August 29, 2018 Approved Minutes

Present: Dave Ballantine (Chair/CLAS), Steve Estes (Ex-Officio), Amanda Durik (PSYC), Trude

Jacobsen (HIST/SEAS), Kristen Myers (WGST), Deepak Naidu (MATH), Alicia

Schatteman (PSPA), Carol Thompson (PHYS)

Suzanne Hogan (CLAS)

Meeting called to order at 1:35 PM

A. Action on Minutes

Minutes from the #8 meeting on November 8, 2017, have been approved electronically and forwarded to the catalog editor.

B. Miscellaneous

We welcomed five new members to the committee, Trude Jacobsen, Kristen Myers, Alicia Schatteman, Carol Thompson, and Deepak Naidu who is filling in for Michael Geline during the fall semester.

The College Curriculum Committee responsibilities were reviewed. Ballantine reminded the committee of the importance of reviewing proposals and commenting on O365 prior to the meetings. We would like to achieve a consent agenda whenever possible; a total of four votes are needed for a quorum.

A consent agenda was assembled for the following items: revisions to the Major in Nonprofit and NGO Studies, Minor in Nonprofit and NGO Studies, Certificate of Undergraduate Studies in Nonprofit and NGO Studies; revision of PHYS 600. **Motion of approval** moved by Amanda Durik, seconded by Carol Thompson, and approved by all members.

C. Curriculum – Old Business

Department of Mathematical Sciences

MATH 410 and MATH 411 were approved as writing-infused courses.

D. Curriculum – New Business

College of Liberal Arts and Sciences

Revisions to the College requirement for the B.S. degree were approved.

NORTHERN ILLINOIS UNIVERSITY COLLEGE OF LIBERAL ARTS AND SCIENCES CURRICULUM COMMITTEE August 29, 2018 Approved Minutes

Center for N	onprofit	and NGO	Studies
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Program revisions for the major, minor, and certificate of undergraduate study were app	roved.
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Department of Philosophy

Revisions to PHIL 591 and PHIL 695 were approved, along with revisions to the M.A. program.

Department of Physics

Revisions to PHYS 410, PHYS 600, PHYS 659, and PHYS 684 were approved.

Meeting adjourned at 2:40 PM

TABLED:

None

NORTHERN ILLINOIS UNIVERSITY COLLEGE OF LIBERAL ARTS AND SCIENCES CURRICULUM COMMITTEE #1 Meeting – August 29, 2018 Approved Attachments

College of Liberal Arts and Sciences

Other Catalog Change Page 220-221, 2018-19 Undergraduate Catalog

College Requirements for the B.S. Degree

Candidates for the degree in the College of Liberal Arts and Sciences must demonstrate competence in laboratory science/mathematical/computational skills equivalent to that attained through two years of regular college instruction (10-15 semester hours). This requirement may be met by completing one of the sequences listed below with at least a 2.00 GPA in the sequence four courses or sequences from the lists below. The four courses/sequences must be selected from at least two of the three groups (A/B/C). Students should note that the sequences listed below are intended to be minimum requirements for the B.S. degree and that some departments have additional course requirements in the laboratory/mathematical sciences for their majors. Students seeking the B.S. degree should check the catalog for the requirements of a particular major to determine which one-of the following sequences-courses to complete and what which additional courses may be required for that major.

Undergraduate students who are seeking a double major that includes a B.S. in the College of Liberal Arts and Sciences, and who have satisfied the requirements for a B.S. degree in another College, will be considered to have satisfied the College B.S. requirements as long as all other required course work in the CLAS degree-granting program has been completed.

1.*MATH 206 or *MATH 210, *MATH 211, STAT 301, and one course chosen from CSCI 210, CSCI 220, CSCI 230, CSCI 240, CSCI 250

2.*MATH 229, MATH 230, and one course chosen from MATH 240, CSCI 210, CSCI 220, CSCI 230, CSCI 240, CSCI 250, STAT 350

3.*MATH 206 or *MATH 210, *MATH 211, and a two-semester laboratory sequence in other than the major department to be met by one of the following sequences.

