CAS Faculty Meeting Agenda

February 28, 2018 in Ruth Garvey Fink Convocation Hall, BTC

Refreshments start at 2:30p.m.
Meeting will start promptly at 3:00 p.m.

I.   Welcome & Call to Order

II. Dr. Juli Mazachek, Vice President of Academic Affairs, and Dr. Alan Bearman, Dean of University Libraries and the Center for Student Success and Retention, on Improving Graduation Rates

III. Dr. Kevin Charlwood, Chair of Mathematics & Statistics, on New Math Initiatives

IV. *Approval of Minutes from August 30, 2017

V.   Old Business

VI. New Business

    A. *New Programs
        a. Applied Statistics
        b. New Minor – Computer Information Sciences with Concentration in Digital Forensics
        c. New Minor – Computer Information Sciences
    B. *Program Changes
        a. Bachelor of Arts in Religious Studies
        b. Bachelor of Arts in Computer Information Sciences
        c. Bachelor of Science in Computer Information
        d. Bachelor of Arts in Computer Information Sciences with Emphasis in Digital Forensics
        e. Bachelor of Science in Molecular Biology in Biotechnology
        f. MEd Special Education High Incidence
        g. Bachelor of Arts in Mathematics (dated 11-28-17)
        h. Bachelor of Science in Mathematics (dated 11-28-17)
        i. Bachelor of Arts in Kinesiology in Health and Fitness Promotion
        j. Bachelor of Science in Kinesiology in Exercise and Rehabilitation Science
    C. *Proposed Changes to Degree Requirements and Catalog Language
        a. Bachelor of Arts
        b. Bachelor of Science
        c. Associate of Arts in Natural Sciences and Mathematics
        d. Associate of Arts in Humanities and Creative and Performing Arts
        e. Associate of Liberal Studies
        f. Bachelor of Science in General Science

VII. Informational Items/Updates

    A. Tentative CAS Faculty Meeting: Wednesday, April 18, 2018 at 3:00pm in Henderson 112

    B. Other Announcements

VIII. Adjournment

*See attachment

CAS Faculty Meeting
Washburn University
August 30, 2017
Washburn A

1. Dean Stephenson welcomed faculty to a new school semester. Her remarks focused on the benefits of making socially responsive human connections.
2. Minutes from February 27, 2017 were approved.
3. Old Business. None
4. New Business
5. Faculty Handbook Changes:
    a. Senior Lecturer Process-Approved with revisions.

6. Curriculum Changes
    a. B.A. in Kinesiology-Approved
    b. B.S. in Chemistry certified by ACS-Approved
    c. B.S. in Anthropology (Forensics Concentration)-Approved
7. Announcements.
    a. Faculty Success Groups
        i. Major Maps

8. Meeting adjourned at 4:35

Respectfully Submitted,

Bruce Mactavish

COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	Kevin Charlwood	Approve	2017-09-11
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-18
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty			

Approved By:	Faculty Senate _____	University Faculty _____	WU Board of Regents _____

1. Title of Program.

   Applied Statistics

2. Rationale for offering this program.

   Applied or research statisticians are in high demand by business, industry and government. Our actuarial science track is focused on preparing students to become actuaries, and to pursue the Society of Actuaries (SOA) or Casualty Actuary Society (CAS) exam series to gain credentialing as associates or fellow of the respective societies. The new Applied Statistics tracks overlaps heavily with the actuarial science track, featuring three new courses in place of MA 343 Applied Statistics, MA 384 Theory of Interest, and MA 385 Actuarial Mathematics. These three new courses, MA 340 ANOVA/Design of Experiments, MA 341 Nonparametric Tests/Quality Control and MA 342 Statistical Computing have already been proposed in the CAS online proposal system. The statistical applications contained in these courses, especially the computing course, will make successful students highly marketable for any positions requiring a strong statistics background. The new program also provides a nice option for students in the actuarial science track who opt not to pursue the SOA/CAS professional exam series.

3. Exact proposed catalog description.

   Mathematics â€" Applied Statistics specialization
   STUDENT LEARNING OUTCOMES
   1. Students will demonstrate the ability to solve a variety of problems in mathematics including calculus, probability and statistics, and linear algebra.
   2. Students will demonstrate the ability to write mathematically, using proofs and/or statistical analysis, and to solve challenging problems both pure and applied.
   3. Students will demonstrate the ability to communicate mathematical and statistical results both

orally and in writing.

4. Students will demonstrate the ability to identify and utilize the appropriate practices and tools, including the use of technology, to solve mathematics problems and perform statistical modeling and analysis of data.

Courses

Calculus (MA 151, 152, 253), Linear Algebra (MA 301), ANOVA/Design of Experiments (MA 340), Nonparametric/Quality Control (MA 341), Statistical Computing (MA 342), Mathematical Statistics I (MA 344), Mathematical Statistics II (MA 345), Regression Analysis (MA 346), Stochastic Processes (MA 347), Time Series Analysis (MA 348), Introduction to Structured Programming (CM 111), Contemporary Programming Methods (CM 245), Data Structures and Algorithmic Analysis (CM 307), Data Mining (CM 332), and Database Management Systems (CM 336).

Both BA and BS options are possible. Other requirements for the program are those for the BA or BS degrees. MA 340, 341, and 342 are new courses.

4. List and financial implications.

Both Drs. Mosier and Shaw will teach the new courses; based on frequency of offering, we will need to find instruction for one section of MA 140 Statistics each semester. With current adjunct costs of $1,860 per three-credit course (for those possessing a Master's degree), this amounts to $3,720 per year.

5. Are any other departments affected by this new program?

Y

The MA 343 Applied Statistics course will eventually be replaced by a selection of one of MA 340, 341 or 346. CIS students are impacted by this, for those in a CIS track where MA 343 is an option/requirement. We plan to offer MA 343 in SP18 and SP19 to assuage these concerns. Our other tracks in Mathematics & Statistics are also affected by this change involving MA 343, which will be addressed with the appropriate program changes. The five proposed CIS courses for Applied Statistics are already regularly offered by CIS.

COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	Bruce Mechtly	Approve	2017-08-29
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-18
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty			

	Faculty	University	WU Board
Approved By:	Senate _____	Faculty _____	of Regents _____

1. Title of Program.

   Minor in Computer Information Science with Concentration in Digital Forensics

2. Rationale for offering this program.

   We believe that a minor with a concentration in digital forensics will attract Criminal Justice majors who wish to add this skill set to their bachelor's degree.

3. Exact proposed catalog description.

   The Minor in Computer Information Science with Concentration in Digital Forensics will give a student valuable computer skills including those used in digital forensics investigations. The minor will consist of 15 hours of Computer Information Science coursework, including at least six upper division hours. The courses must include CM203 Digital Forensics I and CM303 Digital Forensics II. Other courses may be selected to match the particular interest of the student.

4. List and financial implications.

   None

5. Are any other departments affected by this new program?

   N

COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	Bruce Mechtly	Approve	2017-08-29
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-18
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty			

	Faculty	University	WU Board
Approved By:	Senate _____	Faculty _____	of Regents _____

1. Title of Program.

   Minor in Computer Information Sciences

2. Rationale for offering this program.

   This is really a change, but the minor was not in the system. We are changing the number of hours required for the minor in CIS from 21 to 15. This will make it have the same number of hours as our new Minor in CIS with a Concentration in Digital Forensics.

