition to the 6 credits of United States Cultures and International Cultures.
[93] This course fulfills the University's United States Cultures requirement.

Last Revised by the Department: Summer Session 2006

Blue Sheet Item #: 34-02-111

Review Date: 10/11/05

HH

Information Sciences and Technology

Abington College (ISSAB)
Berks College (ISSBL)
Capital College (ISSCA)
University College: Penn State Beaver, Penn State Brandywine, Penn State Greater Allegheny, Penn State Hazleton, Penn State New Kensington, Penn State Lehigh Valley, Penn State Mont Alto, Penn State Schuylkill, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York (ISSCC)
World Campus

University Park, College of Information Sciences and Technology (ISTBS)

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

This major is structured to provide students with the theoretical frameworks and skill sets necessary to compete and be productive in the information technology-intensive global context that defines the new "Information Age." Specifically, the degree will be focused on a program that will build an understanding of core information technologies and related areas of study; will prepare students for the practical application of various information sciences and related technologies; and engage students in sharpening their abilities to think critically and to work in teams. All this will be done with considerable interdisciplinary integration in order to expose students to the cognitive, social, institutional, and global environments of IST. Team projects in most courses, a required internship, and a senior capstone experience provide additional, focused venues for involving students in the cutting-edge issues and technologies of the field.

INFORMATION SYSTEMS: DESIGN & DEVELOPMENT OPTION: This option is focused on expanding the skills needed to develop advanced information technology systems using state-of-the-art tools and techniques. The emphasis is on providing the student with both knowledge in the design, implementation, testing and evolution of complex software systems as well as a set of project-oriented, team-programming experiences.

INFORMATION TECHNOLOGY: INTEGRATION & APPLICATION OPTION: This option is designed to prepare students to use information technology to realize a variety of system-based goals (e.g., reliability, accessibility, efficiency, etc.). It is focused on developing a theoretical foundation and the skill set needed for integrating information technology into different systems for the purpose of enhancing system performance. The emphasis is on providing the student with both the theoretical frameworks needed to use information technology as a system attribute as well as a set of application-oriented experiences and skills.

INFORMATION CONTEXT: PEOPLE, ORGANIZATIONS, AND SOCIETY OPTION: This option focuses on how information technology affects social change and the delivery of information to the consumer. This includes the human-machine interface; organization and retrieval of information; digital libraries; information and telecommunications services; information and media industry structures; software services and intermediaries; telecommunications and information law and policy; sociological aspects of technology change; multimedia; and art, design, and aesthetics.

Entrance Requirements: To be eligible for entrance to the Information Sciences and Technology (ISTBS) major, students must:

1. be taking, or have taken, a program appropriate for entry to the major as shown in the *Bulletin*, including approximately 60 credits of course work.
2. have completed the following entrance-to-major requirements with grades of C or better in each: IST 110(3); IST 210(4); and IST 220(3). These courses must be completed by the end of the semester during which the entrance-to-major procedure is carried out.
3. have achieved a minimum cumulative grade point average of 2.00 prior to and through the end of the semester during which the entrance-to-major procedure is carried out.

For the B.S. degree in Information Sciences and Technology, a minimum of 125 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of the *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 7 credits

REQUIREMENTS FOR THE MAJOR: 85 credits
(This includes 12 credits of General Education courses: 6 credits of GQ courses; 3 credits of GS courses; and 3 credits of GWS courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 64 credits

PRESCRIBED COURSES (33 credits)
CMPSC 101 GQ(3)**[1]**, IST 110 GS(3)**[1]**, IST 210(4)**[1]**, IST 220(3)**[1]**, IST 230(3)**[1]**, IST 240(3)**[1]** (Sem: 1-4)
STAT 200 GQ(4) (Sem: 3-6)
IST 495(1)**[1]** (Sem: 3-8)
IST 301(3)**[1]**, IST 331(3)**[1]** (Sem: 5-8)
IST 440W(3)**[1]** (Sem: 7-8)

ADDITIONAL COURSES (10 credits)
ECON 102 GS(3), ECON 104 GS(3), or ECON 014 GS(3) (Sem: 1-4)
ENGL 202C GWS(3) or ENGL 202D GWS(3) (Sem: 1-4)
MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (21 credits)
Attainment of third-level proficiency in a single foreign language (12 credits). Proficiency must be demonstrated by either examination or course work. See the admission section of the general information in this *Bulletin* for the placement policy for Penn State foreign language courses. (Sem: 1-4)
Select 6 credits of international courses in foreign culture from College-approved list (Sem: 5-8)
Select 3 credits**[1]** at the 400 level in emerging issues and technologies from College-approved list (Sem: 5-8)

REQUIREMENTS FOR THE OPTION: 21 credits

INFORMATION SYSTEMS: DESIGN & DEVELOPMENT OPTION: 21 credits

PRESCRIBED COURSES (3 credits)**[1]**
IST 311(3) (Sem: 5-8)

ADDITIONAL COURSES (6 credits)**[1]**
Select 6 credits from IST 411(3), IST 412(3), or IST 413(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from College-approved list (Sem: 5-8)

INFORMATION TECHNOLOGY: INTEGRATION & APPLICATION OPTION: 21 credits

PRESCRIBED COURSES (9 credits)**[1]**
IST 302(3), IST 420(3), IST 421(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)

Select 12 credits from College-approved list (Sem: 5-8)

INFORMATION CONTEXT: PEOPLE, ORGANIZATIONS, AND SOCIETY OPTION: 21 credits

PRESCRIBED COURSES (6 credits)**[1]**
IST 431(3) and IST 432(3) (Sem: 5-8)

ADDITIONAL COURSES (3 credits)**[1]**
IST 302(3) or IST 413(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from College-approved list (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2009

Blue Sheet Item #: 37-06-049

Review Date: 4/14/09

IS

Information Systems

Capital College (INFSY)

JANE S. KOCHANOV, *Director of Undergraduate Studies, School of Business Administration*

This major prepares students to enter rapidly expanding fields associated with technology. This includes programming, systems analysis and design, database administration, network management, support services and training, and management of information resources. Students obtain competence both in information technology and in business theory. Thus, the curriculum combines technical content with managerial aspects of information systems. Each student's background is complemented with basic business instruction in accounting, marketing, management, and finance. With business and non-business electives, the program is designed to develop necessary skills to be an effective Information Systems employee. Because the Harrisburg area is the center of industry and economic development for South Central Pennsylvania, students are provided with many opportunities to experience the exciting and challenging world of business.

Students will obtain:

Knowledge in technologies that support the information environment.

Knowledge in business or organizational processes that are supported by technology.

General skills and abilities that promote good communication, problem-solving and analytical abilities, and the ability to work in a team environment.

Skills to participate in and lead multidisciplinary teams in the development, implementation, and management of information technology solutions.

The program meets the objectives through varied experiences and an emphasis on good

communication skills.

Entry to Major Requirements:
Entry to the Information Systems major requires the completion of 8 entry-to-major courses: ACCTG 211(4); ECON 102 GS(3); ENGL 015 GWS(3) or ENGL 030 GWS(3); FIN 301(3); MATH 110 GQ(4) or MATH 140 GQ(4); MGMT 301(3); MKTG 301(3); SCM 200 GQ(4) or STAT 200 GQ(4); and a 2.00 or higher cumulative grade-point average. Additional information about this major is available in the office of the Director of Undergraduate Studies, School of Business Administration at Penn State Harrisburg.

For a B.S. in Information Systems, a minimum of 120 credits is required. At least 30 credits of the final 60 credits must be taken at the Capital College. At least 50 percent of the business credit hours required for the degree must be taken at the Capital College. No more than 60 credits should be from business and business-related courses.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 8 credits

REQUIREMENTS FOR THE MAJOR: 79 credits
(This includes 12 credits of General Education courses: 3 credits of GWS courses; 3 credits of GS courses; 6 credits of GQ courses)

PRESCRIBED COURSES (49 credits)
ACCTG 211(4) (Sem: 1-4)
ECON 102 GS(3), FIN 301(3), MGMT 301(3), MKTG 301(3) (Sem: 1-4)
ENGL 202D GWS(3) (Sem: 3-4)
B A 364Y US;IL(3), B A 462(3), ECON 104 GS(3), MIS 204(3), MIS 307(3)**[1]**, MIS 390(3)**[1]**, MIS 448(3)**[1]**, MIS 450(3)**[1]**, MIS 465(3)**[1]**, SCM 301(3) (Sem: 5-8)

ADDITIONAL COURSES (24 credits)
Select 3 credits from CMPSC 101 GQ(3) or CMPSC 121 GQ(3) (Sem: 1-4)
Select 4 credits from MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)
Select 4 credits from SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 1-4)
Select 4 credits from B A 243(4) or B A 241(2) and B A 242(2) (Sem: 5-6)
Select 9 credits**[1]** from the following: IST 302(3), IST 451(3), IST 456(3), MIS 413(3), MIS 440(3), MIS 446(3), MIS 460(3), MIS 461(3), MIS 466(3), MIS 489(3) (Sem: 5-8).

SUPPORTING COURSES AND RELATED AREAS (6 credits)
Select 6 credits from 200-400 level business courses from: ACCTG, B A, ECON, FIN, MGMT, MIS, MKTG, or SCM in consultation with an academic adviser and in support of the student's interests. (Sem: 3-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Reviewed by the Department: Summer Session 2011

Blue Sheet Item #:40-01-046

Review Date: 8/16/2011

UCA Revision #1: 8/8/06
UCA Revision #2: 7/27/07

CL

Interdisciplinary Humanities

Capital College (I HUM)

PROFESSOR PATRICIA E. JOHNSON, *Program Coordinator, School of Humanities*

This major helps students appreciate, understand, and interpret relationships among the arts, ideas, media, and values that have shaped Western and world cultures. Students are expected to be active learners who can synthesize, interpret, and communicate knowledge and experience through writing, speaking, and creative expression in a variety of media. The School helps students meet these goals by offering a range of interdisciplinary and discipline-based courses in the arts, art history, communication studies, English, history, literature, music, philosophy, theatre, and writing.

Entry to Major Requirements:
Entry to the Interdisciplinary Humanities major requires the completion of 28 or more credits and a 2.00 or higher cumulative grade-point average.

For a B.HUM. degree in Interdisciplinary Humanities, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 11-15 credits

REQUIREMENTS FOR THE MAJOR: 60-64 credits
(At least 36 of the last 60 credits must be earned at Penn State, according to University Policy 83-80.)

PRESCRIBED COURSES (6 credits)
I HUM 300W(3)**[1]**, I HUM 400(3)**[1]** (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (54-58 credits)
(At least 12 credits of supporting courses must be at the 400 level.)
Select 12-16 credits: 1 course each from 4 different major/program offerings in AMSTD,

C ART, ART H, A&A, CAMS, CMSTD, COMM, HCOMM, CMLIT, ENGL, ENLSH, C HIS, HIST, HUM, LIT, C MUS, MUSIC, PHIL, PHLOS, RL ST, SPCOM, THTRE, or choice(s) from a School of Humanities approved list. (Sem: 3-8)
Select 15 credits from AM ST, AMSTD, C ART, CMSTD, COMM, HCOMM, CMLIT, ENGL, ENLSH, C HIS, HIST, HUM, LIT, C MUS, MUSIC, PHIL, PHLOS, RL ST, SPCOM, THTRE, or choice(s) from a School of Humanities approved list. (Sem: 3-8)
Select 9 credits[1] from Interdisciplinary Humanities (HUM or I HUM) courses (Sem: 4-8)
Select 18 credits from the School of Humanities approved list in consultation with an academic adviser or select a Capital College minor in support of the student's interests. (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2001

Blue Sheet Item #: 29-04-009

Review Date: 3/8/04

CL

Letters, Arts, and Sciences

Abington College (LASAB)
Altoona College (LASAL)
Penn State Harrisburg (LASCA)
University College (LASCC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Greater Allegheny, Penn State Hazleton, Penn State Mont Alto, Penn State Shenango, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York
University Park, College of the Liberal Arts (LAS)
World Campus

Letters, Arts, and Sciences is a multi-disciplinary, theme-oriented, and student-designed major leading to a bachelor of arts degree. The major consists of 36 credits, divided into two sections. The core (12 credits) consists of 3 credits each in the following: research methods/projects; communication skills; theory/application; and critical analysis. The additional courses (24 credits) consist of courses directed toward the student's theme, 15 credits of which must be at the 400 level.

In order to be eligible for entrance to the major, the student must submit a proposal. In consultation with an LAS adviser, the student formulates a proposal designing a program that investigates a theme from the viewpoint of at least three different subject areas. Students may not duplicate existing majors from any academic area. An important standard for entrance to the Letters, Arts, and Sciences major is the student's ability to design a program with academic integrity worthy of a bachelor of arts degree.

For the B.A. degree in Letters, Arts, and Sciences, a minimum of 120 credits is required.

Per Senate Policy 83-80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. For more information, check the Recommended Academic Plan for your intended program.

Early Admission Program for Professional Schools*:* If a student is accepted and

enrolled as a degree candidate in a professional postgraduate degree program requiring three years or more to complete (such as medical school, dental school, law school, theological seminary, etc.) and if that student completes 94 undergraduate credits at Penn State including General Education, B.A. requirements, and the LAS 12-credit core requirements, that student may use up to 30 credits from the professional school to complete the B.A. in LAS.

It must be emphasized that only top students are accepted into professional school programs on such an early admission basis and that not every professional school has such a policy. Students must have enrolled in LAS prior to attending the professional school to request graduation in LAS.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 15 credits

BACHELOR OF ARTS DEGREE REQUIREMENTS: 24 credits
(3 of these 24 credits are included in the REQUIREMENTS FOR THE MAJOR, GENERAL EDUCATION, or ELECTIVES and 0-12 credits are included in ELECTIVES if foreign language proficiency is demonstrated by examination.)
(See description of Bachelor of Arts Degree Requirements in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 36 credits**[1]**

ADDITIONAL COURSES (24 credits)
In consultation with adviser, select 24 credits from University-wide offerings to include:
a) 12 credits at the 400 level representing at least three different subject areas;
b) a 3 credit 400-level capstone course (to be selected in consultation wtih adviser);
c) at least 9 credits (of the 24 total) from the humanities and social sciences. (Sem: 1-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
In consultation with adviser, select 3 credits in research methods/projects from courses that involve research methodology or that focus on a research project; select 3 credits in communication skills from courses that focus on expression including those in verbal, symbolic, and written skills; select 3 credits in theory/application from courses that focus on theory, principle, central concepts, or fundamental issues; select 3 credits in critical analysis from courses that focus on evaluation, synthesis, and analysis. (Sem: 1-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2008

Blue Sheet Item #: 36-04-042

Review Date: 1/15/08

Reviewed by Publications: 06/23/06

LA

Management

Capital College (MNGMT)

JANE S. KOCHANOV, *Director of Undergraduate Studies, School of Business Administration*

This major provides students with the knowledge and skills managers need in today's dynamic business environments. Core management courses provide a general overview of key management competencies including effective leadership, team building, managing and motivating human resources, facilitating organizational change and learning, and fostering and applying organizational knowledge for competitive advantage. Students complement this general management foundation with a human resource management, entrepreneurship, supply chain management, or individualized concentration.