*BIOS 103 and *BIOS 105, BIOS 209 and BIOS 211, BIOS 213, or BIOS 357
*CHEM 210 and *CHEM 212, *CHEM 211 and *CHEM 213
*GEOG 101 and *GEOG 102, GEOG 302
GEOG 256, GEOG 359
*GEOL 120 and GEOL 121, GEOL 320
*PHYS 210, *PHYS 211
*PHYS 253, *PHYS 273

4.*MATH 229 and a two semester laboratory sequence in other than the major department to be met by one of the following sequences.

*BIOS 103 and *BIOS 105, BIOS 209 and BIOS 211, BIOS 213, or BIOS 357
*CHEM 210 and *CHEM 212, *CHEM 211 and *CHEM 213
*GEOG 101 and *GEOG 102, GEOG 302
*GEOG 105 and *GEOG 106, MET 300
GEOG 256, GEOG 359
*GEOL 120 and GEOL 121, GEOL 320

#1 Meeting – August 29, 2018 Approved Attachments

*PHYS 210, *PHYS 211 *PHYS 253, *PHYS 273

5.*MATH 211, STAT 301, and a two semester laboratory sequence in other than the major department to be met by one of the following sequences.

*BIOS 103 and *BIOS 105, BIOS 209 and BIOS 211, BIOS 213, or BIOS 357

*CHEM 210 and *CHEM 212, *CHEM 211 and *CHEM 213

*GEOG 101 and *GEOG 102, GEOG 302

GEOG 256, GEOG 359

*GEOL 120 and GEOL 121, GEOL 320

*PHYS 210. *PHYS 211

*PHYS 253, *PHYS 273

Group A. Mathematics

MATH 206 - Introductory Discrete Mathematics (3)

OR MATH 210 - Finite Mathematics (3)

MATH 211 - Calculus for Business and Social Science (4)

OR MATH 229 - Calculus I (4)

MATH 230 - Calculus II (4)

MATH 232 - Calculus III (4)

MATH 240 - Linear Algebra and Applications (4)

Group B. Computation

CSCI 210 - Elementary Programming (4)

CSCI 230 - Computer Programming in FORTRAN (4)

CSCI 240 - Computer Programming in C++ (4)

CSCI 250 - Computer Programming in COBOL (4)

STAT 301 - Elementary Statistics (4)

STAT 350 - Introduction to Probability and Statistics (3)

Group C. Lab Sciences

BIOS 103 - General Biology (3)

AND BIOS 105 - General Biology Laboratory (1)

BIOS 208 - Fundamentals of Cellular Biology (3)

AND BIOS 210 - Fundamentals of Cellular Biology Laboratory (1)

BIOS 209 - Fundamentals of Organismal Biology (3)

AND BIOS 211 - Fundamentals of Organismal Biology Laboratory (1)

BIOS 213 - Introductory Bacteriology (3)

BIOS 357 - Human Anatomy and Physiology (5)

CHEM 210 - General Chemistry I (3)

AND CHEM 212 - General Chemistry Laboratory I (1)

CHEM 211 - General Chemistry II (3)

AND CHEM 213 - General Chemistry Laboratory II (1)

GEOG 101 - Introduction to Environmental Geography (3)

AND GEOG 102 - Introduction to Environmental Geography Laboratory (1)

GEOG 105 - Weather, Climate, and You (3)

AND GEOG 106 - Weather and Climate Laboratory (1)

GEOG 253 - Environment and Society (3)

#1 Meeting – August 29, 2018 Approved Attachments

GEOG 302 - Soil Science (4)

GEOG 359 - Introduction to Geography Information Systems (3)

GEOL 120 - Introductory Geology (3)

AND GEOL 121 - Introductory Geology Laboratory (1)

GEOL 320 - Environments and Life Through Time (4)

MET 300 - Meteorology (4)

PHYS 210 - General Physics I (4)

PHYS 211 - General Physics II (4)

PHYS 253 - Fundamentals of Physics I: Mechanics (4)

PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)

The Office of Testing Services administers a Mathematics Placement Examination to each student at the time of admission, interprets the test, and notifies the student of the result and the appropriate initial mathematics course. The student should also note that it is possible to take a proficiency test in any of the courses listed in the above sequences.