3. Exact proposed catalog description.

   Minor programs in Computer Information Science are individually designed by the student in consultation with a departmental advisor and subject to departmental approval. A minor will consist of 15 hours of Computer Information Science coursework, including at least six upper division hours. Courses may be broadly selected or may concentrate in an area of particular interest.

4. List and financial implications.

   None

5. Are any other departments affected by this new program?

   N

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	Ian Smith	Approve	2017-08-25
Division	Corey Zwikstra	Approve	2017-09-15
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-15
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty			

Approved By: Faculty Senate _____ University Faculty _____ WU Board of Regents _____

Program: Bachelor of Arts in Religious Studies

1. Reason for this program change?

The proposed changes to the religious studies major reflect changes within the Department of Philosophy and within the discipline of religious studies and the academy more generally. The Department has historically had only one professor of religious studies. The previous incumbent, Barry Crawford, retired after the 2016-2017 academic year, and the new program administrator, Chris Jones, believes that the program needs to be updated in line with the contemporary discipline of religious studies and with student expectations for humanities majors.

To start with the latter point, the program at present is too large-55 credit hours, nearly all of it required coursework. At a public university without a religious affiliation, very few students are interested in majoring in religious studies by itself. At present, there are only five active majors, and no one has graduated with a BA in religious studies from Washburn University since 2012. In order to grow the major and thereby fill upper division religious studies courses, we need to be able to attract students who are interested in double majoring. Consequently, we have proposed reducing the major's footprint to 31 credit hours and building more flexibility in terms of the courses students can take. This number (31 credit hours) is the same number that is required of our approved Philosophy BA anyway. At the same time, we have not sacrificed competency within the discipline of religious studies because we have brought more focus to the major (see below).

The major, as it previously existed, included required coursework in anthropology, sociology, history, and ethics-fields that may enhance work in religious studies but are in no way intrinsic to it. Religious studies in the 21st century is an academic discipline in its own right, with its own distinct theories and methodologies. It has been characterized most especially of late by serious reflection on whether Western bias is innate in its constitutive terminology (e.g., "religion," "ritual," "sacred") and whether scholars should adopt a humanistic/philological/interpretive framework or a social scientific/explanatory framework. The new program focuses on preparing students in these areas.

2. Complete revised description.

The requirements for the major in Religious Studies consist of the following:
- RG 101 (3): Introduction to Religion
- RG 102 (3): World Religions
- PH 201 (3): History of Ancient Western Philosophy
- PH 202 (3): History of Modern Western Philosophy
- RG 331 (3): Understanding Religion
- RG 398 (1): Senior Thesis Research
- RG 399 (3): Senior Thesis
- Twelve (12) additional credits
    o At least six must be RG courses
    o At least nine must be upper division
    o External courses require advisor's prior approval

3. Describe the nature of the proposed change.

The proposed required courses focus on learning theories and methods associated with religious studies, while the additional courses allow students the flexibility to specialize in areas of their choosing, areas in which they will ultimately have to produce a senior thesis. RG 101 introduces students to religious studies as an academic discipline, inviting both engagement with and reflection upon constitutive terminology and the interpretation/explanation dilemma (as above). RG 102 exposes students to a wide range of data in the field. PH 201 and 202 are included as a foundation for RG 331, in which students will read a wide range of contemporary theorists of religion and begin to position themselves within the field. Elective coursework within the major can be interdisciplinary and allow the student to specialize. In the senior thesis, the student selects one or more theoretical approaches to religion as an analytical prism for their area of focus.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes

5. Does this change affect any other departments?

Y

We have removed required courses from two departments (Sociology/Anthropology and History). This may in theory affect enrollment in these courses (SO 318, AN 313, HI 100, 101, 102), though religious studies is a small enough program to render the impact negligible. Religious studies majors will still be able to take up to six hours outside of the Philosophy Department toward their major, and so some of the aforementioned courses may still count toward their major anyway.

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	Bruce Mechtly	Approve	2017-08-29
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-18
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty	N/A		

Approved By: Faculty Senate __N/A__ University Faculty __N/A__ WU Board of Regents __N/A__

Program: Bachelor of Arts in Computer Information Science

1. Reason for this program change?

   We are combining our CM467 (2 hrs) and CM468 (1 hr) courses into one course: CM465 CIS Capstone Project (3 hrs). CM468 only meets once in the semester to take an MFT and this was viewed as problematic in the context of the definition of a credit hour. CM467 and CM468 will be deleted once all the changes have been approved.

2. Complete revised description.

   Computer Information Sciences Core - 13 hrs
    CM111 Intro to Structured Programming (4)
    CM231 Computer Organization/Assembler (3)
    CM245 Contemp Programming Methods (3)
    CM261 Networked Systems I (3)

   Computer Information Sciences Required - 21 hrs
    CM307 Data Structures & Algorithmic Analysis (3)
    CM322 Operating Systems (3)
    Either CM331 Computational Intelligence (3)
    or CM332 Data Mining (3)
    CM333 Software Engineering (3)
    CM336 Database Management Systems (3)
    CM361 Network Systems II (3)
    CM465 CIS Capstone Project (3)

   Approved Elective CM Upper Division Coursework - 6 hrs

These courses should be selected in consultation with a departmental advisor. All 6 hours must be upper division.

Correlated - 30-32 hrs
  PH220 Logic (3)
  EC200 Princ of Microeconomics (3)
  EC201 Princ of Macroeconomics (3)
  Either BU342 Organization and Management (3)
  or BU346 Organizational Behavior (3)
  EN208 Business/Technical Writing (3)
  CN150 Public Speaking (3)
  Either CN340 Professional Interviewing (3)
  or CN341 Persuasive Speaking (3)
  Either MA140 Statistics (3)
  or MA343 Applied Statistics (3)
  Either MA141 Applied Calculus I (3)
  or MA151 Calculus I (5)
  MA206 Discrete Math - Computing (3)

3. Describe the nature of the proposed change.

We are combining our CM467 (2 hrs) and CM468 (1 hr) courses into one course: CM465 CIS Capstone Project (3 hrs). CM467 and CM468 will be deleted once all the changes have been approved.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes

5. Does this change affect any other departments?

N

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	**Recommendation**	**Review Date**
Department	Bruce Mechtly	Approve	2017-08-29
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-18
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty	N/A		

Approved By: Faculty Senate ___N/A___ University Faculty ___N/A___ WU Board of Regents ___N/A___

Program: Bachelor of Science in Computer Information Science

1. Reason for this program change?

We are combining our CM467 (2 hrs) and CM468 (1 hr) courses into one course: CM465 CIS Capstone Project (3 hrs). CM468 only meets once in the semester to take an MFT and this was viewed as problematic in the context of the definition of a credit hour. CM467 and CM468 will be deleted once all the changes have been approved.

Also, we are dropping the requirements of MA207 and MA301 in the Math Minor. The student may take these courses or other MA/NSD courses to satisfy the minor.

2. Complete revised description.

Computer Information Sciences Core - 13 hrs
  CM111 Intro to Structured Programming (4)
  CM231 Computer Organization/Assembler (3)
  CM245 Contemp Programming Methods (3)
  CM261 Networked Systems I (3)

Computer Information Sciences Required - 21 hrs
  CM307 Data Structures & Algorithmic Analysis (3)
  CM322 Operating Systems (3)
  Either CM331 Computational Intelligence (3)
  or CM332 Data Mining (3)
  CM333 Software Engineering (3)
  CM336 Database Management Systems (3)

CM361 Network Systems II (3)
CM465 CIS Capstone Project (3)

Approved CM Electives - 12 hrs
These courses should be selected in consultation with a departmental advisor. Minimum of 6 hours must be upper division.

