CHANGES AND DELETIONS IN DEGREE PROGRAM REQUIREMENTS

	Signature	Review Recommendation	Review Date
Department	_(signature)_	Approved	11/17/06
Division	_(signature)_ Friese	Approve	4/11/07
Dean	Gordon D McQuere	Approved	9/11/07
Dept. of Educ.			

(If course relates to teacher certification program.)

Curriculum Committee	_(signature)_	Approve	10/10/07
Accepted by CFC	_(signature)_	Approve	11/14/07
Accepted by CAS Faculty	_(signature)_	Approved	4/16/08
			Date

Degree Program:

Master of Education, Reading Specialist (P-12)

Description of Proposed Changes to the Program:

The Standards for the Reading Specialist that are used to guide preparation of teachers for this licensure have undergone revision for Kansas Department of Education during the fall of 2006. These new standards are aligned with those put forward by the International Reading Association. It is expected that the Kansas State Board of Education will act to adopt them in the next few months. The standards have been reduced from sixteen to five, yet all standards from the previous document are addressed. The knowledge and skills relating to reading have not changed dramatically and must still be demonstrated by those preparing to be Reading Specialists. One notable exception is that all standards now relate to both reading and writing, so Reading Specialists need specific training in the area of writing.

While writing has been addressed to some degree in several courses within the Reading Specialist Program, writing has not been given as much emphasis as will now be required. To adequately address both aspects of literacy, it will be necessary to adjust the program to include a specific course in writing. This course is already established and has been taught: RD 516 Teaching Writing. To provide the needed space for this to occur within the established 36 hour master's degree, RD 518 Integraging Language and Literacy Through Inquiry will be dropped. The concepts of an integrated curriculum can still be addressed within the course on writing, and in other courses within the program.

Detail of Course Changes:

RD 516 Teaching Writing (3)   Added

RD 518 Integrating Language and Literacy Through Inquiry   Deleted

M.Ed. Reading Specialist (P-12)

Current Program:	Proposed Program:

Core Courses:
ED 560 Advanced Educational Psychology
ED 565 Introduction to Educational Research
ED 568 Curriculum Development & Evaluation

Core Courses:
ED 560 Advanced Educational Psychology
ED 565 Introduction to Educational Research
ED 568 Curriculum Development & Evaluation

Reading Courses:
RD 484 Reading in the Content Area
RD 510 Classroom Reading Instruction
RD 512 Literature for Literacy Instruction
RD 518 Integrating Lang. & Literacy Through Inquiry
RD 520 Assessment Procedures in Reading
RD 522 Instruction for Readers at Risk
RD 526 The Reading Specialist
RD 528 Language Development and Assessment
RD 530 Literacy Practicum

Reading Courses:
RD 484 Reading in the Content Area
RD 510 Classroom Reading Instruction
RD 512 Literature for Literacy Instruction
RD 516 Teaching Writing
RD 520 Assessment Procedures in Reading
RD 522 Instruction for Readers at Risk
RD 526 The Reading Specialist
RD 528 Language Development & Assessment
RD 530 Literacy Practicum

This 36 hour program and completion of required Capstone Experience leads to a M. Ed. in Reading. Upon successful completeion of the Reading Specialist content examination (Praxis), a conditional licensure as a Reading Specialist may be obtained through KSDE. Professional licensure as a Reading Specialist is earned by successful completion of a supervised internship during the conditional licensure period (2 years) after graduation. Those wishing to seek this license must successfully complete the four performance units while enrolled in the internship (minimum of 2 semesters):

RD 550 The Reading Specialist Internship (1)

COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	*Bruce J. Mechtly*	*Approval*	*11-28-07*
Division	*Sam A. Leung*	*Approve*	*12/13/07*
Dept. of Educ.			
(If course relates to teacher certification program.)			
Dean	*Gordon McQuere*	*Approved*	*1/31/08*
Curriculum Committee	*Tom Prasch*	*Approve*	*2/26/08*
Accepted By CFC	*David J. Freeman*	*Approved*	*3-5-08*
CAS Faculty	*Sara A. Tucker*	*Approved*	*4/16/08*

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

1. Title of program.

Bachelor of Arts in Computer Information Science

2. Exact proposed catalog description.

CIS Core (13 hours)
CM111 Introduction to Structured Programming (4)
CM231 Computer Organization/Assembler Language (3)
CM245 Contemporary Programming Methods (3)
CM261 Networked Systems I (3)

CIS Required (21 hours)
CM307 Data Structures and Algorithmic Analysis (3)
CM322 Operating Systems (3)
CM331 Computational Intelligence (3)
CM333 Software Engineering (3)
CM336 Database Management Systems (3)
CM361 Networked Systems II (3)
CM467 CIS Capstone Project (2)
CM468 CIS Senior Seminar (1)

