

Provost's Comprehensive Program Review Report

Institution: Middle Georgia State University

Academic Program Name: B.S. in Biology

CIP Code: 260101

College or School: School of Health & Natural Sciences

Department: Natural Sciences

Date of Last Internal Review: 6/12/2016

Outcome of Previous Program Review (brief narrative statement): It was recommended that the program be maintained as it currently stands with the requirement of 22 courses.

Categorical Summation

Check any of the following to categorically describe the program. (All the institutions will follow the same criteria.)

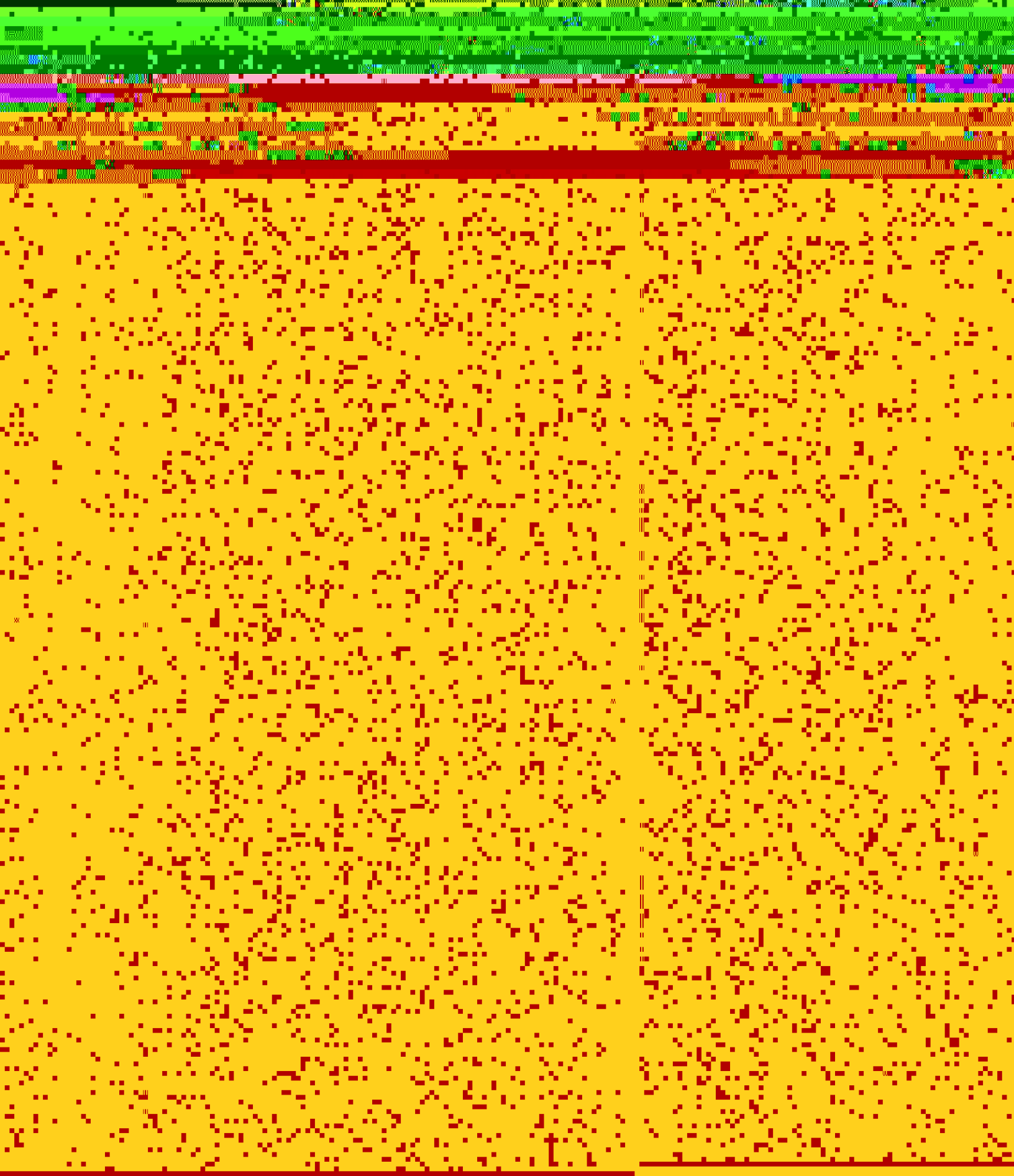
this program.

