



MEMORANDUM

DATE: September 19, 2025

TO: Dr. Don Green
President
Gordon State College

FROM: Dr. Joanne Ardochini
Provost, Vice President of Academic & Student Affairs
Gordon State College

CC: Dr. Victor Vilchiz
Dean, School of Nursing, Health Science & STEM
Gordon State College

Terry Betkowski
SACSCOC Liaison
Gordon State College

Dear President Green:

Please find enclosed the Comprehensive Program Reviews (CPR) for our Biology Programs conducted during the 2024-2025 academic year. While the full report contains numerous suggestions regarding the program, I direct you to the summary memo prepared by Dr. Duffus, which briefly lays out arguments regarding the quality, viability, and productivity of the program.

It is very clear from the CPRs that both Programs have multiple recommendations for improvement. Dr. Vilchiz and his team will be working on these areas over the 25-26 academic year.

Respectfully,

J. Ardochini, Ph.D.

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Provost, Vice President for Academic Affairs & Student Affairs

COMPREHENSIVE PROGRAM REVIEW: AY 2024-2025

Project Team 2024-25 Academic Assessment Committee: Prof. Michele Anderson, Dr. Joanne Ardovini, Professor Ashlee Fuller, Dr. John George, Dr. Brenda Johnson, Amanda Maynard, Dr. Wesley Venus, Professor Nancy Walraven, Dr. Ed Whitelock, with special assistance from Dr. Lynn Rumfelt and Dr. Amanda Duffus

Academic Program Name: **Bachelor of Science in Biology** and **Bachelor of Science in Biology with Teaching Certification**

CIP Code: 26.0101

College or School and Department: School of Nursing, Health and STEM, Department of STEM

Date of Last Internal Review: AY 2015-2016

Outcomes of Previous Program Review:

The Bachelor of Science in Biology Comprehensive Program Review was scheduled to be performed in AY 2022-2023 but was not completed. Hence, AY2024-25 Program Assessment Committee reviewed this Program.

The *AY2015-16 Comprehensive Program Review of BS Biology* found the program to be one of the strongest at Gordon State College. The quality of the program was evidenced in the rigorous curriculum that followed University System of Georgia Board of Regents (USG BOR) guidelines and standards. Students are taught by a reputable Faculty, demonstrated by the number of terminal degrees and professional involvement in scholarly activities. More than 90 percent of Biology (BIOL) classes are taught by full-time Faculty. ETS Major Field Test, Exit Interview, and Senior Capstone course results indicated students experienced a high degree of learning and were well-prepared for future endeavors. Recommendation was made to revise the program mission statement to be more succinct.

The *AY 2015-16 Comprehensive Program Review* also found a productive program, where BS Biology students comprised 15 – 20 percent of all baccalaureate students at Gordon State College. During the five-years under review, a total of 77 students graduated with the BS Biology and five with BS Biology Teacher Certification.

Further, the *AY2015-16 Comprehensive Review* concluded the viability of the program, finding BS Biology one of the least expensive programs to operate, 47 percent lower than BS Math and 25 percent less than BS Nursing. 3000-4000 courses were offered multiple times each year with 12 or more students. The number of students in the program averaged 78 per year

The *BS Biology Teacher Certificate Program* was presented to USG for approval in July of 2009 and was a new program during the review years. There are no unique BIOL course requirements; therefore, the low number of students were not found to present a viability or productivity issue

Current Date Program Reviewed at the Institution for this report:

AY 2019-20; AY 2020-21; AY 2021-22; AY 2022-23; and AY 2023-24

Executive Summary and Memo:

Qualitative and quantitative data support the Quality, Validity, and Productivity of the Bachelor of Science Biology (“BS BIOL”) and Bachelor of Science Biology with Teaching Certification (“BS BIOL TC”) programs. Program Mission Statement and Curriculum meet and exceed Board of Regent Requirements. Students entering the program exceed Gordon State College requirements in GPA, Freshman Index, and SAT/ACT scores. Graduating GPA averaged 3.286 over the review period and 90+ percent of courses are instructed by full-time Faculty. Most students (75.2 percent) enter the BS BIOL program with 30 or fewer hours. Of concern are the 35.5 percent drop in enrollments in the five years of review, along with the Faculty workload, which exceeded Standard Workload requirements each year. Overloaded Faculty leaves little margin for growth and expansion. Students’ time to graduation averaged 4.84 years, one of the lowest years-to-completion programs at Gordon State. Student retention averaged 58.4 percent. While commendable at GSC, the average is ten percentage points lower than the national average. Numerous recommendations are provided throughout this **Comprehensive Program Review** report.

Quality Summary:

The BS BIOL and BS BIOL Teacher Certification were found to be quality programs. The [*United Nations*](#) (2000) defined Quality in education as “Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.” Quality includes “Content that is reflected in relevant curricula and materials for the acquisition of ... skills” with “outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.” Further, GSC Students identify program quality through ease in scheduling required courses, expertise of Faculty, and availability of program advisors and Faculty. Thus, program quality is deduced from *Program Mission Statement, Curriculum, Student Inputs, Student Outputs, and Faculty Outputs*. Program Mission Statement and Curriculum support program quality focuses on “exceptional education through innovative teaching and engaged learning.” Curriculum design meets Board of Regents’ requirements. Faculty offer required courses multiple times during the academic year for ease in student registration. Average Enrollment Maximums averaged 69.2% over the review period, suggesting Faculty offer courses at times and locations desired by students. Incoming SAT / ACT, HS-GPA, and Freshman Index scores for program majors exceed base levels set for full admission at Gordon State. Student Output variables of Exit Exam Scores evidence program quality, with a 5-year average of 163 (out of 200 possible). All BS-BIOL students carried a five-year average GPA of 3.3006, one of the highest program GPA averages at Gordon State. Graduating GPA saw a five-year average of 3.2862, exceeding institutional requirements. *SACS-COC Resource Manual* (2024) concluded, “Sufficiency in faculty resources is critical to the quality and integrity of an institution’s academic programs to support its mission” (CR 6.1). BS BIOL Faculty are full-time Faculty and serve at a ratio of 7.2 : 1 to part-time Faculty. Research-based findings show that institutions with a higher proportion of terminally degreed faculty had improved graduation outcomes. All BS BIOL Faculty hold terminal degrees in their field, actively participate in discipline conferences, and regularly publish in peer-reviewed academic journals. Based on this evidence, the 2024-25 Academic Assessment Committee deem the BS BIOL and BS BIOL TC to be quality programs. Numerous recommendations are provided.

Viability Summary:

Program viability is viewed as the ability of the current system to maintain a separate existence, to ensure sustainability and consistency. Viability requires effectiveness along with critical resources for programs to generate students, capital, and other resources for the institution. Data on **Student Numbers** and **Faculty Numbers** generally support viability of BS BIOL and BS BIOL TC programs. Most BS BIOL students enter the program as first-time-

full-time Freshmen (average of 107.6 per year over five-year review period). Many students enter the program with 1 – 30 hours (average of 84 students). An average 191.6 students declare BS BIOL majors in the Freshman year, or 75.2 percent of all BS BIOL students. Research suggests students who declare a major early in college are more likely to graduate in four years. Program viability is strengthened by the number of BS BIOL courses instructed by full-time Faculty (72.46 percent), predicting better outcomes for students.

Of concern for program viability is the decline in the number of declared majors in the BS BIOL program, from its peak in AY 2019-20 (400) to 258 in AY 2023-24, a 35.5 percent drop. Dwindling numbers will reduce the capacity and strength of the program, compromising viability. Additionally, Faculty Workload presents a concern. Each year BS BIOL Faculty workload exceeded the standard faculty workload defined in the *Faculty Handbook*. Even after an increase in standard workload in AY 2022/23, BIOL Faculty workload exceeded the new standard. The 31.75 students to one Faculty ratio is not reflective of Gordon State's advertised ratio of 21 students to one Faculty. Overworked Faculty rarely produces best outcomes, jeopardizing program sustainability and consistency. Numerous recommendations are provided.

Productivity Summary:

The [*US Bureau of Labor Statistics*](#) defines productivity as “a measure of economic performance that compares the amount of goods and services produced with the amount of inputs used to produce those goods and services.” In analyzing productivity, the focus is on outputs: enrollment, retention, and student completion data. Ideally, productivity improves each year, as this is a key variable in the College's success, profitability, and ability to thrive. In improving productivity, space is made available for growth and expansion. BS BIOL data provides evidence of productivity. *Student Time to Graduation* averaged 4.84 years, one of the lowest at Gordon State. And the Time to Graduation continues to improve, with a 77.8 percent increase in student graduating in 3 – 4 years. This data suggests Faculty and Faculty Advisors effectively move students through the program to successful completion. BS BIOL student retention average of 58.4 percent remains one of the highest at Gordon State College. The data also shows room for improvement opportunities in program productivity. Numerous recommendations are provided.

Program Quality

Mission Statement and Curriculum

Program Mission Statement

“As a four-year degree granting institution of the University System of Georgia, Gordon State College provides a dynamic environment where students are actively engaged intellectually in their classes and in independent research activities supervised by our faculty members. This degree program’s mission is to provide an exceptional education through innovative teaching and engaged learning for the benefit of the world in which we live.”

“The Department of STEM (Science, Technology, Engineering and Mathematics) at Gordon State College provides a dynamic environment where students are engaged intellectually in their classes. Faculty members in the Bachelor of Science in Biology program are committed to providing students with a high-quality education that will prepare them for professional and graduate degree work.”

“Students are strongly encouraged to develop critical thinking and investigative skills that will enable them to both obtain and succeed in their future career choices. There are ample opportunities for students to perform undergraduate research with faculty mentors. Students obtaining a Bachelor of Science in Biology at Gordon State College will be prepared to pursue professional degrees in the fields of pharmaceutical and biotechnology, medical sciences (Professional schools, i.e. Medical School, Dental School, Veterinarian School, Physical Therapy, etc.), as well as advance/graduate level degrees in specialized fields of Biology. Students obtaining a Bachelor of Science in Biology with Teacher Certification will be prepared to teach junior high and high school Biology courses.”

Program Curriculum Requirements

Associates of Science in Biological Sciences and Biology completion provides the IMPACTS core curriculum and prerequisite courses required in the Bachelor of Science in Biology.

Institutional Priority (4 credits):

- FIRE 1000 Freshman Introduction to Reasoning Essentials (2 credits)
- COLQ 29XX Colloquium (2 credits)

Mathematics and Quantitative Skills (3 credits):

- MATH 1113 Pre-calculus (must complete with C or better grade) (4 credits), or MATH 1401 Elementary Statistics (3 credits), or MATH 1501 Calculus I (4 credits) or higher MATH

Political Science & US History (6 credits):

- POLS 1101, or POLS 1101H American Government (3 credits)

- HIST 2111 American History I, HIST 2111H American History I Honors, HIST 2112 American History II (3 credits)

Arts, Humanities & Ethics (6 credits):

- Group 1 (Choose one course) (3 credits): ARTS 1100 Art Appreciation, ARTS 1101 Survey of Art History I, ARTS 1102 Survey of Art History II; COMM 1100 Introduction to Human Communication, COMM 1110 Fundamentals of Public Speaking, COMM 1500 Introduction to Interpersonal Communication; FREN 1001 Elementary French I, FREN 1002 Elementary French II; HUMN 1500 Introduction to Humanities; MUSC 1100 Music Appreciation; SPAN 1001 Elementary Spanish I, SPAN 1002 Elementary Spanish II, SPAN 1060 Accelerated Elementary Spanish; THEA 1000 Voice and Diction, THEA 1100 Theatre Appreciation
- Group 2 (Choose one course) (3 credits): ENGL 2111 World Literature I, ENGL 2111H World Literature I Honors, ENGL 2112 World Literature II, ENGL 2121 British Literature I, ENGL 2122 British Literature II, ENGL 2131 American Literature I, ENGL 2132 American Literature II, ENGL 2141 African American Literature I, ENGL 2142 African American Literature II; PHIL 2010 Introduction to Philosophy, PHIL 2010H Honors Introduction to Philosophy, PHIL 2020 Introduction to Ethics

Communication in Writing (6 credits)

- ENGL 1101 Composition I (3 credits)
- ENGL 1102 Composition II (3 credits)

Technology, Math, & Sciences (STEM) (11 credits)

