

Item: AS: V.b

# COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS Tuesday, February 20, 2018

# SUBJECT: REQUEST FOR APPROVAL OF DEGREE TERMINATIONS: BA/BS IN GEOLOGY AND BA/BS IN GEOGRAPHY

# **PROPOSED BOARD ACTION**

Request approval to terminate the Bachelor of Arts and Bachelor of Science in Geology (40.0601) and the Bachelor of Arts and Bachelor of Science in Geography (45.0701) to roll up into the Bachelor of Science in Geoscience (40.0699)

# **BACKGROUND INFORMATION**

The Department of Geoscience was established in 2009 by merging two disciplines: Geology and Geography. A recent external program review recommends, "developing hybrid BA and BS Geoscience degrees that focus on the mission statement of the department". The Ph.D. program has proven to be a great success and the traditional Geography and Geology master's degrees were successfully merged into the M.S. in Geosciences in fall 2016. The interdisciplinary B.A./B.S. in Geosciences (40.0699) represents the final phase of the plan and will span the topical areas covered in the department.

# IMPLEMENTATION PLAN/DATE

The termination of the individual degree programs and the roll up into the new B.A./B.S. in Geoscience will be effective Fall 2018. Students will be notified of a teach-out plan and expected to finish by December 2021.

# FISCAL IMPLICATIONS

The courses required in the umbrella degree program are the same courses required in the individual degree programs. Therefore, the loss of the individual degree programs will not result in a loss in faculty, courses or other resources.

**Supporting Documentation:** Program Termination Form, Program CIP Change Form **Presented by:** Dr. Russell Ivy, Associate Provost for Programs and Assessment **Phone:** 561-297-2353

	FAU	
(	RCVD:	$\backslash$
	SEP 2 2 2017	
05	S	\$
Ŷ	OF THE PROVO	

### PROGRAM TERMINATION FORM

Board of Governors, State University System of Florida

UNIVERSITY: \_Florida Atlantic University\_

**PROGRAM NAME:** B.A./B.S. in Geography

DEGREE LEVEL(S): <u>Baccalaureate</u> CIP CODE: <u>450701</u>

OFFICIAL TERMINATION DATE: \_\_\_\_\_\_ July 2018\_\_\_\_\_\_ (Last date that students will be accepted into program)

OFFICIAL PHASE-OUT DATE: \_\_\_\_\_ December 2021

(Last date that data will be submitted for this program)

This is the form to be used for university requests to terminate doctoral degree programs and is recommended for use when terminating other programs. The request should be approved by the University Board of Trustees (UBOT) prior to submission to the Board of Governors, State University System of Florida for approval. Please fill out this form completely for each program to be terminated in order for your request to be processed as quickly as possible. Attach additional pages as necessary to provide a complete response. In the case of baccalaureate or master's degree programs, the UBOT may approve termination in accordance with BOG Regulation 8.012 (3), with notification sent to the Board of Governors, Office of Academic and Student Affairs. The issues outlined below should be examined by the UBOT in approving termination.

**1.** Provide a narrative rationale for the request to terminate the program.

The department was formed by merging two disciplines: Geology and Geography, and the current baccalaureate degree programs (B.A./B.S. in Geography, B.A./B.S. in Geology) reflect the legacy. A strategically planned fusing process started years ago with a goal to allow students to focus on trainings in the interdisciplinary field of Geoscience rather than the traditional individual disciplines of Geography and Geology.

A synergistic Geosciences Ph.D. program was established in 2009, which has proven to be a great success – 18 PhDs already awarded by the end of Summer 2016. We continued the fusing process at master's program level by merging the traditional Geography and Geology master's degrees and successfully launched an

#### interdisciplinary M.S. Geosciences in Fall 2016.

At the baccalaureate degree level, the faculty in the Department voted to develop an interdisciplinary B.A./B.S. in Geosciences, which will span the topical areas covered in the department, and will replace the current baccalaureate degree programs (B.A./B.S. in Geography, B.A./B.S. in Geology). Curricular proposals have been developed and approved at the department level. This is in line with program review recommendations by outside consultants which occurred in 2014-2015. The reviewers recommended the following:

The Review Team believes that the Department should seriously consider the realignment of its undergraduate and graduate degree granting programs. Unless a significant number of new faculty lines are forthcoming, it does not seem that the traditional BA and BS Geography degrees are viable in the long term. Instead, the Review Team recommends developing hybrid BA and BS Geoscience degrees that focus on the mission statement of the department.

