



Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - New Course Proposal Form

New Course Proposal Form

Submitted on 10/25/2017 by William Bray (WBray@MissouriState.edu).

***All fields require input**

- New COURSE
- New REGULAR PERMANENT SECTION of an existing variable content course. If a new regular section of an existing variable topics course, enter the existing course number below

Course Code:
MTH

Course Number: (Check Availability)
136

Course Title:
Precalculus 1

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Prerequisite/Co-requisite or enter 'None':
Suitable placement score on the mathematics placement exam or a grade of C or better in MTH 101 or 103.

General Course Description: (Include any Pass/Not Pass grading restrictions, repeatable limits, limitation on course applicability, UG/GR parallel course, etc.)

This course is part one of a two course sequence with emphasis on the analytic, graphical, and numerical representations of functions. The focus of the course is on the library of algebraic functions (polynomial, rational, exponential, and logarithmic functions) along with higher algebraic reasoning in preparation for the study of Calculus (MTH 261). Grade of C or better required to enroll in MTH 137 or MTH 287. Credit will not be given for both MTH 136 and 138, or both MTH 136 and 135. Cannot count toward the mathematics major or minor. Cannot be taken Pass/Fail.

Credit Hours: Lecture Contact Hours: Lab Contact Hours:

Note: If variable credit, enter the highest number and add to end of course description. (e.g. "Variable credit, may be taken 1-3 hours.")

Periodicity. Check all that apply.



- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Fall | <input type="checkbox"/> Fall (even-numbered years only) | <input type="checkbox"/> Fall (odd-numbered years only) |
| <input checked="" type="checkbox"/> Spring | <input type="checkbox"/> Spring (even-numbered years only) | <input type="checkbox"/> Spring (odd-numbered years only) |
| <input checked="" type="checkbox"/> Summer | <input type="checkbox"/> On Demand only | |

Complete Catalog Description:

MTH 136 Precalculus 1

Prerequisite: Suitable placement score on the mathematics placement exam or a grade of C or better in MTH 101 or 103.

This course is part one of a two course sequence with emphasis on the analytic, graphical, and numerical representations of functions. The focus of the course is on the library of algebraic functions (polynomial, rational, exponential, and logarithmic functions) along with higher algebraic reasoning in preparation for the study of Calculus (MTH 261). Grade of C or better required to enroll in MTH 137 or MTH 287. Credit will not be given for both MTH 136 and 138, or both MTH 136 and 135. Cannot count toward the mathematics major or minor. Cannot be taken Pass/Fail.

Credit hours: 3 Lecture contact hours: 3 Lab contact hours: 0

Typically offered: Fall, Spring, Summer

Include sample syllabus (list topics, course goals.) Use text box OR upload only file types of PDF, DOC or DOCX.

Attached

Purpose of Course

Students can take this course to meet the Focus on Quantitative Literacy portion of the Foundations requirement in General Education. This course will meet Goal 5 of the MSU General Education Learning Goals. The course is designed to provide students whose program of study requires Calculus (MTH 261) with a mastery of necessary algebraic functions and reasoning.

Relationship to Other Departments

Needed in all STEM fields and will replace the role of MTH 135 College Algebra for students in those fields and majors requiring MTH 261 in their program of study.

Is there a graduate/undergraduate parallel course to this one? No Yes

New Course Resource Information

Anticipated Average Enrollment per section:	<input type="text" value="35"/>	Maximum Enrollment Limit per section:	<input type="text" value="60"/>
Anticipated Average Enrollment per semester:	<input type="text" value="300"/>	Maximum Enrollment Limit per semester:	<input type="text" value="400"/>
Anticipated Average Enrollment per year:	<input type="text" value="600"/>	Maximum Enrollment Limit per year:	<input type="text" value="700"/>
Faculty Load Assignment (equated hours):	<input type="text" value="3.0"/>		

Is another course being deleted? No Yes

What will this course require in the way of:

Additional library Holdings

NONE

1

Additional computer resources

NONE

Additional or remodeled facilities

NONE

Additional equipment or supplies

NONE

Additional travel funds

NONE

Additional faculty; general vs specialized

NONE

Additional faculty; regular vs per-course

NONE

Other additional expenses

NONE

If additional faculty are not required, how will faculty be made available to teach this course?

This course replaces MTH 135 College Algebra for students in STEM fields. Hence, part of current instructional staff teaching MTH 135 will teach MTH 136.

