#### Minutes of Regular Meeting, Faculty Senate, Clayton State University, March 14, 2016, 11 a.m.

Members Present: Randall Gooden, Celeste Walley-Jean, Kathryn Pratt Russell, Barbara Musolf, Kathryn Kemp, Marcy Butler, Chris Pitsikoulis, Junfeng Qu, John Mascaritolo, Craig Hill, Adam Kubik, Muhammad Rahman, Reza Kheirandish, Debra Cody, Catherine Matos

Non-members: Jill Lane, Elaine Manglitz, Shayla Mitchell, Patricia Todebush, Shannon Cochran, Chaogui Zhang

- I. Reading and Approval of the Minutes A. No minutes were approved at this meeting.
- II. Reports of President, Provost and Standing Committees

## A. President's Report

President Hynes submitted a written report since he could not be in attendance. Dr. Hynes gave an update on the "campus carry" gun legislation, the Board of Regents' expressed disappointment in its passing by the legislature, and the upcoming efforts to devise campus strategies to deal with the new legal conditions. He also provided an update on the state budget, which is given here. "Both the senate and the house versions of the budget included a 3% salary increase for USG faculty and staff. Based on that, the university HR office distributed guidelines for implementing recommendations for increases on campus. Because there were differences between the House and Senate versions of the FY 17 budget, a conference committee representing both house and senate members/leadership will develop a single version upon negotiation. The senate version included/added \$1.55m for a portion of the academic core renovations (roofs). Our hope is that the house may be able to find another \$2.1m to allow for further renovation requests (but without major chiller/mechanical requests) which we will make part of later discussions). At this point there are no guarantees, but we will be waiting to see what if any part of our request will emerge in the final budget." He also acknowledged Dr. Jim Flowers for his help in these efforts. The President also gave an update on leadership development training for faculty at CSU.

B. Provost's Report:

Jill Lane represented the office of the Provost at the meeting. Dr. Lane reported that there will be an update on the Faculty Survey, which concerns the experiential learning activities that faculty do in their undergraduate courses. In course deactivation efforts, no new programs are being added to the list for deactivation. Only moribund courses and programs are being listed. For instance, Accounting Technology was listed as a campus program, but has not offered since 1998. Dr. Lane also announced that a new orientation director is coming in.

- III. Reports of Special Committees
- IV. Special Orders
- V. Unfinished Business and General Orders

#### VI. New Business

A. Motion to Approve a Revision of the Policy for Adoption of New Promotion and Tenure Guidelines by Academic Units and a Policy for Adoption of Amended Promotion and Tenure Guidelines and for their Implementation, As Approved by the Faculty Affairs Committee.

Dr. Musolf moved to approve. Dr. Musolf added that a flow chart had been provided (which is included in the Appendix along with the motion. She explained that the college committee and the university committee had been added to the process for consistency across colleges. After much discussion, Dr. Kheirandish made a substitute motion to enable the University P&T committee will have a consulting role rather than an approving role. Dr. Walley-Jean seconded. All voted to approve the substitute motion, with one vote against approvel. Then Dr. Walley-Jean offered a substitute motion that added a 3/5 vote by all college faculty subject to promotion and tenure vote (which is the current practice), and this vote would occur after approval by the appropriate college committee. Dr. Pratt Russell seconded. 11 voted in favor of this (second) substitute motion, with 3 opposed. The final vote was taken on the second substitute motion (which incorporated the first substitute motion as well). The vote showed 13 in favor and 1 opposed. The motion passed.

B. Motion to Approve Changes to MATH 3010 and MATH 3020/3030 and to Change MATH 5100 to MATH 5000, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Qu moved to approve. The motion was unanimously approved.
C. Motion to Approve Changes to Math Courses for Pre-Middle Level and Middle Level Education Majors, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Qu moved to approve. Dr. Zhang clarified an enrollment detail. The motion was unanimously approved.

D. Motion to Approve Requirement That College of Business Students Must Take ECON 2105 As a Non-Business Elective If Not Taken to Satisfy Area E, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Qu moved to approve. The motion was unanimously approved.

E. Motion to Approve Modifications in Area A of the Core Curriculum for Science and Math Majors, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Kemp moved to approve. The motion was unanimously approved.