Correlated - 32 hrs
  PH220 Logic (3)
  EC200 Princ of Microeconomics (3)
  EC201 Princ of Macroeconomics (3)
  Either BU342 Organization and Management (3)
  or BU346 Organizational Behavior (3)
  EN208 Business/Technical Writing (3)
  CN150 Public Speaking (3)
  Either CN340 Professional Interviewing (3)
  or CN341 Persuasive Speaking (3)
  Either MA140 Statistics (3)
  or MA343 Applied Statistics (3)
  MA151 Calculus I (5)
  MA206 Discrete Math - Computing (3)

Additional Bachelor of Science Requirements

Students must also meet the Bachelor of Science University Requirements. A 30-hour minor in the Division of Natural Sciences and Mathematics is required and must be approved by the department chairperson. If the minor is in Math, the student must take MA152. At least 20 of these hours must be selected from one discipline. Transfer students must complete at least nine upper division hours in computer information sciences from Washburn University.

3. Describe the nature of the proposed change.

We are combining our CM467 (2 hrs) and CM468 (1 hr) courses into one course: CM465 CIS Capstone Project (3 hrs). CM467 and CM468 will be deleted once all the changes have been approved. Also, we are dropping the requirements of MA207 and MA301 in the Math Minor.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes

5. Does this change affect any other departments?

N

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	Bruce Mechtly	Approve	2017-08-29
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	N/A		
(If relates to teacher certification program.)			
Dean	Laura Stephenson	Approve	2017-09-18
Curriculum Committee	Linzi Gibson	Approve	2017-10-02
Accepted by CFC			
CAS Faculty	N/A		

Approved By: Faculty Senate ___N/A___ University Faculty ___N/A___ WU Board of Regents ___N/A___

Program: Bachelor of Arts in Computer Information Sciences with Emphasis in Digital Forensics

1. Reason for this program change?

We are combining our CM467 (2 hrs) and CM468 (1 hr) courses into one course: CM465 CIS Capstone Project (3 hrs). CM468 only meets once in the semester to take an MFT and this was viewed as problematic in the context of the definition of a credit hour. CM467 and CM468 will be deleted once all the changes have been approved.

2. Complete revised description.

Computer Information Sciences Core - 16 hrs
 CM111 Intro to Structured Programming (4)
 CM203 Digital Forensics I (3)
 CM231 Computer Organization/Assembler (3)
 CM245 Contemporary Programming Methods (3)
 CM261 Networked Systems I (3)

Computer Information Sciences Required - 18 hrs
 CM303 Digital Forensics II (3)
 CM307 Data Structures & Algorithmic Analysis (3)
 CM322 Operating Systems (3)
 Either CM331 Computational Intelligence (3)
 or CM332 Data Mining (3)
 CM361 Network Systems II (3)
 CM465 CIS Capstone Project (3)

Approved Elective CM Upper Division Coursework - 6 hrs
Course(s) should be selected in consultation with a departmental advisor. All 6 hours must be upper division.

Correlated - 33-35 hrs
  CJ130 Public and Private Security (3)
  CJ415 Forensic Science in Criminal Justice (3)
  CN150 Public Speaking (3)
  Either CN340 Professional Interviewing (3)
  or CN341 Persuasive Speaking (3)
  EN208 Business/Technical Writing (3)
  Either MA140 Statistics (3)
  or MA343 Applied Statistics (3)
  Either MA141 Applied Calculus I (3)
  or MA151 Calculus I (5)
  MA206 Discrete Math - Computing (3)
  PH220 Logic (3)
  PY100 Basic Concepts in Psychology (3)
  PY2XX 200-level Psychology General Ed (3)

3. Describe the nature of the proposed change.

We are combining our CM467 (2 hrs) and CM468 (1 hr) courses into one course: CM465 CIS Capstone Project (3 hrs). CM467 and CM468 will be deleted once all the changes have been approved.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes

5. Does this change affect any other departments?

N

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	John Mullican	Approve	2017-09-11
Division	Jennifer Wagner	Approve	2017-09-15
Dept. of Educ.	Cherry Steffen	Approve	2017-09-28

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-09-28
Curriculum Committee	Linzi Gibson	Approve	2017-10-04
Accepted by CFC			
CAS Faculty	N/A		

	Faculty	University	WU Board
Approved By:	Senate N/A	Faculty N/A	of Regents N/A

Program: Bachelor of Science in Molecular Biology and Biotechnology

1. Reason for this program change?

   To add a course (BI 343) to the Elective Supportive Courses section. BI 343 is also undergoing a course change, so the approval process should address the BI 343 course change first and then this program change.

2. Complete revised description.

   The B.S. degree in Molecular Biology and Biotechnology (MBB) is designed to provide students an opportunity to focus their undergraduate studies in the molecular biosciences in an effort to prepare themselves for either entering the workforce directly as baccalaureate-level research scientists or for entering competitive graduate programs to further their studies. The curriculum is designed to be rich in laboratory experiences through coursework, research and an internship. In addition to 83 credit hours of science courses, MBB majors will be required to take an ethics course to appreciate the interplay between biology and society.

   REQUIREMENTS FOR MOLECULAR BIOLOGY AND BIOTECHNOLOGY (MBB) MAJORS
   MBB majors must take a 34-hour core consisting of:

   BI 102 General Cellular Biology (5)
   BI 103 General Organismal Biology (5)
   BI 234 Introduction to Biotechnology (3)
   BI 301 General Microbiology (4)
   BI 333 General Genetics (4)
   BI 353 Molecular Genetics (3)
   BI 354 Molecular Biology Laboratory (3)

BI 390 Biology Seminar (1)
BI 395 Biology Research (3)
BI 440 Biotechnology Internship (3)

Elective Supportive Courses for MBB Majors:
(Students must complete a minimum of 8 additional hours from the following list):
BI 322 Advanced General Botany (4)
BI 325 Microbiology of Human Diseases (5)
BI 328 Plant Anatomy and Physiology (3)
BI 330 Animal Physiology (4)
BI 343 Human Genetics (3) <----------------Add
BI 355 Developmental Biology (5)
BI 357 Histology (4)
BI 362 Immunology (3)
BI 363 Immunology Lab (2)
BI 370 Virology (3)
CH 343 Organic Chemistry Laboratory II (2)
CH 352 Biochemistry II (3)
CH 353 Biochemistry Laboratory II (2)

The following non-biology courses are required of MBB majors:
CH 151/152 Fundamentals of Chemistry (1 year with lab) (10)
CH 340/342 Organic Chemistry I (with lab) (5)
CH 341 Organic Chemistry II (3)
CH 350/351 Biochemistry I (1 semester with lab) (5)
MA 140 Statistics (3)
MA 151 Calculus and Analytic Geometry I (5)
PS 261/262 College Physics (1 year with lab) OR
  PS 281/282 General Physics (1 year with lab) (10)
PH 214 Medical Ethics (3)

The Bachelor of Science (B.S.) degree in Molecular Biology and Biotechnology requires a 34-hour BI core, 8 additional BI or CH hours elective hours as listed above, and the above-listed non-biology courses. The above-listed coursework for the B.S. in MBB satisfied the natural sciences minor. The B.S. degree in Molecular Biology and Biotechnology requires 124 credit hours to graduate.