List names of current faculty qualified and available to teach this course

Any of our current instructors including: Blanton, Brown, Bunn, Carr, Stand-Hawkins, Shea, Sherrill, Stafford, Sherrill, Sun, Tripi, Van Ornum, Zhou.

What is the anticipated source of students for this course?

Any fields/majors requiring student pursue the study of Calculus (MTH 261)

If from within the department, will students be taking this course in addition to or in place of other courses?

All mathematics majors are required to take MTH 261--MTH 136 along with MTH 137 (new course) will provide one pathway to MTH 261 for students not prepared to begin their studies in MTH 261.

If from outside the department, which courses in other departments would most likely be affected?

Any departments that currently require their students take MTH 261: Biology, Chemistry, Geology, Physics, Engineering.

Other comments:

This course was designed to satisfy the learning outcomes for the STEM pathway as established by the Missouri Mathematics Pathways Taskforce and will be part of the 42 hour common block of transfer courses within the State of Missouri. As such, it replaces MTH 135 College Algebra for all majors, in particular STEM majors, requiring MTH 261 as part of their program of study.

What is the date that this new course was approved by departmental or program faculty? (MM/DD/YYYY)

09/27/2017

1

Current Status:

College Council Review

Proposal Progress:

10/25/2017 - Submitted by Department Head (William Bray)

Review Comments:

No comments have been added to this proposal.



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MTH 136 Precalculus 1 (Generic) Syllabus & Policy Statement

Instructor Name, Contact Information & Office Hours (mandatory on all syllabi and policy statements)

Type of Course: General Education—Foundations: Focus on Quantitative Literacy

Prerequisites: Suitable score on the mathematics placement exam or a grade of C or better in MTH 101 or MTH 103.

Description: This course is part one of a two course sequence with emphasis on the analytic, graphical, and numerical representations of functions. The focus of the course is on the library of algebraic functions (polynomial, rational, exponential, and logarithmic functions) along with higher algebraic reasoning in preparation for the study of Calculus (MTH 261). Grade of C or better required to enroll in MTH 137 or MTH 287. Credit will not be given for both MTH 136 and 138 or for both MTH 136 and 135. Cannot count toward the mathematics major or minor. Cannot be taken Pass/No Pass.

Philosophy of the Course: The course is designed to provide students whose program of study requires Calculus (MTH 261) with a mastery of necessary algebraic functions and reasoning.

Purpose of the Course: Students can take this course to meet the Focus on Quantitative Literacy portion of the Foundations requirement in General Education. This course will meet Goal 5 of the MSU General Education Learning Goals:

General Goal (5): Students will be able to reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.

This is achieved through the following student learning outcomes (SLO):

SLO 5.1. Interpret and communicate information presented in mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).

SLO 5.2. Convert relevant information into various mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).

SLO 5.3. Calculate numerically and symbolically to solve a problem.

SLO 5.4. Analyze data quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions.

SLO 5.5. Use appropriate mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.

SLO 5.6. Express evidence in support of an argument by employing an appropriate form of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).

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Required Textbook: Precalculus: Functions and Graphs, by Swokowski and Cole, 12th edition.

Additional Course Materials: Along with the required textbook, the instructor and students will use written and on - line sources to explore particular topics in more depth.

Content Learning Objectives & Connection with General Education. The course meets the above SLOs through the following content learning objectives.

I. Foundations of Functions. (SLO 5.1, 5.2, 5.5, 5.6)

Students will use multiple representations of different function types to investigate quantities and describe relationships between quantities. Specifically, students will be able to:

1. Use multiple representations of functions to interpret and describe how two quantities change together.
2. Measure, compute, describe and interpret rates of change of quantities embedded in multiple representations.
3. Use appropriate tools and representations to investigate the patterns and relationships present in multiple function types.

II. Analysis of Functions. (SLO 5.1, 5.2, 5.3, 5.5, 5.6)

Students will describe characteristics of different function types and convert between different representations and algebraic forms to analyze and solve meaningful problems. Specifically, students will be able to:

1. Create, use and interpret linear equations and convert between forms as appropriate.
2. Create, use and interpret exponential and logarithmic equations and convert between forms as appropriate.
3. Create, use and interpret polynomial, power and rational functions.
4. Construct, use and describe transformations, operations, compositions and inverses of functions.