Correlated (33 hours)
PH220 Logic (3)
EC200 Principles of Microeconomics (3)
EC201 Principles of Macroeconomics (3)
BU342 Organization and Management (3) or BU346 Organizational Behavior (3)
EN208 Business and Technical Writing (3)

Revised 3/5/2002

CN150 Public Speaking (3)
CN340 Professional Interviewing (3) or CN341 Persuasive Speaking (3)
MA140 Statistics (3)
MA141 Applied Calculus I (3) or MA151 Calculus and Analytic Geometry I (5)
MA145 Mathematics for Decision Making (3)
MA206 Discrete Mathematics for Computing (3)

plus 12 hours of electives (approved by advisor, min 6 hrs upper division)
plus all University and BA General Education requirements

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3. Rationale for offering this program.

This new degree represents a consolidation of the current BS in Computer Information Science and the current BA in Computer Information Systems into BS and BA degrees that will be easier for CIS faculty to support. We currently have a lower enrollment than we had in the past, and this consolidated degree will eliminate some duplication in effort in supporting two different degrees.

4. List any financial implications.

None.

1COLLEGE OF ARTS AND SCIENCES
NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	_JL Bla_	approve	1/18/08
Division	Sam W. Leung	approve	2/15/08
Dept. of Educ. (If course relates to teacher certification program.)			
Dean	Gordon D. McQuere	Approved	8/19/08
Curriculum Committee	Tom Prul	Approved	4/8/08
Accepted By CFC	David B. Lierman	Approved	4-9-08
CAS Faculty	Hans A. Styph	Approved	4/16/08

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

1. Title of program.

Bachelor of Science in Computational Physics

2. Exact proposed catalog description.

To major in Computational Physics with a Bachelor of Science Degree, one must satisfactorily complete Physics 261 and 262 or 281 and 282, 291, 320, 330, 334, 335, 340, 350, 365, 366, and 368, and pass a written (Major Field Test) and/or oral comprehensive examination. The required correlated courses in Computer Information Sciences are 111, 113, 170, 244, 245, 307, and 390. The required correlated courses in Mathematics and Statistics are 151, 152, 153, 206, 241, 301, 343, and 376.

3. Rationale for offering this program.

Statistics compiled by the American Institute of Physics (AIP) show that 5 to 8 years after graduation 24% of physics bachelors are employed in the category that AIP calls software. In addition, 19% are in engineering. Of those employed in the software area, knowledge and skills rated as important are 94% for computer programming and 90% for software development. The figures for those in engineering are 37% and 24%. But when physics bachelors employed in engineering, math, or science rated their bachelors' education in terms of scientific software, only 20% rated it as very good. A National Science Foundation (NSF) study has called for increased computational background in all the sciences at both the bachelors and post-graduate levels.

Full computational physics degrees are still relatively rare. In the state of Kansas KSU, ESU, FHSU, and WSU have no computational physics degree, concentration or emphasis. KU offers a BA with a concentration in computational physics with 9 credit hours of computer science required. PSU has a BS

Revised 3/5/2002

with an emphasis in computational physics that requires only 6 credit hours of computer science.

Computational physics is becoming the third branch of physics in conjuction with and complementing the long standing experimental and theoretical branches. Washburn University physics faculty have expertise in the field of computational physics. The University now has the facilities (HiPACE), the faculty, and the opportunity to attract students into an exciting new program.

4. List any financial implications.

None, as nearly all the courses are currently existing. Two new courses, PS 291 and PS 368, will need to be developed. These will be included in the course rotation and covered by existing faculty.

Recommended Academic Schedule
Bachelor of Science Degree
Major in Computational Physics

Freshman

MA151 Calculus and Analytical Geometry I	5	MA152 Calculus and Analytical Geometry II	5
CM111 Introduction to Structured Programming	4	PS281 General Physics I	5
EN101 Freshman Composition	3	CM113 Visual Programming	3
PE198 Lifetime Wellness	2	MA206 Discrete Mathematics for Computing	3
General Education Course	3	General Education Course	1
Total Fall	17	Total Spring	17

Sophomore

PS282 General Physics II	5	PS335 Theoretical Mechanics I	3
MA153 Calculus and Analytical Geometry III	3	CM244 The C Programming Language	3
CM170 FORTRAN Programming	3	MA241 Differential Equations	3
PS291 Elementary Computational Physics	2	General Education Course	9
General Education Course	3		
Total Fall	16	Total Spring	18

Junior

CM245 Contemporary Programming Methods	3	MA343 Applied Statistics	3
MA301 Linear Algebra	3	CM307 Data Structures and Algorithmic Analysis	3
MA376 Numerical Analysis	3	PS320 Electromagnetic Theory I	3
PS365 Introduction to Theoretical Physics	3	PS334 Thermodynamics	3
PS366 Introduction to Computational Physics	3	PS340 Electronics	3
Total Fall	15	Total Spring	15

