

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		02-82	App-4/15/03	App-4/29/03

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Connie J. Sutton	Email Address CJSUTTON
Proposing Department/Unit Geoscience	Phone 7-5626

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply)

☐ New Course
 ☐ Course Prefix Change
 ☐ Course Deletion
☐ Course Revision
 ☐ Course Number and/or Title Change
 ☐ Catalog Description Change

Current Course prefix, number and full title

Proposed 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, Pan-African)
☐ This course is also proposed as an Honors College Course.

3. Program Proposals

☐ New Degree Program
 ☐ Catalog Description Change
 ☒ Program Revision
☐ New Minor Program
 ☐ Program Title Change
 ☐ Other
☐ New Track

Earth & Space Science

Education

Current program name

Proposed program name, if changing

4. Approvals

Date

Department Curriculum Committee Chair(s)	Darlene Richards	2-5-03
Department Chair(s)	Darlene Richard	2-5-03
College Curriculum Committee Chair		02/19/03
College Dean	John D. Sed	02/19/03
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)	Joseph Dornarack TEC	
	John D. Sed DEAN COEET	2/24/03
UWUCC Co-Chairs	Gail Schuist	4/15/03

* where applicable

FEB 25 2003

I. Description of Curriculum Change

Bachelor of Science in Education – Earth and Space Science (*)

Liberal Studies: As outlined in Liberal Studies section
with the following specifications: **52**

Mathematics: MATH 121

Natural Science: CHEM 111-112

Social Science: PSYC 101

Liberal Studies Electives:

PHYS 111, MATH 217

College: **29**

Professional Education Sequence:

COMM 103 Digital Instructional Technology 3 sh

EDSP 102 Educational Psychology 3 sh

EDSP 477 Assessment of Student Learning:

Design and Interpretation of Educational
Measures 3 sh

EDUC 242 Pre-student Teaching Clinical Exp I 1 sh

EDUC 342 Pre-student Teaching Clinical Exp II 1 sh

EDUC 441 Student Teaching 12 sh

EDUC 442 School Law 1 sh

EDUC 451 Teaching Science in the Sec School 3 sh

EDEX 301 Educ of Stud. With disabilities
In Inclusive Secondary Settings 2 sh

Major: **39**

Required Courses:

BIOL 103 General Biology I 4 sh

GEOS 121 Physical Geology 3 sh

GEOS 122 Physical Geology Laboratory 1 sh

GEOS 131 Historical Geology 3 sh

GEOS 132 Historical Geology Laboratory 1 sh

GEOS 341 Solar System 3 sh

GEOS 342 Stellar Astronomy 3 sh

GEOS 350 Operation of the Planetarium 1 sh

GEOS 361 Physical Oceanography 3 sh

GEOS 371 Meteorology I 3 sh

PHYS 112 Physics II Lecture 3 sh

PHYS 121 Physics I Lab 1 sh

PHYS 122 Physics II Lab 1 sh

Controlled Electives: **9 sh**

Geology electives

(200 level or higher)

Other Requirements: **0**

Free Electives: **0**

Total Degree Requirements: **120**

(*) See requirements leading to teacher certification, titled
“Admission to Teacher Education,” in the College of Education
and Educational Technology section of this catalog

II.(2a). Table Comparing Old and New Programs**Bachelor of Science in Education –
Earth and Space Science (*)**

Liberal Studies: As outlined in Liberal Studies section 55 – 56
with the following specifications:

Mathematics: MATH 121
Natural Science: CHEM 111-112
Social Science: PSYC 101

Liberal Studies Electives:
BTED/COSC/IFMG 101,
PHYS 111,
no courses with GEOS prefix

College: 30

Professional Education Sequence: (1)

COMM 103 Digital Instructional Technology	3 sh
EDSP 102 Educational Psychology	3 sh
EDSP 477 Assessment of Student Learning: Design and Interpretation of Educational Measures	3 sh
EDUC 242 Pre-student Teaching Clinical Exp I	1 sh
EDUC 342 Pre-student Teaching Clinical Exp II	1 sh
EDUC 441 Student Teaching	12 sh
EDUC 442 School Law	1 sh
EDUC 451 Teaching Science in the Sec School	3 sh
EDED 102 American Ed in Theory and Practice	3 sh

Major: 39

Required Courses:

BIOL 103 General Biology I	4 sh
GEOS 121 Physical Geology	3 sh
GEOS 122 Physical Geology Laboratory	1 sh
GEOS 131 Historical Geology	3 sh
GEOS 132 Historical Geology Laboratory	1 sh
GEOS 341 Solar System	3 sh
GEOS 342 Stellar Astronomy	3 sh
GEOS 350 Operation of the Planetarium	1 sh
GEOS 361 Physical Oceanography	3 sh
GEOS 371 Meteorology I	3 sh
PHYS 112 Physics II Lecture	3 sh
PHYS 121 Physics I Lab	1 sh
PHYS 122 Physics II Lab	1 sh

Controlled Electives: 9 sh

Geology electives
(not GEOS 101, 103, 105, 111, 113, 141)

Other Requirements: 0

Free Electives: 0

Total Degree Requirements: 124 – 125

(*) See requirements leading to teacher certification, titled
“Admission to Teacher Education,” in the College of Education
and Educational Technology section of this catalog.

(.) Special Education Competency Requirement: Revision
pending will eliminate exam option and will require EDEX 301
(2sh).

**Bachelor of Science in Education – Revision
Earth and Space Science (*)**

Liberal Studies: As outlined in Liberal Studies section 52
with the following specifications:

Mathematics: MATH 121
Natural Science: CHEM 111-112
Social Science: PSYC 101

Liberal Studies Electives:
PHYS 111,
no courses with GEOS prefix
MATH 217

College: 29

Professional Education Sequence:

COMM 103 Digital Instructional Technology	3 sh
EDSP 102 Educational Psychology	3 sh
EDSP 477 Assessment of Student Learning: Design and Interpretation of Educational Measures	3 sh
EDUC 242 Pre-student Teaching Clinical Exp I	1 sh
EDUC 342 Pre-student Teaching Clinical Exp II	1 sh
EDUC 441 Student Teaching	12 sh
EDUC 442 School Law	1 sh
EDUC 451 Teaching Science in the Sec School	3 sh

EDEX 301 Educ of Stud. With disabilities
In Inclusive Secondary Settings 2 sh

Major: 39

Required Courses:

BIOL 103 General Biology I	4 sh
GEOS 121 Physical Geology	3 sh
GEOS 122 Physical Geology Laboratory	1 sh
GEOS 131 Historical Geology	3 sh
GEOS 132 Historical Geology Laboratory	1 sh
GEOS 341 Solar System	3 sh
GEOS 342 Stellar Astronomy	3 sh
GEOS 350 Operation of the Planetarium	1 sh
GEOS 361 Physical Oceanography	3 sh
GEOS 371 Meteorology I	3 sh
PHYS 112 Physics II Lecture	3 sh
PHYS 121 Physics I Lab	1 sh
PHYS 122 Physics II Lab	1 sh

Controlled Electives: 9 sh

Geology electives
(not GEOS 101, 103, 105, 111, 113, 141)

Other Requirements: 0

Free Electives: 0

Total Degree Requirements: 120

(*) See requirements leading to teacher certification, titled
“Admission to Teacher Education,” in the College of Education
and Educational Technology section of this catalog.

II.(2b). Summary of Changes: Listing of all description changes and associated course changes.

A. Liberal Studies

1. Description Changes: Old Program = 55/56 sh; New Program = 52 sh*
2. Change in requirements:
 - a. Liberal Studies electives – Old = 9 sh, New = 6 sh
 - (1) Delete BTED/COSC/IFMG 101
 - (2) Add MATH 217

B. Professional Education

1. Description Changes: Old Program = 30 sh; New Program = 30 sh
2. Change in requirements:
 - a. Delete FDED 102 – 3 sh
 - b. Add EDEX 301 – 2 sh

*Option of Military Science (which would be shown as 52/53 sh) is not listed as per direction of Chair of UWUCC, see attached email.

II.(c). Rationale for Program Change.

A. Liberal Studies electives:

1. Deletion of BTED/COSC/IFMG 101 – The education students arriving at IUP today have a much better background in the use of the computer than the students ten years ago when the requirement was added. Additionally, the education students receive in-depth computer instruction in COMM 103 which is required during their first three semesters on campus. Students begin to develop their professional portfolio and study the use of the computer as a tool in the classroom. Therefore, it is felt that the previously required computer course is not necessary.
2. The State of Pennsylvania recently added more required mathematics credits for all education majors. Students must have a minimum of 6 sh. Calculus I is required for their Liberal Studies Math requirement. MATH 217 has been added because of the high use of the concepts covered in this course to the discipline of science.