# 2. Indicate on which campus(es) the program is being offered and the extent to which the proposed termination has had or will have an impact on enrollment, enrollment planning, and/or the reallocation of resources.

The program is offered on the Boca Raton and Davie campuses. The new degrees do not require changes to the delivery of courses, nor the reallocation of resources. We expect enrollment will remain stable or potentially increase because the new programs should be able to retain all the existing students and it will also attract additional applicants with the interdisciplinary training.

3. Provide an explanation of the manner in which the University intends to accommodate any students or faculty who are currently active in the program scheduled to be terminated. State what steps have been taken to inform students and faculty of the intent to terminate the program?

The department had faculty meetings in Fall 2016 to approve the curricula for the new BA/BS in Geoscience. Faculty voted to terminate the four existing baccalaureate degrees when the new degrees become available and after existing students complete their degrees.

All existing students were contacted by emails five times in Spring 2017 and were asked, via an online survey, whether they want to continue in the older degree programs or shift to the new B.A./B.S. in Geosciences when the new degrees become available in Fall 2018. Out of total 103 existing students (B.A. Geography 22, B.S. Geography 22, B.A. Geology 15, B.S. Geology 44), 37 students replied, 23 of which plan to continue their current degree programs, 1 to shift to new programs, 13 not decided yet. For the B.A./B.S. Geography students, total 8 replied, 3 of which plan to continue

their current degree programs, 5 not decided.

Admissions to the old program will be halted in August of 2018, when the new B.A./B.S. Geosciences degree programs are expected to start. The survey indicates that the last student to graduate from the old programs would graduate no later than December of 2020. The tentative date to terminate the old programs will be Fall 2021 to accommodate potential delays. However, given that not all students responded to the survey, we will keep monitoring and communicating with the existing students once the new degrees started and will adjust the termination date if necessary.

# 4. Provide data (and cite source) on the gender and racial distribution of students and faculty. For faculty also list the rank and tenure status of all affected individuals.

Faculty (16)

Dr. Tiffany Briggs, Assistant Professor, tenure-track

Dr. Xavier Comas, Associate Professor, tenured

Dr. Maria Fadiman, Associate Professor, tenured

Mr. James Gammack-Clark, Senior Instructor

Dr. Russell Ivy, Professor, Associate Provost, tenured

Dr. Tobin Hindle, Associate Scientist

Dr. Erik Johanson, Assistant Professor, tenure-track

Dr. Weibo Liu, Assistant Professor, tenure-track

Dr. Scott Markwith, Associate Professor, tenured

Dr. Anton Oleinik, Associate Professor, tenured

Dr. Colin Polsky, Professor, CES Director, tenured

Dr. Charles Roberts, Associate Professor and Associate Dean, tenured

Dr. Tara Root, Associate Professor, tenured

Dr. David Warburton, Associate Professor, tenured

Dr. Caiyun Zhang, Associate Professor, tenured

Dr. Zhixiao Xie, Professor and Chairperson, tenured

Faculty (Source: Banner)

Gender: Female 4, Male 12; Racial Distribution: Asian 3, Hispanic 1, White 12.

Students (Source: Banner, 103)

All four programs (B.A./B.S. in Geography, B.A./B.S. in Geology)

Gender: Female 54, Male 49; Racial Distribution: American Indian or Alaska Native 4, Asian 5, Black 6, Native Hawaiian or Other Pacific Islander 1, While 85, unknown 2.

B.A. Geography (22) Gender: Female 15, Male 7; Racial Distribution: Asian 1, Black 3, While 18. B.S. Geography (22) Gender: Female 11, Male 11; Racial Distribution: American Indian or Alaska Native 1, While 19, unknown 2.

B.A. Geology (15) Gender: Female 8, Male 7; Racial Distribution: Asian 3, Black 1, Native Hawaiian or Other Pacific Islander 1, While 10.