Senior

CM390 Special Topics in Computer Science	3	PS368 Computational Physics Research	3
PS330 Optics	3	EN300 Advanced Composition	3
PS350 Modem Physics I	3	Elective	6
General Education Course	3		
Elective	2		
Total Fall	14	Total Spring	12

B.S. Degree, Major in Computational Physics

PHYSICS COURSES

TITLE	COURSE NUMBER	CREDITS
College/General Physics I	PS261/281	5
College/General Physics II	PS262/282	5
Elementary Computational Physics	PS291	2
Electricity-Magnetism I	PS320	3
Optics	PS330	3
Thermodynamics	PS334	3
Theoretical Mechanics I	PS335	3
Electronics	PS340	3
Modern Physics I	PS350	3
Introduction to Theoretical Physics	PS365	3
Introduction to Computational Physics	PS366	3
Computational Physics Research	PS368	3

CORRELATED COURSES

Computer Information Sciences

TITLE	COURSE NUMBER	CREDITS
Introduction to Structured Programming	CM111	4
Visual Programming	CM113	3
FORTRAN Programming	CM170	3
C Programming	CM244	3
Contemporary Programming Methods	CM245	3
Data Structures and Algorithmic Analysis	CM307	3
Special Topics in Computer Science	CM390	3

Mathematics and Statistics

TITLE	COURSE NUMBER	CREDITS
Calculus and Analytical Geometry I	MA151	5
Calculus and Analytical Geometry II	MA152	5
Calculus and Analytical Geometry III	MA153	3
Discrete Mathematics for Computing	MA206	3
Differential Equations	MA241	3
Linear Algebra	MA301	3
Applied Statistics	MA343	3
Numerical Analysis	MA376	3

TOTAL SCIENCE AND MATH CREDITS   89

REQUIRED BS MINOR — 30 Credits (Example)

TITLE	COURSE NUMBER	CREDITS
Introduction to Structured Programming	CM111	4
Visual Programming	CM113	3
FORTRAN Programming	CM170	3
C Programming	CM244	3
Contemporary Programming Methods	CM245	3
Data Structures and Algorithmic Analysis	CM307	3
Special Topics in Computer Science	CM390	3
TOTAL		22
Calculus	MA151 and MA152	10

UNIVERSITY AND GENERAL EDUCATION REQUIREMENTS

Physics	39
Computer Science	22
Mathematics and Statistics	28
English	6
Physical Education	2
General Education	19
Electives	8
TOTAL	124

UPPER DIVISION CREDITS

PS320, PS330, PS334, PS335, PS340	15
PS350, PS365, PS366, PS368	12
CM307, CM390	6
MA301, MA343, MA376	9
EN300	3
TOTAL	45

CREDITS OUTSIDE MAJOR   85

ASSESSMENT PLAN
For
Bachelor of Science Degree in Computational Physics

MISSION STATEMENT

The program provides graduates the appropriate technical training in preparation for careers in the computational physics workforce, or for continuing education in computational physics or a related professional school.

OBJECTIVES

Computational physics majors at Washburn University, upon graduation, are expected to have:

1) achieved a comprehensive understanding of the vocabulary and methodology of physics;

2) achieved a comprehensive understanding of the vocabulary and methodology of computer science and mathematics;

3) integrated the physics, computer science, and mathematics knowledge into a cohesive understanding of the field of computational physics;

4) demonstrated the ability to move from observations to logical conclusions and apply analytical thinking to problem solving;

5) shown comprehensive knowledge of the subject matter in terms of content, problem solving, experimental design, and data reduction and analysis;

6) acquired an appreciation for scholarly activity and research.

ASSESSMENT METHODS

The above objectives are assessed for the computational physics major by:

1) the percentage of students performing at or above the 70% level on the measure (final exam, homework assignments, written laboratory reports, and computational assignments) appropriate to the course;

2) completing (in the last semester) the ETS Major Field Test in Physics at the 50th percentile or better;

3) presenting a written report on results of the Computational Physics Research course passed with a grade of C or better.

The results of evaluations will be reported to the chair of the department, who will maintain records on performance outcomes of majors as a group.

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Signature	Recommendation	Review Date
Dept. Chair	*Bruce J. Mechly*	*Approval*	*11-28-07*
Division	*San H. Leung*	*Approve*	*12/13/07*
Dept. of Educ.			

(If course relates to teacher certification program.)

	Signature	Recommendation	Review Date
Dean	*Gordon D McQuere*	*Approved*	*1/31/08*
Curriculum Committee	*Thu Prul*	*Approve*	*2/26/08*
Accepted By CFC	*David P. Freeman*	*Approved*	*3-5-08*
CAS Faculty	*Kena A. Huyt*	*Approved*	*4-16-08*

	Faculty	University	WU Board
Approved By:	Senate	Faculty	of Regents

General Information: Change ☐   Deletion ☒

1. Reason for this program change or deletion?
The old degrees are being phased out and replaced by a new BS and BA in CIS.