III. Algebraic Reasoning. (SLO 5.1, 5.2, 5.3, 5.5, 5.6)

Students will identify and apply algebraic reasoning to write equivalent expressions, solve equations and interpret inequalities. Specifically, students will be able to:

1. Use algebraic techniques to simplify expressions and locate roots.
2. Use algebraic reasoning to simplify a variety of expressions and find roots of equations involving multiple function types.
3. Use rational exponents to express and simplify a variety of expressions and solve equations.
4. Solve and apply systems of equations and inequalities.

Assessment of Specific Learning Outcomes

Student success of the specific learning outcomes will be assessed through a variety of means. The assessment tools include, but are not limited to, homework (written and/or online), quizzes (written and/or online), tests (written and/or online), and a common (across all sections of the class) written final exam.

1

The overall course grade will be weighted as follows: 60% in-class exams (at least three); 25% Final exam; 15% other (homework, quizzes, etc., at the discretion of the instructor). The section instructor will assign final course letter grades based on the overall weighted grade as follows: 90-100% A; 80-89% B; 70-79% C; 60-69% D; below 60% F. Precalculus 1 (MTH 136) instructors do not use plus/minus grading option.

Attendance. Due to the nature of this course, attendance to each class is critical and will be recorded. Any student missing two classes in the first two weeks of class may be dropped from the course by the instructor. Students should make every effort to be in attendance at each session. In the event that you must miss class,, you should contact the instructor for any items that were distributed during class. You should also contact a classmate to get any missed notes. In the event that the absence occurred on the day of an exam, see below.

Other required policies as per the Provost's office will be put into all syllabi and policy statements including: Academic Integrity, Dropping the Class, Statement of Nondiscrimination, Statement on Disability Accommodation, Cell Phone Use Policy, and Emergency Response Statement.

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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - New Course Proposal Form

New Course Proposal Form

Submitted on 10/25/2017 by William Bray (WBray@MissouriState.edu).

*All fields require input

- New COURSE
- New REGULAR PERMANENT SECTION of an existing variable content course. If a new regular section of an existing variable topics course, enter the existing course number below

Course Code:

MTH

Course Number: (Check Availability)

137

Course Title:

Precalculus 2

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Prerequisite/Co-requisite or enter 'None':

MTH 136 or suitable score on the Mathematics placement exam.

General Course Description: (Include any Pass/Not Pass grading restrictions, repeatable limits, limitation on course applicability, UG/GR parallel course, etc.)

This course is part two of a two course sequence with emphasis on the analytic, graphical, and numerical representations of functions. The focus of the course is on the library of trigonometric functions along with higher algebraic and geometric reasoning in preparation for the study of Calculus (MTH 261). Grade of C or better required to enroll in MTH 261. Credit will not be given for both MTH 137 and 138 or MTH 137 and 181. Cannot count toward the mathematics major or minor. Cannot be taken Pass/Fail. Students who place into MTH 137 and pass with a C or better automatically satisfy the Quantitative Literacy requirement under General Education.

Credit Hours:

3

Lecture Contact Hours:

3

Lab Contact Hours:

0

Note: If variable credit, enter the highest number and add to end of course description. (e.g. "Variable credit, may be taken 1-3 hours.")

Periodicity. Check all that apply.

2

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Fall | <input type="checkbox"/> Fall (even-numbered years only) | <input type="checkbox"/> Fall (odd-numbered years only) |
| <input checked="" type="checkbox"/> Spring | <input type="checkbox"/> Spring (even-numbered years only) | <input type="checkbox"/> Spring (odd-numbered years only) |
| <input checked="" type="checkbox"/> Summer | <input type="checkbox"/> On Demand only | |

Complete Catalog Description:

MTH 137 Precalculus 2

Prerequisite: MTH 136 or suitable score on the Mathematics placement exam.

This course is part two of a two course sequence with emphasis on the analytic, graphical, and numerical representations of functions. The focus of the course is on the library of trigonometric functions along with higher algebraic and geometric reasoning in preparation for the study of Calculus (MTH 261). Grade of C or better required to enroll in MTH 261. Credit will not be given for both MTH 137 and 136 or MTH 137 and 181. Cannot count toward the mathematics major or minor. Cannot be taken Pass/Fail. Students who place into MTH 137 and pass with a C or better automatically satisfy the Quantitative Literacy requirement under General Education.