F. Motion to Approve Modifications in Area D of the Core Curriculum for Science and Math Majors, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Cody moved to approve. The motion was unanimously approved.

G. Motion to Approve Renumbering of PHYS 2545, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Walley-Jean moved to approve. Dr. Todebush explained the change from a 2000-level to a 3000-level numbering as one necessary to make the course count in the Physics minor. The motion was unanimously approved.

H. Motion to Approve Interdisciplinary Studies Course Changes, As Approved by the Undergraduate Curriculum Committee on February 12, 2016. Dr. Pratt Russell motioned to open the discussion. Dr. Cochran explained the course changes, and mentioned that there should have been a memo from the UCC. Dr Walley-Jean pointed out that the course changes were listed in a report from the Feb 12 UCC meeting, which was sent to the senate two weeks ago. However, there had been no memo. Dr. Walley-Jean suggested that the Senate/UCC develop a standard process for either/both the UCC and department chairs of what materials need to be provided to Faculty Senate before curriculum changes can be approved by the Senate. She also noted that it is unfair to have curriculum changes (that have passed UCC) held up in Senate because the Senate did not receive the information in an acceptable format. No one has yet delineated what an acceptable format is. Dr. Pratt Russell moved to table the motion until a document was considered by the senate. Dr. Musolf seconded. The motion was tabled until next meeting. I. Campus Carry Law Discussion. This discussion was initiated from the floor. Preliminary

- remarks were made prior to a full discussion at the next meeting.
- VII. Adjournment. Dr. Pratt Russell moved to adjourn. Dr. Rahman seconded. The meeting was adjourned at 12:10 p.m.

# Appendix

VI. A. Motion to Approve a Revision of the Policy for Adoption of New Promotion and Tenure Guidelines by Academic Units and a Policy for Adoption of Amended Promotion and Tenure Guidelines and for their Implementation, As Approved by the Faculty Affairs Committee

## 205.03.1.3 Adoption of New and Amended Promotion and Tenure Guidelines by Academic Units

The faculty of each academic unit immediately below the college level (department, area, program or school) are responsible for developing guidelines for promotion and tenure for the members of its faculty. Promotion and tenure guidelines developed and that may be amended by the unit must conform to all BOR and University criteria and requirements and must meet the standards of applicable accrediting agencies and of professions within the unit. New and amended guidelines must be approved by three-fifths of the full-time, tenure-track and tenured faculty in the unit.

Upon approval by the faculty of the academic unit, the college promotion and tenure committee will review the proposed new or amended guidelines to make sure that they align with the requirements of the faculty handbook and that they meet the minimum college requirements. Approval will require three-fifths of the members of the committee. The college promotion and tenure committee will only consider general requirements and not discipline specific requirements as identified by the department committees. Once the guidelines are approved they will be referred to the dean of the college for approval or disapproval.

Upon approval of the proposed new or amended guidelines by the college promotion and tenure committee and the college dean, the University promotion and tenure committee will review and approve or disapprove the proposed new or amended guidelines, to make sure that they align with the

Faculty Handbook and meet the minimum university requirements. Approval will require three-fifths of the members of the committee. The university promotion and tenure committee will only consider general requirements and not discipline specific requirements as identified by the department or college committees. Once the guidelines are approved they will be referred to the provost for approval or disapproval.

Following approval by the University promotion and tenure committee and the provost, the president of the University will approve or disapprove the new or amended proposed guidelines. Proposed guidelines will not become effective until the necessary academic unit vote and approvals are obtained and the guidelines are published by the head of the academic unit on the University promotion and tenure Web site.

Academic units within a college may choose to adopt promotion and tenure guidelines as a college. In such case, the same approvals must be obtained as set forth for guidelines for academic units.

If the faculty of any academic unit chooses not to adopt promotion and tenure guidelines, then the promotion and tenure guidelines that were in effect before August 1, 2015, will be in effect for that academic unit.

Based upon BOR and University criteria and requirements and the guidelines of each academic unit within the college or the college as a whole, academic units will establish forms for use in the promotion and tenure process in their respective colleges. Once adopted, such forms will be published by the dean of the college on the University promotion and tenure Web site.

