This proposal is now 11-876.

LSC Use Only No:

LSC Action-Date:

UWUCC USE Only No. UWUCC Action-Date: Senate Action Date:

11-6	24			
Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee				
Contact Person	Email Address			
Dr. Fello	sfello@iup.edu			
Proposing Department/Unit	Phone			
Professional Studies in Education	7-2047			
Check all appropriate lines and complete information as reques for each program proposal.	ted. Use a separate cover sheet for each course proposal and			
Course Proposals (check all that apply)				
New CourseCourse Prefix Cl	nangeCourse Deletion			
Course RevisionCourse Number and/or TitleCatalog Description Change				
Current Course prefix, number and full title	<u>Proposed</u> course prefix, number and full title, if changing			
2. Additional Course Designations: check if appropriate				
This course is also proposed as a Liberal Studies Course Other: (e.g., Women's Studies,				
This course is also proposed as an Honors College Course. Pan-African)				
Catalog De	escription ChangeProgram Revision			
3. Program Proposals				
New Degree ProgramProgram Title ChangeOther				
New Minor Program XNew Track				
Middle Level Education Grades 4-8 Science Specialization				
Current program name	Proposed program name, if changing			
4. Approvals	Date			

Received

APR 11 2011

**Liberal Studies** 

Department Curriculum Committee Chair(s)	Mary Jarret for he	4/2/11
Department Chair(s)	Jannes V. Rotigel	4/8/11
College Curriculum Committee Chair		4.8-11
College Dean	Mary am Rafath	4.11.11
Director of Liberal Studies *		
Director of Honors College *		
Provost *  Additional signatures as appropriate:		
(include title)		
UWUCC Co-Chairs		

<sup>\*</sup> where applicable

## II. Description of Curriculum Change

## 1. Catalog Description

The program is designed to prepare pre-service teachers to meet the demands of teaching all academic subjects at the Middle Level in grades 4-8 with a specialization in Science Education.

#### 2. Rationale/Justification

In response to the Pennsylvania Department of Education's new guidelines for Teacher Certification, this program, Middle Level Education for Grades 4-8 with Science specialization, has been

designed to foster an understanding of middle level learners and their learning needs, focusing on teaching of science and other academic subjects at this level.

Students enrolled in this program would complete 123 credits as outlined by the Pennsylvania Department of Education. The program has been designed to include 52 credits in Liberal Studies Education. Of these 52 credits, twelve are included as part of the specialization in science and nine credits serve as both social science requirements and the requirement for a non-western cultures course.

The Pre-Professional and Professional Education Requirements comprise 26 credits, which include COMM 103 Digital Instructional Technology and EDSP 102 Educational Psychology in the Pre-Professional category. The Professional Education Sequence coursework includes EDEX 301 Education of Students with Disabilities in Inclusive Secondary Settings and EDUC 499 Multicultural/Multiethnic Education, which focus on teaching in a multicultural, multiethnic, and diverse classroom setting. The Professional Core Requirements also include EDUC 242 Pre-Student Teaching I and EDUC 342 Pre-Student Teaching II, which are two one-credit courses that are required as practicum experiences related to coursework from the required Middle Level courses. All courses in this undergraduate program have instructional hours embedded for working with English Language Learners and students with a myriad of learning disabilities. The number of hours required by PDE, 90 ELL and 270 special education requirements, have been met.

EDUC 442 School Law and EDSP 477 Assessment of Student Learning: Design and Interpretation of Educational Measures provide pre-service teachers with additional background knowledge regarding the profession. The final practicum experiences are EDUC 421 Student Teaching and EDUC 441 Student Teaching, which are the field placement components for two unique student teaching experiences, one in grades 4-8 with a science specialization and one in grades 4-8 without an science specialization, providing students with two unique field placements.

In the Required Middle Level Education courses, 27 credits represent coursework in adolescent development, literature, classroom management, methodology classes, and pedagogy as outlined by the Pennsylvania Department of Education. All students in this undergraduate program also have a course on students with disabilities, with additional coursework in all of the methodology classes on the special needs of learners in an inclusive setting. The courses are identified below.

The Required Middle Level Education courses are: MATH 317 Probability and Statistics and MATH 413 Methods of Teaching Mathematics at the Middle Level, delivered through the Mathematics Education Department and approved by the IUP Senate in December 2009. MIDL 221 Literature for Middle Level, MIDL 222 Reading Instruction and Assessment in Grades 4-8, MIDL 311 Social Studies Instruction and Assessment in Grades 4-8, MIDL 312 Science Instruction and Assessment in Grades 4-8, MIDL 310 Instructional Theory and Planning, MIDL 315 Adolescent Development/Classroom Management, and MIDL 425 Language Arts Instruction and Assessment in Grades 4-8 create a foundation for learning the developmental characteristics of the middle learner, pedagogical strategies, and instructional theory and application. These courses meet the guidelines as outlined by the Pennsylvania Department of Education to prepare pre-service teachers to teach a variety of subjects at the Middle Level. These courses have been approved by the IUP Senate.