HUMAN RESOURCE MANAGEMENT CONCENTRATION: This concentration prepares students for a career in human resource management by developing skills and competencies in managing diversity and equal opportunity, ethical and fair treatment of employees, human resource planning and staffing, employee training and development, compensation and benefits, performance management, labor relations, and protecting employee safety and health. Students completing this concentration would be prepared to demonstrate their knowledge of the core principles of human resource practices and the application of those principles for potential certification as a Professional in Human Resources (PHR), Senior Professional in Human Resources (SPHR), or Global Professional in Human Resources (GPHR).

ENTREPRENEURSHIP CONCENTRATION: The Entrepreneurship concentration is designed to introduce undergraduate students to the process of new venture development. Topics covered in the concentration include business plan development, the nature of management in small business, and the role of creativity and innovation in the entrepreneurial process. Opportunities are provided for student participation in the development of an actual new business venture.

SUPPLY CHAIN MANAGEMENT CONCENTRATION: The Supply Chain Management concentration prepares students for a professional career in managing supply chain activities by developing knowledge, skills, and competencies in the areas of logistics, procurement, inventory, transportation, and warehouse management. Students learn analytical techniques including trade-off analysis, construction and evaluation of networks, and optimization methods. Emphasis is placed on attaining an in-depth understanding of both inter-functional and inter-firm collaboration, whereby supply chains become the basis of competitive advantage.

INDIVIDUALIZED CONCENTRATION: The Individualized concentration is designed to provide students with a customized specialization that enables them to develop their own concentration in a management field of their choice. It allows flexibility in developing student knowledge and competencies in accordance with their personal, professional, and career interests.

Entry to Major Requirements:
Entry to the Management major requires the completion of 8 entry-to-major courses: ACCTG 211(4); ECON 102 GS(3); ENGL 015 GWS(3) or ENGL 030 GWS(3); FIN 301(3); MATH 110 GQ(4) or MATH 140 GQ(4); MGMT 301(3)[1]; MKTG 301(3); SCM 200 GQ(4) or

STAT 200 GQ(4); and a 2.00 or higher cumulative grade-point average. Additional information about this major is available in the office of the Director of Undergraduate Studies, School of Business Administration at Penn State Harrisburg.

For a B.S. degree in Management, a minimum of 120 credits is required. At least 50 percent of the business credit hours required for the degree must be taken at the Capital College. No more than 60 credits should be from business and business-related courses.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: Select 8 credits of non-business courses.

REQUIREMENTS FOR THE MAJOR: 79 credits
(This includes 12 credits of General Education Courses: 3 credits of GWS courses; 3 credits of GS courses; 6 credits of GQ courses.)

PRESCRIBED COURSES (46 credits)
ACCTG 211(4) (Sem: 1-4)
ECON 102 GS(3), FIN 301(3), MGMT 301(3)**[1]**, MKTG 301(3) (Sem: 1-4)
ENGL 202D GWS(3) (Sem: 3-4)
B A 364Y US;IL(3), B A 462(3)**[1]**, ECON 104 GS(3), MGMT 341(3)**[1]**, MGMT 433(3)**[1]**, MGMT 466(3)**[1]**, MIS 204(3), MIS 390(3), SCM 301(3) (Sem: 5-8)

ADDITIONAL COURSES (21 credits)
Select 4 credits from MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)
Select 4 credits from SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 1-4)
B A 243(4) or B A 241(2) and B A 242(2) (Sem: 5-6)

Select 9 credits from one of the following four areas of concentration A, B, C, D:

A. HUMAN RESOURCE MANAGEMENT CONCENTRATION
MGMT 440(3)**[1]**, MGMT 450(3)**[1]** (Sem: 5-8)
Select 3 credits in MGMT **[1]** at the 300-400 level from department list in consultation with academic adviser (Sem: 5-8)

B. ENTREPRENEURSHIP CONCENTRATION
MGMT 431(3)**[1]**, MGMT 453(3)**[1]** (Sem: 5-8)
Select 3 credits in MGMT **[1]** at the 300-400 level from department list in consultation with academic adviser (Sem: 5-8)

C. SUPPLY CHAIN MANAGEMENT CONCENTRATION
Select 6 credits from SCM 320(3)**[1]**, SCM 416(3)**[1]**, SCM 445(3)**[1]** (Sem: 5-8)
Select 3 credits in SCM **[1]** or MGMT **[1]** at the 300-400 level from department list in consultation with academic adviser (Sem: 5-8)

D. INDIVIDUALIZED CONCENTRATION

Select 9 credits in MGMT **[1]** at the 300-400 level from department list in consultation with academic adviser (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from 200-400 level business courses from: ACCTG, B A, ECON, FIN, MIS, MGMT, MKTG, or SCM in consultation with an academic adviser and in support of the student's interests. (Sem: 3-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Reviewed by the Department: Summer Session 2011

Blue Sheet Item #:40-01-048

Review Date: 8/16/2011

UCA Revision #1: 8/8/06
UCA Revision #2: 7/27/07

CL

Marketing

Capital College (MRKT)

JANE S. KOCHANOV, *Director of Undergraduate Studies, School of Business Administration*

This major is designed for students interested in careers involving sales, promotion, services, distribution, research, and planning for business and the public sector. The major provides students with key concepts and methods of analysis in marketing. It focuses on understanding customer needs, developing products or services, creating and implementing marketing plans, monitoring customer responses, and projecting marketing activities for the future.

Entry to Major Requirements:
Entry to the Marketing major requires the completion of 8 entry-to-major courses: ACCTG 211(4); ECON 102 GS(3); ENGL 015 GWS(3) or ENGL 030 GWS(3); FIN 301(3); MATH 110 GQ(4) or MATH 140 GQ(4); MGMT 301(3); MKTG 301(3)**[1]**; SCM 200 GQ(4) or STAT 200 GQ(4); and a 2.00 or higher cumulative grade-point average. Additional information about this major is available in the office of the Director of Undergraduate Studies, School of Business at Penn State Harrisburg.

For the B.S. degree in Marketing, a minimum of 120 credits is required. At least 50 percent of the business credit hours required for the degree must be taken at the Capital College. No more than 60 credits should be from business and business-related courses.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: Select 8 credits of non-business courses.

REQUIREMENTS FOR THE MAJOR: 79 credits
(This includes 12 credits of General Education Courses: 3 credits of GWS courses; 3 credits of GS courses; 6 credits of GQ courses.)

PRESCRIBED COURSES (46 credits)
ACCTG 211(4) (Sem: 1-4)
ENGL 202D GWS(3), ECON 102 GS(3), FIN 301(3), MGMT 301(3), MKTG 301(3)**[1]** (Sem: 1-4)
B A 364Y US;IL(3), B A 462(3), ECON 104 GS(3), MIS 204(3), MIS 390(3), SCM 301(3) (Sem: 5-8)
MKTG 330(3)**[1]**, MKTG 342(3)**[1]**, MKTG 450W(3)**[1]** (Sem: 5-8)

ADDITIONAL COURSES (21 credits)
Select 4 credits from MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)
Select 4 credits from SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 1-4)
B A 243(4) or B A 241(2) and B A 242(2) (Sem: 5-6)
Select 9 credits **[1]** from the following: ECON 342(3), MKTG 302(3), MKTG 327(3), MKTG 422(3), MKTG 445 IL(3), MKTG 476(3), MKTG 478(3), MKTG 485(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from 200-400 level business courses from: ACCTG, B A, ECON, FIN, MIS, MGMT, MKTG, or SCM in consultation with an academic adviser and in support of the student's interests. (Sem: 3-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Reviewed by the Department: Summer Session 2011

Blue Sheet Item #:40-01-049

Review Date: 8/16/2011

UCA Revision #1: 8/3/06
UCA Revision #2: 7/27/07

CL

Mathematical Sciences

Capital College (MA SC)

PROFESSOR THANG N. BUI, *Program Chair, School of Science, Engineering, and Technology*

The two options and the variety of the course offerings provide concentrations in various areas such as actuarial science, management science/operation research, statistics, education, and preparation for graduate studies.

Small classes, excellent faculty, opportunities to work with faculty on projects, and strong employment prospects are just some of the strengths of the program. Students will be helped to develop: a solid foundation in mathematical studies; an awareness of the utility of mathematics, statistics, and computers; skills in translating practical problems into mathematical terms; a competency in the use of modern mathematical tools;

problem-solving skills; and an awareness of the importance of mathematics in society.

The program is designed to prepare students for employment in business, industry, government, and education immediately after graduation, but graduate study in mathematics or related disciplines is also a viable alternative. Mathematical modeling is emphasized, and all students are required to take courses in statistics and computer science.

Entry to Major Requirements:
Entry to the Mathematical Sciences major requires that the student has completed with a grade of C or higher: MATH 140 GQ(4), MATH 141 GQ(4). A 2.00 or higher cumulative grade-point average is required.

The Mathematical Sciences Secondary Education Option prepares students to meet the requirements, as established by the Pennsylvania Department of Education, to be certified for the Instructional I Certificate in Mathematics at the secondary level.

Students admitted to the program must have the appropriate clearances. These include FBI fingerprint check, Act 151 child abuse history clearance, and Act 34 criminal record check.

Students thinking seriously about entering the education program should plan their freshman and sophomore years carefully. Semesters 5 through 8 are very structured.

Entry to the Mathematical Sciences Secondary Education option requires the following additional requirements:

1. a minimum cumulative grade-point average of 3.0
2. completion of ENGL 015 GWS(3) or ENGL 030 GWS(3) and three credits of literature from approved list with a C or higher grade

Selective Retention:

Following entrance to the major, students will be evaluated for retention in the program based on:

1. maintaining a cumulative GPA of 3.0 or higher;
2. completion of required courses with a C or higher grade;
3. an acceptable or above rating on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

To be eligible to student teach, students must:

1. maintain a cumulative GPA of 3.0 or higher;
2. complete all required Content and Education Courses with a C or higher grade;
3. submit passing scores from the PAPA (Preservice Academic Performance Assessment)
4. be rated acceptable or above on the Penn State Harrisburg Professional Dispostions for Teacher Education.*

In order to successfully complete the Secondary Education Mathematics Program, students must:

1. complete EDUC 490 with a grade of C or higher;
2. maintain a cumulative GPA of 3.0 or higher;
3. complete all required Content and Education Courses with a C or higher grade;
4. pass the Penn State Harrisburg Mathematics Content Exam with an 80% or higher
5. complete a presentation portfolio; and
6. be rated acceptable or above on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

For a B. S. degree in Mathematical Sciences, a minimum of 120 credits is required.
For a B. S. degree in Mathematical Sciences with the Secondary Education option, a minimum of 121 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(9 to 18 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 84-94 credits
(This includes 9-18 credits of General Education courses: 3 credits of GWS courses; 6 credits of GQ courses. In addition, the Secondary Education option includes 6 credits of GH courses and 3 credits of GS courses)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 20 credits

PRESCRIBED COURSES (20 credits)
MATH 140 GQ(4)**[1]**, MATH 141 GQ(4)**[1]** (Sem: 1-2)
ENGL 202C GWS(3) (Sem: 4)
MATH 315(3)**[1]**, MATH 430(3)**[1]**, (Sem: 5)
MATH 401(3)**[1]**, (Sem: 6)

REQUIREMENTS FOR THE OPTION: 64-74 credits

GENERAL MATHEMATICAL SCIENCES OPTION: (64 credits)

PRESCRIBED COURSES (31 credits)
CMPSC121 GQ(3), MATH 230(4) (Sem: 3)
MATH 220 GQ(2)**,** MATH 251(4) (Sem: 4)
MATH 318(3) (Sem: 5)
MATH 455(3)**[1],** STAT 301GQ(3) (Sem: 6)
MATH 435(3), MATH 475W US;IL(3) (Sem: 7)
MATH 449(3) (Sem: 8)

SUPPORTING COURSES AND RELATED AREAS (33 credits)
Select 6 credits of 200 level or above courses. (Sem: 5-6)
Select 18 credits of 300-400 level Mathematics courses or SSET 295 in consultation with an academic adviser. Up to 6 of these credits may be replaced by any 200 or greater level CMPSC courses or CMPSC 122. (Sem: 5-8)
Select 9 credits of 300-400 level courses in consultation with an academic adviser and in support of the student's interests. (Sem: 5-8)

SECONDARY EDUCATION IN MATHEMATICAL SCIENCES OPTION: (74 credits)

PRESCRIBED COURSES (62 credits)
HD FS 239 GS(3) (Sem: 1-4)
CMPSC121 GQ(3)**[1]**, EDPSY 014(3)**[1]**, MATH 230(4)**[1]** (Sem: 3)
C I 280 GH(3)**[1]**, MATH 220 GQ(2)**[1]**, MATH 250(3)**[1]** (Sem: 4)
EDUC 313(2)**[1]**, EDUC 314(3)**[1]** (Sem: 5)
EDUC 315W US(3)**[1]**, EDUC 458(3)**[1]**, MATH 427(3)**[1]**, STAT 301GQ(3)**[1]** (Sem: 6)
EDUC 417(3)**[1]**, EDUC 459(3)**[1]**, MATH 435(3)**[1]**, MATH 475W US;IL(3)**[1]** (Sem: 7)
EDUC 490(12)**[1]** (Sem: 8)

ADDITIONAL COURSES (3 credits)
Select 3 credits from MATH 425(3) or MATH 450(3)**[1]** (Sem: 7-8)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 3 credits of literature (GH) from department list.**[1]** (Sem: 1-3)
Select 3 credits of 100-400 level courses (Sem: 4)
Select 3 credits of 300-400 level courses in Mathematics, Computer Science, Statistics, or Education.**[1]** (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2013

Blue Sheet Item #: 41-06-034

Review Date: 04/09/2013

UCA Revision #1: 8/9/06
UCA Revision #2: 7/30/07

CL

Mechanical Engineering

Penn State Berks (ME BL)
Penn State Erie, The Behrend College (ME BD)
Penn State Harrisburg (ME CA)

Built upon a broad foundation in physics, chemistry, and mathematics, this major has the objective of educating graduates to be problem solvers. Graduates of this program will have had opportunities to learn about applying scientific principles, engineering analysis, and engineering design to solve unstructured problems that are typical of those found in mechanical engineering. The major helps prepare graduates for a lifelong productive career, whether they choose professional practice, graduate school, or some other career path. Graduates will have had opportunities to learn how to work with others toward a common goal, to clearly express their ideas in written and verbal form, and to be independent and capable of adapting to the continuously changing technology of the work environment.