3. Describe the nature of the proposed change.

The nature of this change is minor, involving only the addition of one course, BI 343 Human Genetics (3), to the "Elective Supportive Courses for MBB Majors" section.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes

5. Does this change affect any other departments?

N

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	Cherry Steffen	Approve	2017-11-16
Division	Cherry Steffen	Approve	2017-11-16
Dept. of Educ.	Cherry Steffen	Approve	2017-11-16

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-11-17
Curriculum Committee	Linzi Gibson	Approve	2018-02-02
Accepted by CFC			
CAS Faculty			

	Faculty	University	WU Board
Approved By:	Senate _____	Faculty _____	of Regents _____

Program: MEd - Special Education High Incidence

1. Reason for this program change?

We are requesting this change to the High Incidence M.Ed. to reduce the number of hours for the graduate spec ed program from 36 to 33. We would like to take out the curriculum. ED 668 (curriculum class) does not address any of the specific spec ed standards. All of the special education standards are addressed in the remaining course in the program. Further, reducing the number of hours, and hence the costs, may help to make us more competitive.

2. Complete revised description.

Washburn University offers a Master's Degree in High Incidence Special Education, K-6 and 6-12. The requirements for provisional endorsement by the Kansas State Department of Education may be met prior to completion of the Master's Degree. An added endorsement is granted following successful completion of the approved sequence of courses.

Program Requirements
(total of 36 credit hours)

ED 665 Introduction to Educational Research (3)
RD 622 Instruction for Readers at Risk (3)

Adaptive Special Education Professional Courses
SE 610 Learning & Behavior Problems (3)
SE 620/622 Educational Planning (3)
SE 630/632 Methods & Materials (3)
SE 635 Conferencing & Consulting in Special

Education (3)
SE 640 Individual & Group Management (3)
SE 656/658 Practicum I (3)
SE 657/659 Practicum II (3)
SE 660/662 Assessment (3)
SE 680 Resources for Families (3)

3. Describe the nature of the proposed change.

Remove the requirement for ED 668. Decrease the number of required hours for the M.Ed. in High Incidence Special Education from 36 to 33 credit hours.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes

5. Does this change affect any other departments?

N

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	Kevin Charlwood	Approve	2017-11-28
Division	Jennifer Wagner	Approve	2017-11-28
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-12-04
Curriculum Committee	Linzi Gibson	Approve	2018-01-18

Accepted by CFC _____ _____ _____

CAS Faculty _____ _____ _____

	Faculty	University	WU Board
Approved By:	Senate _____	Faculty _____	of Regents _____

Program: Bachelor of Arts in Mathematics

1. Reason for this program change?

Re-doing my last two sets of entries for program changes to all three tracks, not realizing that they had not taken effect (until final approval). This set of changes encompasses the two earlier sets of changes.

2. Complete revised description.

Mathematics
Calculus (MA 151, 152, 253), Discrete Mathematics (MA 207), Linear Algebra (MA 301), one of the following three courses ANOVA/Design of Experiments (MA 340); Nonparametric Tests/Quality Control (MA 341); or, Regression Analysis (MA 346), Abstract Algebra (MA 354), Introduction to Real Analysis I (MA 371), Introduction to Real Analysis II (MA 372), Logic for Programming (PH 110) or Logic (PH 220), Mathematical Statistics (MA 344), a minimum of two hours of Problem Solving Strategies (MA 380), and Capstone Research (MA 388). In addition, 10-15 hours of correlated courses approved by the department are required. The correlated course requirement will be one of the following: Physics 261 and 262; Physics 281 and 282; EC 200, EC 201, BU 342, and BU 347; EC 200, EC 201, AC 224, AC 225, and BU 381; or a specially designed sequence to be approved by the Department Chair.

Mathematics (Secondary Education Specialization)
Statistics (MA 140), Calculus (MA 151, 152, 253), Number Theory and Discrete Math for Middle School and Secondary Teachers (MA 204), Discrete Mathematics (MA 207), Mathematics for Middle and Secondary Teachers (MA 230), Linear Algebra (MA 301), Abstract Algebra (MA 354), Modern Geometry (MA 367), Introduction to Real Analysis I (MA 371), a minimum of two hours of Problem Solving Strategies (MA 380), History of Mathematics (MA 381), and Capstone Research

(MA 388). Students seeking certification to teach mathematics must also be formally admitted to the University's Professional Teacher Education Programs. For admission requirements, see EDUCATION in this catalog.

Mathematics (Actuarial Science Specialization)
Calculus (MA 151, 152, 253), Linear Algebra (MA 301), one of the following two courses ANOVA/Design of Experiments (MA 340); Nonparametric Tests/Quality Control (MA 341), Mathematical Statistics (MA 344, MA 345), Regression Analysis (MA 346), Time Series Analysis (MA 348), Stochastic Processes (MA 347), Mathematical Theory of Interest (MA 384), Actuarial Mathematics (MA 385), Accounting (AC 224, AC 225), Economics (EC 200, EC 201), Business/Insurance - BU 374, BU 381, and BU 483.

3. Describe the nature of the proposed change.

MA 343 Applied Statistics is being replaced by a choice of one of three courses selected from MA 340, MA 341 and MA 346 for pure math and a choice of MA 340 or MA 341 for actuarial science, and by MA 140 for the math for secondary education program. MA 153 Calculus III is now numbered MA 253. In the math for secondary education track, two new courses are added: MA 204 and MA 230. The Logic requirement of PH 110 or PH 220 for secondary education is replaced by the new MA 204 course. MA 250 Theory of Interest is now numbered MA 384.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes.

5. Does this change affect any other departments?

Y

The Education department, as the math for secondary education track has education students in it.

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGE FORM

	Chair's Signature	Recommendation	Review Date
Department	Kevin Charlwood	Approve	2017-11-28
Division	Jennifer Wagner	Approve	2017-11-28
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

		Recommendation	Review Date
Dean	Laura Stephenson	Approve	2017-12-04
Curriculum Committee	Linzi Gibson	Approve	2018-01-18
Accepted by CFC			
CAS Faculty			

Approved By:	Faculty Senate _____	University Faculty _____	WU Board of Regents _____

Program: Bachelor of Science in Mathematics

1. Reason for this program change?

Re-doing program changes made to all three tracks in two earlier sessions, same as for the BA degree just submitted.

2. Complete revised description.

Mathematics
Calculus (MA 151, 152, 253), Discrete Mathematics (MA 207), Linear Algebra (MA 301), one of the following three courses ANOVA/Design of Experiments (MA 340); Nonparametric Tests/Quality Control (MA 341); or, Regression Analysis (MA 346), Abstract Algebra (MA 354), Introduction to Real Analysis I (MA 371), Introduction to Real Analysis II (MA 372), Logic for Programming (PH 110) or Logic (PH 220), Mathematical Statistics (MA 344), a minimum of two hours of Problem Solving Strategies (MA 380), and Capstone Research (MA 388). In addition, 10-15 hours of correlated courses approved by the department are required. The correlated course requirement will be one of the following: Physics 261 and 262; Physics 281 and 282; EC 200, EC 201, BU 342, and BU 347; EC 200, EC 201, AC 224, AC 225, and BU 381; or a specially designed sequence to be approved by the Department Chair.