- CHEM 1211K Principles of Chemistry (must complete with C or better grade) (4 credits)
- CHEM 1212K Principles of Chemistry II (4 credits)
- MATH 1401 Elementary Statistics (3 credits), or MATH 1501 Calculus I (4 credits) or MATH 1502 Calculus II (4 credits)

Social Sciences (6 credits)

- Choose two courses: ANTH 1102 Introduction to Anthropology; any ECON; any HIST not taken above; PSYC 1101 Introduction to Psychology; SOCI 1101 Introduction to Sociology; or POLS 2201 State and Local Government, POLS 2301 Introduction to Comparative Politics, POLS 2401 Global Issues

Institutional Requirements (4 credits)

- PHED 1001 Health and Wellness for Living; or PHED 1010 Physical Fitness for Life (3 credits)
- Choose one course (1 credit): PHED 1109 Pace walking; PHED 1015 First Aid/CPR; PHED 1101 Jogging; PHED 1103 Weight training; or any PHED 1 credit activity course

Major Foundations (18 credits)

- BIOL 1107K Principles of Biology I (must complete with C or better grade) (4 credits)
- BIOL 1108K Principles of Biology II (must complete with C or better grade) (4 credits)

- One credit hour of Mathematics (excess from Mathematics and Quantitative Skills)
- One credit hour of Technology, Math, & Sciences (STEM) (excess from STEM)

Additional electives to total 18 credits for Major Foundations category:

- CHEM 2401K Organic Chemistry I (4 hours)
- CHEM 2402K Organic Chemistry II (4 hours)
- PHYS 1111K Introductory Physics I (4 hours)
- PHYS 1112K Introductory Physics II (4 hours)
- Or any Physics with lab (4 hours)
- GEOL 1121K Introductory Geoscience I: Physical Geology (4 hours)
- GEOL 1122K Introductory Geoscience II: Historical Geology (4 hours)
- Any 2000-level BIOL course(s)
- Any CSCI course(s)
- Any MATH courses except MATH 1001 and MATH 1111
- Any SPAN or FREN courses

Bachelor of Science in Biology – General Biology (Concentration 1)

Requirements beyond the AS in Biological Sciences

Common Biology Requirements (24 Credits)

- BIOL 3200K Genetics (4 credits)
- BIOL 3300K Cellular and Molecular Biology (4 credits)
- BIOL 3500K Ecology (4 credits)
- BIOL 4200 Evolution (3 credits)
- BIOL 4000 Senior Seminar (2 credits)
- Additional semester hours in biology courses numbered 3000 and above (7 credits)

Additional Requirements (8 credits) (may be counted in major foundations category or general electives category)

- CHEM 2401K Organic Chemistry I
- PHYS 1111K Introductory Physics I (or PHYS 2211K Principles of Physics I)

Additional Upper-Level Electives (15 credits)

Any courses numbered 3000 and above in BIOL and any discipline that student meets the course prerequisites (examples include: BIOL, ENGL, HIST, HUSV, CRJU, FTA, GFA, HLTW, MGNT, OATC, ORGL, POLS, PSYC, SOCI, THEA)

General electives (13 – 23 credits)

Choose from courses numbered 1000 and above from biology and other disciplines. Additional hours may be required if CHEM 2401 and PHYS 1111 are used in the Major Field of Study. The following courses are strongly encouraged: CHEM 2402K, PHYS 1112K, MATH 1501, MATH 1502.

Bachelor of Science in Biology total Credit Hours: 120-124***BS in Biology with Teacher Certification (Concentration 2)******Requirements beyond the AS in Biological Sciences*****Required Courses 24 Credit Hours**

- BIOL 3200K Genetics
- BIOL 3300K Cellular and Molecular Biology
- BIOL 3500K Ecology
- BIOL 4200 Evolution
- BIOL 4000 Senior Seminar
- Seven additional semester hours in biology courses numbered 3000 and above

Additional Requirements H1 8 Credit Hours

- CHEM 2401K Organic Chemistry I
- PHYS 1111K (or 2211K)

Required Education Courses H2 36 Credit Hours

- EDUC 2110 Investigating Critical and Contemporary Issues in Education
- EDUC 2120 Exploring Socio-Cultural Perspectives on Diversity in Educational Contexts
- EDUC 2130 Exploring Learning and Teaching
- EDUC 3005 Middle and Secondary Curriculum, Instruction, and Assessment
- LART 3006 Reading in the Content Areas
- SPED 3105 The Exceptional Learner in the Secondary Classroom
- EDUC 3504 Seminar in Secondary School Practicum
- EDUC 3505 Secondary Practicum
- EDUC 4504 Seminar in Secondary School Teaching
- EDUC 4505 Secondary Student Teaching
- EDUC 4800 Curriculum and Instruction in Education

Bachelor of Science in Biology with Teaching Certification Total Credit Hours: 132

Board of Regents' Guidelines for Program

BIOLOGICAL SCIENCES

Area F Learning Outcomes

1. Biology majors will demonstrate knowledge and application of the introductory principles of cellular biology, genetics, ecology, organismal biology, and evolution.
2. Biology majors will demonstrate competence in scientific reasoning by using quantitative and qualitative skills to critically analyze data and evaluate biological phenomena.

Area F Guidelines

Eighteen (18) hours of lower-division (1000- or 2000-level) courses. The courses include those which are prerequisite to higher level major courses and those related to the disciplines within the biological sciences. Science courses which do not serve as prerequisites for subsequent courses may be taken in part or in total in Area D.

Area F for Biological Sciences majors may be configured as follows:

Required: Hours

Principles of Biology I and II (with lab) 0-8 hours

Principles of Chemistry I and II (with lab) 0-8 hours

Additional Course Work:

Lower division science courses for majors chosen from biology, organic chemistry, general physics, and geology; mathematics not taken as part of areas A or D, computer science, foreign language. 2-18 hours

Total 18 hours

Source: https://www.usg.edu/curriculum/assets/curriculum/documents/Biological_Sciences.pdf

Mission Statement and Curriculum Narrative

While the University System of Georgia does not provide a definition, the [United Nations](#) (2000) defined *Quality in education* as “Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.” Quality includes “Content that is reflected in relevant curricula and materials for the acquisition of ... skills” with “outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.”

BS BIOL and BS BIOL TC share the same mission statement. The Mission Statement aligns with the overall institutional Mission Statement and focuses on student outcomes. The BS BIOL curriculum meets and exceeds the USG Board of Regents requirements.

RECOMMENDATIONS:

1. In collaboration with Biology Faculty, Staff, and the Department Head of STEM begin the effort of developing a program specific mission statement.
2. Upon completion and approval, post the program mission statement on the Bachelor of Science in Biology, Gordon State College website for public viewing.
3. Develop procedures that include monitoring and updating the program mission statement annually, to ensure it supports and reflects the mission of Gordon State College.
4. Establish a regular survey of students to identify preferences for course day/time and location, especially preferences for online or on-campus offerings.
5. Institute program-level inventory of lab equipment and review to ensure latest in equipment and design populate BIOL lab rooms
6. Review lab facilities at McDonough campus to see if requirements are met. If so, consider scheduling courses on the McDonough campus. On average, 20 percent of First-Time-Full-Time Freshmen come to Gordon from Henry County (*2023-24 GSC Fact Book*, p. 41).
7. Continue to monitor enrollment and capacities for clues into student preferences for course scheduling.
8. Create a Wait List during Registration to monitor demand for course day/times
9. Create a program policy for creating new sections when the Wait List reaches a certain level.
10. Regularly monitor program mission statement and update as job market demands evolve.
11. Include program mission statement on all promotional materials.
12. Monitor program mission statement on Gordon website to ensure links remain live.
13. Avoid the use of antiquated language in mission statements. Keep statements relevant to students in language and scope.

Offerings by Course

Number of sections each year from AY 2019-20 (BS Biology)

Course Offerings - Sections Each Academic Year

Program Title	Course Title	2020	2021	2022	2023	2024
BS - Biology	BIOL 3100	1	1	1	1	1
	BIOL 3200K	2	2	2	1	1
	BIOL 3300K	2	2	2	2	1
	BIOL 3340K	1	1	1	1	1
	BIOL 3500K	2	2	2	2	1
	BIOL 3520K	1		1		1
	BIOL 3550K		1		1	
	BIOL 3600K		1		1	
	BIOL 4000	2	2	2	2	2
	BIOL 4100	1		1		1
	BIOL 4200	2	2	2	2	1
	BIOL 4350	1				1
	BIOL 4460		1		1	
	BIOL 4600K	1		1		1
	BIOL 4700K		1		1	
	BIOL 4750	1		1		1
	BIOL 4900	2	2	1	1	1

Number of sections of required courses and electives offered

Students identify program *quality* with ease in scheduling required courses. **BS BIOL** Core courses (3200, 3300, 3500, 4000 and 4200) are scheduled multiple times each year, offering several opportunities for students to take required courses. BIOL Core also includes “seven additional semesters in biology courses numbered 3000 and above” and a wide variety of options are scheduled. More popular courses are scheduled each year, and others are scheduled every other year. All 3000-4000 BIOL courses were scheduled two or more times during the review years. The schedule of BIOL courses suggests varied opportunities for students to complete CORE and CORE Electives.

Number of sections each year from AY 2019-20 (BS Biology Teacher Certification)**Course Offerings - Sections Each Academic Year**

Program Title	Course Title	2020	2021	2022	2023	2024
BS - Biology Teaching Certification	BIOL 3100	1	1	1	1	1
	BIOL 3200K	2	2	2	1	1
	BIOL 3300K	2	2	2	2	1
	BIOL 3340K	1	1	1	1	1
	BIOL 3500K	2	2	2	2	1
	BIOL 3520K	1		1		1
	BIOL 3550K		1		1	
	BIOL 3600K		1		1	
	BIOL 4000	2	2	2	2	2
	BIOL 4100	1		1		1
	BIOL 4200	2	2	2	2	1
	BIOL 4350	1				1
	BIOL 4460		1		1	
	BIOL 4600K	1		1		1
	BIOL 4700K		1		1	
	BIOL 4750	1		1		1
	BIOL 4900	2	2	1	1	1
	EDUC 2110	7	6	7	9	11
	EDUC 2120	7	7	6	9	7
	EDUC 2130	7	6	4	5	6
	EDUC 3005	1	1	1	1	1
	EDUC 3504	2	2	1	1	1
	EDUC 3505	2	2	2	1	1
	EDUC 4505	2	3	2	2	1
	EDUC 4800	1	1	1	2	1
	LART 3006	3	3	4	2	3
	SPED 3105	1	1	1	1	

Number of sections of required courses and electives offered

BS Biology – Teaching Certification shares the same Core courses (3200, 3300, 3500, 4000 and 4200) as BS Biology program. Core courses were scheduled multiple times each year, offering several opportunities for students to take required courses. BIOL Core also includes “seven additional semesters in biology courses numbered 3000 and above” and a wide variety of options were scheduled. More in-demand courses were scheduled each year, and others were scheduled every other year. All 3000-4000 BIOL courses were scheduled two or more times during the review years. The

schedule of BIOL courses suggests varied opportunities for students to complete CORE and CORE Electives. Teaching Certification requires EDUC 2110, 2120, 2130, 3005, 3006, 3105, 3504, 3505, 4504, 4505, and 4800. The EDUC 2000-level courses are offered each year four to eleven times each. EDUC and LART 3000-level courses are offered one-to-three times each year. EDUC 4000-level courses are scheduled each year, one to four times. Only SPED 3105 is offered once a year for four of the review years and phased out by the final review year. Again, the numerous offerings of required courses suggested ease in students including the course in their semester schedules.