After completing the fundamental science core, students may pursue their interest in mechanical engineering by studying fluid and solid mechanics, engineering materials and their properties, thermodynamics and heat transfer, computer-aided design, kinematics and dynamics of machine elements, machine design, finite elements, control systems, electricity, and electronic instrumentation and machinery. The students will be required to analyze and solve a significant mechanical engineering design problem during their senior year.

Entrance Requirement: In addition to the Carnegie unit and minimum GPA requirements described by University policies, all students applying for entrance to any of the engineering majors at either Behrend or Capital college must have at least a 2.0 cumulative GPA by the end of the semester prior to applying for entrance to the major and have completed, with a minimum grade of C: CHEM 110 GN(3), MATH 140 GQ(4), MATH 141 GQ(4), and PHYS 211 GN(4). These courses must be completed by the end of the semester during which the admission to major process is carried out.

For the B.S. degree in Mechanical Engineering, a minimum of 131 credits is required. Each student must earn at least a grade of C in each 300- and 400-level course in the major field.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(21 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in REQUIREMENTS FOR THE MAJOR)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 107-108 credits
(This includes 21 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses; 3 credits of GS courses; 3 credits of GWS courses.)

PRESCRIBED COURSES (88-89 credits)
CHEM 110 GN(3)**[1]**, EDSGN 100S(3) (Sem: 1-2)
E E 211(3), E MCH 211(3)**[1]**, E MCH 212(3)**[1]**, E MCH 213(3)**[1]**, M E 300(3)**[1]**, MATH 140 GQ(4)**[1]**, MATH 141 GQ(4)**[1]**, MATH 220(2-3)**[1]**, MATH 230(4), MATH 251(4)**[1]**, PHYS 211 GN(4)**[1]**, PHYS 212 GN(4) (Sem: 1-4)
CMPSC 200 GQ(3), ENGL 202C GWS(3) (Sem: 3-6)
M E 320(3)**[1]**, M E 345W(4)**[1]**, M E 349(3)**[1]**, M E 357(3)**[1]**, M E 365(1)**[1]**, M E 367(3)**[1]**, M E 380(3)**[1]**, M E 410(3)**[1]** (Sem: 5-6)
M E 448(3)**[1]**, M E 449(3)**[1]**, M E 468(3)**[1]**, MATSE 259(3)**[1]** (Sem: 7-8)

ADDITIONAL COURSES (6 credits)
ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-6)
CHEM 111 GN(1) and PHYS 214(2); or CHEM 112 GN(3), or BIOL 141 GN(3) (Sem: 3-4)

SUPPORTING COURSES AND RELATED AREAS (13 credits)
Select 13 credits of program elective courses**[1]** from school-approved list. (These credits must be selected to fulfill the thematic requirements of the major.) (Sem: 7-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2011

Blue Sheet Item #: 39-04-098

Review Date: 01/11/2011

UCA Revision #1: 8/9/06
UCA Revision #2: 7/30/07

BD

Mechanical Engineering Technology

Capital College (M E T)

PROFESSOR MICHAEL DIDEBAN, *Program Coordinator, School of Scinece, Engineering, and Technology*

The goal of the Mechanical Engineering Technology program is to provide our students with the necessary training and education so that they can provide high-level technical support to a variety of industrial, commercial, consulting, and governmental organizations. The emphasis of our program is in the application of scientific and engineering principles. Technical communication in oral and written form is also emphasized. Our graduates are expected to appreciate the ethical and societal responsibilities of a technologist, the concepts of Continuous Quality Improvement and the continuing impact of globalization of design, manufacturing and marketing of technical goods and services. Our graduates are trained to deal with choice of materials and methods that are safe, environmentally and aesthetically acceptable and economically competitive. Typical responsibilities that may be assigned to our graduates are the development and evaluation of machines and mechanisms; development, organization and supervision of manufacturing processes and procedures; the instrumentation, control and testing of a process; quality control; technical marketing and sales; design of mechanical systems for heating and cooling and energy management.

The strengths of our program include: hands-on training; extensive laboratory experience; state of the art computer methods, excellent job placement and accreditation by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Graduates who wish to continue their professional development can take the Fundamentals of Engineering exam in Pennsylvania, a prerequisite for taking the Professional Engineering exam.

Entry to Major Requirements:
Entry to the Mechanical Engineering Technology major requires a 2.00 or higher cumulative grade-point average.

Re-enrollment:
Associate degree students should file a re-enrollment form during the final semester of their associate degree. Students re-enrolling from an associate's degree into the bachelor's degree should run a degree audit from eLion, using the M E T major code, to determine their curriculum requirements.

For a B.S. degree in Mechanical Engineering Technology, a minimum of 128 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(18 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in GENERAL EDUCATION or REQUIREMENTS FOR THE MAJOR course selection including Supporting Courses and Related Areas)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 101 credits

(This includes 18 credits of General Education courses: 3 credits of GWS courses; 9 credits of GN courses; 6 credits of GQ courses.)

PRESCRIBED COURSES (48 credits)
CHEM 110 GN(3), CHEM 111 GN(1) (Sem: 1-4)
MATH 140 GQ(4) (Sem: 1-5)
ENGL 202C GWS(3) (Sem: 3-4)
ENGR 420Y US;IL(3)**[1]**, I E 303(2), IET 308(3), MET 321(2), MET 332(3)**[1]**, MET 336(3)**[1]**, MET 341(3)**[1]**, MET 358(3), MET 431(3)**[1]**, MET 438(3), MET 448(2), MET 454(3), MET 481(1), MET 486(3) (Sem: 5-8)

ADDITIONAL COURSES (35-39 credits)
Select 3 credits from: EDSGN 100(3) or EG T 120(3) (Sem: 1-2)
Select 3-4 credits from: PHYS 150 GN(3) or PHYS 211 GN(4) (Sem: 1-2)
Select 3 credits from: E MCH 211(3) or ET 300(3) or MCH T 111(3) **[1]** (Sem: 2-3)
Select 3-4 credits from: PHYS 151GN(3) or PHYS 212 GN(4) (Sem: 2-4)
Select 3 credits from: IET 101(3) or IET 311(3) (Sem: 2-5)
Select 3-4 credits from: IET 215(2) and IET 216(2) or IET 321(3) (Sem: 2-5)
Select 4 credits from: STAT 200 GQ(4) or MATH 141 GQ(4) (Sem: 2-6)
Select 3 credits from: E MCH 212(3), ET 321(3), or MET 206(3) **[1]** (Sem: 3-4)
Select 3 credits from: ET 322(3), E MCH 213(3), or MCH T 213(3) **[1]** (Sem: 3-4)
Select 1 credit from: ET 323(1) or MCH T 214 (1) (Sem: 3-6)
Select 3 credits from: MET 210W(3) or MET 365(3) (Sem: 3-6)
Select 3-4 credits from: EET 101(3) and EET 109(1); or EET 320(3) (Sem: 3-7)

SUPPORTING COURSES AND RELATED AREAS (14-18 credits)
Select 5-9 credits from the department approved list of courses. (Sem: 5-8)
Select 9 credits from 300-400 level technology and engineering elective courses in consultation with an academic adviser and in support of the student's interests. (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2008

Blue Sheet Item #: 36-03-004

Review Date: 11/27/07

UCA Revision #1: 8/9/06
UCA Revision #2: 7/30/07

Comments

CL

Nursing

Altoona College
Penn State Abington
Penn State Erie,The Behrend College
Penn State Harrisburg
University College: Penn State Fayette, Penn State Mont Alto, Penn State New Kensington, Penn State Schuylkill, Penn State Shenango, Penn State Worthington Scranton
University Park, School of Nursing (NURN)

World Campus

PROFESSOR PAULA MILONE-NUZZO, *Dean, School of Nursing*

This major prepares registered nurse students as professional practitioners in areas of health promotion and maintenance, illness care, and rehabilitation. The major in Nursing is accredited by The National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326 (404-975-5000), Commission on Collegiate Nursing Education (CCNE), One DuPont Circle, NW Suite 530, Washington, DC 20036; 202-463-6930. Part-time or full-time study is available at any of the campus sites. The University Park site is a blended program, which includes resident instruction and online nursing courses. The World Campus site is completely online.

Senate legislation 42-97 *Credit by Portfolio Assessment* enables students to receive credit for certain prescribed nursing courses based on their RN licensure.

Students must meet all requirements of the clinical institutions that provide preceptors and clinical experiences. These requirements may include CPR certification, professional liability insurance, health examination, drug testing, criminal background check (State and Federal) and child abuse history clearances. Students also are responsible for their own transportation to and from clinical settings and may need the use of a car.

Graduates of this major may qualify for admission to a graduate nursing program.

For the B.S. degree in Nursing, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(21 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 3-5 credits

REQUIREMENTS FOR THE MAJOR: 91-93 credits**[1]**
(This includes 21 credits of General Education courses: 3 credits of GHA courses; 9 credits of GN courses; 3 credits of GQ courses; 6 credits of GS courses.)

PRESCRIBED COURSES (76 credits)
BIOL 129 GN(4), BIOL 141 GN(3), BIOL 142(1), HD FS 129 GS(3), MICRB 106 GN(3), MICRB 107 GN(1), NUTR 251 GHA(3), PSYCH 100 GS(3) (Sem: 1-4)
NURS 200W(3)**[38]**, NURS 251(3)**[38]**, NURS 357(3)**[38],** NURS 390 US(3)**[38]** (Sem: 3-4)
NURS 225(3)**[37]**, NURS 230(4)**[37]**, NURS 250 US(2)**[37]**, NURS 301(4)**[37]**, NURS 305(3)**[37]**, NURS 306(3)**[37]**,
NURS 310(3)**[37]**, NURS 320(3)**[37]**, NURS 405B(4)**[37]**, NURS 420(4)**[37]**, (Sem: 5-6)
NURS 417 US;IL(4)**[38]**, NURS 465(3)**[38]**, NURS 475(3)**[38]** (Sem: 7-8)

ADDITIONAL COURSES (9-11 credits)
CHEM 101 GN(3); or CHEM 110 GN(3) and CHEM 111 GN(1) (Sem: 1-4)
SOC 001 GS(3) or SOC 005 GS(3) (Sem: 1-4)
STAT 200 GQ(4) or STAT 250 GQ(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (6 credits)

Select 6 credits from courses on school-approved list in consultation with adviser (3 credits of which must be at the 400 level)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[37] Credit by Portfolio Assessment
[38]Due to restricted enrollment, the School of Nursing assigns the semester in which students enroll in these courses and all course prerequisites must be successfully completed.

Last Revised by the Department: Summer Session 2010

Blue Sheet Item #: 38-05-061

Review Date: 02/23/2010

UCA Revision #1: 8/9/06

HH

Nursing

Penn State Altoona
Penn State Harrisburg
University Park (NURS)

PROFESSOR PAULA MILONE-NUZZO, *Dean, School of Nursing*

The Bachelor of Science Degree in Nursing prepares students to become professional practitioners in areas of health promotion and maintenance, illness care, and rehabilitation. After earning this degree in Nursing, students are qualified to take the registered nurse examination for licensure by the State Board of Nursing. The Nursing major is accredited by The National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326 (404-975-5000), the Commission on Collegiate Nursing Education (CCNE), One DuPont Circle, NW Suite 530, Washington, DC 20036 (202-463-6930), and approved by the Pennsylvania State Board of Nursing.

B.S. Nursing majors will choose one of the following options:

General Nursing Option (NURS GNURS): This option admits students directly to the major as first year students and at the time of admission only. Students may not transfer or change major into the 4-year nursing program. The first year of the 4-year BS Nursing program may be completed at most Penn State campuses. Clinical experiences occur at local clinical facilities surrounding Penn State's University Park Campus and 1-2 years at Penn State Hershey Medical Center, which requires students to reside at that location.

Second or Additional Degree Option (NURS SCND): This option admits students, who have successfully completed a bachelor's degree in another discipline, to the major through a review process. All students must have met all general education and prerequisite course requirements. This option is available at Penn State Altoona and Penn State Harrisburg. Clinical experiences occur at facilities surrounding Altoona and Harrisburg.

For Both Options: All transportation and expenses related to clinical are the responsibility of the student. All students must carry professional liability insurance; complete an annual health examination, criminal background and child abuse history clearance; maintain CPR certification and adhere to any additional requirements of the

clinical facilities.

Undergraduate Academic Progression Policy

The Academic Progression policy delineates the academic standards for pre-licensure students (students without an RN license). Failure of two nursing courses results in dismissal from the Nursing major. Details of the academic progression policy are available in the student handbook.
(http://www.hhdev.psu.edu/nurs/Handbooks/index/html).

For the B.S. degree in Nursing, a minimum of 120 credits is required. The Second or Additional Degree Option requires the completion of 60 credits of general education and prerequisite courses in the first degree program (prior to admission) and 60 credits of nursing courses completed after admission.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(21 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

(Second or Additional Degree Option: First-Year Seminar not required since students accepted into this program are required to have earned a bachelor's degree in another discipline)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 4-9 credits

REQUIREMENTS FOR THE MAJOR: 87-92 credits**[1] [2]**
(This includes 21 credits of General Education courses: 3 credits of GHA courses; 9 credits of GN courses; 3 credits of GQ courses; 6 credits of GS courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 30-32 credits

PRESCRIBED COURSES (21 credits)
BIOL 129 GN(4), BIOL 141 GN(3), BIOL 142(1), HD FS 129 GS(3), MICRB 106 GN(3), MICRB 107 GN(1), NUTR 251 GHA(3), PSYCH 100 GS(3) (Sem: 1-4)

ADDITIONAL COURSES (9-11 credits)
CHEM 101(3); or CHEM 110 GN(3) and CHEM 111 GN(1) (Sem: 1-4)
SOC 001 GS(3) or SOC 005 GS(3) (Sem: 1-4)
STAT 200 GQ(4) or STAT 250 GQ(3) (Sem: 1-4)

REQUIREMENTS FOR THE OPTION: 57-60 credits

GENERAL NURSING OPTION: (57 credits)

PRESCRIBED COURSES (54 credits)
NURS 225(3)**[38]**, NURS 230(4)**[38],** NURS 250 US(2)**[38]**, NURS 251(3)**[38]** (Sem: 3-4)
NURS 200W(3)**[38]**, NURS 301(4)**[38]**, NURS 305(3)**[38]**, NURS 306(3)**[38],** NURS 310(3)**[38]**, NURS 320(3)**[38]**, NURS 350(2)**[38]** (Sem: 5-6)
NURS 405A(4)**[38]**, NURS 405B(4)**[38]**, NURS 415 US;IL(4)**[38]**, NURS 420(4)**[38]**, NURS

450A(2)**[38]**, NURS 450B(3)**[38]** (Sem: 7-8)

SUPPORTING COURSES AND RELATED AREAS (3 credits)
Select 3 credits at the 400 level from School-approved list in consultation with adviser (Sem: 7-8)

SECOND OR ADDITIONAL DEGREE OPTION: (60 credits)

PRESCRIBED COURSES (60 credits)
NURS 225(3)**[38]**, NURS 230(4)**[38]**, NURS 250 US(2)**[38]**, NURS 251(3)**[38]** (Sem: 1)
NURS 200W(3)**[38]**, NURS 301(4)**[38]**, NURS 305(3)**[38]**, NURS 310(3)**[38]**, NURS 350(2)**[38]** (Sem: 2)
NURS 306(3)**[38]**, NURS 320(3)**[38]**, NURS 415 US;IL(4)**[38]**, NURS 420(4)**[38]** (Sem: 3)
NURS 405A(4)**[38]**, NURS 405B(4)**[38]**, NURS 450A(2)**[38]**, NURS 450B(3)**[38]**, NURS 495(6)**[38]** (Sem: 4)

[1]A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[2] Completed prior to admission for students taking the Second or Additional Degree Option.
[38] Due to restricted enrollment, the School of Nursing assigns the semester in which students enroll in these courses and all course prerequisites must be successfully completed.