The Middle Level Science track is comprised of 4 courses beyond the introductory level. As outlined by PDE, middle level teachers in grades 4-8 must show evidence of a strong content background in the sciences. At the introductory level, twelve credits are already included from Liberal Studies: BIOL 103 General Biology, GEOS 101/102 The Dynamic Earth SCI 105 Physical Science I. CHEM 101College Chemistry I is also part of the introductory level courses, making 16 credits. Fourteen additional credits comprise the Middle Level Science specialization as more advanced courses. This specialization is divided among several departments: Biology, Chemistry, Physics, and Geoscience. These courses are: a choice of BIOL 113 Genetics in Modern Society, BIOL 114 Environmental Science, BIOL 119 Emerging Diseases or BIOL 115 Biotic Diversity of North America, GEOS 150 Geology of National Parks or GEOS 251 Age of Dinosaurs, PHYS 151/161 Medical Physics, CHEM 102 College Chemistry II. These courses already exist at IUP; no new courses have been developed to meet the PDE guidelines.

#### III. Proposal Outline

#### Bachelor of Science in Education-Middle Level Program-Science Specialization

#### **Middle Level Education Science Specialization**

Special Education- 136.75 In-class hours 298.5 Contact hours E.L.L. 54.5 In-class hours 119 Contact Hours

Liberal Studies: As outlined in Liberal Studies section with the following	52	
Humanities-HIST 195, ENGL 121, PHIL/RLST		
Mathematics: MATH 151, MATH 152 (required)		
Natural Science: BIOL 103, SCI 105, GEOS 101/102 (required)		
Social Science: GEOG 101, 102 or 104, ECON 101 or 121, PLSC 1010		
Liberal Studies Electives: 0cr		
College:	26	
Pre-professional Education Sequence:	Contact Hours	
COMM 103 Digital Instructional Technology	3cr	32 SPED/ 4
		ELL
EDSP 102 Educational Psychology	3cr	60 SPED/ 24
		ELL
Professional Education Sequence:		
EDEX 301 Education of Students with Disabilities in Inclusive S	Secondary Settings 2cr	60 SPED/ \$
		ELL
EDSP 477 Assessment of Student Learning: Design and Interpre	etation of Educational 3cr	36 SPED/ 24
Measures		ELL
EDUC 242 Pre-Student Teaching I	lcr	5 SPED
EDUC 342 Pres-Student Teaching II	1cr	20 SPED
EDUC 421 Student Teaching-Science setting	5cr	30 SPED/10 ELL
EDUC 441 Student Teaching- non-Science Setting	5cr	30 SPED/10 ELL
EDUC 442 School Law	lcr	8 SPED/8 ELL
EDUC 499 Multicultural/Multiethnic Education	2cr	5 ELL
Major:		27
Required Middle Level Courses:		
MATH 317 Probability and Statistics	3 cr	
MATH 413 Methods of Teaching Mathematics at the Middle Lev	vel 3 cr	
MIDL 221 Literature for Middle Level	3cr	6 SPED/9 ELL
MIDL 222 Reading Instruction and Assessment in Grades 4-8	3cr	6 SPED/2 ELL
MIDL 310 Instructional Theory and Planning Grades 4-8	3 cr	6 SPED/ 4 ELL
MIDL 311 Social Studies Instruction and Assessment Grades 4-	8 3cr	6 SPED/6 ELL

MIDL 312	Science Instruction and Assessment Grades 4-8	3cr	4 SPED/2 ELL
MIDL 315	Adolescent Development/Classroom Management	3cr.	6 SPED/\$ ELL
MIDL 425	Language Arts Instruction and Assessment Grades 4-8	3cr	8 SPED/ 4.5 ELL
Science Distribu	tion Requirements:		18
BIOL 113 or	Genetics in Modern Society	3 cr.	
BIOL 114 or	Environmental Science		
BIOL 115 or	Biotic Diversity of North America		
BIOL 119	Emerging Diseases		
CHEM 101	College Chemistry I	4 cr.	
CHEM 102	College Chemistry II	4 cr.	
GEOS 150 or	Geology of National Parks	3 cr.	
GEOS 251	Age of Dinosaurs		
PHYS 151/161	Medical Physics Lecture/Lab	4 cr.	
Total Degree Requirements:		123	