#### 205.03.1.4 Implementation of amended and new guidelines

New and amended department or college guidelines that have been reviewed by August 1 will be in effect for new faculty appointed in the year that they were approved. Faculty that have appointments prior to the August 1 of the year they go into effect may choose to be evaluated using the old or approved new/amended department or college guidelines for four years following their last review. Faculty must inform their departmental committee when they turn in their portfolio under which guidelines they want to be evaluated. The fifth year after guidelines are approved all faculty will be evaluated using the new or amended guidelines.

VI. B. Motion to Approve Changes to MATH 3010 and MATH 3020/3030 and to Change MATH 5100 to MATH 5000, As Approved by the Undergraduate Curriculum Committee on February 12, 2016

**Commented [BM1]:** Or should it be published by the provost's office?

## MEMORANDUM

To: Dr. Richard Singiser, Chair Undergraduate Curriculum Committee From: Dr. Lila F. Roberts, Dean College of Information and Mathematical Sciences Date: November 8, 2015 RE: CIMS Curriculum Committee Actions on Mathematics Proposals

The Department of Mathematics and the CIMS Curriculum Committee has proposed the following changes to the Mathematics curriculum. Specifically,

1. MATH 3010 Number Concepts and Relations

• Change course number to 2010 • Change prerequisites to: MATH 1112 or MATH 1113 with a minimum grade of C (can be taken concurrently) Rationale: This course will serve as a pre-requisite for the middle grades program. It is more appropriate as a 2000 level course. The original prerequisite of MATH 1231is not essential for students in this class.

2. MATH 3020/3030 Concepts of Algebra/Concepts of Geometry

• Change prerequisites to MATH 1112, MATH 1112A or MATH 1113 with a minimum grade of C AND MATH 1231 with a minimum grade of C AND MATH 2010 with a minimum grade of C • Change level restrictions to: All levels EXCEPT this level—Graduate Students • Change major restrictions to: Restricted ONLY to these Majors: Middle Grades Education Rationale: These prerequisite changes are necessary due to the changes to MATH 3010.

3. Change the course number of MATH 5100 History of Mathematics to MATH 5000 so that course numbering will be consistent with the other options in the Master of Liberal Studies degree. I have attached the original memos from Dr. Zhang proposing these changes.

I will submit a Banner Action Form for MATH 3020 and MATH 3030, however, I do not know the protocol for changing a course number in Banner. Please advise if this is an option in a Banner Action Form

VI. C. Motion to Approve Changes to Math Courses for Pre-Middle Level and Middle Level Education Majors, As Approved by the Undergraduate Curriculum Committee on February 12, 2016 (See attachment: Proposed Changes to Math 3010, 3020/3030

VI. D. Motion to Approve Requirement That College of Business Students Must Take ECON 2105 As a Non-Business Elective If Not Taken to Satisfy Area E, As Approved by the Undergraduate Curriculum Committee on February 12, 2016

# MEMORANDUM

TO: UCC

- FROM: College of Business Curriculum Committee
- SUBJECT: College of Business Curriculum Changes
- DATE: November 3, 2015

The Curriculum Committee has approved the following curriculum changes.

1. Allow non-business majors to minor in Finance. It appears to be a demand for the Finance minor from non-business majors. There is no reason for this minor to be open only for business majors.

#### **Present Catalog Description**

The finance minor will offer Clayton State University students the opportunity to focus on a specific area of business that offers excellent employment opportunity in the Atlanta area and beyond. Students must be admitted to a BBA major to declare a minor in Finance.

## **Proposed Description**

The finance minor will offer Clayton State University students the opportunity to focus on a specific area of business that offers excellent employment opportunity in the Atlanta area and beyond.

 Change the Prerequisites for the Corporate Finance class. The Finance faculty believes that the Math 1241 course is not required for success in Finance. This change will make it easier for nonbusiness majors to enroll in this course.

## **Present Description**

FINA 3101 - Corporate Finance (3-0-3) An introduction to the principles of financial management, including capital budgeting, the cost of capital, acquisition of funds, and capital structure strategies of the non-financial corporation. Prerequisite(s): Admission to the College of Business, MATH 1241 or MATH 1113 or MATH 1501.