Last Revised by the Department: Summer Session 2010

Blue Sheet Item #: 38-05-062

Review Date: 02/23/2010

(R&T 2/28/06)

UCA Revision #1: 8/9/06

Address update, accrediting agency: 10/2/09

Comments

HH

Political Science

Altoona College (PLSAL)
Capital College (PLSCA)
University Park, College of the Liberal Arts (PL SC)
World Campus

PROFESSOR SCOTT BENNETT, *Head*

The Political Science major offers the student an opportunity to understand not only American federal, state, and local governments, but also the political systems of other nations and the philosophies that underlie them. Courses are offered in American, comparative, and international politics, and in political theory and methodology. Internship opportunities are available.

For the B.A. degree in Political Science, a minimum of 123 credits is required.

Per Senate Policy 83-80.5, the college dean or campus chancellor and program faculty

may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. For more information, check the Recommended Academic Plan for your intended program.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selections)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selections, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in ELECTIVES, GENERAL EDUCATION course selections, or REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 18 credits

BACHELOR OF ARTS DEGREE REQUIREMENTS: 24 credits
(3 of these 24 credits are included in the REQUIREMENTS FOR THE MAJOR, GENERAL EDUCATION, or ELECTIVES and 0-12 credits are included in ELECTIVES if foreign language proficiency is demonstrated by examination.)
(See description of Bachelor of Arts Degree Requirements in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 36 credits**[1]**

SUPPORTING COURSES AND RELATED AREAS (36 credits)
(In meeting these requirements, students must take at least one course at any level from the four fields offered in the department: Political Theory/Methodology, American Politics/Public Administration, Comparative Politics, and International Relations)
Select 12 credits from below the 400 level (Sem: 1-6)
Select 15 credits from the 400 level and above in political science (Sem: 3-8)
Select 9 credits in political science or in related disciplines from departmental list of approved courses. Substitutions may be made with the written permission of the faculty adviser. (Sem: 3-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 1999

Blue Sheet Item #: 28-01-056

Review Date: 11/01

LA

Date department head updated by Publications: 4/20/10

Psychology

Capital College (PSYC)

University College: Penn State Schuylkill

COBI MICHAEL, Program Coordinator, School of Behavioral Science and Education

The Psychology major emphasizes the scientific study of human behavior in areas such as cognition, development, learning, physiology, personality, and social processes. The curriculum is designed to provide students with a broad background in psychological theory and research and to develop the analytical and critical thinking skills necessary to be good consumers of scientific information.

The Psychology program exposes students to a number of areas of psychology but allows flexibility in the specific courses that are taken in each sub-area. Students are also required to obtain applied experience by completing an internship or by assisting faculty with their research. Elective credits can be used for additional internship or research experience.

The Psychology program prepares students for careers in local, state, and federal government and for entry-level psychological services positions in human service, applied behavior, human resources, and related fields. The Psychology program also provides a strong background for graduate education at both the master's and the doctoral level in counseling, social work, and many areas of psychology.

For a B.S. degree in Psychology, a minimum of 122 credits is required.

Entry to Major Requirements:
Entry to the Psychology major requires a 2.00 cumulative grade-point average and an average of C (2.00) or better in any courses already taken in the major.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(6 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES :
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 9 credits

REQUIREMENTS FOR THE MAJOR: 74 credits
(This includes 6 credits of General Education courses: 3 credits of GWS courses; 3 credits of GN courses.)

PRESCRIBED COURSES (10 credits)**[1]**
ENGL 202A GWS(3), PSYCH 100 GS(3) (Sem: 1-4)
PSYCH 301W(4) (Sem: 4-5)

ADDITIONAL COURSES (46 credits)**[1]**
Select BI SC 004 GN(3) or BIOL 141 GN(3) (Sem: 1-4)
(At least 15 credits of the following courses must be at the 400 level.)
Select 4 credits from: (Sem: 3-4)
Category 1 (Statistics) PSYCH 200 GQ(4) or STAT 200 GQ(4)
Select 6 credits from two different developmental categories (3 credits each

category): (Sem: 2-8)
Category 2a (Lifespan) PSYCH 212 GS(3)
Category 2b (Adult) PSYCH 416(3)
Category 2c (Child) PSYCH 410(3)
Category 2d (Adolescence) PSYCH 412(3)
Select 6 credits from two different individual difference categories (3 credits each category) (Sem: 2-8)
Category 3a (Social Psychology) PSYCH 221 GS(3) or PSYCH 420(3)
Category 3b (Personality Psychology) PSYCH 238 GS(3) or PSYCH 438(3)
Category 3c (Personal Adjustment) PSYCH 243 GS(3) or PSYCH 471(3)
Category 3d (Health Psychology) PSYCH 441(3)
Select 6 credits from two different clinical categories (3 credits each category) (Sem: 5-8)
Category 4a (Physical Disabilities) PSYCH 370 US(3)
Category 4b (Childhood Disorders) PSYCH 476(3)
Category 4c (Abnormal Psychology) PSYCH 270(3) or PSYCH 470(3)
Category 4d (Behavior Modification) PSYCH 473(3)
Category 4e (Developmental Disabilities) PSYCH 443
Select 6 credits from two different experimental categories (3 credits each category) (Sem: 5-8)
Category 5a (Physiological Psychology) PSYCH 260 or PSYCH 462(3)
Category 5b (Cognitive Psychology) PSYCH 256 GS or PSYCH 452 or PSYCH 456(3)
Category 5c (Learning Theory) PSYCH 261 GS(3) or PSYCH 461(3)
Select 3 credits from applications in psychology (Sem: 5-8)
Category 6 (Applied Experience) PSYCH 395(1-18) or PSYC 494(1-12)
Select 12 credits of any PSYCH courses not used above, with the exception that only one course selected from any Category 1 through 5 will count for the major (Sem: 2-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
Select 6 credits from AAA S, AM ST, ARAB, ART, ART H, BRASS, C ART, C MUS, CAMS, CAS, CHNS, CMLIT, COMM, DANCE, ELISH, ENGL, ENLSH, FR, GER, GREEK, HCOMM, HEBR, HIST, HUM, I HUM, INART, IT, J ST, JAPNS, KOR, LATIN, LING, LIT, MEDVL, MUSIC, PHIL, PHILO, PHLOS, PORT, RL ST, RUS, SP ST, SPAN, STS, THEA, THTRE, WMNST 106 GH;US;IL(3), WMNST 101 GH;US(3), WMNST 102 GH;IL(3), WMNST 104 GH;US(3), WMNST 117 GH;US;IL(3), WMNST 130 IL(3), WMNST 137 GH;US;IL(3), WMNST 194 GH;US;IL(3), WMNST 205 US(3), WMNST 270(3), WMNST 407 US(3), WMNST 410(3), WMNST 419 US;IL(3), WMNST 421 IL(3), WMNST 430 US(3),WMNST 438(3), WMNST 455 US(3), WMNST 457 US;IL(3), WMNST 462 US(3), WMNST 466 US;IL(3), WMNST 489(3), WMNST 490 US;IL(3), WMNST 491(3) (Sem: 1-8)
Select 12 credits from AAA S, AFRAS, ANTH, BE SC (except BE SC 302), CRIMJ, ECON, HCM, HD FS, PL SC, PUBPL, R SOC, SCLSC, SO SC, SOC, WMNST 100 GS;US;IL(3), WMNST 103 US(3), WMNST 110 GS;US(3), WMNST 116 GS;US;IL(3), WMNST 136 US(3), WMNST 202 GS;IL(3), WMNST 250 US(3), WMNST 415W GI(3), WMNST 423 US(3), WMNST 424 US(3), WMNST 428 US;IL(3), WMNST 432 US(3), WMNST 452(3), WMNST 453 US(3), WMNST 456(3), WMNST 464 US(3), WMNST 471 US(3), WMNST 476W(3) (Sem: 1-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2005

Blue Sheet Item #: 34-01-020

Review Date: 8/30/05

UCA Revision #1: 9/1/06
UCA Revision #2: 7/30/07

Publications updated department head: 4/28/08

CL

Public Policy

Capital College (PUBPL): Penn State Harrisburg

PROFESSOR STEVEN A. PETERSON, *Interim Program Coordinator, School of Public Affairs*

The Public Policy major is designed for students interested in policy issues, politics, public administration, and related areas like policy analysis and policy advocacy. The program explores a myriad of critical issues facing our communities, the nation, and the world. Students receive the educational foundation for careers in the public sector, in government-related businesses, and in non-profit organizations, as well as for graduate work in the fields of law, public administration, criminal justice, public policy, political science, and health care administration. Building on the program core, students may choose electives from a broad array of courses in public policy and other areas. Students may wish but are not required to pursue a concentration within the Public Policy major. The following concentrations are available: U.S. Public Policy; Law and Justice; and International Policy. Students should consult their adviser for a complete listing of courses in each of these concentrations. Overall, the Public Policy program seeks to advance the ideals of an active, informed citizenry and a commitment to public service.

Our proximity to the state capital at Harrisburg provides students with a rich environment for both study and for internships. In addition to our full-time faculty, Public Policy draws on part-time faculty with particular professional strengths. In recent years students have explored politics and political issues in classes taught by a state senator, a former lieutenant governor, a corrections system administrator, and a governor's press secretary. This integration of academic study with the "real world" of Pennsylvania politics and policy making is further enhanced through quality internships. The Public Policy program prides itself in placing qualified students in internships that facilitate the development of professional skills and promote the prospects for professional employment following graduation. Internship options include the Harrisburg Semester: Public Service Leadership Internships (PSLI). (For more information, see www.hbg.psu.edu/hbg/hburgsem.) Students are encouraged to complete an internship during their senior year. Additional information regarding internships may be obtained by contacting the Public Policy Internship Coordinator.

Admission Requirements for Transfer Students:
Transfer students must have a 2.00 or higher cumulative grade-point average. The evaluation of prior college work is done on an individual basis by the Office of Enrollment Services at Penn State Harrisburg.

Entry to Major Requirements:
Entry to the Public Policy major requires a 2.00 or higher cumulative grade-point average and an average of C (2.00) or better in any course already taken in the major.

For a B.S. degree in Public Policy, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits

(6 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 16 credits

REQUIREMENTS FOR THE MAJOR: 65 credits
(This includes 6 credits of General Education GS courses.)
(At least 15 credits must be at the 400 level.)

PRESCRIBED COURSES (15 credits)**[1]**
ECON 102 GS(3), ECON 104 GS(3), PL SC 001 GS(3), PL SC 309(3), PUBPL 304W(3) (Sem: 1-6)

ADDITIONAL COURSES (18 credits)
Select 9 credits from the following: PL SC 300-499(3), PUBPL 241(3), PUBPL 300-499(3) (Sem: 1-8)
Select 6 credits from the following: PL SC 419(3), PL SC 425(3), PL SC 444(3), PL SC 488(3), PL SC 489(3), PUBPL 305(3) (Sem: 5-8)
Select 3 credits from the following: PUBPL 480(3), PUBPL 481(3), PUBPL 482(3), PUBPL 483(3), PUBPL 484(3), PUBPL 485(3), PUBPL 490(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (32 credits)
Select 12 credits from the following: ACCTG 200-499(3), AFRAS 300-499(3), AM ST 300-499(3), BE SC 300-499(3), COMMS 300-499(3), CRIMJ 300-499(3), ECON 300-499(3), ENVE 460(3), FIN 300-499(3), HIST 300-499(3), MGMT 300-499(3), MKTG 300-499(3), SCLSC 300-499(3), SO SC 300-499(3), SOC 300-499(3), SRA 211(3), WMNST 300-499(3) (Sem: 5-8)
Select 20 credits in consultation with an academic adviser and in support of the student's interests (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2008

Blue Sheet Item #: 36-05-018

Review Date: 2/26/08

UCA Revision: #2: 7/30/07

Coordinator updated: 6/5/12

CL

Science

Abington College (SCIAB)
Altoona College (SCIAL)
Berks College (SCIBL)
Capital College (SCICA)
University College (SCICC): Penn State Worthington-Scranton, Penn State York
University Park, Eberly College of Science (SC BS)
Integrated Five-Year Science/Business M.B.A. Program (SCBUS)

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

PROFESSOR RONALD MARKLE, *in charge*

The Science major is an interdisciplinary degree that aims to provide a broad, general education in science. The bachelor of science (B.S.) curriculum is designed specifically for students who have education goals relating to scientific theory and practice and who require a high degree of flexibility to obtain their educational objectives. After completing foundation courses in calculus, chemistry, physics, and the life sciences, students will select additional science courses from designated areas. A large number of supporting credits permit students to readily include significant breadth or specialization into their undergraduate curriculum. Some examples include minors in business, computer and information science, education, kinesiology, or other fields. The degree allows students throughout the Commonwealth to become familiar with both the theory and the practice of science. It can help prepare students for various careers in pharmaceutical, biotechnical, chemical, medical, and agricultural industries. The degree can also be tailored to meet the specific requirements of professional programs such as medical, dental, or pharmacy schools. The General Science option of the B.S. Science degree allows for the most flexibility. Achievement in a more specialized set of goals can be met by selecting one of the other B.S. options offered: the Biological Sciences and Health Professions option, the Legal Studies, Government Service, Public Policy option, the Life Sciences option, the Mathematical Sciences option, or the Physical Sciences option. Not all of these options are available at all locations, and there are minor distinctions of the core curriculum at some locations, so see the Science program director at your College for further details.

In order to be eligible for entrance to the Science major, a student at any location must have: 1) attained at least a 2.00 cumulative grade-point average; 2) completed MATH 140 GQ(4) with a grade of C or better; 3) completed at least two of the following courses, BIOL 110 GN(4); CHEM 110 GN(3); PHYS 211 GN(4) or PHYS 250 GN(4), with a grade of C or better.

For the B.S. degree in Science, a minimum of 124 credits is required, with at least 15 credits at the 400 level.