# V. Letters of Support



Geoscience Department
Indiana University of Pennsylvania
114 Walsh Hall
Indiana, Pennsylvania 15705

Dr. Steven A. Hovan, Chair (724) 357-7662 office (724) 357-5700 fax email: hovan@iup.edu

October 25, 2010

To: Dr. Susan Fello, Professional Studies in Education

From: Steve Hovan, Chairperson, Geoscience Dept

RE: proposed revision to Middle Level Education Program (Grades 4-8)

Dear Dr. Fello,

Thank you for the summary and discussion of the proposed revision to the Middle Level Education Program. I've discussed these changes with the faculty in the Dept. Geoscience and we support your efforts to modify this program. We generally offer several hundred seats each semester in GEOS 150 (Geology of National Parks) and GEOS 151 (Age of Dinosaurs) and we feel both of these courses would provide your students with excellent opportunities to learn more about important science topics related to the Geosciences.

Good luck with your proposal. Please let me know if you have any questions or need additional information from us.

Sincerely,

Steve Hovan

Chair, Geoscience Department

Sh.A.IA



# Indiana University of Pennsylvania

n military.com

Department of Chemistry Weyandt Hall, Room 143 975 Oakland Avenue Indiana, Pennsylvania 15701-1001 P 724-357-2361 F 724-357-2437 www.iup.edu/chemistry

March 26, 2011

To: Professional Studies in Education

From: Dr. John Woolcock

Subject: Proposed Middle Level Education Science Program

The following recommendation was made by the Chemistry Department Curriculum Committee on 03/24/11: "The committee discussed the Professional Studies in Education for Teaching Middle Grades 4-8. The degree now incorporates much more science, which the committee agreed was a good thing. The degree requires students to take CHEM 101 and 102. The committee shares Dr. Woolcock's concern about enrollment, and the possibility of an additional anticipated five or six students could necessitate the opening of a new lab section. Thus, support is given conditionally that resources are available to accommodate these students."

I have also discussed this with the Dean of the College of Natural Science and Mathematics, Dr. Zanich. We agreed that the numbers of students likely to be in this program, as cited in the proposal, could be accommodated in the existing sections of CHEM 101-102 B. CHEM 101-102 A sections are restricted for students in Nursing, Respiratory Care and Nuclear Medicine while the sections of CHEM 101-102 B are open to all other majors in the College of Health and Human Services. However, there are some lab sections of CHEM 101-102 B that are restricted to Food and Nutrition majors. So, I support this program proposal under these conditions.

To: Professional Studies in Education

From:

Re: proposed science strand for Middle Level Education Grades 4-8

Dear PSE Department,

Based on a review of the Middle Level Education Grades 4-8 BSED proposal, the Physics Department can support your department's efforts to deliver this program. From our department, students will be taking the following courses: SCI 105 and Physics 151/161.

Sincerely,

**Chair, Physics Department** 

3/17/2011

#### IUP I-Mail: ☑ Message from InBox Folder



From: "Carl S. Luciano" <luciano@iup.edu> Subject: Re: Middle Level Science Update Date: Mon, 28 Mar 2011 09:24:22 -0400 To: "Susan E Fello" <sfello@iup.edu>

Cc: <luciano@iup.edu>, "Holly Travis" <h.j.travis@iup.edu>

Susan

Thank you for the update and for the inclusion of a wider selection of non-lab Biology options for students. I believe this will be beneficial to our own IUP students in the Middle Level Science program and to the students whom they teach as well.

Please accept this email an indication of my support and please contact me with any further questions.

Thanks, CL.

Dr. Carl S. Luciano
Professor and Chair
Department of Biology
Indiana University of Pennsylvania
---- Original Message ---- From: "Susan E Fello" <sfello@iup.edu>
To: <carl.luciano@iup.edu>
Cc: <kdils@iup.edu>; <hannibal@iup.edu>
Sent: Monday 28 March 2011 7:27 AM
Subject: Middle Level Science Update

Good morning, Carl,

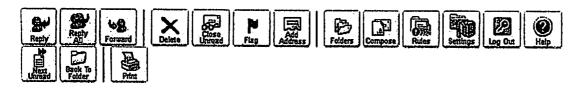
The PSE faculty met on Friday and approved your suggestion of adding BIOL 113 and BIOL 119. Now students will have a choice of four other biology classes from which to choose after taking BIOL 103.

We are hoping that we can receive your letter of support by the day's end so that we may move this proposal to TECC.

Thank you. Sincerely, Susie Fello

Middle Level Coordinator

Professional Studies in Education



A service of the Technology Services Center Last updated: 03/13/2004 by jbr