Program MEETS Institution's Criteria

Program is critical to the institutional mission and will be retained

Program is not critical to the institutional mission and will be retained

Overall a



IERB's Comprehensive Program Review Rubric and Evaluation

Program Reviewed: BS Biology

Contextual Notes:

Area of Focus	Exemplary Area	Satisfactory Area	Area of Concern	No Evidence	Notes
Enrollment	<i>program</i>				

IERB's Comprehensive Program Review Rubric and Evaluation

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Program Strengths of Note:

Areas of Serious Concern:

Other Comments:

IERB's Comprehensive Program Review Rubric and Evaluation

Comprehensive Program Review

FY 2020 -2021

Institution: Middle Georgia State University

Academic Program: BS Biology

College or School: School of Health and Natural Sciences

FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 YR Growth	FY16 compared to FY20 only
27	12	33	24	34	5.93%	26%

Program Purpose & Mission

The Bachelor of Science degree in Biology prepares students for the array of opportunities in the field of biological science. This program offers an academically strong preparation of students planning to: (1) attend professional and graduate schools in biological and health science fields, (2) seek employment in industries using biologically related technology, or (3) teach biology in secondary schools. The department is committed to creating a well-rounded, scientifically educated student that is capable of competing on the local as well as national level.

Alignment of program mission with department, school and institutional mission

The B.S. Biology program aligns well with the mission of the Department of Natural Sciences, which is, in part, to provide courses for science majors pursuing their degrees. The B.S. Biology program does provide students interested in pursuing health science-related professional degrees (e.g., medical, dental, pharmacy, etc.) with a robust undergraduate biology degree that allows them to be successful in their professional programs. This aligns well with the school of Health & Natural Sciences mission. It should be noted that the biology degree also supports students interested in disciplines beyond health sciences and students have gone on to rigorous graduate/professional programs in Ecology, Veterinary Sciences, Biology and Wildlife & Fisheries. The department also has numerous students who enter directly into the workforce for Biology majors have gotten jobs related to water and wastewater management, in scientific laboratories and also teaching science in local schools (e.g., Stratford, Bibb county, Jasper County H.S., etc.) all of which align quite well with the institutional mission of creating lifelong learners whose scholarship and careers enhance the region.

Program age, tracks, concentrations, etc.

The B.S. Biology program has been offered on the Macon campus since the Fall of 2006. The Cochran campus program was first offered in Fall 2012. There are currently two tracks, the Biology track and the Biology Education track. The Biology Education track, which was housed in the School of Education from Fall 2016 to Fall 2020, was moved back to the Dept of Natural Sciences starting Fall 2020.

lower level courses required by science majors. This has been compounded by an increased need for more lower level courses in support of Health Sciences students' degree plans. It is recommended that the Cochran campus be responsible only for the first two years of the B.S. Biology degree. This recommendation is the same as it was in 2016. Removing the B. S. Biology program from the Cochran campus would solve two problems: 1) faculty with courses that are underenrolled can be used to offer high enrollment lower level courses that are in demand (e.g., BIOL 1001/1002, CHEM 1151/1152, etc.); and 2) reduced lab space on the Cochran campus can be devoted to science major courses.

From fall 2016 until fall 2022, the Cochran campus will be responsible for the first two years of the B.S. Biology degree. This recommendation is the same as it was in 2016. Removing the B. S. Biology program from the Cochran campus would solve two problems: 1) faculty with courses that are underenrolled can be used to offer high enrollment lower level courses that are in demand (e.g., BIOL 1001/1002, CHEM 1151/1152, etc.); and 2) reduced lab space on the Cochran campus can be devoted to science major courses.

labs. The Chemistry faculty compared performance of students on a lab report between one section that had CURE labs associated with them versus one section with no CURE labs. Their results indicated that students in the CURE labs were better able to relate specific water chemistry tests to tropical fish health. All but one of the faculty who offered CURE's last year, are offering them again this year. They intend to refine some of the CURE work they did last year by either narrowing the scope of the labs (Genetics) or having to move a number of labs online due to Covid-19 (Chemistry).

Plans for Action

The Department will continue to promote the B.S. Biology program to the best of its ability. This includes participating in campus recruitment events, engaging students with social media and keeping the website up to date. The department would appreciate institutional promotion of the biology degree as a professional degree that can lead to job opportunities at the B.S. level as well as the potential to pursue postbaccalaureate programs. In the upcoming year, departmental faculty have been invited to participate in the Southeastern Regional PULSE (SERP) Institute to improve undergraduate life sciences for all students in our region. The objective of the SERP Institute is to inspire and support departments in improving factors known to optimize student success and faculty efficacy.

Departmental biology faculty are interested in developing a distinct B.A. Biology degree to distinguish students who take non-science electives in the upper level curriculum from students who take all science courses. This distinction has a precedent at other USG institutions (ref websites) and is relevant to students applying to postbaccalaureate science programs. There is also considerable interest in developing an M.S. in Biology degree.

Program Demand

It is likely that demand for the B.S. Biology degree will remain high in the upcoming years. Students with science degrees can work in multiple sectors including scientific research, industrial and education. Employment outcomes for B.S. Biology degree holders are promising. Median annual earnings of Biology degree holders are at the national average and unemployment rate is lower than the national average (<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020144>). The biology program also prepares students well for rigorous postbaccalaureate programs as evidenced by their admissions into graduate programs in medical, dental and veterinary schools.

Literature Cited

. National Center for Education Statistics. May 2020.
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=20201A4> Accessed 2 February 2021.