Credit hours: 3 Lecture contact hours: 3 Lab contact hours: 0

Typically offered: Fall, Spring, Summer

Include sample syllabus (list topics, course goals.) Use text box OR upload only file types of PDF, DOC or DOCX.

Attached

Purpose of Course

This is the second course in a two course sequence (along with MTH 136) and is designed to provide students whose program of study requires Calculus (MTH 261) with a mastery of necessary trigonometric functions and reasoning.

Relationship to Other Departments

Needed in all STEM fields and will replace the role of MTH 181 Trigonometry for students in those fields.

Is there a graduate/undergraduate parallel course to this one? No Yes

New Course Resource Information

Anticipated Average Enrollment per section:	30	Maximum Enrollment Limit per section:	40
Anticipated Average Enrollment per semester:	150	Maximum Enrollment Limit per semester:	200
Anticipated Average Enrollment per year:	300	Maximum Enrollment Limit per year:	440
Faculty Load Assignment (equated hours):	3.0		

Is another course being deleted? No Yes

What will this course require in the way of:

Additional library Holdings

None

Additional computer resources

None

2

Additional or remodeled facilities

None

Additional equipment or supplies

None

Additional travel funds

None

Additional faculty; general vs specialized

None

Additional faculty; regular vs per-course

None

Other additional expenses

None

If additional faculty are not required, how will faculty be made available to teach this course?

Faculty who currently teach MTH 181 will be used to teach MTH 137. MTH 181 will no longer be offered after Fall 2018.

List names of current faculty qualified and available to teach this course

Blanton, Bunn, Shand-Hawkins, Stafford, Belshoff, Guo, Hu, Kemp, Kilmer, Rebaza, Reid, Rogers, Senger, Shah, Stanojevic, Sun, Wickham, Wright

What is the anticipated source of students for this course?

Any fields/majors requiring student pursue the study of Calculus (MTH 261).

If from within the department, will students be taking this course in addition to or in place of other courses?

All mathematics majors are required to take MTH 261--MTH 137 along with MTH 136 (new course) will provide one pathway to MTH 261 for students not prepared to begin their studies in MTH 261.

If from outside the department, which courses in other departments would most likely be affected?

Any departments that currently require their students take MTH 261: Biology, Chemistry, Geology, Physics, Engineering.

Other comments:

None.

What is the date that this new course was approved by departmental or program faculty? (MM/DD/YYYY)

09/27/2017

Current Status:

College Council Review

Proposal Progress:

10/25/2017 - Submitted by Department Head (William Bray)

Review Comments:

No comments have been added to this proposal.

2



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MTH 137 Precalculus 2 (Generic) Syllabus & Policy Statement

Instructor Name, Contact Information & Office Hours (mandatory on all syllabi and policy statements)

Prerequisites: Grade of C or better in MTH 136, or suitable score on the mathematics placement exam.

Description: This course is part two of a two course sequence with emphasis on the analytic, graphical, and numerical representations of functions. The focus of the course is on the library of trigonometric functions along with higher algebraic and geometric reasoning in preparation for the study of Calculus (MTH 261). Grade of C or better required to enroll in MTH 261. Credit will not be given for both MTH 137 and 138 or MTH 137 and 181. Cannot count toward the mathematics major or minor. Cannot be taken Pass/Fail. Students who place into MTH 137 and pass with a C or better automatically satisfy the Quantitative Literacy requirement under General Education.

Required Textbook: *Precalculus: Functions and Graphs*, by Swokowski and Cole, 12th edition.

Additional Course Materials: Along with the required textbook, the instructor and students will use written and on - line sources to explore particular topics in more depth.

Content Learning Outcomes. The following provide the broad content learning outcomes for students in this course.

I. Trigonometric Functions.

1. Demonstrate and understanding of the definitions of the basic trigonometry functions and their relation to geometry through right triangles and the unit circle.
2. Identify important properties of the graphs of trigonometric functions and their behavior under transformations.
3. Define and analyze the inverse trigonometric functions.

II. Algebraic and Geometric Reasoning

1. Develop and use trigonometric identities.
2. Solve equations involving trigonometric functions.
3. Understand and apply the Law of Sines and Law of Cosines.
4. Understand and apply the trigonometric functions in the study of vectors and polar coordinates.

