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Missouri State

Curricular Action Workflow



Change Program Proposal Form

Submitted on 10/22/2018 by La Toya Kissoon-Charles (LKissoon@MissouriState.edu).

Department:

Biology

Type of Program

Choose One:

- Non-Comprehensive Undergraduate Major
- Option
- Certification
- Comprehensive Undergraduate Major
- Minor
- Academic Rules
- Certificate
- Other
- Graduate Program

Does this program include any new courses?

- No
- Yes (A corresponding new course form must be submitted to create each new course.)

Title of Program Affected:

1

Biology/Wildlife Biology-BS

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

Current catalog description for Biology-Wildlife Biology (BS) only attached.

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)

Undo Redo **B** *I* ~~S~~

The proposed change is inserted in bold under the Wildlife Biology section of the course catalog. This includes addition of a course option under the management section of course options.

Attached

What is changing? Check all boxes that apply:

- | | | |
|---|---|---|
| <input type="checkbox"/> Title change | <input type="checkbox"/> From option to program (major) | <input checked="" type="checkbox"/> Other |
| <input type="checkbox"/> Course changes of under 18 hours | <input type="checkbox"/> From program (major) to option | |
| <input type="checkbox"/> Course changes of 18 hours or more | | |

Adding another course option to the options for the management section

Reason for Proposed Change:

1

Wetland Ecology is offered every spring semester and does not appear to be on the radar of many Wildlife Biology students because it is not listed as a course under the management section. A major project that Wetland Ecology students work on throughout the semester is a detailed proposal for restoring or enhancing a degraded wetland habitat (usually a real life scenario) – the proposal

What is the date that this new program was approved by departmental or program faculty?

(MM/DD/YYYY)

10/22/2018

Current Status:

College Council Review

Proposal Progress:

10/22/2018 - Submitted by Department Head (S Mathis)

Review Comments:

No comments have been added to this proposal.

Copy As New Proposal

①

Biology (Comprehensive) (BS)

Bachelor of Science

A. General Education Program and Requirements

B. Major Requirements

1. BIO 121(4), 122(4), 235(3), 236(1), 302(1), 492(0), 550(3)
2. PHY 123(4) or 203(5) and PHY 124(4) or 204(5)
3. MTH 138(5) or 181(3), or eligibility for MTH 261 on mathematics placement test
4. BIO 310(5) or 320(4) or 361(4) or 544(4); consult options below before selecting course
5. CHM 116(4) and 117(1), or CHM 160(4) and 161(1); consult options below before selecting course
6. CHM 201(3) and 202(2), or CHM 302(5) or 342(5); consult options below before selecting course
7. Public Affairs Capstone Experience will be fulfilled by completion of BIO 302(1), 492(0) and two additional courses from the following: BIO 300(1), 355(4), 367(3), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Courses may also be used to satisfy option requirements.
8. Complete requirements in one of the following options. (Note: With approval of advisor, up to 3 hours of the following can be substituted for one of the BIO courses listed in any option: BIO 300, 399, 499, or 597.)

d. **Wildlife Biology** (68-87 hours total)

1. Required courses: BIO 320(4) or 361(4), 367(3), 368(1)
2. Complete two courses in plant biology from: BIO 334(3), 339(2), 530(3), 544(4)
3. Complete three courses in animal biology from: BIO 370(4), 371(3), 380(5), 571(4), 573(3), 574(2), 575(3), 576(3), 577(3)
4. Complete a minimum of 5 hours in management from: BIO 373(3), 485(1-3), 509(4), 532(3), 562(4), 589(3)
5. Complete two courses in ecology and evolution from: BIO 436(4), 515(3), 539(3), 563(3), 567(4), 578(4), 579(4), 584(3)
6. Complete one course in human dimensions from the following: AGN 335(3), BIO 547(3), BIO 561(2), CRM 210(3), ECO 540(3), GRY 108(3), GRY 351(2), PHI 302(3), PLS 555(3), LAW 537(3)
7. Complete one course in earth/environmental science: AGN 215(3), CHM 260(3), GLG 110(4), GRY 142(4)

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Biology (Comprehensive) (BS)

