

The Pennsylvania State University  
COLLEGE OF EDUCATION

Student: \_\_\_\_\_

PSU ID Number: \_\_\_\_\_ E-Mail \_\_\_\_\_

Adviser: \_\_\_\_\_

**SECONDARY EDUCATION**  
**Chemistry Teaching Option**

(See back for info on entrance, retention and exit criteria)

DR. S. MCDONALD, Contact Person  
126 Credits Required  
**EFFECTIVE MAY 2012**

<http://www.ed.psu.edu/>

**I. GENERAL EDUCATION COMPONENTS**  
45 Cr.

(Select appropriate courses listed in the General Education  
Bulletin. Note that General Education courses  
may not be taken SA/UN.)

WRITING/SPEAKING (GWS) – 9 Cr.

•**ENGL 15 GWS or 30 GWS** \_\_\_\_\_ (3)  
ENGL 202A GWS or 202B GWS \_\_\_\_\_ (3)  
CAS 100A GWS \_\_\_\_\_ (3)

QUANTIFICATION (GQ) – 6 Cr.

•**(MATH 140 GQ)** \_\_\_\_\_ (3)  
•**(MATH 141 GQ)** \_\_\_\_\_ (3)

NATURAL SCIENCES (GN) – 9 Cr.

•**(BIOL 110 GN)** \_\_\_\_\_ (3)  
•**(CHEM 110 GN)** \_\_\_\_\_ (3)  
•**(PHYS 211 GN)** \_\_\_\_\_ (3)

ARTS (GA) – 6 Cr.

\_\_\_\_\_ (3)  
\_\_\_\_\_ (3)

HUMANITIES (GH) – 6 Cr.

•**(LITERATURE GH)** \_\_\_\_\_ (3)  
\_\_\_\_\_ (3)

SOCIAL & BEHAVIORAL SCIENCES (GS) – 6 Cr.

•**(PSYCH 100 GS)** \_\_\_\_\_ (3)  
(HD FS 239 GS) \_\_\_\_\_ (3)

HEALTH AND PHYSICAL ACTIVITY (GHA) – 3 Cr.

\_\_\_\_\_ ( ) \_\_\_\_\_ ( ) \_\_\_\_\_ (3)

II. FIRST YEAR SEMINAR (FYS)/ELECTIVES 0-4 Cr.  
(FYS) \_\_\_\_\_ ( )

**III. REQUIREMENTS FOR THE MAJOR**  
45 Cr.

Prescribed Courses – 36 Cr.+

•**PSYCH 100 GS** \_\_\_\_\_ (3)\*  
•**EDPSY 14** \_\_\_\_\_ (3)  
•**C I 295** \_\_\_\_\_ (2)°  
C I 280 GH \_\_\_\_\_ (3)  
SPLED 400 \_\_\_\_\_ (4)  
SPLED 403B \_\_\_\_\_ (3)  
P<sup>C</sup> I 495C (SA/UN) \_\_\_\_\_ (3)°  
P<sup>C</sup> I 495E \_\_\_\_\_ (15)°

Additional Courses – 3 Cr.+

P<sup>PSYCH</sup> 412 (or HDFS 239 GS\*) \_\_\_\_\_ (3)

Supporting Courses & Related Areas – 6 Cr.+

EDTHP 400 – level selection (or 115 US) \_\_\_\_\_ (3)  
•**Literature Selection GH** \_\_\_\_\_ (3)\*

CODES:

+ Must earn “C” or better (C I 495C offered SA/UN only).

° See adviser for prerequisites and early application for clinical experiences.

\* The following courses may satisfy General Education components: PSYCH 100 GS and HD FS 239 GS (Soc. & Behavioral Science); 6 cr. of MATH 140 GQ and 141 GQ (Quantification); 9 credits of the Prescribed and GN courses (Natural Science); and 3 crs of Literature GH (Humanities).

# SCIED 411 prerequisites are underlined above.

P<sup>See</sup> See Baccalaureate Degree Programs Bulletin for prerequisites.

W Satisfies 3 credits of writing-intensive course requirement.

• Required for entrance to major/certification program.