TWO-YEAR PREPROFESSIONAL PREPARATION: The first two years of the Science major (62 credits) can meet the pre professional needs of those interested in admission to some schools of pharmacy, physical therapy, optometry, nursing, and physician assistant training. Successful students can then transfer after two years of undergraduate study to the professional school to which they are admitted. Note, however, that no Penn State degree can be awarded after only two years (62 credits) of study in the Science major. Also, note that the abbreviated two-year curriculum alone does not prepare students for admission to professional schools of general medicine, veterinary medicine, or dental medicine. Consult with your college's health sciences professional adviser for additional information.

ACCELERATED SCIENCE B.S./M.B.A. PROGRAM: Students admitted to this special

cooperative program between the Eberly College of Science and The Smeal College of Business will be able to combine a Bachelor of Science degree in the Science major, with a Master of Business Administration degree. Highly motivated students, who enter the University with a sufficient number and proper distribution of AP credits, will have the opportunity to complete the requirements for both programs within five years. The B.S. degree in the Science major General Science option, will be conferred upon satisfactory completion of:

1. A minimum of 112 acceptable undergraduate credits, which must include:

    1. (30 credits) The University's General Education requirements in the areas of Writing and Speaking (9), Health and Physical Activity (3), Arts (6), Humanities (6), and Social and Behavioral Sciences (6). (Note: Students will be required to take ECON 102 GS(3) and ECON 104 GS(3) in order to satisfy the Social and Behavioral Sciences requirement. The University's General Education requirements in the areas of Quantification and Natural Sciences will be satisfied by course work listed under heading "c".)
    2. The University's First-Year Seminar, United States Cultures, International Cultures, and Writing Across the Curriculum requirements. (Note: These requirements may be double counted in order to satisfy other requirements in the program.)
    3. (53-57 credits) BIOL 110 GN(4), CHEM 110 GN(3), CHEM 111(1), CHEM 112 GN(3), CHEM 113 GN(1), CMPSC 203 GQ(4), MATH 140 GQ(4), MATH 141 GQ(4), PHYS 211 GN(4), PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2), or PHYS 250 GN(4), PHYS 251 GN(4), STAT 200 GQ(4); an additional life science course selected from B M B 211(3), B M B 251(3), or MICRB 201(3); and 14 additional credits of course work from the Eberly College of Science, with at least nine credits at the 400 level.
    4. (0-8 credits) Demonstration of second semester proficiency in a single foreign language.
    5. (3-9 credits) SC 295(1-3), SC 395(1-3), SC 495(1-3) (Note: Students must complete three Eberly College of Science Cooperative Education experiences, including at least one experience which is a full semester in length.)
    6. (4 credits) ACCTG 211(4)
    7. (4-22 credits) Supporting courses and related areas selected from the program list.

2. The first semester of course work in The Smeal College of Business M.B.A. program (i.e., a minimum of 12 graduate credits).

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(15 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in GENERAL EDUCATION course selection or SUPPORTING COURSES AND RELATED AREAS)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection or SUPPORTING COURSES AND RELATED AREAS)

WRITING ACROSS THE CURRICULUM:
(Included in GENERAL EDUCATION course selection or REQUIREMENTS FOR THE MAJOR or SUPPORTING COURSES AND RELATED AREAS)

REQUIREMENTS FOR THE MAJOR: 94 credits
(This includes 15 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses.)

COMMON REQUIREMENTS FOR MAJOR (All options)

PRESCRIBED COURSES (20 credits)
CHEM 110 GN(3)**[1]**, CHEM 111 GN(1), CHEM 112 GN(3), CHEM 113 GN(1), MATH 140 GQ(4)**[1]**, MATH 141 GQ(4) (Sem: 1-2)
BIOL 110 GN(4)**[1]** (Sem: 1-4)

REQUIREMENTS FOR THE OPTIONS: 60-88 credits

GENERAL SCIENCE OPTION: (68-79 credits)

ADDITIONAL COURSES (15-20 credits)
Select 4 credits from BIOL 129 GN(4), BIOL 220W(4), BIOL 230W(4), BIOL 240W(4) or BIOL 141 GN(3) and BIOL 142(1) (Sem: 3-4)
Select 3-4 credits from STAT 200 GQ(4), or STAT 250 GQ(3) or STAT 301(3) or STAT 401(3) (Sem: 3-4)
Select 8-12 credits from PHYS 211 GN(4)**[1]**, PHYS 212 GN(4)**,** PHYS 213 GN(2), PHYS 214 GN(2); or PHYS 250 GN(4)**[1]**, PHYS 251 GN(4) (Sem: 3-6)

SUPPORTING COURSES AND RELATED AREAS (53-59 credits)
(A maximum of 12 credits of Independent Study [296, 496] may be applied toward credits for graduation.)
Select 20-26 credits from program list (Students may apply 6 credits of ROTC.) (Sem: 1-8)
Select 3 credits from earth and mineral sciences (Sem: 3-8)
Select 18 credits in life, mathematical, or physical sciences, with at least 9 credits**[1]** at the 400 level**[60]** (Sem: 3-8)
Select 3 credits in Global, Social and Personal Awareness from department approved course list in consultation with adviser (Sem: 3-8)
Select 3 credits in Teamwork and Interpersonal Communication from department approved course list in consultation with adviser (Sem: 3-8)
Select 6 credits of 400-level courses (Sem: 5-8)

BIOLOGICAL SCIENCES AND HEALTH PROFESSIONS OPTION: (66-80 credits)

PRESCRIBED COURSES (3 credits)
H P A 101(3) (Sem: 3-6)

ADDITIONAL COURSES (24-31 credits)
Select 4 credits from BIOL 129 GN(4), BIOL 220W(4), BIOL 230W(4), BIOL 240W(4) or BIOL 141 GN(3) and BIOL 142(1) (Sem: 3-4)
Select 3-4 credits from STAT 200 GQ(4), or STAT 250 GQ(3) or STAT 301(3) or STAT 401(3) (Sem: 3-4)
Select 6-8 credits from CHEM 210(3), CHEM 212(3), CHEM 213(2) or CHEM 202(3), CHEM 203(3) (Sem: 3-6)
Select 3 credits from B M B 211(3), B M B 251(3), MICRB 201(3), BIOL 222(3), or BIOL 322(3) (Sem: 3-6)
Select 8-12 credits from PHYS 211 GN(4)**[1]**, PHYS 212 GN(4)**,** PHYS 213 GN(2), PHYS 214 GN(2); or PHYS 250 GN(4)**[1]**, PHYS 251 GN(4) (Sem: 3-6)

SUPPORTING COURSES AND RELATED AREAS (39-46 credits)
(A maximum of 12 credits of Independent Study [296, 496] may be applied toward credits for graduation.)
Select 15 credits from program list for Healthcare/ Medicine/Ethical Competencies; 6 credits must be at the 400-level (Sem: 3-8) Select from department approved course list in consultation with adviser.
Select 9-16 credits from program list (Students may apply 6 credits of ROTC. (Sem: 1-8)
Select 3 credits in Global, Social and Personal Awareness from department approved

course list in consultation with adviser (Sem: 3-8)
Select 3 credits in Teamwork and Interpersonal Communication from department approved course list in consultation with adviser (Sem: 3-8)
Select 9 credits[1] of 400-level B M B, BIOL, BIOTC, or MICRB courses (Sem: 5-8)

LEGAL STUDIES, GOVERNMENT SERVICE, PUBLIC POLICY OPTION (68-78 credits)

ADDITIONAL COURSES (15-20 credits)
Select 4 credits from BIOL 129 GN(4), BIOL 220W(4), BIOL 230W(4), BIOL 240W(4) or BIOL 141 GN(3) and BIOL 142(1) (Sem: 3-4)
Select 3-4 credits from STAT 200 GQ(4), or STAT 250 GQ(3) or STAT 301(3) or STAT 401(3) (Sem: 3-4)
Select 8-12 credits from PHYS 211 GN(4)[1], PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2); or PHYS 250 GN(4)[1], PHYS 251 GN(4) (Sem: 3-6)

SUPPORTING COURSES AND RELATED AREAS (53-58)
Select 11-16 credits from program list (Students may apply 6 credits of ROTC. (Sem: 1-8)
Select 18 credits in life, mathematical, or physical sciences, with at least 9 credits[1] at the 400 level[60] (Sem: 3-8)
Select 18 credits from program list for Legal Studies, Government Service, Public Policy; 6 credits must be at the 400-level (Sem: 3-8) Select from department approved course list in consultation with adviser.
Select 3 credits in Global, Social and Personal Awareness from department approved course list in consultation with adviser (Sem: 3-8)
Select 3 credits in Teamwork and Interpersonal Communication from department approved course list in consultation with adviser (Sem: 3-8)

LIFE SCIENCE OPTION: (60-88 credits)

ADDITIONAL COURSES (24-30 credits)
Select 4 credits from BIOL 220W GN(4), BIOL 230W GN(4), BIOL 240W GN(4) (Sem: 3-4)
Select 3 credits from CMPSC 101 GQ(3), MATH 250(3), or STAT 250 GQ(3) (Sem: 3-4)
Select 3 credits from B M B 211(3), B M B 251(3), or MICRB 201(3) (Sem: 3-4)
CHEM 202(3), CHEM 203(3); or CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-6)
PHYS 211 GN(4)[1], PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2); or PHYS 250 GN(4)[1], PHYS 251 GN(4) (Sem: 3-6)

SUPPORTING COURSES AND RELATED AREAS (36-58 credits)
(A maximum of 12 credits of Independent Study [296, 496] may be applied toward credits for graduation.)
Select 21-35 credits from program list (Students may apply 6 credits of ROTC.) (Sem: 1-8)
Select 0-8 credits in a foreign language (proficiency demonstrated by examination or course work to the level of the second semester; if fewer than 8 credits are needed to reach the required proficiency, students choose selections from program list to total 8 credits) (Sem: 1-8)
Select 6 credits of 400-level courses (Sem: 5-8)
Select 9 credits[1] of 400-level B M B, BIOL, BIOTC, or MICRB courses (Sem: 5-8)

MATHEMATICAL SCIENCE OPTION: (61-88 credits)

PRESCRIBED COURSES (5-6 credits)
CMPSC 122(3), MATH 220 GQ(2-3) (Sem: 3-6)

ADDITIONAL COURSES (24-29 credits)
Select 3 credits from B M B 211(3), B M B 251(3), or MICRB 201(3) (Sem: 3-4)
CMPSC 121 GQ(3), CMPSC 201 GQ(3), or CMPSC 202 GQ(3) (Sem: 3-6)
MATH 230(4) or MATH 251(4) (Sem: 3-6)
CMPSC 360(3) or MATH 311W(3-4); STAT 301 GQ(3) or STAT 318(3) (Sem: 3-8)

PHYS 211 GN(4)[1], PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2); or PHYS 250 GN(4)[1], PHYS 251 GN(4) (Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (32-53 credits)
(A maximum of 12 credits of Independent Study [296, 496] may be applied toward credits for graduation.)
Select 17-30 credits from program list (Students may apply 6 credits of ROTC.) (Sem: 1-8)
Select 0-8 credits in a foreign language (proficiency demonstrated by examination or course work to the level of the second semester; if fewer than 8 credits are needed to reach the required proficiency, students choose selections from program list to total 8 credits) (Sem: 1-8)
Select 9 credits[1] of 400-level CMPSC, CSE, MATH, or STAT courses (Sem: 5-8)
Select 6 credits of 400-level courses (Sem: 5-8)

PHYSICAL SCIENCE OPTION: (63-85 credits)

PRESCRIBED COURSES (15 credits)
ASTRO 291 GN(3), PHYS 211 GN(4)[1], PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2) (Sem: 3-6)

ADDITIONAL COURSES (16-19 credits)
Select 3 credits from B M B 211(3), B M B 251(3), or MICRB 201(3) (Sem: 3-4)
CHEM 202(3), CHEM 203(3); or CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-6)
MATH 230(4) or MATH 251(4) (Sem: 3-6)
Select 3-4 credits from ASTRO 292 GN(3; E MCH 211(3); M E 300(3); or PHYS 237(3) (Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (32-51 credits)
(A maximum of 12 credits of Independent Study [296, 496] may be applied toward credits for graduation.)
Select 17-28 credits from program list (Students may apply 6 credits of ROTC.) (Sem: 1-8)

Select 0-8 credits in a foreign language (proficiency demonstrated by examination or course work to the level of the second semester; if fewer than 8 credits are needed to reach the required proficiency, students choose selections from program list to total 8 credits) (Sem: 1-8)
Select 6 credits of 400-level courses (Sem: 5-8)
Select 9 credits[1] of 400-level ASTRO, CHEM, or PHYS courses (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[60] Physical sciences include ASTRO, CHEM, PHYS; mathematical sciences include CMPSC, MATH, STAT; life sciences include BIOL, BIOTC, B M B, MICRB.

Last Revised by the Department: Summer Session 2010

Blue Sheet Item #: 39-01-105A

Review Date: 08/24/2010

UCA Revision #1: 9/1/06
UCA Revision #2: 7/730/07

SC

Secondary Education Social Studies

Capital College (SESST)

PROFESSOR J. SCOTT LEWIS, *Program Coordinator, School of Behavioral Sciences and Education*

The Secondary Education Social Studies major prepares students to meet the requirements as established by the Pennsylvania Department of Education, to be certified for the Social Studies Instructional I Certificate. The major prepares students to teach history, government, economics, geography, psychology, sociology, and anthropology.

Students are challenged to prepare for teaching assignments at the middle and high school level, and in diverse settings characterized as rural, urban, and suburban. The art and science of teaching in secondary schools is undergoing significant transformation as new technologies, time allocation for instruction, and new instructional strategies are impacting the delivery of social studies instruction.

Students admitted to the program must have the appropriate clearances. These include FBI fingerprint check, Act 151 child abuse history clearance, and Act 34 criminal record check.

Students thinking seriously about entering the education program should plan their freshman and sophomore years carefully. Semesters 5 through 8 are very structured.

Entry to Secondary Education Social Studies requires the following:

1. A minimum grade point average of 3.0.
2. Completion of ENGL 015 GWS(3) or ENGL 030 GWS(3) and three credits of literature from approved list with a C or higher grade.
3. Completion of six credits of college-level mathematics (MATH or STAT prefixes) with a C or higher grade.

Selective Retention:
Following entrance to the major, students will be evaluated for retention in the program based on:

1. maintaining a cumulative GPA of 3.0 or higher;
2. completion of required courses with a C or higher grade;
3. an acceptable or above rating on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

To be eligible to student teach, students must:

1. maintain a cumulative GPA of 3.0 or higher;
2. complete all required Content and Education Courses with a C or higher grade;
3. submit passing scores from the PAPA (Pre-Service Academic Performance Assessment) for Reading, Writing and Mathematics;*
4. be rated acceptable or above on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

In order to successfully complete the Secondary Education Social Studies Program, students must:

1. complete EDUC 490 with a grade of C or higher;
2. maintain a cumulative GPA of 3.0 or higher;
3. complete all required Content and Education Courses with a C or higher grade;
4. complete a presentation portfolio; and
5. be rated acceptable or above on the Penn State Harrisburg Professional Dispositions for Teacher Education.*

*FOR MORE DETAILED INFORMATION SEE THE SECONDARY EDUCATION HANDBOOK.