Number of Day, evening, and online sections

Course Offerings - Sections by Day, Evening, and Online

	2020				2021				2022			2023				2024			
Program Title	Day Classes	Evening Classes	Fully Online ..	Hybrid/ Partiall..	Day Classes	Evening Classes	Fully Online ..	Hybrid/ Partiall..	Day Classes	Fully Online ..	Hybrid/ Partiall..	Day Classes	Evening Classes	Fully Online ..	Hybrid/ Partiall..	Day Classes	Evening Classes	Fully Online ..	Hybrid/ Partiall..
BS - Biology	17			2	4		10	4	10	5	2	9	1	5	1	9	1	4	1
BS - Biology Teaching Certification	38	1	11	2	15	1	28	4	18	25	2	19	1	28	1	14	1	29	3

Number of Day, Evening, and Online sections offered

Day Classes - Non Online classes with meeting start times prior to 6pm

Evening Classes - Non Online classes with meeting time on or after 6pm

Fully Online Classes - Online classes with instructional method of Fully or Entirely Online

Hybrid/Partially Online Classes - Online classes with instructional method of Hybrid or Partially Online

Students identify program *quality* with their ability to schedule required courses. 90 percent of **BS Biology** courses were scheduled during the day on campus in AY 2019-20, and 10 percent offered in a hybrid format. When the COVID pandemic hit, only 20 percent of BIOL courses were offered on campus as the Faculty pivoted to online and hybrid models. By AY 2021-22, 60 percent of courses were scheduled during the day on campus. In AY 2022-23, evening courses were introduced and continued into AY 2023-24. The schedule of course offerings showed a Faculty willing to adopt different scheduling models to accommodate student needs.

The **BS Biology Teaching Certification** course schedule already offered diverse opportunities for students to build a schedule. The majority (73 percent) of courses were offered during the day on campus in AY 2019-20. Every year except AY 2021-22, evening classes were scheduled. The COVID pivot in AY 2020-21 saw the number of on-campus day classes drop to 30 percent, while online and hybrid sections increased to 66.7 percent of courses offered. Online and hybrid course offerings remained at 60+ percent for the remaining review years. The schedule offers a range of location opportunities for students to register for courses needed.

Number of Sections by Location/Delivery

Course Offerings - Sections by Location/Delivery

Program Title	2020		2021		2022		2023		2024	
	Barnesville/Main Campus	Online Class	Barnesville/Main Campus	Online Class	Barnesville/Main Campus	Online Class	Barnesville/Main Campus	Online Class	Barnesville/Main Campus	Online Class
BS - Biology	17	2	4	14	10	7	10	6	9	5
BS - Biology Teaching Certification	39	13	16	32	18	27	20	29	14	32

Campus/Location of offerings by campus. Online classes include e-Core.

BS BIOL and **BS BIOL Teaching Certification** courses are scheduled either on the Barnesville campus or online. Significantly more Biology Teaching Certification courses are offered online after AY 2019-20. After COVID pandemic, Biology courses returned to mainly on campus (60+ percent). However, **Biology Teaching Certification** moved most of the courses to an online location (60 to 70 percent). The reason for this heavy reliance on online course delivery is unclear.

Section Enrollments (Mean Class Size) BS Biology

Course Offerings - Enrollments (Mean Class Size)

Program Title	Course Title	2020		2021		2022		2023		2024	
		Enrolled	Capacity	Enrolled	Capacity	Enrolled	Capacity	Enrolled	Capacity	Enrolled	Capacity
BS - Biology	BIOL 3100	24	24	24	24	19	24	21	24	16	24
	BIOL 3200K	17	24	13	24	18	24	12	24	24	24
	BIOL 3300K	18	24	19	24	14	24	16	24	17	24
	BIOL 3340K	14	24	15	24	17	24	11	24	21	24
	BIOL 3500K	17	24	15	24	16	24	17	24	24	24
	BIOL 3520K	18	24			13	24			7	24
	BIOL 3550K			24	24			19	24		
	BIOL 3600K			18	24			11	24		
	BIOL 4000	14	20	19	24	13	25	17	27	11	24
	BIOL 4100	25	24			16	24			17	24
	BIOL 4200	20	24	16	24	17	25	11	24	9	24
	BIOL 4350	18	24							10	24
	BIOL 4460			25	24			10	24		
	BIOL 4600K	10	24			12	24			11	24
	BIOL 4700K			13	24			25	29		
	BIOL 4750	17	24			19	24			18	24
	BIOL 4900	19	24	18	24	24	24	24	24	18	24

Mean class size for section enrollments

BS BIOL and **BS BIOL Teacher Certification** average class size to capacity averages between 45.8 and 89.6 percent, with a 5-year average capacity at 70.4 percent, suggesting available space for enrollments to grow. Courses with the highest capacity occur across the curriculum and include BIOL 3100 (86.7%), 3550 (89.6), and 4900 (85.8%). Only one course averaged less than 50% capacity (BIOL 4600). Eight courses were offered each year under

review (BIOL 3100, 3200, 3300, 3340, 3500, 4000, 4200, and 4900) with average capacity between 60 and 89.6 percent. BIOL 3200, 3300, 3500, 4000, and 4200 are part of the Biology Core. It would make sense that these courses are offered each year and that they would carry a high enrollment. It is also noted that lab capacity is limited to 24 students per course.

The Teacher Certification courses were offered each year with average capacities between 24.2 percent and 83.9 percent, with an average capacity rate of 48.3 percent. Five of the EDUC and SPED class capacities have enrollment capacities less than 35 percent. Four of the EDUC and LART enrollment capacities were above 70 percent. The average capacity suggests abundant resources to allow enrollment growth.

Section Enrollments (Total Enrollments)

Course Offerings - Enrollment Totals

Program Title	Course Title	2020		2021		2022		2023		2024	
		ENRL	MAX_ENRL	ENRL	MAX_ENRL	ENRL	MAX_ENRL	ENRL	MAX_ENRL	ENRL	MAX_ENRL
BS - Biology	BIOL 3100	24	24	24	24	19	24	21	24	16	24
	BIOL 3200K	33	47	26	48	36	48	12	24	24	24
	BIOL 3300K	36	48	38	47	27	48	32	48	17	24
	BIOL 3340K	14	24	15	24	17	24	11	24	21	24
	BIOL 3500K	33	48	29	48	32	48	33	48	24	24
	BIOL 3520K	18	24			13	24			7	24
	BIOL 3550K			24	24			19	24		
	BIOL 3600K			18	24			11	24		
	BIOL 4000	28	40	38	48	26	50	34	53	21	48
	BIOL 4100	25	24			16	24			17	24
	BIOL 4200	40	48	32	48	34	50	22	48	9	24
	BIOL 4350	18	24							10	24
	BIOL 4460			25	24			10	24		
	BIOL 4600K	10	24			12	24			11	24
	BIOL 4700K			13	24			25	29		
	BIOL 4750	17	24			19	24			18	24
	BIOL 4900	38	48	35	48	24	24	24	24	18	24

Total enrollments for sections

BS Biology average Enrollment Maximums ranged from 45.8 to 89.5 percent, with a total average of 69.2 percent. Four Biology Core courses carried an average Enrollment Maximum above 80 percent: BIOL 3100, 3350, 4100, and 4900. Eleven courses had an average Enrollment Maximum between 60 and 79 percent, and only one course showed an Enrollment Maximum below 60 percent (BIOL 3520). Eight of the 17 courses were offered every year. Four of the Biology Electives were offered three of the five academic years, and five Biology Electives were offered twice in the five-year review period – and every other year rotation.

Course Enrollments (Mean Class Size) BS BIOL TC**Course Offerings - Enrollments (Mean Class Size)**

Program Title	Course Title	2020		2021		2022		2023		2024	
		Enrolled	Capacity	Enrolled	Capacity	Enrolled	Capacity	Enrolled	Capacity	Enrolled	Capacity
BS - Biology Teaching Certification	BIOL 3100	24	24	24	24	19	24	21	24	16	24
	BIOL 3200K	17	24	13	24	18	24	12	24	24	24
	BIOL 3300K	18	24	19	24	14	24	16	24	17	24
	BIOL 3340K	14	24	15	24	17	24	11	24	21	24
	BIOL 3500K	17	24	15	24	16	24	17	24	24	24
	BIOL 3520K	18	24			13	24			7	24
	BIOL 3550K			24	24			19	24		
	BIOL 3600K			18	24			11	24		
	BIOL 4000	14	20	19	24	13	25	17	27	11	24
	BIOL 4100	25	24			16	24			17	24
	BIOL 4200	20	24	16	24	17	25	11	24	9	24
	BIOL 4350	18	24							10	24
	BIOL 4460			25	24			10	24		
	BIOL 4600K	10	24			12	24			11	24
	BIOL 4700K			13	24			25	29		
	BIOL 4750	17	24			19	24			18	24
	BIOL 4900	19	24	18	24	24	24	24	24	18	24
	EDUC 2110	20	27	23	29	22	29	23	26	20	26
	EDUC 2120	18	27	20	29	17	29	23	26	19	28
	EDUC 2130	16	29	18	28	23	29	25	30	22	28
	EDUC 3005	15	0	8	0	8	10	4	30	3	30
	EDUC 3504	2	0	3	10	4	10	8	30	4	30
	EDUC 3505	2	0	4	8	2	20	7	30	4	30
	EDUC 4800	15	0	7	15	12	30	3	16	5	30
	LART 3006	13	8	10	7	14	18	19	30	22	30
	SPED 3105	12	0	6	30	8	30	4	30		

Mean class size for section enrollments

Course Offerings - Enrollment Totals

Program Title	Course Title	2020		2021		2022		2023		2024	
		ENRL	MAX_ENRL	ENRL	MAX_ENRL	ENRL	MAX_ENRL	ENRL	MAX_ENRL	ENRL	MAX_ENRL
BS - Biology Teaching Certification	BIOL 3100	24	24	24	24	19	24	21	24	16	24
	BIOL 3200K	33	47	26	48	36	48	12	24	24	24
	BIOL 3300K	36	48	38	47	27	48	32	48	17	24
	BIOL 3340K	14	24	15	24	17	24	11	24	21	24
	BIOL 3500K	33	48	29	48	32	48	33	48	24	24
	BIOL 3520K	18	24			13	24			7	24
	BIOL 3550K			24	24			19	24		
	BIOL 3600K			18	24			11	24		
	BIOL 4000	28	40	38	48	26	50	34	53	21	48
	BIOL 4100	25	24			16	24			17	24
	BIOL 4200	40	48	32	48	34	50	22	48	9	24
	BIOL 4350	18	24							10	24
	BIOL 4460			25	24			10	24		
	BIOL 4600K	10	24			12	24			11	24
	BIOL 4700K			13	24			25	29		
	BIOL 4750	17	24			19	24			18	24
	BIOL 4900	38	48	35	48	24	24	24	24	18	24
	EDUC 2110	139	190	135	175	154	205	208	235	217	291
	EDUC 2120	125	190	137	200	104	175	205	236	134	198
	EDUC 2130	110	200	128	195	91	115	124	152	131	169
	EDUC 3005	15	0	16	0	8	10	4	30	3	30
	EDUC 3504	6	0	8	30	4	10	8	30	4	30
	EDUC 3505	4	0	7	15	4	40	7	30	4	30
	EDUC 4800	30	0	14	30	12	30	5	31	5	30
	LART 3006	38	24	31	21	54	70	37	60	65	90
	SPED 3105	12	0	6	30	8	30	4	30		

Total enrollments for sections

BS BIOL TC Core courses are offered every year, with an Enrollment Maximum between 18 and 85 percent and overall average Enrollment Maximum of 50 percent. It is noted that not all students in the EDUC courses are Biology Teacher Certification students. The 2000-level EDUC courses had the highest Enrollment Maximum (between 70.3 and 77.8 percent) along with LART 3006 (84.5 percent). Each EDUC course was offered each year, with the 2000-level courses with the highest average annual enrollments (116 – 170). The remaining EDUC courses had annual average enrollments of 5 to 13 students. LART 3006 showed an average annual enrollment of 45. This suggests there are far more students in the EDUC pipeline than progress to the 3000- and 4000-level courses later in the major. The five-year average Enrollment Maximum provides plenty of room for program growth.

Program Quality (con't.)

Student Inputs

Number of Students

Student Inputs - Number of Students

Program Title Majr	2019 - 2020			2020 - 2021			2021 - 2022			2022 - 2023			2023 - 2024		
	Total Program Level Students	Students in Program	%	Total Program Level Students	Students in Program	%	Total Program Level Students	Students in Program	%	Total Program Level Students	Students in Program	%	Total Program Level Students	Students in Program	%
BS - Biology	1,528	370	24.2%	1,430	334	23.4%	1,375	254	18.5%	1,410	267	18.9%	1,403	258	18.4%
BS - Biology Teaching Certification	1,528	1	0.1%				1,375	2	0.1%	1,410	2	0.1%	1,403	1	0.1%

Program Level - Bachelors

The number of students enrolled in a program point to the *quality* of the program. The average number of students **BS Biology** remained robust and carried a five-year average of Students in Program of 297. BS Biology students make up 20.68 percent of total Gordon State Program-level Students. Unfortunately, declines in BS Biology enrollment did not track changes in Program Level Students, resulting in a three-year percentage rate below 20 (18.4, 18.5, and 18.9). The percentage of BS Biology students to all Program Level Students peaked in AY 2019-20 and declined each year, from 24.2 to 18.4, or a 24 percent decline in the percentage rate.