Grades. The overall course grade will be weighted as follows: 60% in-class exams; 25% Final exam; 15% other (homework, quizzes, etc., at the discretion of the instructor). The section instructor will assign final course letter grades based on the overall weighted grade as follows: 90-100% A; 80-89% B; 70-79% C; 60-69% D; below 60% F.

2

Attendance. Due to the nature of this course, attendance to each class is critical. Students should make every effort to be in attendance at each session. In the event that you must miss class,, you should contact the instructor for any items that were distributed during class. You should also contact a classmate to get any missed notes. In the event that the absence occurred on the day of an exam, you must contact the instructor beforehand to arrange a makeup.

Other required policies as per the Provost's office will be put into all syllabi and policy statements including: Academic Integrity, Dropping the Class, Statement of Nondiscrimination, Statement on Disability Accommodation, Cell Phone Use Policy, and Emergency Response Statement.

3

Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 10/25/2017 by William Bray (WBray@MissouriState.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

MTH138 Pre-Calculus Mathematics

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

MTH 138 Pre-Calculus Mathematics

Prerequisite: "C" grade or better in MTH 101 or MTH 103 (Recommended: "B" grade or better in MTH 101 or MTH 103), or appropriate placement score. General Education Course (Focus on Quantitative Literacy). Selected topics in algebra and trigonometry to prepare the student for calculus. Cannot receive credit toward graduation for both MTH 138 and MTH 135. Cannot count toward a mathematics major or minor. A grade of "C" or better is required in this course in order to take MTH 261, 287, CSC 125 or 131. Cannot be taken Pass/Not Pass. 5(5-0) F,S

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → **B I S**

MTH 138 Pre-Calculus Mathematics

Prerequisite: "C" grade or better in MTH 101 or MTH 103 (Recommended: "B" grade or better in MTH 101 or MTH 103), or appropriate placement score on the **mathematics placement exam**. General Education Course (Focus on Quantitative Literacy). **Selected topics in algebra and trigonometry to prepare the student for calculus. Cannot receive credit toward graduation for both MTH 138 and MTH 135. Cannot count toward a mathematics major or minor. A grade of "C" or better is required in this course in order to take MTH 261, 287, CSC 125 or 131. The course has emphasis on the analytic, graphical, and numerical representations of functions. The focus is on the library of algebraic functions (polynomial, rational, exponential, and logarithmic functions), the library of trigonometric functions, and a high level of algebraic and geometric reasoning in preparation for the study of Calculus (MTH 261). A grade of C or better required to enroll in MTH 261 or 287. Cannot receive credit for both MTH 136 and 138 or MTH 137 and 138. Cannot count toward the mathematics major or minor. Cannot be taken Pass/Not Pass. 5(5-0) F,S**

3

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

Reason for proposed change

The course description was changed to bring about more clarity in course content and purpose. The new statement is also aligned with that of new courses being proposed (MTH 136 and 137) that provide a two semester version of MTH 138. Change in prerequisite is to enforce the mathematics placement exam.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information

Other (be specific): Primary reason is to bring the course description in line with those of our new courses MTH 136 and 137.

Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

09/27/2017

Current Status:

College Council Review

Proposal Progress:

10/25/2017 - Submitted by Department Head (William Bray)

Review Comments:

No comments have been added to this proposal.



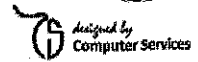
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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Course Proposal Form

Change Course Proposal Form

Submitted on 10/24/2017 by Robin Powell (Robinpowell@missouristate.edu).

***All fields require input**

This proposal applies to:

- An existing COURSE
- An existing REGULAR (e.g. permanent) SECTION of a variable content course.

Existing Course:

CSC450 Introduction to Software Engineering

Will this proposal need to be reviewed by CGEIP? No Yes

Will this proposal need to be reviewed by EPPC? No Yes

Current online catalog description:

CSC 450 Introduction to Software Engineering
 Prerequisite: CSC 344. Principles, techniques and tools used to effect the orderly production of medium and large scale computer programs will be studied. These techniques will be applied to programming projects with students working in teams and managing all phases of a programming project. 3(3-0) F

Revise the current online catalog description as needed: (Strikethrough all deletions and insert/bold new information. Any content that is copied and pasted will lose existing formatting; please review prior to submission.)