**NOTE: Red Cross certification or the equivalent in First Aid and CPR must be completed for certification. On-line courses not acceptable.**

**IV. OPTION REQUIREMENTS**  
60-62 Cr.

Prescribed Courses – 42 Cr.+

•**BIOL 110 GN** \_\_\_\_\_ (4)\*  
•**CHEM 110 GN** \_\_\_\_\_ (3)\*  
•**CHEM 111 GN** \_\_\_\_\_ (1)\*  
•**CHEM 112 GN** \_\_\_\_\_ (3)\*  
•**CHEM 113 GN** \_\_\_\_\_ (1)\*  
P<sup>CHEM</sup> 450 (451) \_\_\_\_\_ (3)  
P<sup>CHEM</sup> 452 \_\_\_\_\_ (3)  
CHEM 457 \_\_\_\_\_ (2)  
•**MATH 140 GQ** \_\_\_\_\_ (4)\*  
•**MATH 141 GQ** \_\_\_\_\_ (4)\*  
•**PHYS 211 GN** \_\_\_\_\_ (4)\*  
•**PHYS 212 GN** \_\_\_\_\_ (4)\*  
#<sup>SCIED</sup> 411W \_\_\_\_\_ (3)  
P<sup>SCIED</sup> 412 \_\_\_\_\_ (3)

Additional Courses – 12-14 Cr.+

P<sup>CHEM</sup> [210,212,213] (preferred) or [202 & 203] \_\_\_\_\_ (6-8)  
P<sup>CHEM</sup> 402, 406, 408, 410, 412, 423, 425, \_\_\_\_\_ (3)  
or CH E 201, 435 \_\_\_\_\_ (3)

Supporting Courses & Related Areas – 6 Cr.+

Select 6 cr. 200 level CHEM or related fields \_\_\_\_\_ (3)  
(eg., BMB 211 and 212, 251, 252; MICRB 251, 442;  
FD SC 400; AN SCI 301; NUTR 251; CH E) \_\_\_\_\_ (3)

Note: Must complete at least 3 cr. of IL and 3 cr. of  
US Cultures selections.

Questions? See online Advising Handbook: <http://www.ed.psu.edu/edservices>

PECT: PAPA •(R) \_\_\_\_\_ •(W) \_\_\_\_\_ •(M) \_\_\_\_\_  
Specialty Test(s) \_\_\_\_\_

## SECONDARY EDUCATION Chemistry Teaching Option: Entrance Criteria

Eligibility for entrance to the Chemistry teaching option in the Secondary Education (SECD) major is based on: (1) formal application, (2) completion of specified prerequisites, and (3) cumulative grade point average. (See Entrance to Major (ETM) information available from your adviser, or at [http://www.ed.psu.edu/edservices/certification/ent\\_criteria.asp](http://www.ed.psu.edu/edservices/certification/ent_criteria.asp)).

Students must participate in a formal Entrance to Major process in a designated selection pool typically during the fourth semester in the Spring. New students from other institutions and current Penn State students who wish to be considered for a change of major into SECD also participate in appropriate, designated selection pools.

General sequences and block scheduling patterns of certain required courses follow. (This is not a complete semester-by-semester schedule.) General Education Courses and Prescribed, Supporting, and Additional Courses should be completed prior to student teaching.

### Requirements for Consideration for Entrance to Major

ENGL 15 or 30  
C I 295  
EDPSY 14  
PSYCH 100  
BIOL 110 GN  
CHEM 110 GN  
CHEM 111 GN  
CHEM 112 GN  
CHEM 113 GN  
MATH 140 GQ  
MATH 141 GQ  
PHYS 211 GN  
PHYS 212 GN

LITERATURE selection (3 cr. GH)

<http://www.ed.psu.edu/educ/current-students/undergraduate/certification/literature>

\*CUM GPA 3.00 (or alt. as per PA Chapter 354)

\*PECT: PAPA (Reading/Writing/Mathematics)

<http://www.ed.psu.edu/educ/current-students/undergraduate/teacher-testing/>

\*80 HOURS WORK EXPERIENCE

Major Preference confirmation via eLion

### Prerequisites for 411 Methods Courses

See Footnote # on  
front page

### Prerequisite for 412 Methods Courses and C I 495C

SCIED 411 W

### Prerequisites for Student Teaching

"C" or better in  
Specified Courses

SCIED 412

C I 495C

### Student Teaching Practicum

C I 495E

*(No additional coursework permitted  
during Student Teaching)*

### Additional Courses Required for Student Teaching

PSYCH 412  
or HD FS 239

All but 2 of  
remaining  
option  
requirements

\*Must be met by end of Fall semester prior to the Entrance to Major process during the Spring.

### RETENTION and EXIT CRITERIA

Candidates for the baccalaureate degree and a Pennsylvania teacher certificate must (1) maintain throughout the program of study the cumulative grade point average required for admission to the program and complete (2) the academic program requirements, (3) the applicable tests and clearances required by the Pennsylvania Department of Education.

For complete information about Entrance/Retention/Exit Criteria applicable to teacher preparation programs, and eligibility for Pennsylvania Teacher Certification, please see:

<http://www.ed.psu.edu/educ/current-students/undergraduate/ent-exit-crit>

Questions? See online Advising Handbook: <http://www.ed.psu.edu/edservices>