B.S. Geology (44) Gender: Female 20, Male 24; Racial Distribution: American Indian or Alaska Native 3, Asian 1, Black 2, While 38.

5. Identify any potential negative impact of the proposed action on the current representation of females, minorities, faculty, and students. None

110C

Signature of Requestor/Initiator

Solal

Signature of Campus EO Officer

Signature of College Dean

Signature of President or Vide President for Academic Affairs

Date Approved by the University Board of Trustees

Signature of Chair, Board of Trustees

08/23/2017

Date

10-2-17

Date

Date

Date

Date

**Revised September 2015** 

# PROGRAM CIP CHANGE REQUEST FORM

Board of Governors, State University System of Florida

**UNIVERSITY:** Florida Atlantic University

PROGRAM NAME: Geology

DEGREE LEVEL(S): B.S.

**OLD/CURRENT CIP CODE**: 40.0601

NEW/REQUESTED CIP CODE : 40.0699

# **NEW CIP CODE EFFECTIVE TERM:** Fall 2018

(First term for students in the program using the new CIP code)

Please use this form to notify the Board of Governors, State University System of Florida that an institution intends to change the CIP code for an already existing degree program and begin reporting enrollments and degrees data under the new CIP code. This action will allow for more accurate data analysis of enrollment and degree productivity as well as it will initiate any necessary changes to the articulation manuals and online search tools.

# **1.** Provide a short background and rationale for the CIP change request.

The Department of Geosciences currently houses undergraduate B.A. and B.S. programs in both geography and geology, and graduate programs (M.S., Ph.D.) in geosciences, which combine subfields of geography and geology into an applied teaching and research focus. A recent external program review recommends "*developing hybrid BA and BS Geoscience degrees that focus on the mission statement of the department*". The development of such baccalaureate geosciences degrees will complete the process of fusing traditional geography and geology at all degree levels in the department. As an initial step in this process, the Department is requesting that the CIP for the B.S. in Geology be changed to the CIP of geosciences, currently used by both M.S. and Ph.D. in Geosciences. This will be followed by a termination of the current B.S. Geography (with teachout plan), a name change of the B.S. Geology to B.S. in Geosciences, along with a curriculum revision – basically a roll up of the B.S. in Geology to the B.S. in Geosciences.

# 2. Explain the impact of the proposed change on the current faculty and current and future students.

There will be no impact on the current faculty as most of the coursework offered in the department will be the same. The degree requirement will simply be repackaged where students will be able to get a B.S. in Geosciences with either a geology focus or a



geography focus. Current students in the geography and geology bachelors programs will be taken care of with a teach out plan as the final changes discussed in #1 are rolled out. As identified in our external program review of Spring 2015, we feel that the future students will be better prepared for the evolving geosciences/environmental job market and, for those who have the interest, certainly better prepared as potential candidates for our graduate programs.

3. Provide evidence that considerations have been given to the impact of this CIP change on existing programs at the university, and the possibility that the program using the new CIP will duplicate already existing programs at other SUS institutions.

As the requested CIP change only impacts the programs housed in the Department of Geosciences, we see no negative impact on any other program or department at FAU, a positive change (when the entire plan in #1 is rolled out) will be to make the baccalaureate programs in the Department of Geosciences more productive and sustainable by combining students with an interest in geography with the students interested in geology into a single rolled up degree program (B.S. in Geosciences). As far as within the SUS, we see no impacts. FAU is the only university in the SUS that offers a combined geography/geology teaching and research focus in a degree program.

4. If applicable, please explain how the CIP change will impact the program's listing in a Programs of Strategic Emphasis (PSE) category. Please provide a rationale to support the need for the program to be included in a PSE category, if it is not already included in a PSE category.

Both the current CIP for our B.S. in Geology and the proposed CIP for the reworked B.S. program are in Programs of Strategic Emphasis.

5. For baccalaureate programs please identify any related changes to the approved common prerequisites and degree program length.

The degree program length remains the same, 120 Cr. Hrs.