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

Computer Information Systems (Bachelor of Arts)

Computer Information Systems Requirements:(22 hrs)
CM 111 Introduction to Structured Programming (4)
CM 245 Contemporary Programming Methods (3)
CM 333 Software Engineering (3)
CM 335 Advanced Applications Programs and Design (3)
CM 336 Database Management Systems (3)
CM 337 Systems Analysis and Design (3)
CM 467 Computer Information Sciences Capstone Project (2)
CM 468 Computer Information Sciences Senior Seminar (1)
    AND
Approved CM Electives (15 hours) At least 6 of the elective hours must be upper division

Note: Approved List of CM Electives available from the Computer Information Sciences Department. (Recommend: CM113 Visual Programming, CM307 Data Structures and Algorithmic Analysis and CM370 Software Project Management).

Required Correlated Courses: (51 hours)
AC 224 Financial Accounting (3)
AC 225 Managerial Accounting (3)
EC 200 Principles of Microeconomics (3)
EC 201 Principles of Macroeconomics (3)
BU 250 Management Information Systems (3)

BU 305 Contemporary Information Systems (3)
BU 309 Business Data Communication and Networking (3)

One of the following two:
    BU 342 Organization and Management (3) OR
    BU 346 Organizational Behavior (3)
BU 360 Principals of Marketing (3)
One BU, AC, or EC upper division course
(Recommend: AC 330 Accounting Information Systems)
EN 208 Business and Technical Writing (3)
CN 150 Public Speaking(3)
One of the following two:
    CN 340 Professional Interviewing(3) OR
    CN 341 Persuasive Speaking(3)
MA 140 Statistics (3)
One of the following two:
    MA 141 Applied Calculus I (3) OR
    MA 151 Calculus and Analytic Geometry I (5)
MA 145 Mathematics for Decision Making (3)
MA 206 Discrete Mathematics for Computing (3)
Note: One must also meet the Bachelor of Arts University Requirements.

Deletions

3. Is the program being deleted from the catalog being replaced with another program? Yes ☒   No ☐
    If so, please explain.
The old degrees are being phased out and replaced by a new BS and BA in CIS.

4. Is the content of this program being distributed to another program?
Yes.

Changes

5. Describe the nature of the proposed change.

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

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Signature	Recommendation	Review Date
Dept. Chair	*Bruce J. Mechtly*	*Approval*	*1-30-08*
Division	*San W. Leung*	*Approve*	*1-30-08*
Dept. of Educ.			
(If course relates to teacher certification program.)			
Dean	*Gordon D. McQuere*	*Approved*	*1/31/08*
Curriculum Committee	*Tom Prasch*	*Approve*	*2/26/11*
Accepted By CFC	*David A. Leeman*	*Approved*	*3-5-08*
CAS Faculty	*Jane A. Tryd*	*Approved*	*4-16-08*

Approved By:	Faculty Senate	University Faculty	WU Board of Regents	

<u>General Information:</u> Change ☒ Deletion ☐

1. Reason for this program change or deletion?

   The changes in this degree are accompanied by a consolidation of the current BS in Computer Information Science and the current BA in Computer Information Systems into BS and BA degrees that will be easier for CIS faculty to support. We currently have a lower enrollment than we had in the past, and this consolidated degree will eliminate some duplication in effort in supporting two different degrees.

   An added benefit of this degree is that the student will be more likely to minor in an NSD department other than Math. Requiring fewer math courses opens many possibilities of interdisciplinary crossover with Physics, Chemistry and Biology. We anticipate that most BS majors will choose Math as their minor area, in which case they will be required to take MA 152 and MA207.

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

   Bachelor of Science in Computer Information Science

   CIS Core (13 hours)
   CM111 Introduction to Structured Programming (4)
   CM231 Computer Organization/Assembler Language (3)
   CM245 Contemporary Programming Methods (3)
   CM261 Networked Systems I (3)

   CIS Required (21 hours)
   CM307 Data Structures and Algorithmic Analysis (3)
   CM322 Operating Systems (3)
   CM331 Computational Intelligence (3)

CM333 Software Engineering (3)
CM336 Database Management Systems (3)
CM361 Networked Systems II (3)
CM467 CIS Capstone Project (2)
CM468 CIS Senior Seminar (1)

Correlated (35 hours)
PH220 Logic (3)
EC200 Principles of Microeconomics (3)
EC201 Principles of Macroeconomics (3)
BU342 Organization and Management (3) or BU346 Organizational Behavior (3)
EN208 Business and Technical Writing (3)
CN150 Public Speaking (3)
CN340 Professional Interviewing (3) or CN341 Persuasive Speaking (3)
MA140 Statistics (3)
MA151 Calculus and Analytic Geometry I (5)
MA145 Mathematics for Decision Making (3)
MA206 Discrete Mathematics for Computing (3)

plus 12 hours of electives (approved by advisor, min 6 hrs upper division)
plus a 30 hour minor in Natural Sciences (approved by department chair)
plus all University and BS General Education requirements

Deletions

3. Is the program being deleted from the catalog being replaced with another program? Yes ☐   No ☐
    If so, please explain.