← → **B** *I* ~~S~~

CSC 450 Introduction to Software Engineering

Prerequisite: CSC 344. Principles, techniques and tools used to effect the orderly production of medium and large scale computer programs will be studied. These techniques will be applied to programming projects with students working in teams and managing all phases of a programming project. ~~3(3-0)~~ **4(4-0)**F

What is changing? Check all boxes that apply.

- Course Code
- Course Number (Check Availability)
- Title
- Prerequisite
- Credit Hours/Contact Hours
- Periodicity
- Description

4

Reason for proposed change

To reflect the actual work involved in the course projects in addition to the regular classroom teaching activities. Projects include the full development of a medium size software.

Does this change affect course assessment (e.g. student learning evidence/outcomes)? No Yes

How did you determine the need for this change? Check all boxes that apply or specify other.

- Routine or annual review/assessment of curriculum
- Faculty Input
- Student Input
- Accreditation/certification compliance
- Review of catalog information
- Other (be specific):
- Check if this is a non-substantive change.

What is the date that this course change was approved by departmental or program faculty? (MM/DD/YYYY)

10/20/2017

Current Status:

College Council Review

Proposal Progress:

10/24/2017 - Submitted by Department Head (Jorge Rebaza-Vasquez)

Review Comments:

No comments have been added to this proposal.



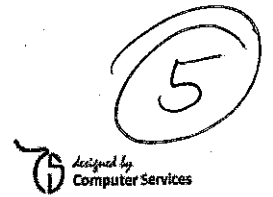
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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 10/24/2017 by Robin Powell (Robinpowell@missouristate.edu).

Department:

Computer Science

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Choose All That Apply:

- Bachelor of Arts
- Bachelor of Music Education
- Bach of Science in Athl Traing
- Bachelor of Applied Science
- Bachelor of Music
- Bach of Science in Education
- Bachelor of Fine Arts
- Bachelor of Science
- Bachelor of Science in Nursing
- Bachelor of Social Work

Title of Program Affected:

Computer Science

Current Catalog Description: (Either cut and paste present description from online catalog OR provide as an attachment below)

5

Minor(s)
 Computer Science
 Bachelor of Arts
 A. CSC 130(3); and CSC 121(3) or 125(4) or 131(4)
 B. Nine additional hours from eligible CSC courses numbered 232 or higher to bring total hours in minor to at least 15.
 Courses not eligible: CSC 399, 500, 505, and 510.

Computer Science
 Bachelor of Science
 A. CSC 130(3); and CSC 121(3) or 125(4) or 131(4)
 B. Six additional hours from eligible CSC courses numbered 232 or higher to bring total hours in minor to at least 12.
 Courses not eligible: CSC 399, 500, 505, and 510.

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

Minor(s)
 Computer Science
 Bachelor of Arts
 A. CSC 130(3); ~~and CSC 121(3) or 125(4) or~~ CSC 131(4); **CSC 232(4)**
 B. ~~Nine~~ **Six** additional hours from eligible CSC courses numbered **higher than 303** ~~232 or~~ higher to bring total hours in minor to at least ~~15~~ **17, with no more than 3 hours in CSC 399**. Courses not eligible: ~~CSC 399, CSC 500, 505, and 510.~~

Computer Science
 Bachelor of Science
 A. CSC 130(3); ~~and CSC 121(3) or 125(4) or~~ CSC 131(4); **CSC 232(4)**
 B. Six additional hours from eligible CSC courses numbered **higher than 303** ~~232 or~~ higher to bring total hours in minor to at least ~~12~~ **17, with no more than 3 hours in CSC 399**. Courses not eligible: ~~CSC 399, CSC 500, 505, and 510.~~

Not Attached

Total Hours: 17

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

To align minor with the basic core requirements in the computer science program, and to better match students with industry needs.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

10/20/2017

Current Status:

College Council Review

Proposal Progress:

10/24/2017 - Submitted by Department Head (Jorge Rebaza-Vasquez)

5

Review Comments:

No comments have been added to this proposal.

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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action
Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 10/24/2017 by Robin Powell (Robinpowell@missouristate.edu).