BS Biology Teacher Certification enrollments remained between 0 and 2 students over the five-year review period, making analysis impractical. Again, it is noted the BS Biology Teacher Certification program extract no resources to operate. Therefore, a low enrollment will not impact productivity or viability of the BS Biology program.

Average Incoming SAT/ACT for Program Majors

Student Inputs- Average Incoming SAT/ACT Scores

Program Title Majr	2019 - 2020			2020 - 2021			2021 - 2022			2022 - 2023			2023 - 2024		
	Students in Program	Avg. ACT Comp	Avg. SAT	Students in Program	Avg. ACT Comp	Avg. SAT	Students in Program	Avg. ACT Comp	Avg. SAT	Students in Program	Avg. ACT Comp	Avg. SAT	Students in Program	Avg. ACT Comp	Avg. SAT
BS - Biology	370	18	921	334	19	933	254	18	933	267	18	925	258	18	897
BS - Biology Teaching Certification	1	22	920				2		1,120	2		1,120	1		880

Average Admissions Test Scores of Students in the Program

NOTE: Not all students will have admissions test scores

Gordon State College requires a High School GPA of ≥ 3.1 or ACT English of ≥ 17 or SAT Verbal of ≥ 430 to exempt Learning Support placement. Additionally, Admissions required an ACT MATH score ≥ 18 and SAT MATH score of ≥ 430 (p. 28, *Academic Catalog*). Thus, an SAT of ≥ 860 is required for Admissions. The Average Incoming SAT for students entering the **BS Biology** program ranged from 897 and 933, exceeding the minimum required Admissions GPA. The five-year average Incoming SAT score was 921.8. Incoming SAT scores for BS Biology Teaching Certification ranged from 880 and

1120, with an average score of 1010. It is noted that both BS Biology and Biology Teaching Certification student Incoming SAT scores dropped below 900 in AY 2023-24. Harvard University's *Education Recovery Scorecard* (<https://educationrecoverycorecard.org/>) reported Henry and Bibb County K-12 students remained a grade level behind in 2024. This may explain the decline in Gordon State's Biology students' decline in SAT scores. Thus, this may be a result of High School "learning loss" due to the COVID Pandemic.

Gordon State requires an ACT Composition score of ≥ 17 for admissions. The average Incoming ACT-Comp scores for BS Biology hovered at 18, just over the minimum 17 requirement. ACT-Comp scores were not reported for BS Biology Teacher Certification.

Average Incoming GPA for Program Majors

Student Inputs - Average Incoming GPA

Program Title Majr	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
	Students in Program	Avg. HS GPA	Students in Program	Avg. HS GPA	Students in Program	Avg. HS GPA	Students in Program	Avg. HS GPA	Students in Program	Avg. HS GPA
BS - Biology	370	3.180	334	3.169	254	3.214	267	3.228	258	3.237
BS - Biology Teaching Certification	1	3.700			2	3.910	2	3.910	1	3.890

Average High School GPA of Students in the Program

NOTE: Not all students will have HS GPA

Gordon State College requires a High School GPA ("HS-GPA") of ≥ 3.1 . The Incoming GPA for BS Biology students averaged 3.206 over the review years. Average HS GPA for each of the review years hovered close to the 3.1 minimum standard, with AY 2023-24 showing the highest GPA. This seems odd, since the SAT and ACT scores for AY 2023-24 were the lowest of the review years. The average Biology Teaching Certification Incoming HS-GPA was 3.85, well above the minimum 3.1 standard.

Freshman Index* for Program Majors

Student Inputs - Average Freshmen Index

Program Title Majr	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
	Students in Program	Average Freshman Index	Students in Program	Average Freshman Index	Students in Program	Average Freshman Index	Students in Program	Average Freshman Index	Students in Program	Average Freshman Index
BS - Biology	370	2,464	334	2,491	254	2,446	267	2,376	258	2,305
BS - Biology Teaching Certification	1	2,862			2	3,040	2	3,040	1	2,805

Average Freshman Index of Students in the Program

NOTE: Not all students will have a freshman index

USG requires applicants to "some State Colleges" to meet a Freshman Index (FI) (https://www.usg.edu/student_affairs/high_school/admissions). The Index is calculated using the applicant's High School GPA and SAT/ACT score. GSC is reported to have a Freshman Index of 1830 (https://www.gwa.com/editoruploads/files/Academics%20Files/University_System_of_Georgia_Admission_Requirements.pdf), along with Dalton State and ABAC, and the lowest Freshman Index levels of the 26 USG institutions. Georgia State University reported the highest FI requirement, at 2500. In this context,

it is inspiring to see the Freshman Index of BS Biology students with a five-year average of 2416.4. It is noted that the FI average score dropped below 2400 in AY 2022-23 and remained below 2400 in AY 2023-24.

Incoming Learning Support Requirements for Program Majors

Student Inputs- Incoming Learning Support Requirements

Program Title Majr	2019 - 2020			2020 - 2021			2021 - 2022			2022 - 2023			2023 - 2024		
	LS Requirement	No LS Requirement	Total	LS Requirement	No LS Requirement	Total	LS Requirement	No LS Requirement	Total	LS Requirement	No LS Requirement	Total	LS Requirement	No LS Requirement	Total
BS - Biology	72	314	370	48	293	334	43	231	254	29	247	267	39	227	258
BS - Biology Teaching Certification		1	1					2	2		2	2		1	1

The percentage of students entering the **BS BIOL** program with Learning Support requirements saw a decline over the review years, from 19.46 percent (AY 2019-20) to a low of 10.86 percent in AY2022-23. In AY 2023-24, the percentage bounced back to 15.12 percent. The five-year average Incoming Learning Support is 15.35 percent. In the review years, none of the students in the BS Biology Teaching Certification program entered with Learning Support requirements.

Student Outputs

Average Exit Scores on National Exams

BS BIOL / BS BIOL TC	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
Major's Field Test (MFT) Scaled Score (Max 200)	146	146	141	141	141
Overall Program Average	143				

Average Graduating Major GPA

Student Outputs - Average Graduating Major GPA

Program Title Majr	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
	Count	Graduating Major GPA	Count	Graduating Major GPA	Count	Graduating Major GPA	Count	Graduating Major GPA	Count	Graduating Major GPA
BS - Biology	26	3.252	30	3.183	29	3.316	29	3.349	19	3.331
BS - Biology Teaching Certification	1	4.000					2	3.963		

GPA in program required courses for students in program at midterm census that graduated from program at end of term.

The average graduating GPA for **BS BIOL** students remained consistent over the review years, between 3.183 (AY2020-21) and 3.349 (AY 2022-23), with a five-year average of 3.2862. **BS BIOL Teacher Certification** graduated three students over the review period, with an average Graduating GPA of 3.9815. Exceptional Graduating GPAs, suggesting significant investment from Faculty and campus resources.

Average Major GPA

Student Outputs - Average Major GPA

Program Title Major	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
	Count	ACYR Major GPA	Count	ACYR Major GPA	Count	ACYR Major GPA	Count	ACYR Major GPA	Count	ACYR Major GPA
BS - Biology	83	3.126	87	3.264	72	3.340	68	3.397	60	3.382
BS - Biology Teaching Certification	1	4.000	1	4.000	2	3.929	3	4.000	2	3.500

GPA in program required courses only. Major GPA Student Count may be smaller than total program count since only students enrolled in a course listed in the program curriculum are included.

The average GPA for all **BS BIOL** students ranged from 3.126 (AY 2019-20) and 3.397 (AY 2022-23), with a five-year average GPA for all BS BIOL students at 3.3006. **BS BIOL Teacher Certification** ranged from 3.5 to 4.0. It is noted that the BS BIOL Teaching Certificate students maintained an average GPA of 4.0 in three of the five review years. The five-year GPA average for BS BIOL Teacher Certificate students held high at 3.8858. It is noted that average GPA declined by 12.5 percent in AY 2023-24, to 3.5, the first drop below 3.9 GPA.

Employment Rates

	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
BS BIOL	N/A	N/A	N/A	N/A	N/A
BS BIOL TC	100%			100%	

Entry into Graduate Programs

	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
BS BIOL	N/A	N/A	N/A	N/A	N/A
BS BIOL TC	N/A	N/A	N/A	N/A	N/A

Student Satisfaction

Student Satisfaction Survey

Data unavailable

Faculty Outputs

Number of Full-time and Part-time Faculty

Faculty Outputs- Number of Faculty

Program Title	Department	2020		2021		2022		2023		2024	
		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
BS - Biology	Natural Sciences	2									
	STEM	6	1	8	1	7	1	7	1	7	1
BS - Biology Teaching Certification	Education	2	3	2	4	3	3	3	2	4	4
	Education, Math & A..	3	3	2	2	2	3	1	2		
	Natural Sciences	2									
	STEM	6	1	8	1	7	1	7	1	7	1
Overall Program		13	7	12	7	12	7	11	5	11	5

Faculty supporting program through assignment to required courses.

SACS-COC Resource Manual (2024) defined "full-time Faculty member" as "one whose major employment is with the institution, whose primary assignment is in teaching or research, and whose employment is based upon a contract for full-time employees." The accrediting agency further concluded, "sufficiency in faculty resources is critical to the quality and integrity of an institution's academic programs to support its mission" (CR 6.1).

The number of **BS BIOL** Full-time Faculty have remained consistent over the review years, ranging between six and eight, and Part-time Faculty remaining consistent at one. The average 7:1 ratio of Full-time Faculty to Part-time Faculty is exceptional. However, the number of BS BIOL Faculty is concerning. The National Center for Education Statistics reported the number of Full-time Faculty nationwide increased by 11 percent from Fall 2011 to Fall 2022 (<https://nces.ed.gov/programs/coe/indicator/csc/postsecondary-faculty>). With 250-350 students in the BS Biol program, seven Faculty hardly seems like enough. This makes the Student-to-Faculty ratio between 36:1 and 50:1, well above the GSC advertised ratio of 21:1.

Of concern in the **BS BIOL Teacher Certificate** program is the 15 percent decline in the number of Full-time Faculty over the review years, alongside the 28.57 percent decline in Part-time Faculty. The average of Part-time to Full-time Faculty ranged from 45.45 percent (AY2022-23 and 2023-24) to 58.33 percent (AY 2020-21 and 2021-22). The five-year average of Part-time to Full-time Faculty is 52.44 percent. In the EDUC courses, two Academic Years saw more Part-time Faculty than Full-time Faculty. The five-year average of Full-time EDUC Faculty was 2.8 while Part-time was 3.2. In other words, 15 percent more Part-time than Full-time EDUC Faculty.

RECOMMENDATIONS:

1. Faculty are encouraged to define appropriate Faculty levels to ensure program quality and integrity. Provide "persuasive evidence" (SACSCOC) that the number of full-time faculty in BS BIOL is adequate to fulfill the responsibilities and functions required for program quality.
2. Establish a plan for distribution of full-time and part-time Faculty. Include in consideration the full scope of faculty responsibilities, i.e., not just their responsibilities for instruction.
3. Establish a protocol for determining the adequacy of the number of full-time Faculty.

4. Maintain a chart with documentation of appropriate experience and qualifications of Faculty, both full-time and part-time, possibly using the SACS-COC form.

5. Plan and conduct regular and documented evaluations of part-time faculty.

Number of Terminally Degreed Faculty and Number of Non-Terminally Degreed Faculty

Faculty Outputs - Number of Terminally Degreed Faculty

Program Title	Department	2020		2021			2022			2023		2024	
		Terminal Degree	Non-Terminal Degree	Terminal Degree	Non-Terminal Degree	Unknown	Terminal Degree	Non-Terminal Degree	Unknown	Terminal Degree	Non-Terminal Degree	Terminal Degree	Non-Terminal Degree
BS - Biology	Natural Scien..	2											
	STEM	7		9			8			8		8	
BS - Biology Teaching Certification	Education	4	1	4	1	1	4	2		5		4	4
	Education, M..	6		3	1		3	1	1	2	1		
	Natural Scien..	2											
	STEM	7		9			8			8		8	
Overall Program		19	1	16	2	1	15	3	1	15	1	12	4

All BS BIOL and the majority of BS BIOL-TC Faculty hold terminal degrees in their field. A terminally degreed Faculty offers important benefits for students, including depth of subject knowledge, critical thinking and rigor, research opportunities, mentorship, networking, and program reputation. Institute for Higher Education Policy found that institutions with a higher proportion of terminally degreed faculty had improved graduation outcomes (Tucker, 2024). BS BIOL TC faculty include a larger number of non-terminally degreed faculty, with as many as four non-terminally degreed faculty to four terminally degreed faculty.