Mathematics (Secondary Education Specialization)
Statistics (MA 140), Calculus (MA 151, 152, 253), Number Theory and Discrete Math for Middle School and Secondary Teachers (MA 204), Discrete Mathematics (MA 207), Mathematics for Middle and Secondary Teachers (MA 230), Linear Algebra (MA 301), Abstract Algebra (MA 354), Modern Geometry (MA 367), Introduction to Real Analysis I (MA 371), a minimum of two hours of Problem Solving Strategies (MA 380), History of Mathematics (MA 381), and Capstone Research (MA 388). Students seeking certification to teach mathematics must also be formally admitted to

the University's Professional Teacher Education Programs. For admission requirements, see EDUCATION in this catalog.

Mathematics (Actuarial Science Specialization)
Calculus (MA 151, 152, 253), Linear Algebra (MA 301), one of the following two courses ANOVA/Design of Experiments (MA 340); Nonparametric Tests/Quality Control (MA 341), Mathematical Statistics (MA 344, MA 345), Regression Analysis (MA 346), Time Series Analysis (MA 348), Stochastic Processes (MA 347), Mathematical Theory of Interest (MA 384), Actuarial Mathematics (MA 385), Accounting (AC 224, AC 225), Economics (EC 200, EC 201), Business/Insurance - BU 374, BU 381, and BU 483.

3. Describe the nature of the proposed change.

Changes are the same as for the BA degree just submitted. MA 343 Applied Statistics is being replaced by a choice of MA 340 or 341 for actuarial science students, a choice of MA 340, 341 or 346 for pure math, and by MA 140 for secondary education students. MA 153 Calculus III is now numbered MA 253. MA 250 Theory of Interest is now numbered MA 384. MA 204 and MA 230 are new courses, now required in math for secondary education; MA 204 replaces the PH 110 or PH 220 Logic requirement.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes.

5. Does this change affect any other departments?

Y

Education, as our math for secondary education students are education majors.

COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	Roy Wohl	Approve	2017-11-20
Division	Cherry Steffen	Approve	2017-12-11
Dept. of Educ.	N/A		

(If relates to teacher certification program.)

Dean	Laura Stephenson	Approve	2017-12-12
Curriculum Committee	Linzi Gibson	Approve	2018-02-02
Accepted by CFC			
CAS Faculty			

Approved By:	Faculty Senate _____	University Faculty _____	WU Board of Regents _____

1. Title of Program.

   Bachelor of Arts in Kinesiology in Health and Fitness Promotion

2. Rationale for offering this program.

   National trends are demanding that Kinesiology graduates have increased health-related knowledge and experiences in developing and applying skills. This degree provides a clear pathway to specific entry level jobs and/or graduate programs in the health and fitness fields. This degree will ultimately replace our current Exercise Physiology degree, which is too narrow in scope and no longer practical for Kinesiology majors desiring health and fitness related jobs upon graduation.

3. Exact proposed catalog description.

   This degree prepares students desiring careers in health promotion, wellness and/or fitness related settings such as exercise and sport performance, personal fitness training, corporate wellness, recreation and leisure, public health, and not-for-profit health-related agencies. In addition, students can pursue advanced degrees in other health and fitness related professions, but may need to complete additional course work to meet prerequisite requirements for specific graduate schools. Health and Fitness Promotion requirements are:

   Major Requirements:
   HL207, KN248, KN250, KN257, KN266, KN300 or KN318, KN306 or KN330, KN321, KN326, KN342, HL377, KN410, plus two electives from the following: KN308, KN335, KN357, KN411, and/or a KN elective course >=300 level).

   Activity Techniques requirement:

Choose one of the following courses: KN341, KN343, KN344, or KN345.

Internship Requirement:
KN498 (150-300 contact hours)

Prerequisite Science Requirements:
BI100/BI101 or BI102, BI250 or BI275, and BI255.

Correlated Requirements:
Choose four of the following courses: AL320, CN306, HS371, MU307, PY326, SO315.

4. List and financial implications.

None.

5. Are any other departments affected by this new program?

Y

The options in the Correlated Requirements are courses from 6 different disciplines, so these courses may see some increase in student enrollment.

COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	Roy Wohl	Approve	2017-11-20
Division	Cherry Steffen	Approve	2017-12-11
Dept. of Educ.	N/A		
(If relates to teacher certification program.)			
Dean	Laura Stephenson	Approve	2017-12-12
Curriculum Committee	Linzi Gibson	Approve	2018-02-02
Accepted by CFC			
CAS Faculty			

	Faculty	University	WU Board
Approved By:	Senate _____	Faculty _____	of Regents _____

1. Title of Program.

   Bachelor of Science in Kinesiology in Exercise and Rehabilitation Science

2. Rationale for offering this program.

   The current BS>Athletic Training major is being phased out due to the National Athletic Trainer's Association moving to a Master's degree minimum to sit for the Board of Certification exam. We have determined that this is not feasible for us and, instead, are creating a "pathway" to graduate school for students planning on pursuing graduate or professional degrees in allied-health related professions such as athletic training, exercise physiology, physical therapy, occupational therapy, chiropractic, cardiac rehabilitation, and nutrition/dietetics to name a few.

3. Exact proposed catalog description.

   This degree prepares students planning to pursue graduate or professional school in fields such as Athletic Training, Exercise Physiology, Physical Therapy, Occupational Therapy, Chiropractic, Cardiac Rehabilitation, and Nutrition/Dietetics. The degree is designed to provide the theoretical knowledge and applied skills and competencies necessary to meet many of the prerequisites required for application to the above mentioned professional degree programs. Exercise and Rehabilitation Science Requirements are

   Major Requirements:
   HL248, KN266, KN291, KN300 or KN318, KN308, KN321, KN326, KN327, KN330, KN342, KN357, KN403, KN410, and KN411.

   Major Electives:
   Choose 9 credits from the following courses: KN257, KN315, KN335; KN341, KN343, KN344 or

KN345; KN350, KN367, KN491.

Correlated Requirements:
AL101 or KN250 and NU102, BI100/BI101 or BI102, BI255, BI275, CH121 or CH151, IL170, PY151 or MA140, AND PS131/132.

Correlated Electives:
Choose four of the following courses: AL257 or AL265, AL320, CN306, HL207, HS371 or HS378, PY231, PY326, and/or 6 credits of EMT certification.

Natural Science Minor Requirements:
30 credits total; 20 credits in Biology, 10 credits in Chemistry, Physics and/or Mathematics.

4. List and financial implications.

None

5. Are any other departments affected by this new program?

Y

Due to the Correlated, Correlated Elective and Natural Science Minor requirements in this degree, numerous departments across the University will benefit from our students taking more of their courses and should see an increase in credit hour production.

FACULTY AGENDA ITEM

Date: 02/09/18

Submitted by: Laura Stephenson, CAS Dean, ext. 1561

SUBJECT: TOTAL NUMBER OF CREDIT HOURS REQUIRED FOR THE BACHELOR OF ARTS DEGREE IN CAS

Description: Proposal is to change the minimum credit hour requirement for the Bachelor of Arts Degree from 124 to 120.