4. Is the content of this program being distributed to another program?

Changes

5. Describe the nature of the proposed change.

See above.

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

Yes.

BA Comparison

New BA	Old BA
CIS Core (13 hours)	**CIS Core (7 hours)**
CM111 Introduction to Structured Programming (4)	CM111 Introduction to Structured Programming (4)
CM231 Computer Organization/Assembler Language	
CM245 Contemporary Programming Methods (3)	CM245 Contemporary Programming Methods (3)
CM261 Networked Systems I (3)	
CIS Required (21 hours)	**CIS Required (15 hours)**
CM307 Data Structures and Algorithmic Analysis (3)	
CM322 Operating Systems (3)	
CM331 Computational Intelligence (3)	
CM333 Software Engineering (3)	CM333 Software Engineering (3)
	CM335 Advanced Application Programming and Design
CM336 Database Management Systems (3)	CM336 Database Management Systems (3)
	CM337 Systems Analysis and Design (3)
CM361 Networked Systems II (3)	
CM467 CIS Capstone Project (2)	CM467 CIS Capstone Project (2)
CM468 CIS Senior Seminar (1)	CM468 CIS Senior Seminar (1)
Correlated (33 hours)	**Correlated (51 hours)**
PH220 Logic (3)	
EC200 Principles of Microeconomics (3)	EC200 Principles of Microeconomics (3)
EC201 Principles of Macroeconomics (3)	EC201 Principles of Macroeconomics (3)
	AC224 Financial Accounting (3)
	AC225 Managerial Accounting (3)
	BU250 Management Info Systems (3)
	BU305 Contemporary Info Systems (3)
	BU309 Business Data Communications (3)
BU342 Organization and Management (3) or BU346 Organizational Behavior (3)	BU342 Organization and Management (3) or BU346 Organizational Behavior (3)
	BU360 Principles of Marketing (3)
	BU, AC or EC UD Elective (3)
EN208 Business and Technical Writing (3)	EN208 Business and Technical Writing (3)
CN150 Public Speaking (3)	CN150 Public Speaking (3)
CN340 Professional Interviewing (3) or CN341 Persuasive Speaking (3)	CN340 Professional Interviewing (3) or CN341 Persuasive Speaking (3)
MA140 Statistics (3)	MA140 Statistics (3)
MA141 Applied Calculus I (3) or MA151 Calculus and Analytic Geometry I (5)	MA141 Applied Calculus I (3) or MA151 Calculus and Analytic Geometry I (5)
MA145 Mathematics for Decision Making (3)	MA145 Mathematics for Decision Making (3)
MA206 Discrete Mathematics for Computing (3)	MA206 Discrete Mathematics for Computing (3)
AND 12 hours of approved electives (min 3 hrs CM, min 6 hrs upper division)	AND 15 hours of approved electives (min 9 hrs upper division)

Notes:
1. Content of CM261/361 covers contents of BU309.