Department:

Computer Science

Type of Program

Choose One:

- | | | |
|---|-------------------------------------|--------------------------------------|
| <input checked="" type="radio"/> Major (Non-Comprehensive/Graduate Program) | <input type="radio"/> Minor | <input type="radio"/> Academic Rules |
| <input type="radio"/> Comprehensive Major | <input type="radio"/> Certificate | <input type="radio"/> Other |
| <input type="radio"/> Option | <input type="radio"/> Certification | |

Title of Program Affected:

Computer Science/Computer Science-BS

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)



Computer Science (Non-Comprehensive)

Bachelor of Science

A. General Education Program and Requirements

B. Major Requirements

1. CSC 130(3), 131(4), 232(4), 335(3), 338(2), 344(3), 365(3), 388(2), 450(3), 482(1)
2. Select nine additional hours from CSC 300; CSC 399; MTH 421 or CSC 421; or CSC courses numbered 500 or higher with at least six hours from courses other than CSC 399 and CSC 596
3. Related mathematics requirement: MTH 215(3) or MTH 261(5)*
4. Related science requirements: select at least four hours from the following: BIO 121(4)*; BMS 110(3)* and 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4); GRY 135(4); GRY 142(4) Other science and mathematics courses may be acceptable with department approval.
5. Public Affairs Capstone Experience will be fulfilled by completion of CSC 335(3), 365(3), and 482(1).
6. Select one of the following options:
 - a. Computer Science
 1. CSC 325(3), 333(2)
 2. Additional related mathematics requirements: 11-13 hours from MTH 215(3), 261(5)*, 280(5), 345(3), 540(3). Note: These required mathematics courses automatically satisfy the requirements for a minor in Mathematics.
 3. PHY 203(5)
 4. Select five additional hours of science or mathematics from the following: BIO 121(4)*; BMS 110(3)* and 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4); GRY 135(4); GRY 142(4); PHY 204(5); and MTH courses numbered 400 or higher. Other science and mathematics courses may be acceptable with department approval.
 - b. Software Development
 1. CSC 455(3)
 2. Select three additional hours from eligible CSC courses numbered 500 or higher excluding CSC 596.
 3. ECO 165(3); PSY 121(3); ENG 321(3). Each of these courses may also count toward General Education requirements.
 4. Select three additional hours in science courses from the following: BIO 121(4)*; BMS 110(3)* and 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4); GRY 135(4); GRY 142(4); PHY 203(5); and MTH courses numbered 400 or higher. Other science or mathematics courses may be acceptable with department approval.
 5. Select one of the following: MKT 350(3), MGT 340(3), COM 315(3), PSY 305(3), PSY 481(3). Other courses may be acceptable with department approval.

*May also count toward General Education requirements

C. Minor Required (Note: The "Computer Science" option contains courses that satisfy the requirements for a minor in Mathematics.)

D. General Baccalaureate Degree Requirements

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → **B I S**

6

Computer Science (Non-Comprehensive)
 Bachelor of Science
 A. General Education Program and Requirements
 B. Major Requirements
 1. CSC 130(3), 131(4), 232(4), 335(3), 338(2), 344(3), 365(3), 388(2), 450(3), 482(1)
 2. Select nine additional hours from ~~CSC 300; CSC 399; MTH 421 or CSC 421; or CSC courses numbered 500 or higher with at least six hours from courses other than CSC 399 and CSC 596~~ **CSC 300, CSC courses numbered higher than 303, with no more than three hours in CSC 399 and no more than three hours in CSC 596.**
 3. ~~Related mathematics requirement: MTH 215(3) or MTH 261(5)*~~
 3. Related science requirements: select at least four hours from the following: BIO 121(4)*; BMS 110(3)* and 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4), GRY 135(4), GRY 142(4) Other science and mathematics courses may be acceptable with department approval.
 4. Public Affairs Capstone Experience will be fulfilled by completion of CSC 335(3), 365(3), and 482(1).
 5. Select one of the following options:
 a. Computer Science
 1. CSC 325(3), 333(2)
 2. ~~Additional related Mathematics requirements: 11-13 hours from MTH 215(3) or MTH 315(3); MTH 261(5)*; MTH 280(5); MTH 345(3), or MTH 540(3).~~
 Note: These required mathematics courses automatically satisfy the requirements for a minor in Mathematics.
 3. PHY 203(5)
 4. Select five additional hours of science or mathematics from the following: BIO 121(4)*; BMS 110(3)* and ~~BMS 111(1)*~~; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4), GRY 135(4), GRY 142(4); PHY 204(5); and MTH courses numbered 400 ~~302~~ or higher **that count toward the mathematics major.** Other science and mathematics courses may be acceptable with department approval.
 b. Software Development
 1. CSC 455(3)
 2. Select three additional hours from eligible CSC courses numbered 500 or higher excluding CSC 596.
 3. ECO 165(3); PSY 121(3); ENG 321(3). Each of these courses may also count toward General Education requirements.
 4. Select three additional hours in science courses from the following: BIO 121(4)*; BMS 110(3)* and 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4), GRY 135(4), GRY 142(4), PHY 203(5); and MTH courses numbered 400 or higher. Other science or mathematics courses may be acceptable with department approval.
 5. Select one of the following: MKT 350(3), MGT 340(3), COM 315(3), PSY 305(3), PSY 481(3). Other courses may be acceptable with department approval.
 *May also count toward General Education requirements
 C. Minor Required (Note: The "Computer Science" option contains courses that satisfy the requirements for a minor in Mathematics.)
 D. General Baccalaureate Degree Requirements