B. Professional Education:

1. Recently FDED 102 was deleted from the Professional Education core by action of the University Senate.
2. EDEX 301 has been a certification requirement for more than five years but had not been added to this curriculum because of the already high number of credits needed for graduation. Students were informed that they needed to complete it either by enrolling in the course or by taking a test, however, to receive certification. We are now formalizing that requirement by adding it to the program. (The test is no longer an option.)

III. Implementation

1. Students currently enrolled in the program will not be affected by these changes but will complete the program which was in place when they first enrolled in it.
2. Faculty resources in our department will not be affected.
3. Other resources also will not be affected.
4. Changes in enrollment are not anticipated.

IV. Evaluation

1. All of the education programs are currently in the middle of the process of evaluation. Preliminary documents were due in May 2002. NCATE will be arriving on campus in November 2003. NCATE follows the science standards prepared by NSTA. In addition PDE will also be reviewing these programs in Spring 2004
2. NCATE and PDE evaluations occur every five years.
3. NCATE = National Council for Accreditation of Teacher Education
NSTA = National Science Teachers Association
PDE = Pennsylvania Department of Education

V. Course Proposals

There are no course revisions for this proposal.

VI. Letters of Support or Acknowledgement

1. Attached is an e-mail from John R. Johnson, Associate Dean of the College of Education describing the deletion of FDED 102 from the Teacher Education Core.
2. Attached is an e-mail from Dr. Gail Sechrist, Chair of UWUCC, stating that the number of credits listed for Liberal Studies does not have to include the military science option.
3. Attached are letters from the Departments of Technology Support and Training, Computer Science, and Management Information Systems and Decision Sciences concerning deletion of BTED/COSC/IFMG 101.

Connie Sutton

From: "John Johnson" <jrjohnsn@iup.edu>
To: "Karen Rivosecchi" <krivosecchi@solaris.voced.iup.edu>; "Clarice Reber" <creber@iup.edu>;
 "Connie Sutton" <cjsutton@iup.edu>; "David Stein" <dwstein@grove.iup.edu>; "Dawn Woodland"
 <woodland@iup.edu>; "Dee Klein" <dklein1st@yahoo.com >; "Eileen Glisan"
 <GLISAN@grove.iup.edu>; "Eileen Glisan Home" <glisan@nauticom.net>; "Janet M. Walker"
 <jwalker@iup.edu>; "Jennifer Rotigel" <jrotigel@grove.iup.edu>; "Joe domaracki"
 <jwdomara@iup.edu>; "John R. Johnson" <jrjohnsn@iup.edu>; "John Wood"
 <jtwood@grove.iup.edu>; "Judi Hechtman" <hechtman@iup.edu>; "Judy McDonough"
 <jrmcdono@grove.iup.edu>; "Judy McDonough" <jrmcdono@adelphia.net>; "Ken Hershman"
 <Hershman@grove.iup.edu>; "Laurie Hurt" <LHurt@grove.iup.edu>; "Laurie Stamp"
 <lnstamp@grove.iup.edu>; "Linda Klingaman" <LRKLINGa@Grove.iup.edu>; "Linda Norris
 Home" <lnorris9@aol.com>; "Linda Norris IUP" <LNorris@grove.iup.edu>; "Linda Szul"
 <lfszul@iup.edu>; "Lorraine Wilson" <LPW@grove.iup.edu>; "Lynne Alvine"
 <LALVINE@grove.iup.edu>; "McPherson, William C" <mcperso@iup.edu>; "Rich Ciganko"
 <RCiganko@grove.iup.edu>; "Roberta Eddy" <RMEDDY@grove.iup.edu>; "Sally McCombie"
 <SMCCOMB@grove.iup.edu>; "Sharon Franklin-Rahkonen" <franklin@iup.edu>; "Susan
 Wheatley" <wheatley@grove.iup.edu >; "Terry Peard" <Tpeard@grove.iup.edu>; "Thomas Lord"
 <trlord@grove.iup.edu>; "Vicki Damiani" <vdamiani@grove.iup.edu>; "Wayne Moore"
 <moore@grove.iup.edu>
Cc: "John Butzow" <jwbutzow@iup.edu>; "Ed Nardi" <ewnardi@iup.edu>; "Laurie Stamp"
 <lnstamp@grove.iup.edu>; "Lynn Anne Mocek" <lmocek@iup.edu>; "Judy Geesey"
 <jgeesey@iup.edu>; "Judi Hechtman" <hechtman@iup.edu>; "John R. Johnson"
 <jrjohnsn@iup.edu>
Sent: Wednesday, December 04, 2002 9:28 AM
Subject: FDED 102 Removed by Senate from the Educaion Core

Coordinators of Teacher Education:

The Senate unanimously approved the proposal to remove FDED 102 form the Teacher Education Core at its December Meeting yesterday afternoon. This change will apply to the incoming Freshmen, Fall 2003. The course will still be required for those candidates "in the pipeline" (most of whom have already taken it or will have taken it by end of Spring Semester 2003) and it will continue to be offered as an elective.