Amount of Sponsored Research Funding

BS BIOL / BS BIOL TC	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
Duffus, Amanda	0	0	0	0	0
Lee, Cathy	0	0	0	0	0
Hyde, Linda	0	0	0	0	0
Stanley, Theresa	0	0	0	0	0
Newton, Cori	0	0	0	0	0
Sanders, Anne	0	0	0	0	0
Jones, Inez	0	\$500.00	0	0	0
Rumfelt, Lynn	0	0	0	0	0
TOTALS	0	\$500.00	0	0	0

Amount of Other External Funds

BS BIOL / BS BIOL TC	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
Duffus and Newton	0	0	0	\$25000	\$25000
Lee, Cathy	0	0	0	0	0
Duffus, Amanda	0	0	0	0	0
Hyde, Linda	0	0	0	0	0
Stanley, Theresa	0	0	0	0	0
Sanders, Anne	0	0	0	0	0
Jones, Inez	0	0	0	0	0
Rumfelt, Lynn	0	0	0	0	0
TOTALS	0	0	0	\$25000	\$25000

Number of Peer-Reviewed Publications

BS BIOL / BS BIOL TC	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
Duffus, Amanda	9	3	1	0	4
Lee, Cathy	1	1	0	1	1
Hyde, Linda	0	0	0	0	0
Stanley, Theresa	0	0	0	0	0
Newton, Cori	0	0	0	0	0
Sanders, Anne	0	0	0	0	1
Jones, Inez	0	0	0	0	0
Rumfelt, Lynn	0	0	0	0	0
Higgins-Harrell, Anna	N/A	N/A	N/A	N/A	2
Jones, Joseph	N/A	N/A	N/A	N/A	2
Little,	N/A	N/A	N/A	N/A	2
Raynie, Stephen	N/A	N/A	N/A	N/A	1
TOTALS	10	4	1	1	13

Number of Faculty Research Fellowships

BS BIOL / BS BIOL TC	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
Duffus, Amanda	0	0	0	0	0
Lee, Cathy	0	0	0	0	0

Hyde, Linda	0	0	0	0	0
Stanley, Theresa	0	0	0	0	0
Newton, Cori	0	0	0	0	0
Sanders, Anne	0	0	0	0	0
Jones, Inez	0	0	0	0	0
Rumfelt, Lynn	0	0	0	0	0
TOTALS	0	0	0	0	0

Number of Academic Conference Presentations

BS BIOL / BS BIOL TC	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
Duffus, Amanda	7	11	4	2	2
Lee, Cathy	2	3	1	2	2
Hyde, Linda	0	0	0	0	0
Stanley, Theresa	0	0	0	0	0
Newton, Cori	1	2	1	3	2
Sanders, Anne	0	1	0	0	0
Jones, Inez	0	0	1	0	1
Rumfelt, Lynn	0	0	0	0	0
Anderson,					1
Higgins-Harrell, Anna					2
Jones, Joseph					2
Little,					2
Raynie, Stephen	3	3	1	1	3
TOTALS	10	17	7	7	7

Faculty Growth and Development

Faculty	Manuscripts completed	Papers submitted for publication	Papers Accepted or Published	Papers Presented	Book Reviews	Professional Development Workshops and Continuing Education	Article and Chapter Reviews
Duffus, Amanda	18	18	15	16	0	13	4
Lee, Cathy	4	4	4	10	0	6	0
Hyde, Linda	0	0	0	0	0	28	0
Stanley, Theresa	0	0	0	5	0	2	0
Newton, Cori	2	2	1	9	0	3	0
Sanders, Anne	1	1	1	0	0	13	0
Jones, Inez	2	1	1	2	0	25	3
Rumfelt, Lynn	0	0	0	0	0	5	0
Anderson, Michelle	0	0	0	1	0	0	0
Brookins, Randall	0	0	0	1	0	0	0
Higgins-Harrell, Anna	0	0	0	2	1	0	0
Jones, Joseph	0	0	0	0	2	0	0
Little, Julie	0	0	0	2	1	0	0
Raynie, Stephen	0	0	1	11	1	0	2
Total	27	26	24	59	5	95	9

BS BIOL and BS BIOL TC Faculty are to be commended for their extensive engagement in the discipline and professional growth opportunities. With 48 presentations at discipline conferences, 27 manuscripts submitted, and 59 academic papers presented at discipline meetings, BS BIOL and BS BIOL TC Faculty are probably the most productive on campus. It is noted that Faculty experienced a significant drop in productivity in AY 2021-22 through AY 2023-24, with a 70 percent drop. No explanation was provided. However, it is noted that the decline corresponds with the AY 2022-23 increase in teaching load and course enrollments.

RECOMMENDATIONS:

1. Celebrate Faculty productivity in research, presentations, and publications
2. Investigate reasons behind the drop in productivity in AY 2021-22, AY 2022-23, and AY 2023-24
3. Identify ways to recognize and reward Faculty for engagement in faculty development opportunities.
4. Explore ways to promote recent Faculty accomplishments to students, possibly something as basic as a bulletin board of recognition located in BIOL student common areas.
5. Continue to monitor and track annual Faculty productivity

Summary Program *Quality* Narrative:

While the University System does not provide a definition of program quality, the [United Nations](#) (2000) defined quality in education as “Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.” Quality includes “Content that is reflected in relevant curricula and materials for the acquisition of ... skills” with “outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.” BS BIOL and BS BIOL TC were found to be quality programs. Assessing program quality is based on *Mission Statement and Curriculum*, *Student Inputs*, *Student Outputs*, and *Faculty Outputs*. The *Mission Statement and Curriculum* Narrative may be viewed on [page 8](#) of this report. Based on the United Nations definition of “quality education” and the above criteria the 2024-25 Assessment Committee finds the BS BIOL and BS BIOL TC programs to be quality programs.

Past GSC students defined “program quality” as (1) the availability of courses, (2) day and time of major courses as convenient to students’ schedules, and (3) extracurricular learning experiences related to the major. **Student Input** indicators include (a) number of students enrolled in the program, (b) Average incoming SAT/ACT and High School GPA, (c) average Freshman Index scores, and (d) the number of students with Learning Support requirements. Each Student Inputs indicator points to the quality of the BS Biology program. Each measure exceeded the minimum required standard for program entrance. The low number of students with Learning Support requirements showed no negative impact on program quality.

- (a) The number of students in BS BIOL remains robust, with a five-year average of 297, or 20.68 percent of total Gordon State program-level students. The percentage of all program-level students peaked at 24.2 percent in AY 2019-20.
- (b) The availability of major courses, course locations, and the day/time of courses meet GSC students’ definition of program quality. Each year a wide selection of BIOL requirements and electives are offered, with some on an every-other-year basis. The number of sections offered each Academic Year shows multiple sections of required courses available for students.
- (c) Students identify program *quality* with their ability to schedule required courses. 90 percent of **BS Biology** courses were scheduled during the day on campus in AY 2019-20, and 10 percent offered in a hybrid format. When the COVID pandemic hit, only 20 percent of BIOL courses were offered on campus as the Faculty pivoted to online and hybrid models.
- (d) Gordon State requires a High School GPA of ≥ 3.1 , ACT of ≥ 17 , or SAT of 860. The average incoming SAT scores for BIOL students was 921.8. The decline in incoming SAT scores in AY 2023-24 (below 900) may be explained by “learning loss” caused by the pandemic. Harvard’s *Education Recovery Scorecard* identified Henry and Bibb Counties K-12 students remaining a grade-level behind in 2024. The average Incoming ACT-Comp scores for BS Biology hovered at 18, over the minimum 17 requirement. Incoming High School GPA averaged 3.206, above the 3.1 minimum.
- (e) BIOL Faculty offers a balance of on campus and online sections to meet students’ scheduling requirements. Due to equipment and lab demands, all courses are offered on the Barnesville campus. Average BIOL enrollments show a capacity of 69.2 percent, suggesting available space for enrollments growth. Average BIOL with Teacher Certification shows a capacity of 48.3 percent, with low enrollment capacities in the 3000-4000 level EDUC courses.

- (f) For lab-centric programs like BS BIOL, equipment plays a primary role in program quality requiring regular inventory, maintenance, and updating of equipment. Students with access to state-of-the-art lab equipment are more likely to evaluate the program as quality.
- (g) Average Class Size points to program quality. The percentage of average BIOL enrollment to class capacity ranged between 45.8 and 89.6 percent, with a 5-year average of 70.4 percent, suggesting room for enrollment growth. Four BIOL electives are scheduled in an every-other-year cycle maximizing enrollments in courses offered.
- (h) Gordon State requires a Freshman Index score of 1830. The average incoming BS Biology Freshman Index was 2416.4, considerably higher than the incoming minimum.
- (i) The percentage of BIOL incoming students with Learning Support requirements declined dramatically in the five-year review period, from 19.46 percent of students to 10.86 percent (AY 2022-23) before bouncing back to 15.12 percent in AY2023-24. The five-year average of Learning Support students was 15.35 percent.

Student Output indicators include (a) Exam scores on national exams, (b) average student GPA, (c) average graduating GPA, (d) employment rates, (e) students entering Graduate programs, and (f) student feedback on Student Satisfaction Survey.

- (a) Students' scores on national exams saw a five-year average of 143 of 200 possible.
- (b) The average GPA for BS BIOL students saw a five-year average of 3.3006, well above the "good standing" level defined by Gordon State (2.0). However, Average GPA declined by 12.5 percent in AY 2023-24 to 3.5, the first time GPA dropped below 3.9.
- (c) Average Graduating GPA for BIOL students remained consistent over the review years, averaging 3.2862.

Faculty Output indicators include (a) percentage of part-time to full-time faculty, (b) number of terminally degreed faculty, (c) peer-reviewed publications, (d) professional growth and development, and (e) faculty presentations at Academic Conferences.

- (a) Percentage of part-time to full-time faculty consistently remained at a 7-to-1 ratio, or 12.5 percent of BS BIOL Faculty.
- (b) All BS BIOL faculty hold terminal degrees. BS BIOL Teaching Certificate program utilizes far more part-time Faculty, with more part-time Faculty than full time. The five-year average full-time Faculty was 4.4 while the average part-time faculty was 5.0.
- (c) BS BIOL Faculty participation in research and conferences shows broad and consistent engagement in the discipline. With 48 presentations at discipline conferences, 26 manuscripts submitted, and 42 papers presented at discipline meetings evidences a Faculty active in their discipline.
- (d) All BS BIOL Faculty engaged in professional growth and development, a total of 95 events, an average of 12 per Faculty.
- (e) BS BIOL Faculty delivered 48 presentations at academic conferences, evidencing a Faculty engaged and involved in their discipline.

PROGRAM VIABILITY

Student Numbers

Overall Credit Hours at Entrance

Student Numbers - Overall Credit Hours at Program Declaration

Program Title Major	Overall hours	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024
BS - Biology	0 Hours	149	118	87	92	92
	1-30 Hours	90	93	74	74	89
	31-60 Hours	64	68	54	61	34
	61-90 Hours	54	40	31	27	29
	91-120 Hours	12	12	3	9	7
	121 or More Hours	1	3	5	4	7
BS - Biology Teaching Certification	31-60 Hours			1	1	
	61-90 Hours			1	1	1
	91-120 Hours	1				

Cumulative overall hours earned (including Transfer credit) at the beginning of the term the student declared the major.