Rationale: In 2011, Washburn University approved a 120 minimum credit hour requirement for all baccalaureate degrees. Approving this proposal would similarly set the minimum required credit hours for CAS Bachelor of Arts degrees at 120. This proposal will not modify existing degrees that specify more than 120 required hours. New programs can be proposed that require more than 120 hours, at the discretion of the proposing academic unit.

Financial Implications: None

Proposed Effective Date: Upon the publication of the 2018-2019 Undergraduate Catalog

Request for Action: Approval by Faculty Senate

Approved by:

Attachments Yes ☒ No ☐

Proposal to Change the Degree Requirements for the Bachelor of Art Degree in the CAS

Current Degree Requirements and Catalog Language
Bachelor of Arts Degree

Each candidate is required to complete the following:
- One hundred twenty-four hours, 84 of which must be graded and 45 of which must be at the 300 or 400 level.
- A major consisting of no less than 24 hours, of which 12 must be at the upper division level.
- Eighty-Four hours outside the major discipline.
- A grade of C or better in Mathematics 112 (MA 112), Mathematics 116 (MA 116), or a course with MA 116 as a prerequisite.
- Six hours of English composition, three of which must be at the upper division level (EN 300).
- The 102 level course in one of the languages offered by the Department of Modern Languages, or the equivalent. Course work taken to fulfill this requirement may not be applied toward general education requirements for completing the BA degree. Equivalents of the required course work are defined as follows:
  - o Successful completion of a similar course of study in a foreign language taken at an accredited post-secondary institution.
  - o Successfully challenging the departmentally administered 102 level examinations or score of "4" or higher on the AP or CLEP foreign language examinations.
    Note: Native speakers of a language other than English may not receive credit for any 100 level courses in that language.
- Students must complete 15 hours in Arts and Humanities with at least 3 hours selected from the area of Art, Music, or Theater; the remaining credit hours must be selected from at least two other disciplines. To meet the distribution requirement in the Social Sciences, students must complete 15 hours, from this group, with no more than 6 hours counted from any one discipline in Social Sciences. To meet the distribution requirement in the Natural Sciences and Mathematics, students must complete 12 hours of Natural Sciences and Mathematics courses; the credit hours must include courses from at least two disciplines other than Mathematics. No more than 6 hours may be counted for General Education credit from any one discipline except in Biology, Chemistry, Physics, or Mathematics where up to 8 hours may be counted if earned in two separate General Education courses. Courses are selected in consultation with an advisor from the approved courses in each of the distribution groupings.
- Candidates must have a cumulative grade point average of at least 2.0 and a grade of C or better in each course in the major, required correlate courses and the two English composition courses. A double major may be completed within the 124 hour total by meeting all the requirements of the two majors. Students may also elect a minor in the College of Arts and Sciences. The minor shall consist of no less than 15 hours specified by the department of which 6 must be at the upper division level. Candidates for a minor must have a grade of C or better in each course in the minor. This optional minor is not to be confused with any other department's required minor or required correlated courses. See the General Information section of this catalog concerning hours transferred to Washburn University.

Proposed Change to Degree Requirements and Catalog Language
Bachelor of Arts Degree

Each candidate is required to complete the following:

- A minimum of 120~~One hundred twenty-four~~ hours, 84 of which must be graded and 45 of which must be at the 300 or 400 level.
- A major consisting of no less than 24 hours, of which at least 12 must be at the upper division level.
- ~~Seventy-eight Eighty-Four~~Eighty hours outside the major discipline.
- A grade of C or better in Mathematics 112 (MA 112), Mathematics 116 (MA 116), or a course with MA 116 as a prerequisite.
- ~~Six hours of English composition, three of which must be at the upper division level (EN 300).~~ EN 101 (or EN 102) and EN 300
- The 102 level course in one of the languages offered by the Department of Modern Languages, or the equivalent. Course work taken to fulfill this requirement may not be applied toward general education requirements for completing the BA degree. Equivalents of the required course work are defined as follows:
    - Successful completion of a similar course of study in a foreign language taken at an accredited post-secondary institution.
    - Successfully challenging the departmentally administered 102 level examinations or score of "4" or higher on the AP or a score of 63 on the CLEP foreign language examinations.
      Note: Native speakers of a language other than English may not receive credit for any 100 level courses in that language.
- Students must complete 15 hours in Arts and Humanities with at least 3 hours selected from the area of Art, Music, or Theater; the remaining credit hours must be selected from at least two other disciplines. To meet the distribution requirement in the Social Sciences, students must complete 15 hours, from this group, with no more than 6 hours counted from any one discipline in Social Sciences. To meet the distribution requirement in the Natural Sciences and Mathematics, students must complete 12 hours of Natural Sciences and Mathematics courses; the credit hours must include courses from at least two disciplines other than Mathematics. No more than 6 hours may be counted for General Education credit from any one discipline except in Biology, Chemistry, Physics, or Mathematics where up to 8 hours may be counted if earned in two separate General Education courses. Courses are selected in consultation with an advisor from the approved courses in each of the distribution groupings.
- Candidates must have a cumulative grade point average of at least 2.0 and a grade of C or better in each course in the major, required correlate courses and the two English composition courses. A double major may be completed within the ~~124~~ 120 hour total by meeting all the requirements of the two majors. Students may also elect a minor in the College of Arts and Sciences. The minor shall consist of no less than 15 hours specified by the department of which at least 6 must be at the upper division level. Candidates for a minor must have a grade of C or better in each course in the minor. This optional minor is not to be confused with any other department's required minor or required correlated courses. See the General Information section of this catalog concerning hours transferred to Washburn University.

FACULTY AGENDA ITEM

Date: 02/09/18

Submitted by: Laura Stephenson, CAS Dean, ext. 1561

SUBJECT: TOTAL NUMBER OF CREDIT HOURS REQUIRED FOR THE BACHELOR OF SCIENCE DEGREE IN CAS

Description: Proposal is to change the minimum credit hour requirement for the Bachelor of Science Degree from 124 to 120.

Rationale: In 2011, Washburn University approved a 120 minimum credit hour requirement for all baccalaureate degrees. Approving this proposal would similarly set the minimum required credit hours for CAS Bachelor of Science degrees at 120. This proposal will not modify existing degrees that specify more than 120 required hours. New programs can be proposed that require more than 120 hours, at the discretion of the proposing academic unit.

Financial Implications: None

Proposed Effective Date: Upon the publication of the 2018-2019 Undergraduate Catalog

Request for Action: Approval by Faculty Senate

Approved by:

Attachments Yes ☒ No ☐

Proposal to Change the Degree Requirements for the Bachelor of Science Degree in the CAS

Current Degree Requirements and Catalog Language
Bachelor of Science Degree

Each candidate is required to complete the following:
- One hundred twenty four hours, 84 of which must be graded and 45 of which must be at the 300-400 level.
- A major consisting of at least 30 hours, and no more than 48 in one department, of which 12 must be at the upper division level. Majors for the Bachelor of Science degree are limited to the following disciplines: Biology, Chemistry, Computer Information Sciences, Mathematics, Medical Technology, Athletic Training, and Physics.
- A thirty hours concentration (minor) chosen from the Natural Sciences and Mathematics Division in departments other than the major, and with at least 20 of these hours in one department. The thirty hours must be approved by the student's major department chairperson.
- Seventy-six hours outside the major discipline, 30 of which must be allocated to the required minor.
- Nine hours in each of the three distribution groups (Arts and Humanities, Social Sciences, and Natural Sciences and Mathematics) with courses selected from at least two disciplines in each group, to include 3 hours in Art, Music, or Theatre within the 9 hours of Arts and Humanities. Courses are selected in consultation with an advisor from the approved courses in each of the distribution groupings.
- Mathematics 112 (MA 112), Mathematics 116 (MA 116) or a course with MA 116 as a prerequisite with a grade of C or better.
- Six hours of English Composition.
- Candidates must have a cumulative grade average of at least 2.0 and a grade of C or better in each course in the major and minor and in English Composition. See the General Information section of this catalog concerning hours transferred to Washburn University.