We will want to review specific instances where exceptions may be in order for transfer students and Post-bac students who are already enrolled in a program of study.

If you have been waiting for this move to become official before "mounting efforts" to revise your program curriculum to meet the mandated 120 hour rule, you may proceed with recommended haste. The Academy Curriculum Review Committee, convened by Dean Butzow has been meeting weekly, anticipating there will be curriculum regions to review. To date, the work load has been sparse.

Thanks for all you do!

John

Connie Sutton

From: "Gail Sechrist" <gailsech@iup.edu>
To: "Connie Sutton" <cjsutton@iup.edu>
Cc: "Gail S Sechrist" <gailsech@iup.edu>
Sent: Monday, January 13, 2003 9:41 AM
Subject: Re: Curr Question

Yes that would work because there would be a way in which a student could complete the degree in 120 credits. It would be the students choice to take the other option that would bring them over 120 just like many now choose to go over 124 to get the classes they want. The Liberal Studies committee wants you to use the lowest number possible for LS rather than a range.

— Original Message —

From: Connie Sutton
To: Sechrist, Gail S
Sent: Monday, January 13, 2003 9:45 AM
Subject: Curr Question

Gail,

I am working on the 120 cr requirement for Earth & Space Science Ed majors. I have it down to 120 credits IF the student takes 3 cr of Wellness. My question: if a student elects Military Sci then it would be 121. Would this proposal fly? It would show 120/121 if I show that option - or is it NOT necessary to show the option?

Thanks,
Connie

Connie Sutton

From: "Jim Wolfe" <jlwolfe@iup.edu>
To: "Connie Sutton" <cjsutton@iup.edu>; <drchrdsn@iup.edu>
Sent: Wednesday, January 29, 2003 9:59 AM
Subject: Re: Deletion of BTED/COSC/IFMG 101

Darlene & Connie,

On behalf of the Computer Science Department, I want to express our disappointment with your decision to no longer require Microbased Computer Literacy; but we understand the situation you are in.

We would expect that science education students would have specific needs for the spreadsheet and database components of the course. We would think that educators would need to deal with simple table-driven data presentation and analysis (the sort of thing that spreadsheets are very good for) and perhaps need to store and retrieve substantial amounts of data (what databases do). Hopefully, the COMM 103 course that you mention will cover some of these aspects of computer use.

Our surveys and the exemption exam for the Microbased Computer Literacy course have revealed that although students often have some knowledge of wordprocessing from High School or other IUP courses, they have little knowledge of spreadsheets and almost no knowledge of databases. Naturally, you know the needs of your students better than I. I hope this change to your requirements works out.

Good luck with your curriculum revision.

Jim Wolfe

Darlene Richardson

From: Connie Sutton <cjsutton@iup.edu>
To: Wolfe, James L <jlwolfe@iup.edu>; Szul, Linda M <lfszul@iup.edu>; Burky, Louise B <lbburky@iup.edu>
Cc: Darlene Richardson <drchrdsn@iup.edu>
Sent: Thursday, January 16, 2003 12:04 PM
Subject: re: Deletion of BTED/COSC/IFMG 101

Jim, Louise, Linda,

The Geoscience Department is in the process of revising its two education programs (Earth & Space Science Education and General Science Education) to comply with the 120 credit mandate. Currently both programs require Microcomputer Literacy as one of the Liberal Studies Electives.

When this course requirement was added to the programs, many of our students arrived at IUP without adequate computer skills. However, current students are much more knowledgeable in the use of computers. In addition, one of their education core requirements, COMM 103, is now heavily computer based and is required during the students' first three semesters, and is usually taken prior to the students enrolling in the literacy course. We believe that we can eliminate the requirement without adversely affecting the preparation of these science teachers. The programs are small and would not negatively affect course enrollments; currently there are 18 students majoring in both programs.

We request a letter of support from your department. It would be helpful if we could receive this letter prior to the end of January. Please send it to Dr. Darlene S. Richardson, Chair of the Geoscience Department. Thank you for your time and effort,
Connie Sutton
Coordinator, Geoscience Education