Rationale: The current B.S. options structure creates confusion among students, especially students who switch majors. It is not uncommon for such students to enter their last year/semester with deficiencies in the B.S. requirements. Advisors must then identify the simplest path to complete the requirements, or to seek courses substitutions if the necessary courses are not available. The proposed revisions would provide more flexibility for students and advisors when seeking a path to complete the B.S. requirements. In addition, eliminating the current requirement for a two-course sequence and adding a few courses to the laboratory science group, may encourage more students to consider taking laboratory science courses as part of their B.S. sequence. All CLAS departments that offer a B.S. degree, and that currently stipulate specific coursework outside the department as requirements for their majors, will be in compliance with the proposed revisions and will not need to change current catalog language. Current requirements in these departments are included in the table below, as well as documentation to illustrate how these requirements align with the proposed B.S. revisions.

Dept.	Current BS Requirements (Outside Department)	Proposed B.S. Reqs.
see College Rec	quirements for BS degree: ANTH, COMS/JOUR, ENGL, HIST,	, NNGO, PHIL, POLS
BIOS	CHEM 210/212, 211/213; 330/331 or 336/337; MATH	2A + 6C (exceeds)
	155/229; PHYS 210/211 or 253/273	
CHEM	Emph. 1: MATH 229/230; MATH 232 or 336; PHYS	1: 3A + 2C (exceeds)
	253/273	2: 2A + 4C (exceeds)
	Emph. 2: BIOS 208/210 209/211, 302; MATH 229/230,	3: 2A + 2C
	PHYS 253/273	4: 2A + 4C (exceeds)
	Emph. 3: MATH 229/230, PHYS 253/273	
	Emph. 4: BIOS 208/210, BIOS 209/211, MATH 229/230,	
	PHYS 253/273	
CSCI	Emph. 1/2: MATH 206, MATH 211 (or 229+230); STAT	1/2: $2,3A + 2B*$
	301 or 350	3: 5A + 1B + 1C
	Emph. 3: MATH 206/229/230/232/240; PHYS 253; STAT	(exceeds)
	350	
	(NOTE: All majors take CSCI 240)	