In addition to offering the traditional Bachelor of Science Degree in Physics or Mathematics, Washburn University offers a 3-2 engineering program in cooperation with Kansas State University and the University of Kansas. Under this program a typical student will take three years of prescribed curriculum at Washburn and then transfer to Kansas State University or the University of Kansas. Upon completion of one year of prescribed work at either of the institutions named, the student will be awarded the Bachelor of Science degree from Washburn, and upon completion of the requirements of the selected school, the appropriate engineering degree will be awarded by that school. Bachelor of Science candidates should meet with the chairperson of their major department no later than their third semester to complete a declaration of major form.

Proposed Change to Degree Requirements and Catalog Language
Bachelor of Science Degree

Each candidate is required to complete the following:

- A minimum of 120.~~One hundred twenty-four~~ hours, 84 of which must be graded and 45 of which must be at the 300-400 level.
- A major consisting of at least 30 hours, and no more than 48 in one department, of which 12 must be at the upper division level. ~~Majors for the Bachelor of Science degree are limited to the following disciplines: Biology, Chemistry, Computer Information Sciences, Mathematics, Medical Technology, Athletic Training, and Physics.~~
- A ~~thirty-hours.~~30 hour concentration ~~(minor)~~ chosen from the Natural Sciences and Mathematics Division in departments other than the major, ~~and~~ with at least 20 of these hours in one department ~~("the concentration").~~ The ~~thirty~~ 30 hours must be approved by the student's major department chairperson.
- Seventy-~~six~~ two hours outside the major discipline, 30 of which must be allocated to the required concentration ~~minor~~.
- Nine hours in each of the three distribution groups (Arts and Humanities, Social Sciences, and Natural Sciences and Mathematics) with courses selected from at least two disciplines in each group, to include 3 hours in Art, Music, or Theatre within the 9 hours of Arts and Humanities. Courses are selected in consultation with an advisor from the approved courses in each of the distribution groupings.
- ~~Mathematics 112 (MA 112),~~ Mathematics 116 (MA 116) or a course with MA 116 as a prerequisite with a grade of C or better.
- ~~Six hours of English Composition.~~ EN 101 (or EN 102) and EN 300
- Candidates must have a cumulative grade average of at least 2.0 and a grade of C or better in each course in the major, and concentration ~~minor~~, and in English Composition. See the General Information section of this catalog concerning hours transferred to Washburn University.

In addition to offering the traditional Bachelor of Science Degree in Physics or Mathematics, Washburn University offers a 3-2 engineering program in cooperation with Kansas State University and the University of Kansas. Under this program a typical student will take three years of prescribed curriculum at Washburn and then transfer to Kansas State University or the University of Kansas. Upon completion of one year of prescribed work at either of the institutions named, the student will be awarded the Bachelor of Science degree from Washburn, and upon completion of the requirements of the selected school, the appropriate engineering degree will be awarded by that school. Bachelor of Science candidates should meet with the chairperson of their major department no later than their third semester to complete a declaration of major form.

FACULTY AGENDA ITEM

Date: 02/09/18

Submitted by: Laura Stephenson, CAS Dean, ext. 1561

SUBJECT: CHANGE IN THE MINIMUM REQUIRED HOURS IN THE ASSOCIATE OF ARTS IN NATURAL SCIENCE AND MATHEMATICS DEGREE

Description: To reduce the minimum required hours from 62 to 60 in the Associate of Arts in Natural Science and Mathematics Degree and to remove MA 112: Essential Mathematics from the General Education Course Requirements

Rationale: This change from 62 to 60 total hours in the Associate of Arts in Natural Science and Mathematics Degree is being recommended in order to establish continuity with the new 120 degree minimum in the Bachelors of Arts. The removal of MA 112: Essential Mathematics is to establish a firm mathematical foundation that is required for additional coursework in Natural Science and Mathematics by requiring students to take MA 116: College Algebra. Financial Implications: None

Proposed Effective Date: Upon the publication of the 2018-2019 Undergraduate Catalog

Request for Action: Approval by Faculty Senate

Approved by:

Attachments Yes ☒ No ☐

NATURAL SCIENCES AND MATHEMATICS
COLLEGE OF ARTS AND SCIENCES

Morgan 209
(785) 670-1636

DEGREE OFFERED

Associate of Arts

Natural Sciences and Mathematics

The Associate of Arts degree in Natural Sciences and Mathematics is intended to give students a broad background in a particular area of liberal studies. Students are required to take coursework in at least three disciplines within Natural Sciences and Mathematics and to take a concentration in one subject area. The credits earned in this associate degree are all applicable toward a bachelor's degree. For information and advising on this degree, please contact the College of Arts and Sciences in Morgan Hall 209.

THE MAJOR

For the Associate of Arts Degree in Natural Sciences and Mathematics, a student must complete 60 62 semester hours with a minimum grade point average of 2.0. Twenty-four credit hours must be completed at Washburn University; of these, 12 of the last 24 must be Washburn University credits. Forty-two hours must be graded. A student may not take the A/pass/fail option in the area of concentration without obtaining written permission from the chairperson of the department offering the course and filing it with the University Registrar's Office. The application for degree should be on file before enrolling for the last 15 hours.

STUDENT LEARNING OUTCOMES

Washburn University students completing this degree, upon graduation, are expected to have:

Acquired an introductory knowledge of the basic principles of science and mathematics.

Developed the ability to understand and utilize the scientific method.

Acquired a foundation for continuing academic study.

Specific course requirements are as follows:

General Education

English Composition (three semester hours, English 101 or its equivalent)

MA 112: Essentials Mathematics or MA 116: College Algebra with a grade of C or better (3 semester hours)

Humanities and Creative and Performing Arts (six semester hours from at least two subject areas)

Natural Sciences (six semester hours from at least two subject areas)

Social Sciences (six semester hours from at least two subject areas)

Area of Concentration

(24 semester hours of Natural Sciences and Mathematics coursework does not include six hours of Natural Sciences and Mathematics general education.)

1. The 24 hours of course work will include at least six hours each from a minimum of three subject areas within the Natural Sciences and Mathematics.
2. At least 12 hours will be from one subject area. These courses will be selected from a list developed by the faculty in that subject area and may include six hours of upper-division credit. The department from which the student takes the 12-hour concentration will be the effective administrative home of the student.
3. A minimum of a C grade is required in all courses within the area of concentration, including the six hours of general education in the Natural Sciences and Mathematics.
4. At least 12 of the hours remaining for the degree will be chosen from outside the area of concentration.