For a B.SOSC. degree in Secondary Education Social Studies, a minimum of 122 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(21 of these credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES, GENERAL EDUCATION, or REQUIREMENTS FOR THE MAJOR)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 3 credits

REQUIREMENTS FOR THE MAJOR: 95 credits
(This includes 21 credits of General Education courses: 6 credits of GH courses, 3 credits of GN courses, 6 credits of GS courses, 6 credits of GQ courses.)
(At least 15 credits must be at the 400 level.)

PRESCRIBED COURSES (65 credits)**[1]**
BI SC 003 GN(3), C I 280 GH(3), EDPSY 014(3), , HIST 020 GH;US(3), HIST 021 GH;US(3), PSYCH 100 GS(3), SOC 001 GS(3) (Sem: 1-4)
EDUC 313(2), EDUC 314(3), EDUC 315W US(3), EDUC 415(3), EDUC 458(3), EDUC 459(3), EDUC 490(12) (Sem: 5-8)
GEOG 040 GS;IL(3), GEOG 128 GS;IL(3), HD FS 239 GS(3), HIST 320(3), PL SC 001 GS(3) (Sem: 5-8)

ADDITIONAL COURSES (12 credits)
Select 6 credits from the following:
MATH 017 GQ(3), MATH 018 GQ(3), MATH 021 GQ(3), MATH 022 GQ(3), MATH 026 GQ(3), MATH 030 GQ(3), MATH 035 GQ(3), MATH 036 GQ(3), MATH 040 GQ(5), MATH 200 GQ(3) or MATH 220 GQ(2-3), STAT 100 GQ(3), STAT 200 GQ(4) (Sem: 1-4)
Select 3 credits from: ECON 104 GS(3) or ECON 014 GS(3) (Sem: 1-4)
Select 3 credits from: HIST 001 GH;IL(3) or HIST 010 GH;IL(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
(6 of these 18 credits must be a the 400-level. In addition, 3 of these must be US cultures)
Select 3 credits of literature courses from approved department list (Sem: 1-4)
Select 3 credits of African African-American studies, American studies, history or minority studies from approved department list (Sem: 5-8)
Select 3 credits of anthropology from approved department list (Sem: 5-8)
Select 3 credits of psychology from approved department list (Sem: 5-8)
Select 3 credits of political science (Sem: 5-8)
Select 3 credits of sociology (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2013

Blue Sheet Item #: 41-06-034A

Review Date: 04/09/2013

Program Coordinator updated: 3/21/11

UCA Revision #1: 9/1/06
UCA Revision #2: 7/30/07

Comments

CL

Security and Risk Analysis

Penn State Altoona (SRAAL)
Penn State Berks (SRABL)
Penn State Harrisburg (SRACA)
University Park, College of Information Sciences and Technology (SRA)
World Campus

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

PROFESSOR FRED FONSECA, *Associate Dean for Undergraduate Studies*

The Bachelor of Science in Security and Risk Analysis (SRA) in the College of Information Sciences and Technology is intended to familiarize students with the general frameworks and multidisciplinary theories that define the area of security and related risk analyses. Courses in the major will engage students in the challenges and problems associated with assuring information confidentiality and integrity (e.g., social, economic, technology-related, and policy issues), as well as the strengths and weaknesses of various methods for assessing and mitigating associated risk.

The major provides a grounding in the analysis and modeling efforts used in information search, visualization, and creative problem solving. This knowledge is supplemented through an examination of the legal, ethical, and regulatory issues related to security that includes analyzing privacy laws, internal control and regulatory policies, as well as basic investigative processes and principles. Such understanding is applied to venues that include transnational terrorism, cyber crimes, financial fraud, risk mitigation, and security and crisis management. It also includes overviews of the information technology that plays a critical role in identifying, preventing and responding to security-related events.

Advisory groups from within and outside the University involved in the design of the major have agreed that graduates who can understand the cognitive, social, economic, and policy issues involved in security and risk management as well as the basics of the information technology and analytics that are included in the security/risk arena will be very successful. These observations drove the design and objectives of the SRA major.

SRA majors will choose one of the following options:

INTELLIGENCE ANALYSIS AND MODELING OPTION. This option focuses on developing a more thorough knowledge of the strategic and tactical levels of intelligence collection, analysis, and decision-making. This includes examining the foundations of decision analysis, economic theory, statistics, data mining, and knowledge management, as well as the security-specific contexts in which such knowledge is applied.

INFORMATION AND CYBER SECURITY OPTION. This option includes a set of courses that provides an understanding of the theories, skills, and technologies associated with

network security, cyber threat defense, information warfare, and critical infrastructure protection across multiple venues.

SOCIAL FACTORS AND RISK. This option includes the legal, regulatory, ethical, and other theories associated with security and risk. Such an examination is focused on understanding the social factors and causes that are linked to transnational terrorism, investigations and litigation involved in business, and other security-related environments.

Entrance Requirements: To be eligible for entrance to the Security and Risk Analysis (SRA) major, students must:

1. be taking, or have taken, a program appropriate for entry to the major as shown in the *Bulletin*, including approximately 60 credits of course work.
2. have completed the following entrance-to-major requirements with grades of C or better in each: IST 110(3); SRA 111(3); and SRA 211(3). These courses must be completed by the end of the semester during which the entrance-to-major procedure is carried out.
3. have achieved a minimum cumulative grade point average of 2.00 prior to and through the end of the semester during which the entrance-to-major procedure is carried out.

For the B.S. degree in Security and Risk Analysis, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(22 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of the *Bulletin*.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 3 credits

REQUIREMENTS FOR THE MAJOR: 94 credits
(This includes 22 credits of General Education courses: 6 credits of GQ courses; 6 credits of GS courses; 3 credits of GWS courses, 3 credits of GH, and 4 credits of GN courses)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 73 credits

PRESCRIBED COURSES (39 credits)
CMPSC 101 GQ(3)**[1]**, SRA 111 GS(3)**[1]** (Sem: 1-2)
IST 110 GS(3)**[1]** (Sem: 1-3)
IST 210(4)**[1]** (Sem: 1-4)
SRA 211(3)**[1]**, SRA 221(3)**[1]**, SRA 231(3)**[1]** (Sem: 2-4)
STAT 200 GQ(4) (Sem: 3-6)
IST 495(1)**[1]** (Sem: 3-8)
IST 432(3)**[1]**, SRA 311(3)**[1]**, STAT 460(3) (Sem: 5-6)
IST 440W(3)**[1]** (Sem: 7-8)

ADDITIONAL COURSES (12 credits)
AG BM 101 GS(3) or ECON 102 GS(3) (Sem: 1-4)

PL SC 001 GS(3), PL SC 014 GS;IL(3), or GEOG 040 GS;IL(3) (Sem: 1-4)
PSYCH 100 GS(3) or SOC 005 GS(3) (Sem: 1-6)
ENGL 202C GWS(3) or ENGL 202D GWS(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (22 credits)
Attainment of third-level proficiency in a single foreign language (12 credits). Proficiency must be demonstrated by either examination or course work. See the admission section of the general information in this *Bulletin* for the placement policy for Penn State foreign language courses. (Sem: 1-4)
Select 4 credits of lab lecture series (GN) in consultation with adviser (Sem: 1-6)
Select 6 credits of international courses from College-approved list or other courses approved by adviser. (Sem: 5-8)

REQUIREMENTS FOR THE OPTION: 21 credits

INTELLIGENCE ANALYSIS AND MODELING OPTION: (21 credits)

PRESCRIBED COURSES (12 credits)**[1]**
ECON 302 GS(3), SRA 321(3) (Sem: 3-6)
SRA 433(3), SRA 468(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 9 credits from College-approved list (Sem: 5-8)

INFORMATION AND CYBER SECURITY OPTION: (21 credits)

PRESCRIBED COURSES (12 credits)**[1]**
IST 220(3) (Sem: 1-6)
IST 451(3), IST 454(3), IST 456(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 9 credits from College-approved list (Sem: 5-8)

SOCIAL FACTORS AND RISK OPTION: (21 credits)

PRESCRIBED COURSES (9 credits)**[1]**
IST 452(3), SRA 471(3), SRA 472(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from College-approved list (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2011

Blue Sheet Item #: 39-06-097

Review Date: 04/12/2011

UCA Revision #1: 8/14/06
UCA Revision #2: 7/30/07

Comments

IS

Sociology

Capital College (SOCIO)

PROFESSOR KENNETH B. CUNNINGHAM, *Program Coordinator*

This major provides students with a sociological perspective on human behavior, social organization and social relations. Using a variety of methods, sociologists study social interaction and relationships, large scale institutions and small groups, communities and societies. The discipline is broad in scope and helps studnets develop the analytic and critical thinking skills needed to amke sense of the growing complexity of the modern world. Students will gain an understanding of various substantive areas of the field including social structure and institutions, social and cultural change, social class, gender, sexuality, and race and ethnicity. The major is excellent preparation for work in government, social service agencies, the non-profit sector or business and industry. Sociologists are employed in such diverse fields as social and human services, non-profit and advocacy organizations, research and policy work, telecommunications, human resource management, and college teaching. This major is valuable preparation for students planning careers in law, advocacy, social welfare, urban planning, and business as well as for graduate work in sociology, community psychology, social work and related fields.

Entry to Major Requirements:
Entry to the Sociology major requires 2.00 or higher cumulative grade-point average.

For a B.S. degree in Sociology, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(3 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES, GENERAL EDUCATION, or MAJOR REQUIREMENTS)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 16 credits

REQUIREMENTS FOR THE MAJOR: 62 credits**[1]**
(This includes 3 credits of General Education course requirements: 3 credits of GWS courses.)

PRESCRIBED COURSES (17 credits)
ENGL 202A GWS(3) (Sem: 1-4)
SO SC 480W(4), SO SC 481(4), SO SC 492(3), SOC 405(3) (Sem: 5-8)

ADDITIONAL COURSES (27 credits)
Select 3 credits from SOC 001 GS(3), R SOC 011 GS(3) (Sem: 1-4)
Select 9 credits from SOC 030(3), SOC 411 US(3) or HD FS 416 US(3), SOC 416(3), SOC 429(3), SOC 430(3), SOC 444(3), SOC 446(3), SOC 448(3), SOC 455(3), SOC 456/WMNST 456(3) (Sem: 5-8)
Select 9 credits from SOC 015(3), SOC 424(3), SOC 425(3), SOC 432(3), SOC 449(3), SOC 450(3), SOC 454 US(3), SOCIO 476(3) (Sem: 5-8)
Select 6 credits from AF AM 212 US(3), BE SC 464 US(3), R SOC/WMNST/CED 420 US;IL(3), SOC/AF AM 409 US(3), SOC 428(3), SOC 435 or HD FS 434 (3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
Select 12 credits (minimum of 3 credits at the 400-level) in consultation with adviser from AAA S, BE SC, SOC (Sem: 5-8)
Select 6 credits (minimum of 3 credits at the 400-level) in consultation with adviser from AM ST, ART, ART H, COMM, CRIMJ, ENGL, I HUM, MUSIC, PSYCH, PL SC, PUBPL, THEA, WMNST (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Summer Session 2010

Blue Sheet Item #: 39-01-074

Review Date: 08/24/2010

Program coordinator updated by Publications: 4/30/09

UCA Revision #2: 7/30/07

CL

Structural Design and Construction Engineering Technology

Capital College (SDCET)

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

PROFESSOR JOSEPH J. CECERE, *Program Chair, School of Science, Engineering, and Technology*

The program in Structural Design and Construction Engineering Technology provides the basic education required for the structural engineer and construction profession. Students learn the basic general engineering concepts needed for this major with emphasis on the fundamentals, structural design principles, and construction techniques through required course work. They are given the opportunity to focus in a discipline of construction management or structural design through a selected option or choose a broad general option. Courses in communication skills, arts, humanities, social and behavioral sciences, and other engineering related areas broaden the program. Students gain experience in working as members of a team and in using interdisciplinary approaches to solve problems. These experiences, as well as those related to design and construction principles, are taught through exercises in the classroom, laboratory, and field. The program culminates with a capstone project course in which the students' knowledge and skills are applied to specific problems.

For the B.S. degree in Structural Design and Construction Engineering Technology, a minimum of 125 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(20-24 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES, REQUIREMENTS FOR THE MAJOR or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 2-10 credits

REQUIREMENTS FOR THE MAJOR: 95-102 credits
(This includes 24 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses; 3 credits of GS courses; 3 credits of GWS courses; 3 credits of GHA courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 76-80 credits

PRESCRIBED COURSES (45 credits)
CHEM 110 GN(3), CHEM 111 GN(1), ENGL 202C GWS(3), MATH 140 GQ(4) (Sem: 1-4)
ET 200(3) (Sem: 2-5)
C E 254 GHA;US(3)[1], SSET 295(1) (Sem: 3)
CET 342(3), CET 343(3) (Sem: 5-6)
C E 333W(3)[1], CET 308(3), CET 430(3)[1], CET 431(3)[1], CET 432(3)[1], CET 434(3), CET 435(3)[1] (Sem: 5-8)

ADDITIONAL COURSES (31-35 credits)
Select 2-3 credits from: EG T 101(1) and EG T 102(1) or EDSGN 100(3) (Sem: 1-2)
Select 3-4 credits from: PHYS 150 GN(3), PHYS 211 GN(4), PHYS 250 GN(4) (Sem: 1-3)
Select 3-4 credits from: PHYS 151 GN(3), PHYS 212 GN(4), PHYS 251 GN(4) (Sem: 2-4)
Select 3 credits from: ECON 014 GS(3), ECON 102 GS(3), ECON 104 GS(3) (Sem: 2-4)
Select 4 credits from: MATH 141 GQ(4), STAT 200 GQ(4) (Sem: 2-6)
Select 3 credits from: E MCH 211(3)[1], ET 300(3), MCH T 111(3)[1] (Sem: 2-6)
Select 3 credits from: E MCH 213(3)[1], ET 322(3)[1], MCH T 213(3)[1](Sem: 2-6)
Select 1 credit from: ET 323(1), MCH T 214(1) (Sem: 2-6)
Select 3 credits from: C E 310(3), SUR 111(3) (Sem: 2-7)
Select 3 credits from: CMPSC 101 GQ(3), CMPSC 121 GQ(3), CMPSC 201 GQ(3), CMPSC 202 GQ(3) (Sem: 3-4)
Select 3-4 credits from: ACCTG 211(4); MGMT 100(3) or MGMT 301(3) (Sem: 3-8)