#1 Meeting – August 29, 2018 Approved Attachments

ECON	General: CSCI 210 or 240, MATH 210/211, STAT 301	General: 2A +2B
	OR MATH 229/230 + STAT 350	OR 2A + 1B
	Emph. 1: CSCI 240, MATH 229/230, STAT 350	1: 2A + 2B
ENVS	CHEM210/212, CHEM 211/213, MATH 211 or MATH	1,2A + 1C + 2C
	229/230, STAT 301	
GEOG	Emph. 1: states that outside reqs. for B.A = MATH 210 or	1. $1A + 1B + 2C*$
	211 or 229, STAT 301, which fulfills half of B.S. reqs. under	
	new proposal.	2: $1A + 1B + 2C$
	Emph. 2: MATH 211 or 229, PHYS 210/211, STAT 301	MET: $4A + 1,2B + 2C$
	MET: CSCI 240 or GEOG 493, MATH 229/230/232/336;	
	PHYS 253/273, STAT 301	
GEOL	Emph. 1: CHEM 210/212, CHEM 211/213, MATH	1: 2A + 4C (exceeds)
	229/230, PHYS 253/273	2: 2A + 2C or
	Emph. 2: CHEM 210/212, CHEM 211/213, (or any other 2	1A + 1B + 2C
	semester lab sequence listed in college BS reqs.), MATH	3: 1,2A + 7C
	229/230 or MATH 211+STAT 301	(exceeds)
	Emph. 3: BIOS 208/210, BIOS 209/211, CHEM 210/212,	
	CHEM 211/213, GEOG 105, MATH 229 (or MATH	
	155+MATH 211), PHYS 210/211	
MATH/STAT	CSCI 230 or 240	3A + 2B*
	(NOTE: all majors take MATH 229/230/240 and STAT	
	350)	
PHYS	Emph. 1: CHEM 210/212, 211/213 (or CSCI 240); MATH	1. 2A + 2C(or
	229/230/232/336	1B+1C)
	Emph. 2: CHEM 210/212, CHEM 211/213, MATH	2: 2A + 2C
	229/230/232/336	3: 2A + 2C(or
	Emph. 3: CHEM 210/212, 211/213 (or CSCI 240); MATH	1B+1C)
	229/230/232/336	
PSYC	Group 1: 1 CSCI + MATH 210/211 + STAT 301	1: 2A + 2B
	Group 2: 1 CSCI + MATH 229/230 + STAT 350	2: 2A + 2B
	Group 3: MATH 211 + STAT 301 (or UBUS 223) + 2-	3: 1A + 1B + 2C
	semester lab sequence	
SOCI	Group 1: CSCI 210, MATH 210, MATH 211, STAT 301	1: 2A + 2B
	Group 2: MATH 229/230, STAT 350	$2: 2A + 1B^1$
	4. All CT AC description (All All All All All All All All All Al	

Impact Statement: All CLAS departments/divisions were consulted and provided input with regard to these changes. The majority of departments didn't identify any issues and were supportive of the revisions.

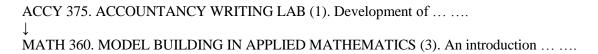
Department of Mathematical Sciences

Other Catalog Change

Page 29, 2018-19 Undergraduate Catalog

#1 Meeting – August 29, 2018 Approved Attachments

Writing-Infused Course List



MATH 410. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR THE MIDDLE SCHOOL II (3). Objectives, problems, strategies, and trends in teaching middle school mathematics. Applications of learning theory and research focusing on remediation, presentation of new concepts, and the use of manipulatives. Accepted for credit as a middle school mathematics methods course, but not as an upper-division mathematical content course. Accepted as mathematical sciences credit only for those preparing to teach middle grades. Not used in major or minor GPA calculations for mathematical sciences majors or minors. For those seeking or holding middle grades education licensure. PRQ: MATH 229 and consent of the department.

MATH 411. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR SECONDARY SCHOOL I (3). Methods and trends of instruction in the pre-secondary school mathematics with particular focus on mathematical practices and processes. Covers the teaching and learning of rational numbers, algebraic reasoning, patterns, functions, measurement, geometric concepts, and statistics and probability. Accepted for credit toward the major or minor only for those preparing to teach. Accepted for credit as a methods course for secondary school, but not as an upper-division mathematical content course. Not used in major or minor GPA calculation except for mathematics education majors and minors.

MEE 481. ENGINEERING DESIGN SEMINAR (1). Complete preparation of an ↓
THEA 482. PLAYWRITING STUDIO (3). Advanced work on new scripts

Rationale: Addition of MATH 410 and MATH 411 to the list of writing-infused courses.

Other Catalog Change Page 124-125, 2018-19 Undergraduate Catalog

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Department of Curriculum and Instruction (LTIC, LTLA, LTRE, TLCI, TLEE)

↓

Major in Middle Level Teaching and Learning (B.S.Ed.)