2. CM335 and CM307 teach the same level of Java competence, but cover different topics.

3. CM231 & CM322 are in the IS model curriculum and should never have been removed from the BA

New BS	Old BS
CIS Core (13 hours)	**CIS Core (13 hours)**
CM111 Introduction to Structured Programming (4)	CM111 Introduction to Structured Programming (4)
CM231 Computer Organization/Assembler Language (3)	CM231 Computer Organization/Assembler Language (3)
CM245 Contemporary Programming Methods (3)	CM245 Contemporary Programming Methods (3)
CM261 Networked Systems I (3)	CM261 Networked Systems I (3)
CIS Required (21 hours)	**CIS Required (21 hours)**
CM307 Data Structures and Algorithmic Analysis (3)	CM307 Data Structures and Algorithmic Analysis (3)
CM322 Operating Systems (3)	CM322 Operating Systems (3)
CM331 Computational Intelligence (3)	CM331 Computational Intelligence (3)
CM333 Software Engineering (3)	CM333 Software Engineering (3)
CM336 Database Management Systems (3)	CM336 Database Management Systems (3)
CM361 Networked Systems II (3)	CM361 Networked Systems II (3)
CM467 CIS Capstone Project (2)	CM467 CIS Capstone Project (2)
CM468 CIS Senior Seminar (1)	CM468 CIS Senior Seminar (1)
Correlated (33 hours)	**Correlated (42 hours)**
PH220 Logic (3)	PH110 Logic for Computer Programming (3) or PH220 Logic (3)
EC200 Principles of Microeconomics (3)	EC200 Principles of Microeconomics (3)
EC201 Principles of Macroeconomics (3)	EC201 Principles of Macroeconomics (3)
BU342 Organization and Management (3) or BU346 Organizational Behavior (3)	BU342 Organization and Management (3) or BU346 Organizational Behavior (3)
EN208 Business and Technical Writing (3)	EN208 Business and Technical Writing (3)
CN150 Public Speaking (3)	CN150 Public Speaking (3)
CN340 Professional Interviewing (3) or CN341 Persuasive Speaking (3)	CN340 Professional Interviewing (3) or CN341 Persuasive Speaking (3)
MA140 Statistics (3)	MA140 Statistics (3)
MA151 Calculus and Analytic Geometry I (5)	MA141 Applied Calculus I (3) or MA151 Calculus and Analytic Geometry I (5)
	MA142 Applied Calculus II (3) or MA152 Calculus and Analytic Geometry II (5)
MA145 Mathematics for Decision Making (3)	MA145 Mathematics for Decision Making (3)
MA206 Discrete Mathematics for Computing (3)	MA206 Discrete Mathematics for Computing (3)
	MA207 Discrete Mathematics (3)
	MA343 Applied Statistics (3)
plus 12 hours of electives (approved by advisor, min 6 hrs upper division)	plus 12 hours of approved electives (min 6 hrs upper division)
plus a 30 hour minor (approved by department chair)	plus a 30 hour minor (approved by department chair)

Notes:
1. PH110 will no longer be offered so it is removed as a choice.
2. If the minor is in Math, then MA152 and MA207 are required.

PROGRAM CHANGES/DELETIONS   ◻ ORIGINAL

	Signature	Review Recommendation	Review Date
Department	W Spark	Recommend Approval	3/28/07
Division	Ross Frieson	Approve	4/11/07
Dean	Gordon Allouie	Approved	4/11/07
Dept. of Educ.			

(If course relates to teacher certification program.)

Curriculum Committee		Appr	10/10/07
Accepted by CFC		Appr	11/14/07

Approved By CAS Faculty: _____ 4/16/08

General Information: Change ☒   Deletion ☐   Date

1. Complete revised course description (including course number, title, credits, and prerequisites)

Deletions

2. Is the course being deleted from the catalog being replaced with another course? Yes ∩ No ∩ If so, please explain.

3. Is the content of this course being distributed to another course or group of courses?

Changes

4. Describe the nature of the proposed change.

   alternative to

   Have HS 271 Aging and Mental Health (3) as an ~~option for~~ HS 270 Adult Theories on Aging (3) in the Health Education and Promotion concentration.

5. Do you currently have the equipment and facilities to teach this class with the proposed change?

   Yes

   Approved By:
   Faculty Senate _____
   Univ Faculty _____
   WU BOR _____

PROGRAM CHANGES/DELETIONS

Approved by: Faculty Senate
Univ Faculty
WU BOR

	Signature	Review Recommendation	Review Date
Department	Wszpalek	Recommend Approved	3/27/07
Division	Ross Friesen	Approval	4/11/07
Dean	Gordon D McClure	Approved	9/19/07
Dept. of Educ. (If course relates to teacher certification program.)			
Curriculum Committee		appvd	10/16/07
Accepted by CFC		appvr	11/14/07
Accepted by CAS Faculty	Jean G Sigh		4/16/08
			Date

General Information: Change ☑ Deletion ☐

1. Complete revised course description (including course number, title, credits, and prerequisites)

PE 318 Exercise Psychology (3 credits) This course will introduce students to the basics and provide students with a solid foundation of psychological consequences and adherence aspects associated with the psychology of exercise. The interconnection among theory, research, application, and intervention will be utilized in order to apply the knowledge learned in this course to actual situations.

PE 335, Introduction to Human Factors and Ergonomics (3 credits)
This course examines human factors and ergonomics as the interdisciplinary study of humans interacting with elements of systems in the workplace and other environments. Thorough analysis, evaluation, and synthesis are employed in the application of design to optimize well-being and performance.

Prerequisite: junior standing or consent of instructor.

Deletions

2. Is the course being deleted from the catalog being replaced with another course? Yes ☐ No ☐
   If so, please explain.

3. Is the content of this course being distributed to another course or group of courses?

Changes

4. Describe the nature of the proposed change.

It is proposed that PE 318 – Exercise Psychology be considered as a concentration course and that students be given a choice to take either PE 300 – Psychology of Sport and Physical Activity or PE 318 – Exercise Psychology within the B.A. program / Exercise Physiology concentration. Currently, students are required to take PE 300 – Psychology of Sport and Physical Activity. Under this proposal, students who are interested in the psychological aspects associated with sport performance can continue to take PE 300, while those students interested in exercise adherence and psychological responses to exercise can pursue their interests through PE 318. This program change would allow students to take course work in areas that are more relevant to their interest areas and career paths..