REQUIREMENTS FOR THE OPTION: 19-22 credits

CONSTRUCTION MANAGEMENT OPTION: (19-21 credits)

PRESCRIBED COURSES (10 credits)[1]
C E 456(3), C E 458(3), C E 488C(4) (Sem: 7-8)

ADDITIONAL COURSES (6-7 credits)
Select 3-4 credits from ACCTG 211(4) or MGMT 100(3), MGMT 301(3) (Sem: 2-8)
Select 3 credits from A E 310(3) or C E 321(3) or ENVE 430(3) or MET 435(3) (Sem: 7-8)

SUPPORTING COURSES AND RELATED AREAS (3-4 credits)
Select 3-4 credits from approved program list (Sem: 7-8)

STRUCTURAL DESIGN OPTION: (19-20 credits)

PRESCRIBED COURSES (13 credits)
C E 445(3)[1], C E 449(3)[1], C E 488D(4)[1], E MCH 212(3) (Sem: 7-8)

ADDITIONAL COURSES (3 credits)
Select 3 credits from CET 361(3) or C E 360(3) (Sem: 7-8)

SUPPORTING COURSES AND RELATED AREAS (3-4 credits)
Select 3-4 credits from approved program list (Sem: 7-8)

GENERAL OPTION: (22 credits)

PRESCRIBED COURSES (12 credits)**[1]**
C E 445(3), C E 449(3), C E 456(3), C E 458(3) (Sem: 7-8)

ADDITIONAL COURSES (10 credits)
Select 3 credits from A E 310(3) or MET 435(3) (Sem: 7-8)
Select 3 credits from C E 360(3) or CET 361(3) (Sem: 7-8)
Select 4 credits from C E 488C(4)**[1]** or C E 488D(4)**[1]** (Sem: 7-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2012

Blue Sheet Item #: 41-03-035

Review Date: 11/13/2012

UCA Revision #1: 8/14/06
UCA Revision #2: 7/30/07

CL

Associate Degrees

Business Administration

Abington College (2BAAB)
Altoona College (2BAAL)
Berks College (2BABL)
Capital College (2BACA)
University College (2BACC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Hazleton, Penn State Mont Alto, Penn State New Kensington, Penn State Lehigh Valley, Penn State Schuylkill, Penn State Shenango, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York
University College (2BACC): Via World Campus

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

The associate degree program in Business Administration provides a foundation in business that, through two options, prepares graduates for either entrance to the Bachelor of Science in Business (BSB) programs in business or for direct entry into the work place. The primary objective of this major is to provide a business-oriented program with sufficient communicative and mathematical skills, socially relevant course work, and specific business specialties to develop a well-rounded and knowledgeable graduate.

The General Business Option provides an introductory foundation to core aspects of the business environment while also preparing students for future transfer into the Bachelor

of Science in Business (BSB).

The Professional Studies Option provides a technically oriented program that prepares students for direct entry into the work force. Because some of the course work in this option is not accepted in baccalaureate business programs, students are encouraged to work closely with faculty and staff advisers.

Students who plan to continue into BSB should meet with their advisers regarding entrance to major and other related requirements.

For the Associate in Science degree in Business Administration, a minimum of 60 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 21 credits
(9 credits of these 21 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 48-50 credits
(This includes 3 credits of GQ General Education courses and 6 credits of GWS General Education courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 30-31 credits

PRESCRIBED COURSES (13 credits)
CAS 100 GWS(3) (Sem: 2-4)
ACCTG 211(4), ENGL 202D GWS(3)**[1]**, MIS 204(3) (Sem: 2-4)

ADDITIONAL COURSES (17-18 credits)
ENGL 015 GWS(3)**[1]** or ENGL 030 GWS(3)**[1]** (Sem: 1-2)
MATH 021 GQ(3), MATH 022 GQ(3), or MATH 110 GQ(4) (Sem: 1-2) **[74]**
B A 243(4)**[1]** or B A 241(2)**[1]** and B A 242(2)**[1]** (Sem: 1-4)
ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-4)
SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 2-4)

REQUIREMENTS FOR THE OPTION: 18-19 credits
(Both options may not be available at every campus.)

GENERAL BUSINESS OPTION: (18-19 credits)

ADDITIONAL COURSES (18-19 credits)
a) Select 3 credits from MGMT 301(3)**[1]** or MGMT 301W(3)**[1]** (Sem: 3-4)
b) Select 3 credits from MKTG 301(3)**[1]** or MKTG 301W(3)**[1]** (Sem: 3-4)
c) Select 12-13 credits from B A 250(3); CAS 250(3) or CAS 252(3); LER 100 GS(3) or LER 136 US(3); ECON 102 GS(3) or ECON 104 GS(3); MATH 022 GQ(3), MATH 110 GQ(4), MKTG 220(3) (Sem: 1-4)

PROFESSIONAL STUDIES OPTION: (18 credits) **[75]**

ADDITIONAL COURSES (18 credits)
Select 18 credits from ACCTG 151(3), ACCTG 152(3), ACCTG 153(3), ACCTG 160(3), B A 100 GS(3), B A 250(3); ECON 102 GS(3) or ECON 104 GS(3);CMPSC 140(3), FIN 100(3), FIN 108(3), H P A 101(3), IST 110 GS(3), IST 210(3), IST 220(3), IST 250(3), LER 100 GS(3), LER 136 US(3); MGMT 100(3) or MGMT 100W(3); MGMT 150(3), MIS 103(3), MIS 106(1-6); MIS 190(3), MKTG 220(3); MKTG 221(3) or MKTG 221W(3); R EST 100(3) (Sem: 1-4)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[74] Students should work closely with academic advisers to ensure the completion of any

and all course work required for entrance to BSB.
[75] This Option is designed for students planning to enter the work force directly upon graduation. Some courses included in this option will not transfer into baccalaureate business programs. Students are encouraged to work closely with their advisers.

Last Revised by the Department: Fall Semester 2007

Blue Sheet Item #: 35-06-534

Review Date: 4/10/07

UCA Revision #1: 8/9/06
UCA Revision #2: 7/26/07

UC

Letters, Arts, and Sciences

Abington College (2LAAB)
Altoona College (2LAAL)
Penn State Erie, The Behrend College (2LABC)
Berks College (2LABL)
Penn State Harrisburg (2LACA)
University College (2LACC): Penn State Beaver, Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Hazleton, Penn State Mont Alto, Penn State Greater Allegheny, Penn State Lehigh Valley, Penn State New Kensington, Penn State Schuylkill, Penn State Shenango Valley, Penn State Wilkes-Barre, Penn State Worthington-Scranton, Penn State York
University Park, College of the Liberal Arts (2 LAS)
World Campus

ASSOCIATE DEAN JOHN L. SELZER, *in charge, Penn State University Park*

The objectives of the Letters, Arts, and Sciences major are to broaden the student's understanding, interests, and skills; to help the student become a more responsible, productive member of the family and community; and to offer a degree program with sufficient electives to permit some specialization according to the student's interests or career plans. Letters, Arts, and Sciences is a complete two-year degree major. However, graduates who later seek admission to baccalaureate degree majors may apply baccalaureate credits toward the new degree.

In addition to a wide variety of baccalaureate majors offered at University Park campus, graduates of the Letters, Arts, and Sciences major may qualify for admission to the baccalaureate degree majors in Behavioral Sciences, Elementary Education, Humanities, or Public Policy offered at Penn State Harrisburg. Or they may qualify for any of a large number of baccalaureate degree majors offered by Penn State Erie, The Behrend College, in business, the liberal arts, and sciences.

For the Associate in Arts degree in Letters, Arts, and Sciences, a minimum of 60 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 21 credits
(6 of these 21 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

ELECTIVES: 15 credits

REQUIREMENTS FOR THE MAJOR: 30 credits#[1]
(This includes 6 credits of General Education GWS courses.)

PRESCRIBED COURSES (6 credits)
ENGL 015 GWS(3) (Sem: 1-2)
CAS 100 GWS(3) (Sem: 3-4)

ADDITIONAL COURSE (3 credits)
ENGL 202A GWS(3), ENGL 202B GWS(3), ENGL 202C GWS(3), or ENGL 202D GWS(3) (Sem: 3-4)

SUPPORTING COURSES AND RELATED AREAS (21 credits)
Select 3 credits in any course designated as arts* (Sem: 1-4)
Select 3 credits in any course designated as humanities* (Sem: 1-4)
Select 3 credits in any course designated as social and behavioral sciences* (Sem: 1-4)
Select 3 credits in any course designated as physical, biological, or earth sciences* (Sem: 1-4)
Select 9 credits in any one of the following areas*: arts, humanities, social and behavioral sciences, natural sciences and quantification, and foreign language skills. (If foreign language courses are chosen, it is recommended that these courses be in one foreign language sequence.) (Sem: 1-4)

[1]A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

#The required credits of General Education and Requirements for the Major must be baccalaureate-level courses. For students intending to seek admission to a baccalaureate program upon graduation, it is recommended that most, if not all, of the courses be at the baccalaureate level. For those students who will seek a bachelor of arts degree upon graduation from Letters, Arts, and Sciences, it is strongly recommended that a foreign language be taken since admission to a bachelor of arts program in the College of the Liberal Arts requires one college-level course, or the equivalent, in a foreign language.

*****Courses that will satisfy the arts, humanities, social and behavioral sciences, natural sciences, and quantification requirements are defined on the Letters, Arts, and Sciences checksheet, which may be obtained from the College of the Liberal Arts associate dean for undergraduate studies at the University Park campus or from any Letters, Arts, and Sciences representative at other locations.

Last Revised by the Department: Summer Session 1988

Blue Sheet Item #: 16-10-044

Review Date: 10/8/02

Reviewed by Publications: 06/23/06

LA

Minors

American Studies Minor

Capital College (AMSTD)

American Studies is an interdisciplinary field that explores the patterns of life and thought of the American peoples, past and present. Its courses are grouped into three general areas of history, society, and culture, and it has special offerings in American themes and eras, museum and heritage studies, material/visual culture, and folklife, and popular culture. The program encourages students to integrate theories, methods, and findings from various fields, including history, literature, folklore, ethnography, politics, art, architecture, and music. It also encourages applications of this knowledge to public heritage and cultural conservation work. American Studies helps students prepare for further study or careers in education, government, communication, law, museums, historical and cultural agencies, and archives. Internships are available for qualified students in American Studies. The internship is an extension of the student's academic studies and is an opportunity to gain practical experience.

A student seeking admission to the American Studies Minor must first be admitted to a major at Penn State. Upon admission, a Minor Adviser will be appointed from within the American Studies faculty to guide the student. For the American Studies Minor, a total of 18 credits is required. At least 6 credits must be at the 400 level.

A grade of C or better is required for all courses in the minor.

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (6 credits)
AM ST 491W(6) (Sem: 5-8)

ADDITIONAL COURSES (12 credits)
Select 12 credits from any American Studies offerings (AM ST). Three of these credits must be at the 400 level. (Sem: 5-8)

Last Revised by the Department: Summer Session 2010

Blue Sheet Item #: 39-01-072

Review Date: 08/24/2010

UCA Revision #2: 7/26/07

CL

Business Administration Minor

Capital College (BADMN)

This interdisciplinary minor provides students in all majors with a business-oriented supplement to their major fields of study. It is intended to provide a set of basic skills that complement the unique competencies gained in their non-business disciplines. It is strongly recommended that students taking this minor elect at least one course in mathematics through college calculus, and a second course in descriptive and inferential statistics, as part of their General Education requirements or electives for the major. Students taking this minor may not have more than 25 percent of their total credits for graduation in business courses, and must receive a grade of C or better in all courses required for the minor. Students pursuing the Business Administration minor should apply to the School of Business Administration and select business courses in consultation with a business adviser.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 22 credits

PRESCRIBED COURSES (7 credits)
ACCTG 211(4), MGMT 301(3) (Sem: 3-4)

ADDITIONAL COURSES (9 credits)
Select 3 credits from ECON 102 GS(3) or ECON 104 GS(3) (Sem: 3-4)
Select 6 credits from B A 243(4) or B LAW 243(3), B A 100 GS(3), B LAW 340(3), B A 364Y US;IL(3), ECON 342(3), ECON 351(3), FIN 100(3) or FIN 301(3), MGMT 321(3), MIS 390(3), MRKT 221(3) or MKTG 301(3), SCM 320(3) (course prerequisites must be met)(Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (6 credits)
Select 6 credits at the 400 level in ACCTG, B A, ECNMS, FIN, HCM, MIS, IST, MGMT, MRKT, or BE SC 408(3), BE SC 410(3), BE SC 468(3), COMM 414(3), PSYCH 473(3), or other School-approved courses (course prerequisites must be met) (Sem: 5-8)

Last Revised by the Department: Summer Session 2002

Blue Sheet Item #: 30-06-054

Review Date: 1/14/03

UCA Revision #1: 8/3/06
UCA Revision #2: 7/26/07

CL

Communications Minor

Capital College (COMCL)

The Communications minor provides students with an introduction to the tool skills needed to function as a professional communicator, as well as a basic understanding of communication processes and theory. Students seeking careers in fields such as public administration, business, criminal justice, law, information technology, and the medical, social and behavioral professions will find this minor provides instruction in a valuable additional knowledge and skill area important in today's information society.

Students must apply for entrance to the minor after achieving fifth semester classification.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (3 credits)
COMM 251(3) (Sem: 3-6)

ADDITIONAL COURSES (3 credits)
COMM 230W(3) (Sem: 3-6)

SUPPORTING COURSES (12 credits)
Select 12 credits from approved department list. At least 6 of these credits must be at the 400-level (Sem: 2-8)

Last Revised by the Department: Fall Semester 2005

Blue Sheet Item #: 33-06-043

Review Date: 04/12/05

UCA Revision #2: 7/27/07

CL

Computer Science Minor

Computing has become an essential component of many disciplines, and it is driving innovation in fields far beyond computer science. The minor in Computer Science at Penn State Harrisburg provides basic proficiency in computer science, with an emphasis on building both a theoretical framework for computer science and providing practical skills needed to apply computer science to other fields of study. The knowledge and skills gained in the minor expands opportunities for students seeking careers in the growing number of fields that require a strong foundation in computer science. In addition, for students seeking to pursue graduate study, the minor provides background knowledge for the computing intensive aspects of their chosen discipline.

The minor begins with the second-level course in computer programming (CMPSC 122), a course in object-oriented programming with web applications (CMPSC 221), a course in discrete math for computer science (CMPSC 360), and a course in data structures (CMPSC 463). These twelve credits are followed with an additional six credits of 400-level work in computer science (CMPSC). Note that CMPSC 121 and MATH 140 are prerequisites for CMPSC 122.