#### Proposed Description:

FINA 3101 - Corporate Finance (3-0-3)

An introduction to the principles of financial management, including capital budgeting, the cost of capital, acquisition of funds, and capital structure strategies of the non-financial corporation. Prerequisite(s):, MATH 1101 (D) or MATH 1111 (D) or higher based upon Math placement scores.

 Change the Prerequisites for the Business Statistics course. The faculty that is teaching this course believes that MATH 1101 or MATH 1111 is sufficient for success in this Business Statistics course.

#### **Present Description**

BUSA 3101 - Business Statistics (3-0-3)

Application of statistical techniques to business problems. Includes descriptive statistics, business forecasting, statistical inference, and regression. Computer software used in this course. Prerequisite(s): Admission to the College of Business, MATH 1231 (C).

Proposed Description:

BUSA 3101 - Business Statistics (3-0-3)

Application of statistical techniques to business problems. Includes descriptive statistics, business forecasting, statistical inference, and regression. Computer software used in this course. Prerequisite(s): Admission to the College of Business, MATH 1101 (D) or MATH 1111 (D) or higher based upon Math placement scores.

4. Remove the MATH 1241 requirement for Business students. A large number of business schools do not require business calculus. This will allow students to take other non-business electives.

Present Description:

 Non-Business Courses
 6 hours

 MATH 1241 Survey of Calculus
 3 hours

 Free Elective from Outside the College of Business
 3 hours

Non-Business Electives MUST be 3 credit hour courses and cannot be courses with the following prefixes: ACCT, AVEL, AVMT, BUSA, BLAW, CAPL, CNET, CITZ, CSOR, CCSU, CSU, DSGN, ELEC, EMS, EXLA, EXLI, EXLP, FINA, HDSK, HFMG (Physical Education), MKMC, MGMT, MKTG, MEDA, OFFC, OMED, PARA, PHED, RGTE, RGTR, READ, TECH, TELE, WCOM, WLAB.

Proposed Description:

Two Free Elective from Outside the College of Business ...... 6 hours

Non-Business Electives MUST be 3 credit hour courses and cannot be courses with the following prefixes: ACCT, AVEL, AVMT, BUSA, BLAW, CAPL, CNET, CITZ, CSOR, CCSU, CSU, DSGN, ELEC, EMS, EXLA, EXLI, EXLP, FINA, HDSK, HFMG (Physical Education), MKMC, MGMT, MKTG, MEDA, OFFC, OMED, PARA, PHED, RGTE, RGTR, READ, TECH, TELE, WCOM, WLAB.

Add this statement under Non-Business Courses
 ECON 2105 must be taken as a non-business elective if not taken to satisfy the area E requirement.

6. Discussion of the new minor in Economics proposal

This is the proposal from the Economics faculty:

Students will need to take six courses to complete a minor in business economics:

All of the following 5 courses: Core and Required Courses Core Courses for ECON Minor 1) Principles of Macroeconomics - ECON 2105 (already exists) 2) Principles of Microeconomics - ECON 2106 (already exists)

Required Courses for ECON Minor:

3) Managerial Economics –ECON 6100 (already exists but will be cross listed as ECON 4644 which is undergraduate level Managerial economics)
4) International Economics –Econ 4501 (new course proposal attached)
5) Monetary Economics – ECON 4103 (new course proposal attached)

Plus one of the following electives:

Business Statistics - BUSA 3101 (already exists) Entertainment & Sports Economics – ECON 4601 (new course proposal attached) Economics of Innovation – Econ 4320 (new course proposal attached) Special topics in Economics - Econ 4800 (already exists, with rotating syllabus) Any other 3000 level or higher ECON course offered by the College of Business

7. Discuss and approve the new course proposals from the Economics faculty ECON 4103 – Monetary Economics ECON 4320 – Economics of Innovation ECON 4501 – International Economics ECON 4601 – Entertainment & Sports Economics ECON 4644 – Managerial Economics

VI. E. Motion to Approve Modifications in Area A of the Core Curriculum for Science and Math Majors, As Approved by the Undergraduate Curriculum Committee on February 12, 2016

# MEMORANDUM

TO: Dr. Richard Singiser, Chair of the Undergraduate Curriculum Committee

FROM: Dr. Nasser Momayezi, Dean of the College of Arts and Sciences

RE: Proposal for Modification of Area A of the Core Curriculum

DATE: December 18, 2015

## **Modification of Program Curriculum:**

We propose to clarify the core curriculum for Science and Mathematics majors to match the USG rules governing the math and science core curriculum. These proposed changes will not alter the total number of credit hours required for completion of the program.