Not Attached

Total Hours: 72

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

To clarify the regulations and correct inconsistencies between the intent and the implementation in the Degree Audit.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

09/08/2017

Current Status:

College Council Review

Proposal Progress:

10/24/2017 - Submitted by Department Head (Jorge Rebaza-Vasquez)

Review Comments:

6

No comments have been added to this proposal.



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Missouri State.

Curricular Action Workflow



Missouri State > Computer Services - MIS > Curricular Action Workflow > CAW - Change Program Proposal Form

Change Program Proposal Form

Submitted on 10/24/2017 by Robin Powell (Robinpowell@missouristate.edu).

Department:

Computer Science

Type of Program

Choose One:

- Major (Non-Comprehensive/Graduate Program)
- Minor
- Academic Rules
- Comprehensive Major
- Certificate
- Other
- Option
- Certification

Title of Program Affected:

Computer Science/Software Development-BS

Current Catalog Description: (Either cut and paste present description from online catalog **OR** provide as an attachment below)

Software Development

1. CSC 455(3)
2. Select three additional hours from eligible CSC courses numbered 500 or higher excluding CSC 596.
3. ECO 165(3); PSY 121(3); ENG 321(3). Each of these courses may also count toward General Education requirements.
4. Select three additional hours in science courses from the following: BIO 121(4)*; BMS 110(3)* and 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4); GRY 135(4); GRY 142(4); PHY 203(5); and MTH courses numbered 400 or higher. Other science or mathematics courses may be acceptable with department approval.
5. Select one of the following: MKT 350(3); MGT 340(3); COM 315(3); PSY 305(3); PSY 481(3). Other courses may be acceptable with department approval.

*May also count toward General Education requirements

Not Attached

Complete New Catalog Description: (Either provide the revised description in the text area below [strikethrough all deletions and insert/bold new information - any content that is copied and pasted will lose existing formatting; please review prior to submission] **OR** provide as an attachment below)

← → B I S

7

Software Development

1. CSC 455(3)
2. Select three additional hours from eligible CSC courses numbered 500 or higher excluding CSC 596.
3. ECO 165(3); PSY 121(3); ENG 321(3). Each of these courses may also count toward General Education requirements.
4. Select three additional hours in science courses from the following: BIO 121(4)*; BMS 110(3)* and BMS 111(1)*; CHM 116(4) and CHM 117(1); CHM 160(4) and CHM 161(1); GLG 110(4), GRY 135(4), GRY 142(4), PHY 203(5); and MTH courses numbered 400 302 or higher that count toward the mathematics major. Other science or mathematics courses may be acceptable with department approval.
5. Select one of the following: MKT 350(3), MGT 340(3), COM 315(3), PSY 305(3), PSY 481(3). Other courses may be acceptable with department approval.
6. Mathematics requirement: MTH 215(3) or MTH 261(5) or MTH 315(3)

*May also count toward General Education requirements

Not Attached

Total Hours: 65

What is changing? Check all boxes that apply:

- Title change
- From option to program (major)
- Other
- Course changes of under 18 hours
- From program (major) to option
- Course changes of 18 hours or more

Reason for Proposed Change:

To clarify the regulations and correct inconsistencies between the intent and the implementation in the Degree Audit.

What is the date that this new program was approved by departmental or program faculty? (MM/DD/YYYY)

09/08/2017

Current Status:

College Council Review

Proposal Progress:

10/24/2017 - Submitted by Department Head (Jorge Rebaza-Vasquez)

Review Comments:

No comments have been added to this proposal.

[Redacted]

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