FACULTY AGENDA ITEM

Date: 02/09/18

Submitted by: Laura Stephenson, CAS Dean, ext. 1561

SUBJECT: CHANGE IN THE MINIMUM REQUIRED CREDIT HOURS IN THE CAS ASSOCIATE OF ARTS DEGREE IN HUMANITIES AND CREATIVE AND PERFORMING ARTS

Description: To reduce the minimum required hours from 62 to 60 in the CAS Associate of Arts Degree in Humanities and Creative and Performing Arts

Rationale: This change from 62 to 60 total hours in the CAS Associate of Arts Degree in Humanities and Creative and Performing Arts is being recommended in order to establish continuity with the new 120 degree minimum in the Bachelors of Arts Degree

Financial Implications: None

Proposed Effective Date: Upon the publication of the 2018-2019 Undergraduate Catalog

Request for Action: Approval by Faculty Senate

Approved by:

Attachments Yes ☒ No ☐

HUMANITIES AND CREATIVE AND PERFORMING ARTS

COLLEGE OF ARTS AND SCIENCES

Morgan 209
(785) 670-1636

DEGREE OFFERED

Associate of Arts

The Associate of Arts degree in the Humanities and Creative and Performing Arts is intended to give students a broad background in a particular area of liberal studies. Students are required to take coursework in at least three disciplines within the Humanities and Creative and Performing Arts and to select a concentration in one discipline. The credits earned in this associate degree are all applicable toward a bachelor's degree. For information and advising on this degree, please contact the College of Arts and Sciences in Morgan Hall 209.

THE MAJOR

For the Associate of Arts in Humanities and Creative and Performing Arts, a student must complete 60 62 semester hours with a minimum grade point average of 2.0. Twenty-four credit hours must be completed at Washburn University; of these, 12 of the last 24 must be Washburn University credits. Forty-two hours must be graded. A student may not take the pass/fail option in the area of concentration without obtaining and filing with the Registrar's office written permission from the chairperson of the department offering the course.

STUDENT LEARNING OUTCOMES

Washburn University students completing this degree, upon graduation, are expected to have:
Acquired an introductory knowledge of the disciplines comprising the humanities.
Acquired a foundation for continuing academic study.

Specific course requirements are as follows:

English Composition (three semester hours, English 101 or its equivalent)
MA 112 or MA 116 College Algebra with a grade of C or better
Humanities and Creative and Performing Arts (six semester hours of courses from at least two subject areas)
Natural Sciences and Mathematics (six semester hours of courses from at least two subject areas)
Social Sciences (six semester hours from at least two subject areas)

Area of Concentration

(24 semester hours of Humanities and Creative and Performing Arts coursework does not include six hours of Humanities and Creative and Performing Arts general education.)

1. The 24 hours of course work will include at least six hours each from a minimum of three subject areas within the Humanities and Creative and Performing Arts.
2. At least 12 hours will be from one subject area. These courses will be selected from a list developed by the faculty in that subject area and may include six hours of upper-division credit. The department from which the student takes the 12-hour concentration will be the effective administrative home of the student.
3. A minimum of a C grade is required in all courses within the area of concentration, including the six hours of general education in the Humanities and Creative and Performing Arts.
4. At least 12 of the hours remaining for the degree will be chosen from outside the area of concentration.

FACULTY AGENDA ITEM

Date: 02/09/18

Submitted by: Laura Stephenson, CAS Dean, ext. 1561

SUBJECT: CHANGE IN THE MINIMUM REQUIRED HOURS IN THE ASSOCIATE OF LIBERAL STUDIES DEGREE

Description: To reduce the minimum required hours from 62 to 60 and to adjust the elective hours from 23-26 hours to 21-24 hours in the Associate of Liberal Studies Degree

Rationale: This change from 62 to 60 total hours and from 23-26 elective hours to 21-24 elective hours in the Associate of Liberal Studies Degree is being recommended in order to establish continuity with the new 120 degree minimum in the Bachelor of Arts Degree

Financial Implications: None

Proposed Effective Date: Upon the publication of the 2018-2019 Undergraduate Catalog

Request for Action: Approval by Faculty Senate

Approved by:

Attachments Yes ☒ No ☐

ASSOCIATE OF LIBERAL STUDIES DEGREE

COLLEGE OF ARTS AND SCIENCES

Morgan 209
(785) 670-1636

The Associate of Liberal Studies degree is intended to give students a broad background in liberal studies in preparation for further study or employment.

STUDENT LEARNING OUTCOMES FOR ASSOCIATE OF LIBERAL STUDIES

Washburn University students completing the Associate of Liberal Studies degree, upon graduation, are expected to have:

Acquired an introductory knowledge of the disciplines comprising the humanities, natural sciences, and social sciences.

Acquired a foundation for continued academic study.

Core Requirements (C or Better)

MA 112/116 Mathematics (3)
EN 101 Freshman Composition (3)
WU 101 Washburn Experience (3)*

General Education Requirements

Social Sciences (minimum of 2 disciplines) (6)
Natural Sciences/Mathematics (minimum of 2 disciplines) (6)
Arts/Humanities (minimum of 2 disciplines) (6)

Specific Additional Requirements: Choose Plan A or Plan B

Plan A Coursework (C or Better)

A focus of at least 12 hours in one College of Arts and Sciences discipline (12)
Courses used to satisfy general education requirements cannot be used to count toward this 12-hour total.

Plan B Coursework (C or Better)

Courses selected from the general education disciplines (12)
Courses used to satisfy general education requirements cannot be used to count toward this 12-hour total.

Electives

Additional coursework to achieve a minimum of 60 62 hours** (21-24 23 26 hours)

*Students transferring to Washburn University with at least 24 hours with a GPA of 2.0 or higher AND those who have completed 24 hours by Spring 2014 are exempt from the WU101 requirement.

**No more than 27 hours in a single discipline excluding core requirements may be included in the 60 62 hour total. Minimum of 24 hours from Washburn with 12 of the last 24 hours at Washburn. Minimum GPA of 2.0.

FACULTY AGENDA ITEM

Date: 08/09/18

Submitted by: Laura Stephenson, CAS Dean, ext. 1561

SUBJECT: CATALOG LANGUAGE CHANGE FOR BACHELOR OF SCIENCE IN GENERAL SCIENCE

Description: To remove the wording "Candidates for this program should meet with the chairperson of the Natural Science and Mathematics division no later than their third semester to complete a declaration of major" in the Bachelor of Science in General Science paragraph in the 2018-2019 Undergraduate Catalog.

Rationale: *Why is this being recommended? For curriculum items, rationale should include student learning assessment data used for curricular change. Rationale may also include, but not be limited to, labor market data, enrollment increase/decrease, accreditation requirement changes, and student course feedback information.*

Financial Implications: None

Proposed Effective Date: Upon the publication of the 2018-2019 Undergraduate Catalog

Request for Action: Approval by Faculty Senate

Approved by:

Attachments Yes ☒ No ☐

Bachelor of Science in General Science

An alternative program to the Bachelor of Science described above is the Bachelor of Science in General Science. A student may elect this program by substituting the following requirements for the major and minor requirements listed above. The candidate must take at least eight hours of course work in each of the subject areas of Biology, Chemistry, Computer Information Sciences, Mathematics and Physics/ Astronomy. These hours must be in courses that would count toward a major in each of the respective departments. Also, an additional 20 hours of course work that would be appropriate for majors in the listed departments must be completed by the student, at least 12 hours of which must be in upper division courses. Students desiring middle school teaching certification in General Science should contact the certification office in the Department of Education for specific requirements relative to that certification. ~~Candidates for this program should meet with the chairperson of the Natural Science and Mathematics division no later than their third semester to complete a declaration of major.~~