There will be no changes to the approved common prerequisites of current B.S. Geology with CIP code 40.0601. Since there are no approved common prerequisites for the proposed B.S. Geosciences with CIP code of 40.0699, the curriculum associated with this request could be the basis to define the common prerequisites in the future if needed.

6. If this is a baccalaureate program, please list the common prerequisites for the current CIP code as listed in the program's curriculum and the common prerequisites associated with the new CIP code.

The approved common prerequisites for the current CIP code (40.0601) at FAU include:

		1
Calculus with Analytic Geometry 1	MAC 2311	4

General Physics for Engineers 1	PHY 2048	3
Physics for Engineers 2	PHY 2044	3
General Chemistry 1 and Lab	CHM 2045, 2045L	4
Physical Geology/Evolution of the Earth	GLY 2010C	4

There are no approved common prerequisites for the proposed B.S. Geosciences with CIP code of 40.0699. The curriculum associated with this request could be the basis to define the common prerequisites in the future if needed.

# **CIP Change Request Form – Signatures Page**

12

Signature of Requestor/Initiator

\_\_\_\_\_

Signature of College Dean/Chair

Signature of President or Vice President for Academic Affairs

08/21/2017

Date

**9/2///** Date

Date

PROGRAM TERMINATION FORM

Board of Governors, State University System of Florida



UNIVERSITY: \_Florida Atlantic University

**PROGRAM NAME:** B.A./B.S. in Geology

DEGREE LEVEL(S): <u>Baccalaureate</u> CIP CODE: <u>400601</u>

OFFICIAL TERMINATION DATE: \_\_\_\_\_\_ July 2018\_\_\_\_\_ (Last date that students will be accepted into program)

### OFFICIAL PHASE-OUT DATE: \_\_\_\_\_ December 2021\_\_\_\_\_

(Last date that data will be submitted for this program)

This is the form to be used for university requests to terminate doctoral degree programs and is recommended for use when terminating other programs. The request should be approved by the University Board of Trustees (UBOT) prior to submission to the Board of Governors, State University System of Florida for approval. Please fill out this form completely for each program to be terminated in order for your request to be processed as quickly as possible. Attach additional pages as necessary to provide a complete response. In the case of baccalaureate or master's degree programs, the UBOT may approve termination in accordance with BOG Regulation 8.012 (3), with notification sent to the Board of Governors, Office of Academic and Student Affairs. The issues outlined below should be examined by the UBOT in approving termination.

### 1. Provide a narrative rationale for the request to terminate the program.

The department was formed by merging two disciplines: Geology and Geography, and the current baccalaureate degree programs (B.A./B.S. in Geography, B.A./B.S. in Geology) reflect the legacy. A strategically planned fusing process started years ago with a goal to allow students to focus on trainings in the interdisciplinary field of Geoscience rather than the traditional individual disciplines of Geography and Geology.

A synergistic Geosciences Ph.D. program was established in 2009, which has proven to be a great success – 18 PhDs already awarded by the end of Summer 2016. We continued the fusing process at master's program level by merging the traditional Geography and Geology master's degrees and successfully launched an interdisciplinary M.S. Geosciences in Fall 2016.

At the baccalaureate degree level, the faculty in the Department voted to develop an

interdisciplinary B.A./B.S. in Geosciences, which will span the topical areas covered in the department, and will replace the current baccalaureate degree programs (B.A./B.S. in Geography, B.A./B.S. in Geology). Curricular proposals have been developed and approved at the department level. This is in line with program review recommendations by outside consultants which occurred in 2014-2015. The reviewers recommended the following:

The Review Team believes that the Department should seriously consider the realignment of its undergraduate and graduate degree granting programs. Unless a significant number of new faculty lines are forthcoming, it does not seem that the traditional BA and BS Geography degrees are viable in the long term. Instead, the Review Team recommends developing hybrid BA and BS Geoscience degrees that focus on the mission statement of the department.

# 2. Indicate on which campus(es) the program is being offered and the extent to which the proposed termination has had or will have an impact on enrollment, enrollment planning, and/or the reallocation of resources.

The program is offered on the Boca Raton and Davie campuses. The new degrees do not require changes to the delivery of courses, nor the reallocation of resources. We expect enrollment will remain stable or potentially increase because the new programs should be able to retain all the existing students and it will also attract additional applicants with the interdisciplinary training.