It is also proposed that PE 335 – Human Factors and Ergonomics be considered as a concentration course and that students be given a choice to take either PE 257 – Prevention and Care of Athletic Injuries or PE 335 – Human Factors and Ergonomics within the B.A. program / Exercise Physiology concentration. Under this proposal, students who are interested in prevention and care aspects associated with athletics can continue to take PE 257, while those students interested in non-sport, work – related, and exercise environments can pursue their interests through PE 335. This program change would allow students to take course work in areas that are more relevant to their interest areas and career paths.

5. Do you currently have the equipment and facilities to teach this class with the proposed change?

~~No~~ Yes

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Signature	Recommendation	Review Date
Dept. Chair		Approve	11/15/07
Division		Approve	11-28-07
Dept. of Educ.			

(If course relates to teacher certification program.)

Dean	Gordon McKuen	Approved	11/29/07
Curriculum Committee		Approve	5 Dec 07
Accepted By CFC		"	12-05-07
CAS Faculty		Approved	4-16-08

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

General Information: Change ☒   Deletion ☐

1. Reason for this program change or deletion?

   CM 212 is no longer being offered.

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

   The Major in Physical Education: Bachelor of Arts Degree
   The Bachelor of Arts degree in physical education will prepare students for future study in physical education and movement science and/or careers in activity-oriented businesses. This degree is NOT for students seeking teaching certification. Each student will take the general education requirements necessary for the Bachelor of Arts degree. The Physical Education core requirements include the following 19 credits: HL 152, PE 250, PE 320, PE 321, PE 326, PE 440, PE 496. Correlated requirements include **CM 101** ~~CM 212~~ or PE 333, BI 250, and BI 255. Activity requirements are 4 credits from the 100-level, one-hour activity course listing or from the following list: PE 260, PE 261, PE 357, PE 360, PE 361, PE 365, or PE 400. Students are also required to take 12 interest area credits in physical education, 6 of which must be 200+ level or higher, and 6 at 300+ level or higher. Interest area credits may be fulfilled by concentration courses in PE but not more than three credits of internship can be applied.

Deletions

3. Is the program being deleted from the catalog being replaced with another program? Yes ☐   No ☐
   If so, please explain.

4. Is the content of this program being distributed to another program?

Changes

5. Describe the nature of the proposed change.

   Replace CM 212 with CM 101 as an option in the correlated requirements for the Physical Education Bachelor of Arts Degree, Physical Education Bachelor of Education Degree, and Athletic Training Bachelor of Science Degree.

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

   Yes

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Signature	Recommendation	Review Date
Dept. Chair	_Roy Wohl_	_Approve_	_11/20/07_
Division	_W. Pull_	_Approve_	_11-28-07_
Dept. of Educ. (If course relates to teacher certification program.)			
Dean	_Gordon D. McQuere_	_Approved_	_11/29/07_
Curriculum Committee	_Tom Prasch_	_Approve_	_5 Dec 07_
Accepted By CFC	_Paul A. Lemon_	_" "_	_12-05-07_
CAS Faculty	_Nan G. Tye_	_Approved_	_4-16-08_

Approved By:	Faculty Senate	University Faculty	WU Board of Regents

General Information: Change ☒   Deletion ☐

1. Reason for this program change or deletion?
Physics Department split PS 101 into PS 101 and PS 102 (Health Emphasis)

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

Deletions

3. Is the program being deleted from the catalog being replaced with another program? Yes ☐   No ☐
   If so, please explain.

4. Is the content of this program being distributed to another program?

Changes

5. Describe the nature of the proposed change.
Add PS 102 (Health Emphasis) as an alternative to PS 101 in the Exercise Physiology concentration within the Physical Education Bachelor of Arts Degree and in the Athletic Training Bachelor of Science Degree.

6. Do you currently have the equipment and facilities to teach the classes within the proposed change?
Yes.

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Signature	Recommendation	Review Date
Dept. Chair	*Ray Wolf*	*Approve*	11/15/07
Division	*Dr. Paul*	*Approve*	11-28-07
Dept. of Educ.			

(If course relates to teacher certification program.)

	Signature	Recommendation	Review Date
Dean	*Gordon D McQuere*	*Approved*	11/29/07
Curriculum Committee	*Tim French*	*Approve*	5 Dec 07
Accepted By CFC	*David A Lennan*	" "	12-05-07
CAS Faculty	*Dana A. Stephan*	*Approved*	4-16-08

	Faculty Senate	University Faculty	WU Board of Regents
Approved By:			

General Information: Change ☒   Deletion ☐

1. Reason for this program change or deletion?
Psychology Department changed the course number from PY 102 to PY 150.

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

Deletions

3. Is the program being deleted from the catalog being replaced with another program? Yes ☐   No ☐
   If so, please explain.