↓

Major Content Area Option: Mathematics (29-31)

*MATH 155 - Trigonometry and Elementary Functions (3)

↓

MATH 303 - Introduction to Number Theory (3)

MATH 410 - Methods of Instruction in the Mathematics Curriculum for Middle School (3)

MATH 416 - Topics in Mathematics for Teachers (3)

*STAT 301 - Elementary Statistics (4)

Two of the following:

*MATH 210 - Finite Mathematics (3)
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#1 Meeting – August 29, 2018 Approved Attachments

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↓
MATH 360 - Model Building in Applied Mathematics (3)
↓
Minor Content Area Option: Mathematics (26)
*MATH 155 - Trigonometry and Elementary Functions (3)
↓
MATH 404 - Methods of Instruction in the Mathematics Curriculum for the Middle School I (3)
^MATH 410 - Methods of Instruction in the Mathematics Curriculum for the Middle School II (3)
MATH 416 - Topics in Mathematics for Teachers (3)
*STAT 301 - Elementary Statistics (4)
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Rationale: Indicate MATH 410 as a writing-infused course.

Notification: The Department of Curriculum and Instruction was notified of these changes via email on September 13, 2018.

Other Catalog Change

Page 313, 2018-19 Undergraduate Catalog

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Department of Mathematics

↓
Major in Mathematical Sciences (B.S.)

↓
Emphasis 5. Mathematics Education

↓
Requirements in Department (43)

*MATH 229 - Calculus I (4)

↓
MATH 401¹ - Clinical Secondary School Experience in Mathematics (1-2)

OR MATH 419 - Secondary School Mathematics Clinical Experience (0)

MATH 410 - Methods of Instruction in the Mathematics Curriculum for the Middle School II (3)

OR MATH 411 - Methods of Instruction in the Mathematics Curriculum for Secondary School I (3)

MATH 412 - Methods of Instruction in the Mathematics Curriculum for Secondary School II (3)

↓
One additional course from the following (3)

MATH 336 - Ordinary Differential Equations (3)

↓
STAT 470 - Introduction to Probability Theory (3)
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Rationale: Indicate MATH 410 and MATH 411 as writing-infused courses.

Nonprofit and NGO Studies

NORTHERN ILLINOIS UNIVERSITY COLLEGE OF LIBERAL ARTS AND SCIENCES CURRICULUM COMMITTEE #1 Meeting – August 29, 2018 Approved Attachments

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The Center for Nonprofit and NGO Studies (NNGO)
Major in Nonprofit and NGO Studies (B.A. or B.S.)
Requirements outside center (33)
ANTH 220 - Introduction to Cultural Anthropology (3),
       OR ECON 160 - Contemporary Economic Issues (3),
       OR HIST 171 - World History II: Problems in the Human Past (3),
       OR PHIL 103 - Contemporary Issues in Ethics (3),
       OR POLS 260 - Introduction to Comparative Politics (3),
       OR SOCI 170 - Introduction to Sociology (3),
       OR SOCI 270 - Social Problems (3)
SOCI 379 - Collective Behavior and Social Movements (3)
Five of the following, chosen with adviser approval
       ACCY 288 - Introduction to Fundamentals of Accounting (3)
       PSPA 331X - Introduction to Public Administration (3),
               OR POLS 331 - Introduction to Public Administration (3),
       PSPA 402 - Resource Strategies for Nonprofit Organizations (3)
               OR MGMT 402X - Resource Strategies for Nonprofit Organizations (3)
       SOCI 375 - Sociology of Organizations (3)
       SOCI 386 - Peace and Social Justice (3)
       SOCI 392 - Organizing for Social Action (3)
       <sup>^</sup>SOCI 457 - Families in a Global Perspective (3)
       THEA 203 - Introduction to Theatre (3)
       ^*THEA 370 - History of Theatre and Drama I (3)
       ^THEA 371 - History of Theatre and Drama II (3)
       #WGST 202 - Women and Cultural Expression (3)
Total Hours for a Major in Nonprofit and NGO Studies: 51-63 (B.A.) OR 61-66 (B.S.)
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Rationale: 1) We removed PSPA 402/MGMT 402X from our requirements in our 18-19 catalog proposal with the intention of adding it to the elective list. When the form was submitted, the addition in the electives was missed. This proposal corrects that omission. 2) SOCI 392 is no longer taught in a consistent manner. 3) THEA 203 was related to our former emphasis in arts and humanities; we no longer offer this emphasis.