# 3. Provide an explanation of the manner in which the University intends to accommodate any students or faculty who are currently active in the program scheduled to be terminated. State what steps have been taken to inform students and faculty of the intent to terminate the program?

The department had faculty meetings in Fall 2016 to approve the curricula for the new BA/BS in Geoscience. Faculty voted to terminate the four existing baccalaureate degrees when the new degrees become available and after existing students complete their degrees.

All existing students were contacted by emails five times in Spring 2017 and were asked, via an online survey, whether they want to continue in the older degree programs or shift to the new B.A./B.S. in Geosciences when the new degrees become available in Fall 2018. Out of total 103 existing students (B.A. Geography 22, B.S. Geography 22, B.A. Geology 15, B.S. Geology 44), 37 students replied, 23 of which plan to continue their current degree programs, 1 to shift to new programs, 13 not decided yet. For the B.A./B.S. Geology students, total 29 replied, 20 of which plan to continue their current degree programs, 8 not decided, 1 to shift to the new programs.

Admissions to the old program will be halted in August of 2018, when the new B.A./B.S. Geosciences degree programs are expected to start. The survey indicates that

the last student to graduate from the old programs would graduate no later than December of 2020. The tentative date to terminate the old programs will be Fall 2021 to accommodate potential delays. However, given that not all students responded to the survey, we will keep monitoring and communicating with the existing students once the new degrees started and will adjust the termination date if necessary.

4. Provide data (and cite source) on the gender and racial distribution of students and faculty. For faculty also list the rank and tenure status of all affected individuals.

### Faculty (16)

Dr. Tiffany Briggs, Assistant Professor, tenure-track Dr. Xavier Comas, Associate Professor, tenured Dr. Maria Fadiman, Associate Professor, tenured Mr. James Gammack-Clark, Senior Instructor Dr. Russell Ivy, Professor, Associate Provost, tenured Dr. Tobin Hindle, Associate Scientist Dr. Erik Johanson, Assistant Professor, tenure-track Dr. Weibo Liu, Assistant Professor, tenure-track Dr. Scott Markwith, Associate Professor, tenured Dr. Anton Oleinik, Associate Professor, tenured Dr. Colin Polsky, Professor, CES Director, tenured Dr. Charles Roberts, Associate Professor and Associate Dean, tenured Dr. Tara Root, Associate Professor, tenured Dr. David Warburton, Associate Professor, tenured Dr. Caiyun Zhang, Associate Professor, tenured Dr. Zhixiao Xie, Professor and Chairperson, tenured

Faculty (Source: Banner)

Gender: Female 4, Male 12; Racial Distribution: Asian 3, Hispanic 1, White 12.

Students (Source: Banner, 103)

All four programs (B.A./B.S. in Geography, B.A./B.S. in Geology)

Gender: Female 54, Male 49; Racial Distribution: American Indian or Alaska Native 4, Asian 5, Black 6, Native Hawaiian or Other Pacific Islander 1, While 85, unknown 2.

B.A. Geography (22) Gender: Female 15, Male 7; Racial Distribution: Asian 1, Black 3, While 18.

B.S. Geography (22)

Gender: Female 11, Male 11; Racial Distribution: American Indian or Alaska Native 1, While 19, unknown 2.

B.A. Geology (15)

Gender: Female 8, Male 7; Racial Distribution: Asian 3, Black 1, Native Hawaiian or Other Pacific Islander 1, While 10.

B.S. Geology (44) Gender: Female 20, Male 24; Racial Distribution: American Indian or Alaska Native 3, Asian 1, Black 2, While 38.

5. Identify any potential negative impact of the proposed action on the current representation of females, minorities, faculty, and students.

None

Signature of Requestor/Initiator

Vaula Behul

Signature of Campus EO Officer

\_\_\_\_

Signature of College Dean

Signature of President or Vice President for Academic Affairs

Date Approved by the University Board of Trustees

Signature of Chair, Board of Trustees

08/23/2017

Date

10-2-17

Date

Date

Date

Date