## **Modification of Program Requirements:**

We propose to revise the program requirements for area A2 for science and math majors to specifically address the math and science requirements for these majors, stating that math and science majors must use Math 1112, Math 1112A MATH 1113, or MATH 1501 to satisfy the area A2 essential skills requirement.

# Justification:

• All science and math majors are required by the USG to take a minimum of MATH 1112 or MATH 1113 in area A2; therefore Math 1101, Math 1111, and MATH 1241 are not options in area A2 for science or math majors.

## **Catalog Changes:**

Existing catalog requirement:

#### A2. One Mathematics Course from Among

- MATH 1101 Mathematical Modeling
- MATH 1111 College Algebra
- MATH 1112 Trigonometry & Analytical Geometry\*
- MATH 1113 Pre-calculus
- MATH 1241 Survey of Calculus
- MATH 1501 Calculus I

\*Only the three credit MATH 1112 can be used by science majors in Area A2 and only if the student has a grade of C or better in MATH 1111.

Proposed Catalog requirement:

## A2. Non-Science/Math Majors

## **One Mathematics Course from Among**

MATH 1101 Mathematical Modeling

MATH 1111 College Algebra

MATH 1112 Trigonometry & Analytical Geometry\*

## MATH 1112A Trigonometry & Analytical Geometry\*

MATH 1113 Pre-calculus

MATH 1241 Survey of Calculus

MATH 1501 Calculus I

\*Only the three credit MATH 1112 can be used by science and math majors in Area A2 and only if the student has a grade of C or better in MATH 1111.

#### A2. Science and Math Majors

## **One Mathematics Course from Among**

MATH 1112 Trigonometry & Analytical Geometry\*

MATH 1112A Trigonometry & Analytical Geometry\*

MATH 1113 Pre-calculus

MATH 1501 Calculus I

\*Only the three credit MATH 1112 can be used <del>by science and math majors</del> in Area A2 and only if the student has a grade of C or better in MATH 1111.

## VI. F. Motion to Approve Modifications in Area D of the Core Curriculum for Science and Math Majors, As Approved by the Undergraduate Curriculum Committee on February 12, 2016

## **Modification of Program Curriculum:**

We propose to revise the core curriculum for Science and Mathematics majors. These proposed changes will not alter the total number of credit hours required for completion of the program. Below are bullet points summarizing the proposed revisions. Also attached is a marked version of the proposed curriculum compared to the current curriculum.

## **Modification of Program Requirements:**

We propose to revise the program requirements for area D for science and math majors to specifically address the math and science requirements for these majors.

#### Justification:

- The current area D1 has not been changed necessarily, but we would like to provide some additional guidance for Biology majors. All Biology majors are required to take a physics sequence (PHYS 1111/1112/L or PHYS 2211/2212/L) in their upper division requirements for their major. Since trigonometry-based physics is essentially the same course as calculus-based physics (with the exception of the type of math applied to solving the problems) it was essential for us to make it very clear that they cannot apply both types of physics classes to their curriculum.
- The current area D2 as listed in the catalog is the same for science and non-science majors. This is confusing for math and science majors since they should be taking higher level mathematics courses for mastery of their disciplines.
- While the USG does not allow programs to have core courses as prerequisites for degree
  requirements beyond the core they have granted exceptions to our science and math programs
  to allow area D courses pre-requisites to other required courses in the Computer Science,
  Mathematics, Biology and Chemistry degree programs. We serve our students better by
  eliminating the lower level mathematics course options from area D2 for science and math
  majors since the lower level math and science courses will not help these students successfully
  obtain their degree in a timely manner. The students will still have to take the other higher level
  math course (that is a prerequisites for other courses in their programs) and count them
  somewhere else in their curricula (if space is available in their curriculum).
- Additionally, all science and math majors are required by the USG to take a minimum of MATH 1112(A) or MATH 1113 in area A2; therefore these courses should not be options in area D2 for science or math majors.
- Lastly, the USG states the following as related to science/math major area D requirements: "Science programs may specify a higher level math course in Area D."
- Area D2 will remain exactly the same (as written in the 2015 catalog) for non-science majors, nonmath majors and health science majors.

