

KENT STATE UNIVERSITY CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date **1-Mar-19** Curriculum Bulletin _____
Effective Date **Fall 2020** Approved by EPC _____

Department **Geology**
College **AS - Arts and Sciences**
Degree **BA - Bachelor of Arts**
Program Name **Geology** Program Banner Code ~~AS-BA~~-GEOL
Concentration(s) Concentration(s) Banner Code(s)
Proposal **Offer program at another campus or off site**

Description of proposal:

Change Request: New Program Offering at an Existing Campus: BA in Geology at Stark Campus

We are proposing to offer the Bachelor of Arts in Geology at the Stark Campus. Currently the Stark Campus offers all the necessary coursework for the BA in Geology. Over the years, due to the student requests, the number of GEOL courses offered at the Stark Campus that are part of the BA in Geology has grown and the number of majors have increased.

Does proposed revision change program's total credit hours? Yes No

Current total credit hours: **120** Proposed total credit hours **120**

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):

No changes are needed to offer this program.

The BA in Geology is ideal for students who consider Stark Campus as their entry point to Kent State University. The presence of multiple degrees at the Stark Campus and the excellent instruction and small class sizes make the BA in Geology an attractive STEM option.

According to the Ohio Board of Regents, universities in Ohio have seen a growth of 260% in the awarding of geology degrees. The proposed addition will follow the positive trend to meet the increasing demand in the field. An environmental study has been performed to see the effect of the program on the local community area. A copy of the environmental scan has been attached to this application for your perusal.

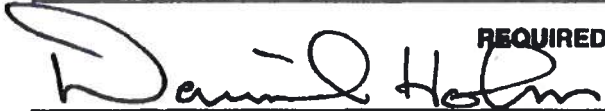


The course rotation currently in place satisfies the requirements of the Bachelor of Arts in Geology. This course rotation has been accomplished with two full-time faculty members and some adjunct instructors. All of the upper division requirements are taught by Dr. Carrie Schweitzer and Dr. Eric Taylor. No additional staffing is required at this time.

Units consulted (other departments, programs or campuses affected by this proposal):

The curriculum committee and the faculty council of the Department of Geology have been consulted. Both committees have approved the proposal. The Dean of the Stark Campus and the Academic Planning Committee (APC) have been consulted and they strongly support the proposal.

No other programs or campuses are expected to be affected by this proposal.

REQUIRED ENDORSEMENTS

 _____ Department Chair / School Director	<u>12, 4, 2019</u>
 _____ Campus Dean (for Regional Campuses proposals)	<u>12, 4, 19</u>
 _____ College Dean (or designee)	<u>12, 13, 19</u>
_____ Dean of Graduate Studies (for graduate proposals)	<u> / / </u>
_____ Executive Vice President for Academic Affairs and Provost (or designee)	<u> / / </u>

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Change Request: Offering Existing Program at Regional Campus

Date of submission: 11/30/2019

Name of institution: Kent State University

Name of campus: Stark Campus

Program to be delivered at the site: Bachelor of Arts degree in Geology

Proposed start date: Fall 2020

Primary institutional contact for this request:

Name: Therese E. Tillett
 Title: Director of Curriculum Services, Office of Provost
 Phone number: 330-672-8558
 E-mail: ttillet1@kent.edu

Date that the request received final approval from the appropriate institutional committee:

Final approval by the Educational Policies Council, a sub-committee of the Faculty Senate, on *date pending*

Educator Preparation Programs:

Program leads to licensure: No
 Program leads to endorsement: No

Briefly describe the rationale for offering the program at this site. In your response, indicate whether the program to be offered at the site will be time limited or ongoing.

Students can currently, with careful planning, obtain this degree at the Stark Campus (at least 3 have done so already). The B.A. in Geology will complement our campus offerings in the B.A. in Environmental Studies and B.A. in Biological Sciences. The offering of this degree at the Stark Campus will be ongoing.

Geology is one of the fastest growing majors on the Stark Campus and has garnered steady student interest throughout. According to the Ohio Board of Regents, universities in Ohio have seen a growth of 260% in the awarding of geology degrees. The proposed addition will follow the positive trend to meet the increasing demand in the field. An environmental study has been performed to see the effect of the program on the local community area. Geology occupation employment is around 850 jobs in Ohio with positive location quotients for specific job designations. Future job projections point to a strong average 10% growth. A copy of the environmental scan has been attached to this application. The scan also highlights the affordability of our program compared to other universities in Stark County. Additionally, Geology, is one of the STEMM disciplines covered by the Choose Ohio First (COF) grant for student merit scholarships, with guaranteed funding from

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the Ohio Department of Higher Education (ODHE) through AYs 2016-2021, and the possibility of future renewal.