Impact Statement: The Department of Public Administration was consulted with regard to the addition of the PSPA 402 course to the list of outside requirements. They did not identify any any negative impact on course availability or enrollment, and are supportive of this action.

Other Catalog Change

Page 322, 2018-19 Undergraduate Catalog

Minor in Nonprofit and NGO Studies (18)

Requirements in center (6)

NNGO 100 - Community Leadership and Civic Engagement (3)

#1 Meeting – August 29, 2018 Approved Attachments

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Requirements outside center (12)
PSPA 326X - Nonprofit Management (3),
OR POLS 326 - Nonprofit Management (3)
Three of the following from different departments (9)
#ANTH 329 - Anthropology and Contemporary World Problems (3)
↓
SOCI 379 - Collective Behavior and Social Movements (3)
SOCI 392 - Organizing for Social Action (3)
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Rationale: SOCI 392 is no longer taught in a consistent manner.

Other Catalog Change Page 322, 2018-19 Undergraduate Catalog

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Certificate of Undergraduate Study
Nonprofit and NGO Studies (12)
Coordinator: Anne Hanley Christopher Einolf (Interim Director)
Required Courses (12)
ANTH 329 - Anthropology and Contemporary World Problems (3).
       OR SOCI 379 - Collective Behavior and Social Movements (3)
NNGO 100 - Community Leadership and Civic Engagement (3)
POLS 326 - Nonprofit Management (3)
       OR PSPA 326X - Nonprofit Management (3)
PSPA 301 - Philanthropy and Fundraising (3)
One Two courses from the following (3-6)
       *MGMT 311 - Social Entrepreneurship (3)
       MKTG 310 - Principles of Marketing (3)
       POLS 220 - Introduction to Public Policy (3)
       ANTH 329 - Anthropology and Contemporary World Problems (3)
       NNGO 350 - Community Organizations in a Digital World (3)
       NNGO 390 - Special Topics in Nonprofit and NGO Studies (3)
       NNGO 429 - International NGOs and Globalization (3)
       NNGO 464X - Disasters Without Borders (3)
       PSPA 301 - Philanthropy and Fundraising (3)
       PSPA 326 - Nonprofit Management (3)
       SOCI 379 - Collective Behavior and Social Movements (3)
       SOCI 392 - Organizing for Social Action (3)
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Rationale: Our Certificate was originally created before there were center specific courses. Now that we have core classes in our center, adding these courses to the certificate allows it to be more topically focused on Nonprofits and NGOs. Since we were able to add core classes to the certificate, we deleted classes that were not core classes and were taught by other departments.

Impact Statement: The ANTH and PSPA/POLS courses were already a part of the certificate program. They are just being moved around within the requirements.

#1 Meeting – August 29, 2018 Approved Attachments

Department of Philosophy

Course Revisions

Page 274, 2018-19 Graduate Catalog

591. DIRECTED READINGS (1-4). Enrollment contingent on May be repeated to a maximum of 9 semester hours toward any one degree provided no repetition of subject matter occurs. S/U grading may be used. PRQ: Consent of department.

695. SPECIAL STUDIES AND RESEARCH (1-4). Guided research for May be repeated to a maximum of 12 semester hours, providing no repetition of subject matter occurs. S/U grading may be used. PRQ: Graduate standing in philosophy or consent of department.

Rationale: There has been a demand for the S/U grading option in these independent study courses, especially for low-credit offerings (1 or 2 credit hours). This change meets that demand by providing students and faculty the flexibility to contract independent studies with the S/U grading option. After a discussion with the Office of Registration and Records, the revision of the grading option wording was altered as shown above. The Philosophy Department would like the ability to offer certain sections of these courses as S/U and other sections as graded.