NOTE: This table includes all students for AY and not just those declaring major during that AY. There can be duplication across AYs. [400, 334, 254, 267, 258] (254.6)

The majority of BS BIOL students enter the program as first-time-full-time Freshmen, and average of 107.6 per year. The second highest number of students enter the BS BIOL program with 1 – 30 hours, an average of 84. This suggests on average 191.6 students declare BS BIOL majors in the Freshman year, or 75.2 percent of all BS BIOL students. Of the remaining students, an average of 56.2 students enter the program in their Sophomore year (31 – 60 hrs.). 48.8 students declare BS BIOL major with more than 60 hours. This suggests most students enter college with Biology as their major, or declare the major within the Freshman year, resulting in few if any unused credit hours at graduation. Santa Barbara City College found that students who select majors early are more likely to graduate in four years. Selecting the major in early college years find degree requirements clearly defined, which helps the student plan for course registration. Selecting and progressing toward a major early may result in more time at Gordon State to complete degree requirements.

Of concern is the overall decline in the number of students in BS BIOL program. From a high of 400 in AY 2019-20, the number of students declined each year to 258 in AY 2023-24, a 35.5 percent decrease. A program cannot remain viable with these levels of enrollment declines.

RECOMMENDATIONS:

1. Investigate potential reasons for five-year declines in student numbers. Compare declines with overall enrollment at Gordon State to see if a correlation exists.
2. Examine enrollment trends at sister institutions to better understand statewide BIOL enrollments patterns.
3. Discuss with program Faculty to identify effective ways to attract and retain potential students

- 4. Explore the option of a Living Learning Community for Biology students in the dorms.
- 5. Track enrollment numbers and post where all BIOL Faculty and staff may easily monitor.
- 6. Review effective enrollment attractions employed in the past and consider resurrecting some best practices (like Science Camp during Summer)
- 7. Discuss enrollment numbers and issues in each Department meeting.

Faculty Workload

Number of Credit Hours Taught in the Program

Number of Credit Hours Taught in the Program

Program Title	2020	2021	2022	2023	2024
BS - Biology	1,118	1,076	936	871	722
BS - Biology Teaching Certification	2,583	2,587	2,285	2,720	2,443

Of concern is the progressive decline in the number of credit hours generated in the BS BIOL program, a 35.4 percent decline from the AY 2019-20 high. This aligns with the decline in student numbers, from 400 in AY 2019-20 to 258 in AY 2023-24, also a 35.5 percent decline. The BS BIOL TC credit hours taught are extreme and probably represent all EDUC courses rather than just BS BIOL TC courses.

Standard Faculty Workload for Degree Program

	AY2019-20	AY2020-21	AY2021-22	AY 2022-23	AY 2023-24
BS BIOL	27.8 hrs.	27.7 hrs.	27.7 hrs.	33.1 hrs.	33.7 hrs.
BS BIOL - TC					

Each year under review saw Faculty workload for BS BIOL exceeding the standard faculty workload defined in the *Faculty Handbook* of 12/12 (24 AY hrs.). In AY 2022/23 Academic Affairs raised the standard workload to 15/15 (30 hrs.) and again the BIOL Faculty workload exceeded the new standard. Overworked Faculty rarely produces the best results. Of course, this is not just a Gordon problem. Unmanageable workloads and time pressures create stress and burnout. [Gallup](#) (2024) reported the educator “talent pool is getting smaller by the day.” Yet the consequences of Faculty burnout and turnover are “significant and extend beyond financial considerations.” In 2018, [Gallup](#) found sustained overloaded employees to be 63 percent ore likely to take sick days and 23 percent more like to visit the emergency room. Studies show that when leaders strive to build Faculty wellbeing, an improved student experience resulted ([Gallup](#), 2021). High levels of Faculty stress create an unstable and unfavorable environment for students. At this precarious time in higher education, it makes sense to invest in Faculty. The return on investment in a thriving Faculty will increase engagement, lower absenteeism, reduce turnover and improve probability of thriving students.

RECOMMENDATIONS:

1. Recruit and hire additional tenure track BS BIOL faculty
2. Encourage training for Administration on negative impacts of Faculty (and employee) stress
3. Convince Administration to take seriously the long-term impact on individuals of overloaded work assignments.
4. Have meaningful conversation with, no at Faculty regarding overloaded schedules and stressors. Faculty whose Dean is willing to listen to work-related problems were 62 percent less likely to be burned out ([Gallup](#), 2018). Ask questions and listen.
5. Deans and Academic Unit Heads can provide meaningful feedback on performance, strengths, and goal achievement.
6. Improve communications on Faculty expectations.
7. Get creative with recognition, acknowledging achievements and milestones. Suggests Academic Unit Heads notice, support, and value Faculty work.
8. Develop a departmental culture of appreciation, engagement, and wellbeing. Culture is a proactive measure. Create an environment where new Faculty will want to work.
9. Encourage, develop, and assess department teamwork, helping one another
10. Academic Unit Heads study research of [Tinto](#) (2012), regarded as the premier resource for student retention theories and solutions. Tinto found students with expansive campus involvement and meaningful relationships with faculty to be more likely to persist and graduate. This makes activity and connections with stable Faculty even more important ([Donaldson](#), et.al., 2000). See also [Leaving College: Rethinking the Causes and Cures of Student Attrition](#), by Vincent Tinto for further impact of qualified Faculty on student retention.

Number of Faculty Supporting the Degree Program (within and outside the academic unit)**Number of Faculty Supporting Program Within/Outside Department**

Department Group	Program Title Majr	2020	2021	2022	2023	2024
within Program	BS - Biology	7	9	8	8	8
	BS - Biology Teaching Certification	7	9	8	8	8
	Total	7	9	8	8	8
outside of Program	BS - Biology	2				
	BS - Biology Teaching Certification	13	10	11	8	8
	Total	13	10	11	8	8

Obviously, there are not enough Faculty to adequately support the number of students in the BS BIOL program. With a five-year average of 254 students and a five-year average of eight Faculty, the result is 31.75 students to one Faculty, far above the Gordon State standard of 21 students to one Faculty promoted on the website. Exceeding Faculty workloads leaves little capacity for program growth. The BS BIOL TC faculty seem barely adequate to meet current enrollment needs. To grow, Faculty base will need to be expanded.

Percentage of Classes Taught by Full-time and Part-time Faculty

Percentage of Classes Taught by Full-time and Part-time Faculty

Program Title	2020				2021				2022				2023				2024			
	Full-time Count	%	Part-time Count	%	Full-time Count	%	Part-time Count	%	Full-time Count	%	Part-time Count	%	Full-time Count	%	Part-time Count	%	Full-time Count	%	Part-time Count	%
BS - Biology	14	73.7%	5	26.3%	14	77.8%	4	22.2%	12	70.6%	5	29.4%	11	68.8%	5	31.3%	10	71.4%	4	28.6%
BS - Biology Teaching Certification	24	46.2%	28	53.8%	27	58.7%	22	47.8%	25	55.6%	22	48.9%	30	61.2%	19	38.8%	31	67.4%	15	32.6%

Number and Percentage of classes taught by Full-time and Part-time Faculty.

Administrative faculty such as Department Heads and Deans are included in the Part-time measures.

NOTE: If "team teaching" is utilized, Full-time Count plus Part-time Count will be greater than Total Count and Full-time% plus Part-time% will be greater than 100%.

On average, 72.46 percent of BS BIOL courses are instructed by full-time Faculty, with the best year being AY2021-22 with 77.8 percent of courses delivered by full time Faculty and the lowest in AY 2023-24 with 68.8 percent taught by full time Faculty. In contrast, 57.82 percent of BS BIOL TC courses are instructed by full time Faculty, meaning almost half of BS BIOL TC courses are delivered by part time instructors. Reliance on part-time Faculty to deliver BS BIOL TC courses may weaken the validity of the program.

Number of Advisees Per Faculty Member

Faculty Workload - Number of Advisees Per Faculty Member

Program Title Majr	Department	Advisor	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
			Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%
BS - Biology	Null	Null	1	0.3%	1	0.3%			2	0.7%	2	0.8%
		Estrella, Kandice									4	1.5%
		Gates, Natashaia									6	2.3%
		Jacobs, Cynthia	24	6.5%	16	4.8%	12	4.7%	4	1.5%	18	6.9%
		Mathis, Justin	24	6.5%					9	3.3%		
	--Undeclared Department	Oliver, Jerry					2	0.8%				
		Wilcox, Charles R							52	19.3%	48	18.5%
		Ellington, Sarah M	2	0.5%								
		Davis, Doug									1	0.4%
		Horn, Jason G	1	0.3%	2	0.6%	1	0.4%				
	Arts & Humanities	Ivey, Robert P	3	0.8%								
		Janssen, David A	2	0.5%	1	0.3%					1	0.4%
		McLeod, Cortney M							1	0.4%	1	0.4%
		Perkowski, Caesar	1	0.3%	1	0.3%						
		Powers, Stephen R									1	0.4%
	Business	Venus, Wesley C							1	0.4%		
		Whitlock, Edward J							1	0.4%		
		Johnson, Brenda E			2	0.6%	1	0.4%				
		Joshi-Beck, Prathibha V			2	0.6%						
		Traylor, Rylan R	1	0.3%			1	0.4%	1	0.4%	3	1.2%
	Business & Public Service	Awbrey, James L	2	0.5%	1	0.3%						
		Campbell, Scott K	1	0.3%	1	0.3%						
		Traylor, Jessica S	3	0.8%	1	0.3%	1	0.4%				
		Webb, Brian M	1	0.3%								
		Calhoun, Valerie J	19	5.1%	5	1.5%	10	3.9%				
	Education	Johnson, Brent E	1	0.3%	2	0.6%	1	0.4%	1	0.4%		
		Jones, Joseph R	2	0.5%					1	0.4%		
		Shubitz, Scott M										
		Raynie, Stephen A	12	3.2%	10	3.0%	2	0.8%	2	0.7%	1	0.4%
		Pollock, Elizabeth A			1	0.3%						
	Education, Arts & Humaniti...	Robison, Matthew	1	0.3%	2	0.6%						
		Schaffer, Autumn	2	0.5%								
		Sanders-Senu, LaRonda M	1	0.3%								
		Fermin-Ennis, Cristina	2	0.5%	7	2.1%	9	3.5%	6	2.2%		
		Hartman, Gregory D	6	1.6%	6	1.8%						
	Natural Sciences	Jia, Beike	5	1.4%								
		Sedgwick, Myles	1	0.3%								
		Vanderbush, Nicole L	3	0.8%								
		Bishop, Samantha H	3	0.8%	1	0.3%			1	0.4%	1	0.4%
		Brooker, Heather E	6	1.6%	4	1.2%	2	0.8%				
	Nursing	Chang, Winsome R	1	0.3%	1	0.3%	1	0.4%				
		Chapman, Caitlin									1	0.4%
		Gordon, Melissa G			1	0.3%	2	0.8%	1	0.4%		
		Harrison, Melissa A	5	1.4%	6	1.8%	2	0.8%	1	0.4%	1	0.4%
		Hattermann, Ally M	1	0.3%	1	0.3%						
		Jackson, Annette J	2	0.5%	1	0.3%	1	0.4%	2	0.7%	1	0.4%
		Johnson, Amie							1	0.4%	1	0.4%
		Key, Jacquelyn A	1	0.3%			2	0.8%			1	0.4%
		Martin, Wendy L	2	0.5%	1	0.3%	1	0.4%	1	0.4%	2	0.8%
		Mertz, Melanie L			1	0.3%	3	1.2%	3	1.1%	4	1.5%
		Mills, Victoria L			1	0.3%						
		Murray-Nobles, JoAnne	3	0.8%	2	0.6%	1	0.4%				
		Nwabuebo, Elizabeth	2	0.5%	1	0.3%	1	0.4%			3	1.2%
		Skinner, Christy B	1	0.3%			1	0.4%	2	0.7%	4	1.5%
		Stevenson, Derrica L					1	0.4%				
		White, Jeff									1	0.4%
		Williams, Mary B	1	0.3%					2	0.7%	1	0.4%
		Wilson, Kelly M			1	0.3%						
		Wright, Marguerite E	2	0.5%								
		Beck, Kris A	2	0.5%								
	Professional Studies	Kicklighter, Barry L			1	0.3%					1	0.4%
		Anderson, Bernard A	1	0.3%								
		Brinkman, Mark A	22	5.9%	18	5.4%	13	5.1%	16	5.9%	12	4.6%
		Carter, Kelly D							1	0.4%		
		Clement, Geoffrey F	1	0.3%								
	STEM	Duffus, Amanda L	23	6.2%	21	6.3%	19	7.4%	18	6.7%	20	7.7%
		Fuller, Allen G					1	0.4%				
		Hyde, Linda L	19	5.1%	18	5.4%	20	7.8%	14	5.2%	21	8.1%
		Jones, Inez S	11	3.0%	21	6.3%	14	5.5%	17	6.3%	8	3.1%
		Lee, Cathy	19	5.1%	21	6.3%	13	5.1%	10	3.7%	4	1.5%
		Lindstrom, Orville	1	0.3%	12	3.6%	9	3.5%	3	1.1%	4	1.5%
		Newton, Cori N	19	5.1%	20	6.0%	13	5.1%	14	5.2%	15	5.8%
		Osborne, Andrew S			10	3.0%	6	2.3%	4	1.5%	13	5.0%
		Prabhakar, Sanjay			11	3.3%						
		Rumfelt, Lynn L	20	5.4%	27	8.1%	26	10.2%	30	11.2%	21	8.1%
		Sanders, Anne	13	3.5%	19	5.7%	15	5.9%	13	4.8%	10	3.9%
		Schmude, Richard W			4	1.2%	9	3.5%	13	4.8%	8	3.1%
		Sliwinski, Claudia			15	4.5%	12	4.7%	11	4.1%	5	1.9%
		Stanley, Theresa L	26	7.0%	21	6.3%	16	6.3%	16	5.9%	14	5.4%
		Walker, Trisha J	5	1.4%	8	2.4%	3	1.2%				
	Student Success Center	Zabdawi, Marwan							1	0.4%		
		Curtis, Martellis	1	0.3%								
		Dennis, Sanford D	11	3.0%	7	2.1%	27	10.5%				
		Gibson, Joanna S							1	0.4%	8	3.1%
		Jones, Kaitlin							3	1.1%		
		Stuckey, Wanda M	8	2.2%	9	2.7%						
		Sylvestre, Katherine E	27	7.3%	12	3.6%	1	0.4%				
		Whitlock, Katharine										
		Woodruff, James P	28	7.6%	21	6.3%	6	2.3%	6	2.2%	12	4.6%
		Stanley, Theresa L	1	0.3%			2	0.8%	2	0.7%	1	0.4%
BS - Biology Teaching ..	STEM											
Grand Total			370	100.0%	334	100.0%	256	100.0%	269	100.0%	259	100.0%