With two dedicated faculty members, Dr. Carrie Schweitzer (Coordinator) and Dr. Eric Taylor, all coursework for the Bachelor of Arts in Geology can be delivered at Kent State University at Stark.

The proposed Geology major at the Stark Campus has some unique features:

1. The program will be primarily anchored at the Stark Campus for students who consider the campus as their entry point to Kent State University. These students will complete the degree at the Stark Campus.
2. By having the full Bachelor of Arts degree in Geology, the STEMM fields will be strengthened. As a true interdisciplinary subject, the B.A. in Geology will offer the students a signature experience on campus with all non-GEOL coursework very well supported by other degree programs available on campus.

SECTION 1: CHANGES NEEDED TO ACCOMMODATE THE NEW PROGRAM(S)

Academic and Administrative Leadership and Services

1.1 Describe the changes (if any) that will be needed in academic and administrative leadership at the site to accommodate the new program.

There are no anticipated changes needed. As this is an established regional campus of Kent State University, there is a dean/chief administrator officer, who reports to the university provost and senior vice president for academic affairs, and a full range of support personnel who are supervised by an assistant dean for academic affairs and a director of student affairs and enrollment management.

These positions supervise staff in offices that include, but are not exclusive to, the library, computer technology, learning center, disability services, admissions, registration, financial aid, advisement, registrar, bursar and tutoring.

The chair of the Department of Geology, Dr. Daniel K. Holm, oversees all curricular and academic aspects of the B.A. in Geology.

1.2 Describe the changes (if any) that will be needed in the site's existing administrative services (e.g., admissions, financial aid, registrar, etc.) to accommodate the new program. If such services are not available at the site, describe how students in the new program(s) will access such services.

There are no additional resources required to implement this degree program. As this is an established regional campus of Kent State University, there is a full range of administrative and support services available, including admissions, financial aid, advising, registrar, tutoring, learning resources center, disability services and library.

1.3 Describe the changes (if any) that will be needed in the site's existing academic student services (e.g., advising, tutoring, psycho-social counseling, placement services, etc.) to

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accommodate the new program. If such services are not available at the site, describe how students in the new program(s) will access such services.

There are no changes needed to accommodate this program.

Resources and Facilities

1.4. Describe the changes in resources and facilities (e.g., classrooms, computer labs, laboratories, study areas, social areas, technology, and other learning environments) that will be needed to accommodate the new program and provide a timeline for implementing the changes.

There are no changes in resources and facilities. This is an established regional campus which already provides the resources and the facilities to host the courses required for the establishment of the program. The specialized Geology labs and research spaces are located on the ground floor of the Science & Nursing building at the Stark Campus. Undergraduate research opportunities in Geology are available to students through the Undergraduate Research Assistant (URA) program. We have two large computer labs, open computer pods in each building, and several designated technology enhanced classrooms. All campus computers have the dedicated software for student access.

1.5 Describe any additional library resources (e.g., personnel, space, technology, etc.) that will be needed to accommodate the new program at the site and provide a timeline for implementing the changes.

There are no additional library resources required to implement this degree program. The Stark campus houses a full academic library with access to computers, information literacy instruction, interlibrary loan, KentLINK and OhioLINK. The library has 3-D printers, a high-end poster printer, and iPads and professional cameras for student use.

1.6. If a full-service library is not available onsite, please indicate how students, faculty, staff in the program will access the resources and services of the main campus library.

Not applicable.

SECTION 2: PROGRAM INFORMATION

2.1 Using the chart below, please list the degree program/general education program that is being added for delivery at the site.

Degree/Major (Concentration)	Available on Campus		Comments for Chancellor's Staff
	Full	Partial	
B.A. degree in Geology	✓		All required courses required for the degree together with a set of elective courses will be offered on-ground at the Stark Campus. The number of electives will be sufficient to complete the degree. The B.A. would be an attractive option for students who desire to double major in STEM

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			disciplines.
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2.2 Indicate whether accelerated, hybrid/blended and/or online delivery options are available for the program at the proposed campus and indicate whether this is different from the delivery option used for the approved program at other campuses:

	Available	Currently Used in the Approved Program
Accelerated	X	Only for CORE courses.
Hybrid/blended	X	Only for CORE courses.
Online		Only at Kent Campus.