Capital College (COMP)

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (12 credits)
CMPSC 122(3) (Sem: 1-3)
CMPSC 221(3) (Sem: 4-5)
CMPSC 360(3), CMPSC 462(3) (Sem:4-8)

SUPPORTING COURSES AND RELATED AREAS (6 credits)
Select 6 credits of 400-level CMPSC courses from the department list of approved Additional Courses (Sem: 5-8)

Last Revised by the Department: Spring Semester 2013

Blue Sheet Item #: 41-05-051

Review Date: 02/19/2013

UCA Revision #1: 8/3/06
UCA Revision #2: 7/27/07

CL

Homeland Security Minor (HLS)

Penn State Harrisburg
Penn State World Campus

The Homeland Security minor provides for development of familiarity with homeland security and defense issues, including emergency management, homeland security policy, and the structure of homeland security operations. Students will come to understand the "all hazards" approach to homeland security and defense. Students will be able to develop familiarity with such aspects of homeland security and defense as emergency management, security administration, border security, and critical infrastructure through taking elective courses. Recipients of the minor would be positioned to enter the work force in entry level positions or to prepare for transition to graduate school.

A grade of C or better is required in all courses for the minor. At least six credits must be at the 400 level.

Scheduling recommendation by semester standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES: (9 credits)
PUBPL 201(3) (Sem 2-5)
PL SC/CRIMJ 439(3), PUBPL 483(3) (Sem 5-8)

SUPPORTING COURSES AND RELATED AREAS: (9 credits)
Select 9 credits from among the following: CRIMJ 304(3), CRIMJ 435(3), PUBPL 306(3), PUBPL 475(3) (Course substitution possible with permission of advisor) (Sem: 5-8)

Last Revised by the Department: Spring Semester 2011

Blue Sheet Item #: 39-06-041

Review Date: 04/12/2011

Information Sciences and Technology for Accounting Minor

Capital College (ISACC): Penn State Harrisburg

Accounting remains a vital organizational function which, in today's business environment, impacts the strategic direction of the firm. Technology has changed the manner in which business organizations are supported by accounting. Thus, accounting professionals with technology skills and technology professionals with accounting skills are extremely valuable in today's modern organization. This new minor will provide students with this integration of knowledge in these two fields.

Students must apply for entrance to the minor no later than the beginning of their sixth semester. A one-time tuition surcharge of $750 will be applied when students formally enroll in the Information Sciences and Technology for Accounting Minor.

A grade of C or better is required for all courses in the minor.

REQUIREMENTS FOR THE MINOR: 22 credits

PRESCRIBED COURSES (19 credits)
IST 110 GS(3), IST 210(4), IST 220(3) (Sem. 1-8)
ACCTG 403(3), ACCTG 432(3), ACCTG 471(3) (Sem. 5-8)

ADDITIONAL COURSES (3 credits)
Select 3 credits from ACCTG 310(3), ACCTG 340(3), ACCTG 472(3) (Sem. 6-8)

Last Revised by the Department: Summer Session 2010

Blue Sheet Item #: 39-01-073

Review Date: 08/24/2010

UCA Revision #2: 7/27/07

CL

Information Sciences and Technology Minor

Abington College
Berks College
Capital College
University College: Penn State Beaver, Penn State Brandywine, Penn State Greater Allegheny, Penn State Hazleton, Penn State Lehigh Valley, Penn State New Kensington, Penn State Schuylkill, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York
University Park, College of Information Sciences and Technology (IST)

This minor is structured to provide students with the theoretical frameworks and skill sets necessary to compete and be productive in the information technology-intensive global context that defines the new "Information Age." Specifically, the minor will be focused on a program that will build an understanding of core information technologies and related areas of study; will prepare students for the practical application of various information sciences and related technologies; and engage students in sharpening their abilities to think critically and to work in teams. All this will be done with the intent to expose students to the cognitive, social, institutional, and global environments of Information Sciences and Technology and to then apply that knowledge as a supplement to their major. A one-time tuition surcharge will be applied to all students enrolled in the minor.

A grade of C or better is required for all courses in this minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 19 credits

PRESCRIBED COURSES (10 credits)
IST 110 GS(3), IST 210(4), IST 220(3) (Sem 1-6)

ADDITIONAL COURSES (9 credits)
Select 3 credits from IST 250(3), IST 301(3), or IST 302(3) (Sem 5-8)
Select 6 credits from IST 402(3), IST 431(3), or IST 432(3) (Sem 5-8)

Last Revised by the Department: Spring Semester 2004

Blue Sheet Item #: 32-01-075

Review Date: 10/6/05

IS

Information Sciences and Technology/Finance Minor

Capital College (ISFIN)

PROFESSOR ORANEE TAWATNUNTACHAI
PROFESSOR GAYLE J. YAVERBAUM

The Information Sciences and Technology/Finance Minor is to enhance skills of students in the information sciences and finance. More organizations are integrating technology as part of their business operations, including finance. Finance is a key function of every business organization. Therefore, technology professionals with finance skills, and finance professionals with technology skills are highly valuable in any organization.

Students must apply for entrance to the minor no later than the beginning of their seventh semester. A one-time, non-refundable tuition surcharge of $750 will be applied when students formally enroll in the IST/FIN Minor.

A grade of C or better is required for all courses to successfully complete the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 22 credits

PRESCRIBED COURSES (19 credits)
IST 110 GS(3), IST 210(4), IST 220(3) (Sem: 1-8)
ECON 351(3), FIN 301(3), FIN 420(3) (Semester 5-8)

ADDITIONAL COURSES (3 credits)
Select 3 credits from FIN 302(3), FIN 406(3), FIN 407 IL(3), FIN 408(3), FIN 409(3), FIN 427(3), FIN 456 IL(3), FIN 496(3), FIN 497(3) (Semester 6-8)

Last Revised by the Department: Summer Session 2005

Blue Sheet Item #: 33-02-004

Review Date: 10/06/05

UCA Revision #2: 7/27/07

CL

International Business Minor

Capital College (INTLB)

This minor provides undergraduate students in all business administration majors with further studies in such areas as international accounting, finance, information systems, comparative management, international marketing, or economics. The objective of the minor is to provide students who are interested in careers in international business with an understanding of problems and problem-solving methods that transcend national boundaries. Proficiency in a foreign language and study abroad provide an understanding of the social, political, and cultural context of the global marketplace. Except for

Accounting, the minor can be included in the major with no additional courses being required. Professional Accountancy students may have to take 12 additional credits.

Students must receive a grade of C or better in all courses required for the minor.

Scheduling Recommendation by Semester Standing given like (1-2)

REQUIREMENTS FOR THE MINOR: 18-24 credits
(A minimum of 3 credits in the minor must be taken in an approved study abroad program.)

PRESCRIBED COURSES (3 credits)
B A 364Y US;IL(3) (Sem. 7-8)

SUPPORTING COURSES AND RELATED AREAS (15-21 credits)
Select 3-12 credits in a single foreign language equivalent to the 12th credit level (Sem. 1-6)
Select 9-12 credits from ACCTG 461 IL(3), ECON 333 GS(3), FIN 407(3), FIN 456 IL(3) or I B 299 IL(3), MGMT 461 IL(3), MIS 446(3), MKTG 445 IL(3) (Sem. 5-8)

Last Reviewed by the Department: Fall Semester 2011

Blue Sheet Item #:40-01-047

Review Date: 8/16/2011

UCA Revision #1: 8/8/06
UCA Revision #2: 7/27/07

CL

Political Science Minor

Altoona College (PLSAL)
Capital College (PLSCA)
University College (PLSCC): Penn State Fayette
University Park, College of the Liberal Arts (PL SC)
World Campus

*Contact: College of the Liberal Arts, James Piazza, **jap45@psu.edu***

The Political Science minor consists of 18 credits with at least one course in each of the following Political Science areas: American, theory/methodology, comparative, and international relations. Six (6) of these 18 credits must be at the 400 level.

When electing this minor, the student should have junior (fifth-semester) standing. Special attention should be given to the fact that courses used to satisfy general education, degree requirements, electives, and major requirements may also be used to satisfy minor requirements.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

ADDITIONAL COURSES (18 credits)

Select 18 credits in Political Science (at least 6 credits at the 400 level) (Sem: 3-8)
Include at least one course in each of the following areas: American, Comparative, International Relations, and Theory

Last Revised by the Department: Fall Semester 1999

Blue Sheet Item #: 28-01-056

Review Date: 11/10/03

LA

Psychology Minor

Penn State Abington (PSYAB)
Penn State Altoona (PSYAL)
Penn State Harrisburg (PSYCA)
University College (PSYCC): Penn State Beaver, Penn State Fayette, Penn State Greater Allegheny, Penn State New Kensington, Penn State Schuylkill
University Park, College of the Liberal Arts (PSY)
World Campus

*Contact: College of the Liberal Arts, Richard Carlson, **cvy@psu.edu***

The Psychology minor is designed to provide undergraduate students with a broad overview of topics and domains within psychology, knowledge and skills related to research methods in psychology, and deeper knowledge of research, theory, and application in one or two specific content domains. Students completing this minor will find a flexible selection of coursework in psychology. The content domains from which students may select courses include biological, clinical, cognitive, developmental, industrial-organizational, and social psychology. Students may choose courses that emphasize theory or application of psychological principles. A number of these courses examine the application of psychological research to societal issues.

The required research methods course, PSYCH 301W, carries a statistics prerequisite that can be met by either PSYCH 200 or STAT 200. STAT 200 does not count toward the minimum 18 credits required for the minor. Students minoring in Psychology at University Park are encouraged to consult the Psychology Advising Center early in the process of planning their minor.

The Psychology minor may be appropriate for students pursuing graduate training or professional careers in fields such as health, business, education, and human services, as well as in psychology.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (7 credits)
PSYCH 100 GS(3), PSYCH 301W(4) (Sem: 1-4)

ADDITIONAL COURSES (11 credits)
Select 11 credits (at least 6 credits at the 400 level) in PSYCH (Sem: 5-8)

Last Revised by the Department: Fall Semester 2001

Review Date: 12/20/02

UCA Revision #1: 8/14/06

Sociology Minor

Penn State Abington (SOCAB)
Penn State Altoona (SOCAL)
Penn State Harrisburg (SOCCA)
University College (SOCCC): Penn State Fayette, Penn State Schuylkill
University Park, College of the Liberal Arts (SOC)

*Contact: College of the Liberal Arts, Sal Oropesa, **rso1@psu.edu***

The sociology minor allows students to explore the wide range of topics, social groups, and social interactions studied by sociologists. From social inequalities and social problems to the familiar institutions of family, school, religion, and government, the diversity of courses available allows sociology minors to explore courses relevant to their interests. The courses also provide multiple viewpoints, studying the intimate interactions of families and small groups and the complex interactions of global economies and political alliances. Requiring a minimum of 18 credits in sociology, including Introductory Sociology (SOC 001) and two courses at the 400 level, students have flexibility in choosing a set of courses for their sociology minor.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (3 credits)
SOC 001 GS(3) (Sem: 1-6)

SUPPORTING COURSES AND RELATED AREAS (15 credits)
Select 15 credits in sociology; at least 6 of those credits must be at the 400 level (Sem: 1-8)

Last Revised by the Department: Fall Semester 2001

Editorial 3/23/07

Women's Studies Minor

Capital College (WOMST)

This interdisciplinary minor provides students with an opportunity to develop a broad understanding of women's perspectives and gender issues and to integrate that understanding into major areas of academic study. A total of 18 credits must be taken as part of the student's program; at least 9 of these credits must be taken at Penn State Harrisburg and 6 must be at the 400 level. Students must receive a grade of C or better in all courses in the minor.

A student seeking admission to the Women's Studies minor must first be admitted to a Division/School major at Penn State Harrisburg. A Program of Study must be completed in consultation with the student's major adviser and submitted to the Women's Studies Coordinating Committee, which will select a Women's Studies adviser for the student. Decisions regarding the appropriateness of courses for the minor will be made by the Women's Studies program. (The major adviser may also serve as adviser to the minor.)

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (6 credits)
WOMST 315(3)**[76]** (Sem: 1-4)
WOMST 415(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 9 credits of Behavioral Sciences and Education, Humanities or Public Affairs. (Sem: 1-8)
Select 3 credits from approved department list of 400-level courses. (Sem: 5-8)

[76] Students who have passed WMNST 100 or equivalent with a grade of C or better may, with the permission of the Women's Studies program, take another Women's Studies course on a more specialized topic instead of WOMST 315.

Last Revised by the Department: Spring Semester 1995

Blue Sheet Item #: 23-06-258

Review Date: 04/14/95

CL

Writing Minor

Capital College (WRTNG): Penn State Harrisburg

Writing is valued as a mode of learning, as a means of expression, and as a skill highly desirable in the workplace. Personal development, interpersonal communication, and professional marketability may all be enhanced by the further study and practice of writing. For these reasons, the Writing minor offers students from virtually every discipline across the University an opportunity to learn more about a wide variety of writing: informative/persuasive, professional, and creative, while improving their own writing skills through hands-on writing experiences. In addition to offering students opportunities to study and practice different types of writing, the minor affords students the opportunity to write for/in different media, producing both print and electronic texts.

For the Writing minor, a total of 18 credits is required. Students may not count courses used to satisfy General Education Writing/Speaking Skills.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES: 6 credits
ENGL 210(3) (Sem: 3-8)
ENGL 420(3) (Sem: 5-8)

ADDITIONAL COURSES: 6-12 credits
At least 3 credits of Additional/Supporting courses must be taken at the 400 level.
Select 6-12 credits from ENGL 212(3), ENGL 213(3), ENGL 215(3), ENGL 411(3), ENGL 412(3), ENGL 413(3), ENGL 414(3), ENGL 416(3), ENGL 417(3), ENGL 418(3), ENGL 419(3), ENGL 421(3), ENGL 422(3), ENGL 423(3), ENGL 425(3), ENGL 470(3), ENGL 471(3), ENGL 474(3) (Sem: 3-8)

SUPPORTING COURSES: 0-6 credits
Select 0-6 credits from a department-approved list (Sem: 5-8)

Last Revised by the Department: Spring Semester 2002

Blue Sheet Item #: 30-01-018

Review Date: 08/28/01

Program coordinator updated by Publications: 9/29/06

CL

| The Pennsylvania State University | ©2001-2013. All rights reserved.

- Nondiscrimination Statement |
- Equal Opportunity Policy |
- Copyright |
- Privacy and Legal Statements |
- About the University Bulletin |
- Contact Info

This is the official bulletin of The Pennsylvania State University. Programmatic expectations for General Education are those in effect at the time of admission to degree candidacy, and college and major requirements are those in effect at the time of entry to college and major. These are accurately indicated in each student's degree audit.

The University reserves the right to change the requirements and regulations listed here and to determine whether a student has satisfactorily met its requirements for admission or graduation, and to reject any applicant for any reason the University determines to be material to the applicant's qualifications to pursue higher education. Nothing in this material should be considered a guarantee that completion of a program and graduation from the University will result in employment.

The University Faculty Senate has responsibility for and authority over all academic information contained in the Undergraduate Bulletin.