## **Current Area D**

Natural Sciences, Mathematics and Technology

D1. Science (Non-Science Majors) .....7 hours

Non-Science majors must satisfactorily complete two courses and one laboratory in Area D1 from the following list.

ASTR 1010 Solar System Astronomy

ASTR 1020 Stellar and Galactic Astron.

ASTR 1020/L Stellar and Galactic Astron.

BIOL 1107/L Principles of Biology I

BIOL 1108 Principles of Biology II

BIOL 1111/L Introductory Biology I

BIOL 1112 Introductory Biology II

CHEM 1151/L Survey of Chemistry I

CHEM 1152 Survey of Chemistry II

CHEM 1211/L Principles of Chemistry I

CHEM 1212 Principles of Chemistry II

PHYS 1111/L Introductory Physics I

PHYS 1112 Introductory Physics II

PHYS 2211/L Principles of Physics I

PHYS 2212/L Principles of Physics II

Second courses in the same discipline sequence require the first as a prerequisite.

Students may not receive credit for both the first Principles course and the other first course in the same discipline (i.e. taking BIOL 1107/L and BIOL 1111/L is not permitted). This rule also applies to the second courses (i.e. taking PHYS 1112/L and PHYS 2212/L is not permitted).

# D1. Science (Health Professions Majors) ......8 hours

Health Professions majors must satisfactorily complete a two semester science course and laboratory sequence from the following:

BIOL 1107/L Principles of Biology I

BIOL 1108/L Principles of Biology II

OR

CHEM 1151/L Survey of Chemistry I CHEM 1152/L Survey of Chemistry II OR CHEM 1211/L Principles of Chemistry I CHEM 1212/L Principles of Chemistry II OR PHYS 1111/L Introductory Physics I PHYS 1112/L Introductory Physics II OR PHYS 2211/L Principles of Physics I PHYS 2212/L Principles of Physics II

D1. Science (Science Majors) ......8 hours

Science majors must satisfactorily complete a two three-hour science courses and their accompanying one-hour laboratory courses from the following.

BIOL 1107/L Principles of Biology I

BIOL 1108/L Principles of Biology II

CHEM 1211/L Principles of Chemistry I

CHEM 1212/L Principles of Chemistry II

PHYS 2211/L Principles of Physics I

PHYS 2212/L Principles of Physics II

Second courses in a discipline require the first as a prerequisite.

All students must complete an additional three hours in Area D2 from the following courses:

CSCI 1301 Computer Science I

MATH 1112(A) Trigonometry and Analytic Geometry\*\*

MATH 1221 Finite Mathematics

MATH 1231 Introductory Statistics

MATH 1241 Survey of Calculus MATH 1113 Pre-calculus MATH 1501 Calculus I MATH 2502 Calculus II

SCI 1901 Selected Topics in Science

Students selecting MATH 1501 or MATH 2502 will count three hours in Area D2 and one hour in Area F or in their degree requirements. **\*\***Only the three credit MATH 1112 can be used by non-science majors in Area D2.

# Newly Proposed Area D

# D1. Science (Non-Science Majors) .....7 hours

Non-Science majors must satisfactorily complete two courses and one laboratory in Area D1 from the following list.

ASTR 1010 Solar System Astronomy

ASTR 1020/L Stellar and Galactic Astron<sup>\*</sup>

BIOL 1107/L Principles of Biology I

BIOL 1108/L Principles of Biology II

BIOL 1111/L Introductory Biology I

BIOL 1112 Introductory Biology II<sup>\*</sup>

CHEM 1151/L Survey of Chemistry I

CHEM 1152 Survey of Chemistry II\*

CHEM 1211/L Principles of Chemistry I

CHEM 1212/L Principles of Chemistry II\*

PHYS 1111/L Introductory Physics I

PHYS 1112/L Introductory Physics II<sup>\*</sup>

PHYS 2211/L Principles of Physics I

PHYS 2212/L Principles of Physics II<sup>\*</sup>

\*With the exception of BIOL 1108/L, the second courses in a discipline require the first as a prerequisite.