SECTION 3: FACULTY

3.1 Complete a faculty matrix for the proposed program at this offsite location. A faculty member must be identified for each course to be taught at the site during the first two years of program delivery. If a faculty member has not yet been identified for a course, indicate that as an “open position” and describe the necessary qualifications in the matrix.

Please note that the courses listed below in the matrix are the major courses in the degree program. All other courses to satisfy graduate requirements comprise general education requirements (Kent Core), first-year orientation (US 10097 Destination Kent State: First Year Experience) and general electives, which are offered on all Kent State University campuses.

The 2019-2020 University Catalog for the program requirements are provided in the link below:

B.A. in Geology program requirements:
<http://catalog.kent.edu/colleges/as/geol/geology-ba/geology-ba.pdf>

A copy of each full-time faculty member’s CV must be included as Appendix A.

*Number of courses instructor will teach per year at all campus locations.

Instructor name and rank	Full/part time	Degree title, institution, year	Years teaching/experience	Course(s) instructor will teach in proposed program	Courses taught*
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Instructor name and rank	Full/part time	Degree title, institution, year	Years teaching/experience	Course(s) instructor will teach in proposed program	Courses taught*
Carrie Schweitzer, Professor	FT	PhD, Applied Geology, Kent State University, 2000	25	GEOL 11040 How the Earth Works; GEOL 11041 How the Earth Works Laboratory; GEOL 11042 Earth and Life through Time; GEOL 11043 Earth and Life through Time; GEOL 34061 Invertebrate Paleontology; GEOL 44074 Paleoceanography; GEOL 40095: ST: Mass Extinctions; GEOL 40095: ST: Paleoecology; GEOL 22000 Introduction to Geology Seminar	8
Eric Taylor, Associate Professor	FT	PhD, Geological Sciences, Ohio State University, 2012	15	GEOL 11041 How the Earth Works Laboratory; GEOL 11042 Earth and Life through Time Laboratory; GEOL 23063 Earth Materials I; GEOL 31070 Earth Materials II (WIC); GEOL 22000 Introduction to Geology Seminar; GEOL 33025 Water and the Environment; GEOL 42035 Scientific Methods in Geology; GEOL 40095: ST: Natural Resources and the Environment; GEOL 40095: ST: Advanced Environmental Geology; GEOL 40095: ST: Medical Geology; GEOL 40095: ST: Geological Hazards and Disasters	10
Dustin Bates	PT	M.S., University of Akron	5	GEOL 11040 How the Earth Works; GEOL 11041 How the Earth Works Laboratory; GEOL 11042 Earth and Life through Time; GEOL 11043 Earth and Life through Time;	4

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Instructor name and rank	Full/part time	Degree title, institution, year	Years teaching/experience	Course(s) instructor will teach in proposed program	Courses taught*
<p>FT Faculties of the Department of Mathematics in rotation. All of them who teach the courses in consideration have extended years of teaching experience.</p> <p>For example, faculty who will teach them in Spring 2020 are Dr. Cynthia Barb Ph.D., Dr. Oliver Ruff Ph.D., Dr. Janice Kover, Dr. Relja Vulcanovic, Dr. John Alexopoulos, Dr. Gro Hovhannisyan, Dr. A. Bathi Kasturiarachi</p>	FT	Ph.D.	7-30	MATH 11010 Algebra for Calculus MATH 11022 Trigonometry	1-2
<p>FT Chemistry Faculty</p> <p>Dr. Andrew Burns Dr. Clarke Earley Dr. Urmila Pal-Chaudhari</p>	FT	Ph.D.	10-30	CHEM 10060 General Chemistry 1; CHEM 10062 General Chemistry Lab 1	1-2
<p>FT Biology Faculty</p> <p>Dr. Greg Smith Dr. Robert Hamilton</p>	FT	Ph.D.	5-15	BSCI 10002 Life on Planet Earth	1-2

3.2 Describe future faculty staffing plans for the program at this location. In your response, include a description of the institution's plans, if any, for adding courses and faculty after the initial two years of operation and a description of the plans to add faculty in response to increases in student enrollment.