Bachelor of Science

A. General Education Program and Requirements

B. Major Requirements

1. BIO 121(4), 122(4), 235(3), 236(1), 302(1), 492(0), 550(3)
2. PHY 123(4) or 203(5) and PHY 124(4) or 204(5)
3. MTH 138(5) or 181(3), or eligibility for MTH 261 on mathematics placement test
4. BIO 310(5) or 320(4) or 361(4) or 544(4); consult options below before selecting course
5. CHM 116(4) and 117(1), or CHM 160(4) and 161(1); consult options below before selecting course
6. CHM 201(3) and 202(2), or CHM 302(5) or 342(5); consult options below before selecting course
7. Public Affairs Capstone Experience will be fulfilled by completion of BIO 302(1), 492(0) and two additional courses from the following: BIO 300(1), 355(4), 367(3), 370(4), 373(3), 398(1), 399(1-3), 485(1-3), 498(3), 499(1-3), 501(2), 505(3), 508(3), 509(4), 511(4), 512(3), 520(3), 527(1-4), 539(3), 547(3), 561(2), 573(3), 574(2), 575(3), 576(3), 577(3), 578(4), 579(4), 584(3), 589(3). Courses may also be used to satisfy option requirements.
8. Complete requirements in one of the following options. (Note: With approval of advisor, up to 3 hours of the following can be substituted for one of the BIO courses listed in any option: BIO 300, 399, 499, or 597.)

d. Wildlife Biology (68-87 hours total)

1. Required courses: BIO 320(4) or 361(4), 367(3), 368(1)
2. Complete two courses in plant biology from: BIO 334(3), 339(2), 530(3), 544(4)
3. Complete three courses in animal biology from: BIO 370(4), 371(3), 380(5), 571(4), 573(3), 574(2), 575(3), 576(3), 577(3)
4. Complete a minimum of 5 hours in management from: BIO 373(3), 485(1-3), 509(4), 532(3), **533(4)**, 562(4), 589(3)
5. Complete two courses in ecology and evolution from: BIO 436(4), 515(3), 539(3), 563(3), 567(4), 578(4), 579(4), 584(3)

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6. Complete one course in human dimensions from the following:
AGN 335(3), BIO 547(3), BIO 561(2), CRM 210(3), ECO 540(3), GRY
108(3), GRY 351(2), PHI 302(3), PLS 555(3), LAW 537(3)
7. Complete one course in earth/environmental science: AGN
215(3), CHM 260(3), GLG 110(4), GRY 142(4)

Missouri State.

2

Curricular Action Workflow



New Program Proposal Form

Submitted on 10/31/2018 by Toby Dogwiler (TDogwiler@MissouriState.edu).

This form is to be used for internal Missouri State approval of any proposal for a new program involving two or more courses, including any new graduate program, new undergraduate major (whether comprehensive or non-comprehensive), new option within an existing program (whether graduate or undergraduate), new minor, new certificate, or new certification program.

New graduate programs, new undergraduate majors, and certificate programs involving more than 18 credit hours require approval by the CBHE as well as approval through the Missouri State curricular process. CBHE applications for such programs are processed through the Office of Institutional Research. All proposals for new programs requiring CBHE approval should progress through the Missouri State curricular process accompanied by a draft of the required CBHE documentation.

Department:

Geography, Geology, & Planning

Proposed Program Title:

Applied Geophysics

2

Choose One:

- Non-Comprehensive Undergraduate Major
- Option
- Certification
- Comprehensive Undergraduate Major
- Minor
- Academic Rules
- Certificate
- Other
- Graduate Program

Does this program include any new courses?

- No
- Yes (A corresponding new course form must be submitted to create each new course.)

Select Degree Type (or Select Graduate Certificate or Undergraduate Certificate):

UGCT - Undergraduate Certificate

General Education Courses Required:

None

Total Hours: 0

General Education Courses Recommended:

None

Total Hours: 0

Requirements (including Admission) and Limitations for Specific Degree/Program:

Applied Geophysics

This certificate provides a 12 hour undergraduate-level programs for students and professionals who desire knowledge of the methods and theories of applying geophysical techniques to the study of Earth systems.

Total Hours: 12

2

Courses Required in Department:

GLG 590 Applied Geophysics	↑ ↓
GLG 591 Seismic Data Processing	
Total Hours: 6	

Courses Required in Other Departments:

Up to 6 credits may be counted from:	↑ ↓
MTH 302 Multivariate Calculus	
MTH 303 Differential Equations	
PHY 291 Computational Physics	
Total Hours: 0	

Prerequisites for Required Courses:

Required Courses	↑ ↓
For GLG 590: either PHY 124 or PHY204; and either MTH 280 or MTH 288; Recommended GLG 340	
For GLG 591: GLG 340 (or permission); either PHY 124 or PHY 204, and either MTH 280 or MTH 288	

Recommended Electives in Department:

GLG 573 Engineering Geology	↑ ↓
GLG 574 Petroleum Geology	
(note: these are not necessarily "more" recommended than the options in MTH or PHY; rather they are options within the certificate that are equivalent usefulness to students seeking this certificate)	
Total Hours: 0	

Recommended Electives in Other Departments:

MTH 302 Multivariate Calculus	↑ ↓
MTH 303 Differential Equations	
PHY 291 Computational Physics	
PHY 391 Mathematical Methods in Physics I	
Total Hours: 0	

2

Limitations on Electives:

None

Please attach the following documents: (only one file may be attached for each requirement; accepts file types of PDF, DOC or DOCX)

- 1. Statement of Rationale: *Attached*
- 2. Estimated costs for first five years: *Attached*
- 3. Complete catalog description (including new courses and course changes pending approval): *Attached*
- 4. If proposal is for a new degree program, you must submit an application to the Missouri Department of Higher Education (MDHE).
 - A. Use the templates below to create your application.
New Undergraduate Major (or certificate with more than 18 hours) | New Graduate Program (or certificate with more than 18 hours)
 - B. Upload and attach the completed MDHE application. *Not Attached*

*If you require assistance to complete the application, contact Julie Masterson, Graduate College, 836-5335.

What is the date that this new program was approved by departmental or program faculty?

(MM/DD/YYYY)

05/04/2018

Current Status:

College Council Review

Proposal Progress:

10/31/2018 - Submitted by Department Head (Toby Dogwiler)

Review Comments:

No comments have been added to this proposal.

2

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2

Applied Geophysics UGCT

Rationale: Geophysics is one of most commonly used methods in applied Earth Sciences in studying the Interior of the Earth. Seismic, electrical, gravity and magnetic methods are used in petroleum, mining, water and environmental exploration studies. The above courses will be taken by our students to broaden their educational and employment opportunities and by local environmental company personnel to increase their knowledge of using geophysical methods in their jobs.

2

Applied Geophysics UGCT

Costs: The courses required and recommended for the Applied Geophysics certificate are already offered by the GGP, Physics and Math Departments. There are no new costs for this certificate program.

2

Applied Geophysics UGCT

Catalog Description

Applied Geophysics

This certificate provides a 12 hour undergraduate-level programs for students and professionals who desire knowledge of the methods and theories of applying geophysical techniques to the study of Earth systems.

Program Requirements (12 hours)

A. GLG 590(3), 591(3)

B. Complete two of the following course: GLG 573(3), 574(3), MTH 302(3), 303(3), PHY 291(3), PHY 391(3)

Note: Students completing a major other than Geology may request a waiver of the GLG 340 prerequisite requirement for GLG 591 if they have completed either MTH 302 or 303 and either PHY 291 or 391.

Missouri State.

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Curricular Action Workflow



Change Program Proposal Form

Submitted on 10/09/2018 by Emmett Redd (Emmettredd@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Non-Comprehensive Undergraduate Major
- Option
- Certification
- Comprehensive Undergraduate Major
- Minor
- Academic Rules
- Graduate Program
- Certificate
- Other

Does this program include any new courses?

- No
- Yes (A corresponding new course form must be submitted to create each new course.)

Title of Program Affected:

3

Physics/Materials Physics-BS

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

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and 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~~

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and Requirements
 Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)
 Major Requirements
 PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
 Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
 Select one of the following option areas:
 Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)
 Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)
 Career Prep Physics: PHY 351(3) and one of either PHY 575(3) or MAT 540(3) and three hours of 400 or 500 level PHY, MAT, or CHM coursework.
 Teaching Prep Physics: AST 115(4); GRY 108(3) and at least six hours from any 300 or 400 or 500 level courses from AST, MAT or PHY coursework excluding PHY 501.
 Related Requirements: MTH 280(5), 302(3), 303(3)
 General Baccalaureate Degree Requirements.

Not Attached

Total Hours: 57

What is changing? Check all boxes that apply:

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

3

Course changes of 18 hours or more

Other

Editorial: PHY 324 is a 4-hour course currently listed in major as 3 hours.

Reason for Proposed Change:

Correcting error in text.

What is the date that this new program was approved by departmental or program faculty?

(MM/DD/YYYY)

10/09/2018

Current Status:

College Council Review

Proposal Progress:

10/17/2018 - Submitted by Department Head (Robert Mayanovic)

Review Comments:

No comments have been added to this proposal.