Other Catalog Change

Page 273, 2018-19 Graduate Catalog

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Master of Arts in Philosophy
1
Core Requirement
PHIL 505 - Intermediate Logic (3)
Two courses in each of the following areas (18)
Ethics and Value Theory (6)
       PHIL 530 - Topics in Ethics (3)
       PHIL 550 - Topics in Social and Political Philosophy (3)
       PHIL 651 - Social and Political Philosophy (3)
One course in History or Philosophy (3)
       PHIL 520 - Topics in the History of Philosophy (3)
       PHIL 521 - Major Philosophers (3)
       PHIL 523 - Medieval Philosophy (3)
       PHIL 526 - American Philosophy (3)
       PHIL 527 19th Century Philosophy (3)
       PHIL 528 - 20th Century Phenomenology (3)
       PHIL 529 20th Century Analytic Philosophy (3)
       PHIL 620 - Topics in the History of Philosophy (3)
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NORTHERN ILLINOIS UNIVERSITY COLLEGE OF LIBERAL ARTS AND SCIENCES CURRICULUM COMMITTEE #1 Meeting – August 29, 2018 Approved Attachments

Rationale: The department doesn't have the instructional personnel to sustain a course requirement in the history of philosophy. While the department has a few faculty who have competence to teach courses in the history of philosophy at the graduate level, it has no specialists in any area of the history of philosophy. Those with competence to teach a course in the history of philosophy need to provide instruction in other areas of the curriculum, resulting in too few offerings to sustain an area requirement. This change would not reduce the total number of credit hours required for the M.A., but would simply increase the number of elective hours by three.

Department of Physics

Course Revision

Page 330, 2018-19 Undergraduate Catalog

410. COMPUTATIONAL PHYSICS (3). Techniques of physics problem solving using computers. Application of numerical analysis, linear analysis, iterative methods, and Monte Carlo simulation to problems in classical and modern physics and related disciplines. Use of equation solving software and high-level programming languages. Students in physics, engineering, chemistry, biology, computer science, geology, meteorology, and related sciences will be exposed to problems in their fields. PRQ: PHYS 300, PHYS 370, PHYS 273 and CSCI 240, or consent of department.

Rationale: This change will allow a broader range of students to take PHYS 410, including non-majors. The existing pre-requisites (PHYS 300 and 370) effectively limit it to physics majors. Replacing these existing pre-requisites with PHYS 273 will help us broaden the course offering.

Course Revision

Page 276, 2018-19 Graduate Catalog

600. CLASSICAL MECHANICS (3). Hamiltonian formulation, canonical transformations, Hamilton Jacobi theory, special relativity, continuous media and fields. Variational principles - Lagrangian and Hamiltonian formulations of mechanics and their equivalence; symmetries and Noether's theorem; applications of variational principles to physical systems such as central force, rigid body motion, and oscillation; canonical transformations - Hamilton-Jacobi equation, Poisson and Lagrange brackets; special relativity. PRQ: PHYS 500 or consent of department.

Rationale: New course description is more detailed while accurately reflecting the content of the course as currently taught.

Course Revision

Page 276, 2018-19 Graduate Catalog

659. SPECIAL PROBLEMS IN PHYSICS (1-10). Special problems in physics under supervision of staff. Problems may be technical in nature or concerned with teaching procedure. May be PRQ: Consent of department. Contingent upon supervisor providing the Physics Department with a detailed syllabus, expected outcomes, and a grading scheme before the course is approved by the Department.

NORTHERN ILLINOIS UNIVERSITY COLLEGE OF LIBERAL ARTS AND SCIENCES CURRICULUM COMMITTEE #1 Meeting – August 29, 2018

Approved Attachments

Rationale: This change will help to assure that PHYS 659 is used as a real course with documented goals and expectations.

Course Revision

Page 276, 2018-19 Graduate Catalog

684. INTRODUCTION TO HIGH ENERGY PHYSICS AND ASTROPHYSICS (3). Quarks, leptons, and PRQ: PHYS 561 PHYS 660 or consent of department.

Rationale: Students who take PHYS 684 are much more likely to have taken the core course PHYS 660 than PHYS 561.