4. Is the content of this program being distributed to another program?

Changes

5. Describe the nature of the proposed change.
Change PY 102 - Statistics (4) (C Minimum) to PY 150 - Statistics (4) (C Minimum) in the Exercise Physiology concentration within the Physical Education Bachelor of Arts Degree.

6. Do you currently have the equipment and facilities to teach the classes within the proposed change?
Yes

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Chair's Signature	**Recommendation**	**Review Date**
Department	*Kevin E. Charlwood*	*approve*	1/31/08
Division	*Sanh Leung*	*approve*	1/31/08
Dept. of Educ. (If course relates to teacher certification program.)	*Shar A. Dye*	*approve*	1/31/08
Dean	*Gordon D McQuere*	*Approved*	2/1/08
Curriculum Committee	*(signature)*	*Approve*	30 Jan 08
Accepted By CFC	*(signature)*	"	2-4-08
CAS Faculty	*(signature)*	*Approved*	4-16-08

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

General Information: Change ☒   Deletion ☐

1. Reason for this program change or deletion?

We are converting our current three hour MA 389 Capstone Experience into two courses - a 2-cr. MA 387 (same course title), and a new 1-cr. (CR/NC) MA 388 Capstone Research. Our rationale is to provide students with more flexibility regarding this required major's work; should a student earn a failing mark in one of the two newly created components, he or she would only need to repeat the failed portion of the Capstone work. The new course, MA 388, will not be graded, but use a credit/no credit system. A credit/no credit system ensures that each acceptable project meets a minimum standard while removing the element of competition amongst the students. Further, the research portion of our current Capstone Experience is graded by a committee and credit/no credit facilitates consensus amongst committee members.

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

On page 135 of the '07 - '08 catalog, under "THE MAJOR," under "Mathematics," we shall replace Capstone Experience (MA 389) with Capstone Experience (MA 387, 2-cr.) and Capstone Research (MA 388, 1-cr., CR/NC). We shall do the same thing under the subsequent heading, "Mathematics (Secondary Education Specialization)."

Deletions

3. Is the program being deleted from the catalog being replaced with another program? Yes ☐ No ☒
   If so, please explain.

4. Is the content of this program being distributed to another program?
No.

Changes

5. Describe the nature of the proposed change.
We are splitting our current Capstone Experience (MA 389) into two components - one, a two-credit graded course (MA 387, same title), along with its current, semester research project component as a separate, one-credit ungraded course (MA 388, Capstone Research, CR/NC).

6. Do you currently have the equipment and facilities to teach the classes within the proposed change?
Yes.

☐ **ORIGINAL**

COLLEGE OF ARTS AND SCIENCES
PROGRAM CHANGES/DELETIONS

	Chair's Signature	Recommendation	Review Date
Department	*Kevin E. Charlwood*	*approve*	*Aug. 30, 2007*
Division	*Sam H. Leung*	*approve*	*Sept 14, 2007*
Dept. of Educ.			

(If course relates to teacher certification program.)

Dean	*Gord D McBuee*	*Approved*	*9/17/07*
Curriculum Committee	*Tim Peterson*	*Approve*	*10/10/07*
Accepted By CFC	*Tim Peterson*	*Approve*	*11/18/07*
CAS Faculty	*Jon A. Stephen*	*approved*	*4/16/08*

Approved By: Faculty Senate   University Faculty   WU Board of Regents

General Information: Change ☒   Deletion ☐

1. Reason for this program change or deletion?

We are proposing this change to MA 104 (Intermediate Algebra) to have this course no longer count towards graduation (same as MA 103 (Beginning Algebra)). Although most other 4-year institutions in Kansas offer Intermediate Algebra, none of the Regents Universities in Kansas offer it for credit towards graduation/degree requirements. This change would bring us in line with other Bachelor's degree granting institutions in Kansas.

2. Complete revised description (including program title, requirements, courses within program, credits, and prerequisites)

MA 104 Intermediate Algebra (3)   **Linear equations and inequalities, polynomials, rational expressions, exponents, radicals, quadratic equations and inequalities, and applications. For students entering with one year of high school algebra who are preparing for Exploring Mathematics or College Algebra. Not open to students with credit in (or simultaneously enrolled in) MA 110, MA 116 or mathematics courses above MA 116. Does not count towards degree credit hour requirements, nor general education requirements. Students in this course are expected to have algebraic knowledge equivalent to MA 103 or one year of high school or junior high school algebra.**

Deletions

3. Is the program being deleted from the catalog being replaced with another program?   Yes ☐   No ☒
   If so, please explain.

4. Is the content of this program being distributed to another program?
No.

Changes

5. Describe the nature of the proposed change.
We are adding to the current catalog description the statement, "Does not count towards degree credit hour requirements, nor general education requirements."

6. Do you currently have the equipment and facilities to teach the classes within the proposed change?
Yes.