The advisement load for full time BS BIOL faculty appears to be the primary responsibility of discipline faculty, especially in the students' junior and senior years. Student Success Center advisors and faculty advisors from other disciplines seem tasked with advising Freshmen and Sophomores. Generally, advisement loads for Faculty should be reassessed and rebalanced. It makes sense for discipline Faculty to advise students in their programs.

Summary Program *Viability* Findings

Program viability is viewed as the ability of the current system to maintain a separate existence, to ensure sustainability and consistency. While seeking to serve students, employers, and taxpayers more efficiency and 'doing more with less,' viability requires effectiveness and resource support for programs that generate students, capital, and other resources for the institution. Data on **Student Numbers** and **Faculty Numbers** support overall viability of BS BIOL and BS BIOL TC programs. Most BS BIOL students enter the program as first-time-full-time Freshmen (average of 107.6 per year over five-year review period). Many students enter the program with 1 – 30 hours (average of 84). An average 191.6 students declare BS BIOL majors in the Freshman year, or 75.2 percent of all BS BIOL students. 72.46 percent of BS BIOL courses are instructed by full-time Faculty, predicting better outcomes for students.

Of concern is the decline in the number of declared majors in the BS BIOL program. Students declaring BS BIOL as their major peaked in AY 2019-20 at 400 and declined each year to 258 in AY 2023-24, a 35.5 percent decline. Dwindling numbers will reduce the capacity and strength of the program.

Additionally, the Faculty Workload presents a concern. Each year under review saw Faculty workload for BS BIOL exceeding the standard faculty workload defined in the *Faculty Handbook* of 12/12 (24 AY hrs.). In AY 2022/23 Academic Affairs raised the standard workload to 15/15 (30 hrs.) and again the BIOL Faculty workload exceeded the new standard. The 31.75 students to one Faculty is not reflective of Gordon State's advertised ratio of 21 students to one Faculty. Overworked Faculty rarely produces best outcomes, jeopardizing program sustainability and consistency.

Program Productivity

Student Graduation Statistics

Student Time to Degree

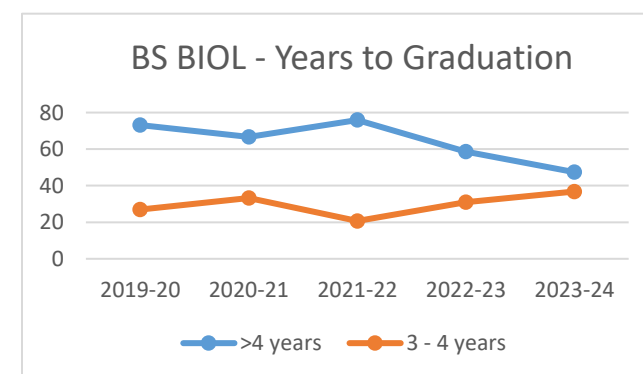
Student Graduation Statistics - Time to Degree

Acyr	Program Title MAJR	2 yrs or less								3 to 4 yrs								More than 4 yrs							
		Non-Transfer		Transfer		Unknown		Total		Non-Transfer		Transfer		Unknown		Total		Non-Transfer		Transfer		Unknown		Total	
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
2020	BS - Biology									2	7.7%	2	7.7%	3	11.5%	7	26.9%	15	57.7%	1	3.8%	3	11.5%	19	73.1%
	BS - Biology Teaching Certification									1	100.0%					1	100.0%								
	Total									3	11.1%	2	7.4%	3	11.1%	8	29.6%	15	55.6%	1	3.7%	3	11.1%	19	70.4%
2021	BS - Biology									4	13.3%	3	10.0%	3	10.0%	10	33.3%	9	30.0%	4	13.3%	7	23.3%	20	66.7%
	Total									4	13.3%	3	10.0%	3	10.0%	10	33.3%	9	30.0%	4	13.3%	7	23.3%	20	66.7%
2022	BS - Biology			1	3.4%			1	3.4%	1	3.4%	1	3.4%	4	13.8%	6	20.7%	12	41.4%	2	6.9%	8	27.6%	22	75.9%
	Total			1	3.4%			1	3.4%	1	3.4%	1	3.4%	4	13.8%	6	20.7%	12	41.4%	2	6.9%	8	27.6%	22	75.9%
2023	BS - Biology			2	6.9%	1	3.4%	3	10.3%	4	13.8%	3	10.3%	2	6.9%	9	31.0%	10	34.5%	1	3.4%	6	20.7%	17	58.6%
	BS - Biology Teaching Certification											1	50.0%			1	50.0%	1	50.0%					1	50.0%
	Total			2	6.5%	1	3.2%	3	9.7%	4	12.9%	4	12.9%	2	6.5%	10	32.3%	11	35.5%	1	3.2%	6	19.4%	18	58.1%
2024	BS - Biology			2	10.5%	1	5.3%	3	15.8%	5	26.3%	2	10.5%			7	36.8%	6	31.6%			3	15.8%	9	47.4%
	Total			2	10.5%	1	5.3%	3	15.8%	5	26.3%	2	10.5%			7	36.8%	6	31.6%			3	15.8%	9	47.4%

Time to Degree based on first-term of enrollment at GSC.

Includes students known to Institutional Research as First-time Freshmen (Non-Transfer) or First-time Transfer (Transfer)

Most BS BIOL students graduate in more than four years (average of 64.34 percent). It is noted that over the five-year review period, the >4 Year rate of graduating students declined from 73.1 percent to 47.4 percent. As the >4-Year rate declined, the 3 – 4 Year rate increased, from a low of 20.7 percent to 36.8 percent. These are highly desirable trends, seeing students graduate in the 4-year timeframe. AY 2023-24 saw increases in Non-Transfer, Transfer, and Unknown students graduating in 3-4-Year rate over AY 2022-23 students. BS BIOL TC student count is too small to draw conclusions or generalizations.



Baccalaureate Level Graduation Numbers (for Review of Baccalaureate Level Programs)**Baccalaureate Level Graduation Numbers**

Program Title MAJR	2020		2021		2022		2023		2024	
	Count	Avg. Years to Grad	Count	Avg. Years to Grad	Count	Avg. Years to Grad	Count	Avg. Years to Grad	Count	Avg. Years to Grad
BS - Biology	26	4.6	30	4.7	29	5.9	29	4.2	19	4.8
Total	26	4.6	30	4.7	29	5.9	29	4.2	19	4.8
BS - Biology Teaching Certification	1	3.7					2	3.7		
Total	1	3.7					2	3.7		

Time to Degree based on first-term of enrollment at GSC.

BS BIOL are graduating on average in 4.84 years. Considering the rigor of the program, graduating in less than five years seems heroic for students. Of concern is the decline in the number of graduates, from a high of 30 in AY 2020-21 to a low of 19 in 2023-24, a 36.7 percent decline. This trend does not track with enrollment, as AY2019-20 enrollment was highest year. Graduation numbers remained high in AY 2020-21, AY 2021-22, and AY 2022-23 and sharply declined in 2023-24, a 34.5 percent drop in year-to-year graduates. BS BIOL TC graduates take on average of 3.7 years to complete their degree. This seems odd as the BS BIOL TC program requires 132 credit hours, meaning students will need to successfully complete 18 hours each semester, which of course, is possible for highly motivated students.

Student Retention**Returned the Subsequent Term****Student Retention - Returning Students**

Program Title MAJR	2019 - 2020				2020 - 2021				2021 - 2022				2022 - 2023				2023 - 2024			
	Total students	Return	Grad	%	Total students	Return	Grad	%	Total students	Return	Grad	%	Total students	Return	Grad	%	Total students	Return	Grad	%
BS - Biology	182	99	1	54.9%	101	46	2	47.5%	72	52		72.2%	119	69		58.0%	106	62	1	59.4%
BS - Biology Teaching Certification	1		1	100.0%					2	2		100.0%					1	1		100.0%

* Academic year - AY of first semester (Summer, Fall or Spring) student has declared major for the program under review.

* Returned - Returned the subsequent Fall term - student enrolled Fall term subsequent to his/her Cohort Term

* Graduated- Graduate prior to subsequent Fall term - student was awarded degree in program prior to the Fall term subsequent to his/her Cohort Term

* % - Percentage retained/graduated - total number of students retained and graduated divided by total students in a Cohort of the Academic Year

BS BIOL five-year student retention averages 58.4 percent, one of the highest at Gordon State College. A standard deviation of 9.0 suggests a wide range in variables. Indeed, the retention ranged from 47.5 percent in AY 2020-21 to a high of 72.2 percent the following year. It can be presumed that the COVID pandemic caused the low retention rate in Fall 2020. Faculty are to be commended for the momentous recovery the following year. Removing these outlier years, the BS BIOL retention rates remained consistent between 54.9 and 59.4 percent. With extremely low enrollments, the BS BIOL TC retention rates remain at 100 percent through the years reviewed. The [National Student Clearinghouse Research Center](#) reported a national “second fall retention” rate of 69.5 percent, a 0.4 percent increase over 2022 retention. While the BS BIOL retention rate of 58.4 does not meet the national average, it is in the competitive area and points to the productivity of the program.

Summary Program *Productivity* Findings

The [US Bureau of Labor Statistics](#) defines productivity as “a measure of economic performance that compares the amount of goods and services produced with the amount of inputs used to produce those goods and services.” In analyzing productivity, we look at the outputs, enrollment, retention, and completion data, to provide evidence of productivity of BS BIOL program. Ideally, productivity improves each year, as this is a key variable in the College’s success, profitability, and ability to thrive. In improving productivity, space is made available for growth and expansion.

BS BIOL *Student Time to Graduation* averaged 4.84 years, one of the lowest at Gordon State. And the Time to Graduation continues to improve. The “>4 Year rate” of graduating students declined from 73.1 percent to 47.4 percent. And as the >4-Year rate declined, the 3 – 4 Year rate increased, from a low of 20.7 percent to 36.8 percent, a 77.8 percent increase. This data suggests Faculty and Faculty Advisors effectively move students through the program to successful completion. Also, the BS BIOL student retention average of 58.4 percent remains one of the highest at Gordon State College.