Students may not receive credit for both the first Principles course and the other first course in the same discipline (i.e. taking BIOL 1107/L and BIOL 1111/L is not permitted). This rule also applies to the second courses (i.e. taking PHYS 1112/L and PHYS 2212/L is not permitted).

## D1. Science (Health Professions Majors) ......8 hours

Health Professions majors must satisfactorily complete a two semester science course and laboratory sequence from the following:

BIOL 1107/L Principles of Biology I BIOL 1108/L Principles of Biology II OR CHEM 1151/L Survey of Chemistry I

CHEM 1152/L Survey of Chemistry II

OR

CHEM 1211/L Principles of Chemistry I

CHEM 1212/L Principles of Chemistry II

OR

PHYS 1111/L Introductory Physics I

PHYS 1112/L Introductory Physics II

OR

PHYS 2211/L Principles of Physics I

PHYS 2212/L Principles of Physics II

D1. Science (Science Majors) ......8 hours

Science majors must satisfactorily complete a two three-hour science courses and their accompanying one-hour laboratory courses from the following.

BIOL 1107/L Principles of Biology I

BIOL 1108/L Principles of Biology II

CHEM 1211/L Principles of Chemistry I

CHEM 1212/L Principles of Chemistry II \*

PHYS 2211/L Principles of Physics I \*\*

PHYS 2212/L Principles of Physics II \*,\*\*

With the exception of BIOL 1108/L, the second courses in a discipline require the first as a prerequisite.

**Commented [MF2]:** No changes, but made some corrections to errors made in this version of the catalog. The Principles courses have a required co-requisite of a lab in the second course (the lab was removed for some reason). Also BIOL 1108/L no longer requires BIOL 1107/L.

<sup>\*\*</sup> Biology majors are required to complete a physics sequence (PHYS 1111/L and 1112/L OR PHYS 2211/L and PHYS 2212/L) in their upper division requirements; therefore they cannot apply calculus-based Physics (PHYS 2211/L and PHYS 2212/L) in area D1 and PHYS 1111/L and PHYS 1112/L in their upper division requirement.

All non-science majors must complete an additional three hours in Area D2 from the following courses:

CSCI 1301 Computer Science I

MATH 1112(A) Trigonometry and Analytic Geometry\*\*\*

MATH 1221 Finite Mathematics

MATH 1231 Introductory Statistics

MATH 1241 Survey of Calculus

MATH 1113 Pre-calculus

MATH 1501 Calculus I

MATH 2502 Calculus II

SCI 1901 Selected Topics in Science

Students selecting MATH 1501 or MATH 2502 will count three hours in Area D2 and one hour in Area F or in their degree requirements.

\*\*\*Only the three credit MATH 1112 can be used by non-science majors in Area D2.

D2. Science, Math or Technology (Science Majors ) ......3 hours

All students must complete an additional three hours in Area D2 from the following courses:

CSCI 1301 Computer Science I

MATH 1231 Introductory Statistics

MATH 1501 Calculus I\*\*\*\*

MATH 2502 Calculus II\*\*\*\*

\*\*\*\*Students selecting MATH 1501 or MATH 2502 will count three hours in Area D2 and one hour in area F or for their specific upper division degree requirements.

**Commented [MF3]:** This is what we are seeking to change in the catalog for D1. BIOL 1108/L can be taken before or after BIOL 1107/L due to a previous change made and approved by the UCC in Spring 2015.

Also we inserted clarification about the physics requirement for biology majors.

**Commented [MF4]:** We removed the following courses as options for D2 science majors: SCI 1901, MATH 1112, 1113, 1221, & 1241.

Area D2 for non-science, non-math, and health science majors will remain the same.

VI. G. Motion to Approve Renumbering of PHYS 2545, As Approved by the Undergraduate Curriculum Committee on February 12, 2016