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An adjunct pool is available to teach introductory courses. As student enrollment increases, adjustments to course offerings will include development of a course rotation for upper division requirements and electives.

The Stark Campus has approximately 25 students in the Geology major currently and has a steady enrollment projection for future years. Helping this trend is the Choose Ohio First scholarships through ODHE that are available for Stark Campus students.

SECTION 4: MARKET / WORKFORCE NEED

4.1 Indicate whether the institution performed a needs assessment/market analysis to determine a need for the program at the proposed site. If so, briefly describe the results of those findings.

Please refer to the Environmental Scan in Appendix B.

4.2 Indicate the projected enrollments for the program at this site over the next three years.

The numbers below are provided for Geology majors in all concentrations.

	2020-2021	2021-2022	2022-2023
First-year students	10	12	15
Second-year students		10	15
Third-year students			15

4.3. Indicate whether the institution consulted with advisory groups, business and industry, or other experts when considering moving the program to the proposed site. If so, briefly describe the involvement of these groups in the development of this request.

The decision to propose this program was reached after extensive consultations with appropriate curricular and administrative bodies on Campus and in the College of Arts and Sciences (e.g., campus Academic Planning Committee, campus dean, college dean; the Undergraduate Curriculum Committee and the Department of Geology).

Information collected by Drs. Schweitzer and Taylor indicate that student interest in this program has increased, and as a result, at least 3 students have completed a B.A. at Kent State Stark in the past few years. Students have expressed interest in taking courses at the Stark Campus to take advantage of our strengths in environmental programs.

4.4. Indicate whether any other institution within a 30-mile radius of your campus currently offers the program(s). If so, list the institutions that offer the program(s) within this radius.

There is only one private university that offers a degree in Geology. There are no public institutions that offer Geology degrees in Stark County.

- University of Mount Union

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APPENDICES

Appendix Description

- A Faculty curricula vitae
- B Environmental Scan

Commitment to Program Delivery at Site

Kent State University is committed to supporting the Geology program at its Stark Campus. If the university decides in the future to either eliminate the degree program or close the campus, Kent State University will provide the necessary resources and means for matriculated students to complete their degree.

Kent State University verifies that the information in the application is truthful and accurate.

[will be signed after EPC]

Melody Tankersley
Interim Provost and Senior Vice President for Academic Affairs
Kent State University

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Appendix B

Geology Environmental Scan Kent State University at Stark

In order to assess the need for a geology degree at Kent State University at Stark, an environmental scan of geology employment and education was conducted. Geological occupation employment is projected to grow. The number of geology bachelor's degrees awarded grew in Ohio by approximately 206 percent from 2008 to 2016 in Ohio. Tuition at Kent State University at Stark is approximately one third of other local programs.

The research includes data from the following sources:

- Ohio Board of Regents
- U.S. Bureau of Labor Statistics
- University of Mount Union Website

Geology Occupation Employment in Ohio

According to the U.S. Bureau of Labor and Statistics, Ohio employs 850 in geology occupations. The location quotient for geological employment in Ohio indicates a lower employment rate than other areas.

Occupation (SOC code)	Employment	Location Quotient
Mining and Geological Engineers (17-2151)	170	0.76
Geoscientists (19-2042)	310	0.28
Hydrologist (19-2043)	240	1.03

Geology Occupations Employment Projections and Job Openings in Ohio

As shown in the table below, The U.S. Bureau of Labor and Statistics is projecting employment growth in geological occupations.

Occupation (SOC code)	2016	2026	Number	Percent	Annual Job Openings (2016-2026)
Mining and Geological Engineers (17-2151)	7,300	7,900	600	8.2%	600
Geoscientists (19-2042)	32,000	36,500	4,500	14.0%	3,500
Hydrologist (19-2043)	6,700	7,400	700	9.9%	700

Ohio Geology Degrees

According to the Ohio Board of Regents, Ohio Universities have been awarding geology degrees as shown in the table below. From 2008 to 2016, the growth of geology bachelor's degrees awarded was 260 percent.

Discipline Area	2008	2009	2010	2011	2012	2013	2014	2015	2016	% Change 2008 to 2016
University Main and Regional Campuses - Bachelor's Degree										
Geology	113	136	141	165	205	221	231	284	294	260%

Cost of Other Stark County Universities offering Geology Degrees

University of Mount Union – \$762 per credit hour per their website

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