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Missouri State

4

Curricular Action Workflow



Change Program Proposal Form

Submitted on 10/09/2018 by Emmett Redd (Emmettredd@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Non-Comprehensive Undergraduate Major
- Option
- Certification
- Comprehensive Undergraduate Major
- Minor
- Academic Rules
- Certificate
- Other
- Graduate Program

Does this program include any new courses?

- No
- Yes (A corresponding new course form must be submitted to create each new course.)

Title of Program Affected:

4

Physics/Career Prep Physics-BS

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

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and 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**

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and Requirements
 Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)
 Major Requirements
 PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
 Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
 Select one of the following option areas:
 Astronomy and Astrophysics: AST 113(3), 114(4) or 115(4); and select two courses from: AST 311(3), 313(3), 315(3), 317(3)
 Materials Physics: MAT 540(3), 550(3), 580(3); PHY 575(3)
 Career Prep Physics: PHY 351(3) and one of either PHY 575(3) or MAT 540(3) and three hours of 400 or 500 level PHY, MAT, or CHM coursework.
 Teaching Prep Physics: AST 115(4); GRY 108(3) and at least six hours from any 300 or 400 or 500 level courses from AST, MAT or PHY coursework excluding PHY 501.
 Related Requirements: MTH 280(5), 302(3), 303(3)
 General Baccalaureate Degree Requirements.

Not Attached

Total Hours: 58

What is changing? Check all boxes that apply:

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

4

Course changes of 18 hours
or more

Other

Editorial: PHY 324 is a 4-hour
course currently listed in
major as 3 hours.

Reason for Proposed Change:

Correcting error in text.

What is the date that this new program was approved by departmental or program faculty?

(MM/DD/YYYY)

10/09/2018

Current Status:

College Council Review

Proposal Progress:

10/17/2018 - Submitted by Department Head (Robert Mayanovic)

Review Comments:

No comments have been added to this proposal.

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Missouri State

5

Curricular Action Workflow



Change Program Proposal Form

Submitted on 10/09/2018 by Emmett Redd (Emmettredd@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Non-Comprehensive Undergraduate Major
- Option
- Certification
- Comprehensive Undergraduate Major
- Minor
- Academic Rules
- Certificate
- Other
- Graduate Program

Does this program include any new courses?

- No
- Yes (A corresponding new course form must be submitted to create each new course.)

Title of Program Affected:

5

Physics/Teaching Prep Physics-BS

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

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and 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)

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and Requirements
 Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)
 Major Requirements
 PHY 152(3), 204(5), 291(3), 324(3), 333(3), 343(3), 353(3), 375(3), 385(2), 386(1), 391(3), 486(1)
 Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
 Select one of the following option areas:
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 Related Requirements: MTH 280(5), 302(3), 303(3)
 General Baccalaureate Degree Requirements.

Not Attached

Total Hours: 58

What is changing? Check all boxes that apply:

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

5

Course changes of 18 hours or more

Other

Editorial: PHY 324 is a 4-hour course currently listed in major as 3 hours.

Reason for Proposed Change:

Correcting error in text.

What is the date that this new program was approved by departmental or program faculty?

(MM/DD/YYYY)

10/09/2018

Current Status:

College Council Review

Proposal Progress:

10/17/2018 - Submitted by Department Head (Robert Mayanovic)

Review Comments:

No comments have been added to this proposal.

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Missouri State.

Curricular Action Workflow



Change Program Proposal Form

Submitted on 10/09/2018 by Emmett Redd (Emmettredd@missouristate.edu).

Department:

Physics, Astronomy, & Mat Sci

Type of Program

Choose One:

- Non-Comprehensive Undergraduate Major
- Option
- Certification
- Comprehensive Undergraduate Major
- Minor
- Academic Rules
- Certificate
- Other
- Graduate Program

Does this program include any new courses?

- No
- Yes (A corresponding new course form must be submitted to create each new course.)

Title of Program Affected:

6

Physics/Astronomy and Astrophysics-BS

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

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
 General Education Program and 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

Major(s)
 Physics (Comprehensive)
 Bachelor of Science
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 Specific General Education Requirements: PHY 203(5), MTH 261(5), ENG 321(3)
 Major Requirements
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 Public Affairs Capstone Experience will be fulfilled by completion of PHY 385(2), 386(1) and 486(1).
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 Related Requirements: MTH 280(5), 302(3), 303(3)
 General Baccalaureate Degree Requirements.

Not Attached

Total Hours: 58

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or more

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major as 3 hours.

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10/09/2018

Current Status:

College Council Review

Proposal Progress:

10/17/2018 - Submitted by Department Head (Robert Mayanovic)

Review Comments:

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