RECOMMENDATIONS:

1. Faculty and Academic Unit Heads continuously monitor and track productivity variables, like Student Years to Graduation, Time to Degree, and Retention and post semester results where Faculty can easily and regularly view.
2. Faculty identify additional factors (metrics) that point to program productivity.
3. Faculty meet regularly to discuss obstacles to retention and ways to reduce obstacles or their impact.
4. Include Productivity variables in discussions in all Departmental meetings.
5. Survey BS BIOL Faculty to discover ways to improve their productivity.
6. Identify ways technology can help in monitoring productivity.
7. Widely communicate productivity successes throughout department
8. Faculty and Department Leaders study the [St. Louis’ Federal Reserve’s](#) (2006) report on Ways to Boost Productivity in Higher Education” report. Despite being 20 years old, the report provides some insightful recommendations.
9. Study [Way, Morgan, Larremore & Clauzet’s](#) research on “Productivity, Prominence, and the Effects of Academic Productivity,” in *National Academy of Science*, where they found that Faculty work environments and culture drove productivity and productivity gains.
10. Focus on Faculty well-being, development, and growth. Why destroy the goose that lays the golden egg?
11. Survey students to understand variables impeding successful degree completion
12. Institute continuous improvement practices and encourage open communication among department members. Encourage Faculty to regularly suggest small changes that cumulatively enhance productivity.
13. Consider purchasing and following the [Malcolm Baldrige National Quality Award Excellence Framework for Education](#) criteria.
14. Acknowledge and highlight Faculty achievements and successes.
15. Establish clear, actionable goals for the department *and* each member of the department
16. Everyone accentuates enhancing productivity.
17. Include Faculty in rewards that high productivity brings the College.

Appendix A: Data Sources

A = Institutional Research

B = Department/Department Head

C = Human Resources

D = Department Website

E = Gordon State College Catalog

F = Board of Regents Website

Note: If other data sources are used, they can be implemented as need to Appendix A and the appropriate sections above.

Appendix B: Student Demographics

Number of program students

Total number of students in the program and as a percentage of all Bachelor students at Gordon State College

See table “Number of Students” in the *Student Inputs* section.

Number of students in [Program] program by self-reported Gender, Age, and Ethnicity and percentage of all Bachelors students at Gordon State College.

Self-Reported Age

Student Demographics Self Reported Age

Program Title Majr	Age Category	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
		Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%
BS - Biology	<= 23	309	83.5%	269	80.5%	204	79.7%	212	78.8%	200	77.2%
	> 23	66	17.8%	68	20.4%	52	20.3%	57	21.2%	60	23.2%
BS - Biology Teaching Certification	<= 23	1	0.3%			2	0.8%	2	0.7%	1	0.4%

Self-Reported Gender

Student Demographics Self Reported Gender

Program Title Majr	GENDER	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
		Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%
BS - Biology	Female	271	73.2%	238	71.3%	186	72.7%	199	74.0%	180	69.5%
	Male	99	26.8%	96	28.7%	68	26.6%	68	25.3%	78	30.1%
BS - Biology Teaching Certification	Female	1	0.3%			2	0.8%	2	0.7%	1	0.4%

Self-Reported Ethnicity

Student Demographics Self Reported Ethnicity

Program Title Majr	Ethnicity/Race	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
		Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%
BS - Biology	Hispanic or Latino	12	3.2%	24	7.2%	21	8.2%	14	5.2%	18	6.9%
	American Indian or Alaska Native	1	0.3%								
	Asian	5	1.4%	4	1.2%	6	2.3%	8	3.0%	6	2.3%
	Black or African American	158	42.7%	122	36.5%	90	35.2%	102	37.9%	93	35.9%
	White	179	48.4%	165	49.4%	125	48.8%	123	45.7%	129	49.8%
	Two or more races	12	3.2%	14	4.2%	10	3.9%	19	7.1%	11	4.2%
	Unknown	3	0.8%	4	1.2%	1	0.4%			1	0.4%
	Native Hawaiian or Other Pacific Islander			1	0.3%	1	0.4%	1	0.4%		
BS - Biology Teaching Certification	White	1	0.3%			2	0.8%	2	0.7%	1	0.4%

Students by Number of Hours Completed

Student Demographics - Students by Number of Hours Completed

Program Title Majr	Number of Hours Earned	2019 - 2020		2020 - 2021		2021 - 2022		2022 - 2023		2023 - 2024	
		Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%	Students in Program	%
BS - Biology	< 60	224	61.0%	175	52.4%	114	44.5%	128	47.8%	134	51.9%
	60 - 74	20	5.4%	33	9.9%	31	12.1%	35	13.1%	26	10.1%
	75 - 89	32	8.7%	25	7.5%	25	9.8%	28	10.4%	30	11.6%
	90 - 104	30	8.2%	17	5.1%	24	9.4%	18	6.7%	15	5.8%
	105 - 120	17	4.6%	28	8.4%	15	5.9%	17	6.3%	12	4.7%
	> 120	43	11.7%	56	16.8%	45	17.6%	40	14.9%	40	15.5%
BS - Biology Teaching Certification	90 - 104					2	0.8%			1	0.4%
	> 120	1	0.3%					2	0.7%		

Number of Hours Earned includes institutional and transfer credits.

Appendix C: Faculty Roster of the Biology Program

NAME	COURSES TAUGHT	ACADEMIC DEGREES EARNED	OTHER QUALIFICATIONS
Brinkman, Mark	BIOL 1111K BIOL 1112K BIOL 1107K BIOL 1108K BIOL 3500K BIOL 3520K BIOL 4905K BIOL 4910K	BS, PhD	Retired December 31, 2024
Duffus, Amanda	BIOL 1112K BIOL 1108K BIOL 2295K BIOL 3200K BIOL 4200 BIOL 4750 BIOL 4900 BIOL 4905	BSc.H., MSc., PhD	MEd
Hyde, Linda	BIOL 1111K BIOL 1107K BIOL 1108K BIOL 4350	BA, PhD	
Jones, Inez	BIOL 1111K BIOL 1112K BIOL 2251K BIOL 2252K BIOL 3350K BIOL 4700K BIOL 4905K	BS, PhD	MBA
Lee, Cathy	BIOL 1111K BIOL 2251K BIOL 2252K BIOL 3100 BIOL 4905K BIOL 4910K	BS, MS, PhD	

Lindstrom, Orville	BIOL 1101 BIOL 1111K BIOL 1112K BIOL 3500K BIOL 3600K	BS, MS, PhD	
Newton, Cori	BIOL 1111K BIOL 1107K BIOL 3300K BIOL 4905K	BS, MA, PhD	
Rumfelt, Lynn	BIOL 1111K BIOL 1112K BIOL 1107K BIOL 4460	BS, PhD	
Sanders, Anne	BIOL 1112K BIOL 2251K BIOL 2252K BIOL 3200K	BS, PhD	
Stanley, Theresa	BIOL 1111K BIOL 2260K BIOL 3340K BIOL 4100	BS, MS, PhD	

Appendix D: Library Resources Complete for English and History

Dorothy W. Hightower Collaborative Learning Center and Library Resources

Mission

The mission of the Dorothy W. Hightower Collaborative Learning Center and Library is to support the teaching, learning, and research needs of the college community by providing a knowledgeable staff, resources, tools, information, learning spaces, and instruction in evaluative and lifelong learning skills.

Library Vision and Primary Function

With an extensive renovation slated for completion by Spring 2016, the Dorothy W. Hightower Collaborative Learning Center and Library is a welcoming environment offering and encouraging flexible, open, and collaborative learning spaces as well as individual study spaces to meet the needs of the 21st

Century student learner. The library provides and maintains a full range of print, non-print, and electronic resources; technology; and services to support teaching and learning at Gordon State College. Additionally, the library promotes awareness, understanding, and the use of these resources through research skills courses, library orientation classes, individualized instruction, online tutorials, and hands-on research assistance for Gordon State students located in Barnesville, Griffin, McDonough and distance education learners. Gordon State College students, faculty, and staff, as well as the surrounding community, are invited to use Hightower Library to pursue academic and intellectual interests.

The primary functions of the library are:

1. To provide physical and electronic access to the necessary informational and instructional resources and technologies which facilitate teaching and nurture learning via logical organization of materials and services, enabling information to be conveniently located, accessed, manipulated, and created.
2. To provide an expert staff, whose value as an informational source equals that of our print and electronic resources, and who are committed to aiding the student, faculty, and staff in the most effective manner.
3. To provide for a growing student body and faculty an attractive yet functional facility which respects the tradition of individual study while simultaneously encouraging the spirit of collaborative engagement, and which allows students, faculty, and staff to achieve their academic goals through research, education, facilitation, presentations, stimulation, and innovation.

Research Assistance

Research assistance is available by walk-up face-to-face assistance, phone, email, and online via PowerPoint and video tutorials, as well as LibGuides (subject guides). Additionally, Gordon State students are assigned a personal librarian based on their majors or home department. Students are able to schedule consultation appointments with their personal librarian to seek help with their research assignments. Faculty/staff may also take advantage of the Personal Librarian program and work with librarians to create/revise class assignments, provide library instruction classes, conduct research for professional development or scholarly activities, or recommend library materials to support the curriculum offered at Gordon State.

The Personal Librarian for BS Biology is Carla Fredd.

Facility and Online Description

The library supports an on-site, physical collection consisting of 108,000 volumes, 7,932 bound periodicals, 8,000 current periodical subscriptions, 10,394 microfilm units, and 36,000 electronic books. In addition to books and periodicals, the library houses a growing collection of audiovisual materials for use in the library or for classroom use. Patrons have access, in GALILEO (**G**eorgi**A** **L**ibrary **L**earning **O**ne) to more than 105,000 online serials and core academic journals with over 93,221 of these full-texts and 325 databases. Equipment is available in the library for viewing these materials.

Hightower Library, a two story building, named for Dorothy Watson Hightower, was built in 1978. Reference materials, bound periodicals, microfilm, the Georgia Collection, video collection, and LP collection were housed on the first floor until renovation began in July 2015. The circulating collection, study

rooms, and AV equipment were located on the second floor. Hightower Library provided space for quiet study and collaborative group work (6 study rooms), 27 computers, 24 laptops, 2 printers, wireless access, 3 microfilm readers, and 2 photocopiers.

During the renovation, students may access computers and quiet study spaces located in the Instructional Complex Building, Academic Hall, Russell Hall, Nursing and Allied Health Sciences Building, and Smith Hall as well as connect remotely using their personal devices or utilize technology at one of the partner libraries (HCPL or SCTC). However, after the renovation has been completed [2], the library will be a state of the art learning facility for the 21st century learner which will house approximately thirty percent of the reference materials, bound periodicals, microfilm collection, and circulating collection while the remaining library materials are located via Guillebeau Hall yet accessible upon electronic request. The renovated building will house an increased number of (1) general student seating, (2) computers, (3) individual and group study rooms for collaborative work and individual quiet study, (4) Presentation Practice Room, (5) Assistive Technology Room, (6) two instructional classrooms, (7) wireless access, (8) microfilm readers, (9) printing, (10) and self-check-out machine.

Guillebeau Hall was built in 1934 as Memorial Gymnasium to honor the men who fought in World War I. Memorial Gymnasium was a Public Works Administration project. The building was remodeled in 1999 and converted to a co-ed honors hall that housed 36 students. The building was renamed in honor of Colonel Joseph Edwin Guillebeau, a former professor and President of Gordon Military College. More recently, the main floor of Guillebeau Hall was renovated during Spring and Summer semesters 2015 to accommodate the library repository. It houses the majority of the library's collection as well as the Archives Collection. Archives consist of materials donated to the college related to the history of the (1) college, (2) Lamar County, (3) City of Barnesville, (4) alumni memorabilia, and (5) well-known alumni. Students and community members wanting to access these materials may do so by scheduling an appointment with the Reference and Instruction Librarian who also serves as the college's Archivist. Library users may access materials in Guillebeau Monday through Friday from 8AM until 5PM upon scheduling an appointment with a librarian.

Biology Resources available in Hightower Library overall

Format	Number of Titles	Comments
Books	1,137	
Electronic Books	11,200	
Print/Microfilm Journals	7	This counts only unique titles
Electronic Journals	2,089	Total count includes some duplicates

Biology databases available through GALILEO

DATABASE TITLE:
Academic Search Complete
Article First
Bepress Digital Commons
Biology: The eSkeletons Project
Biology Journals (ProQuest)
Dissertation Abstracts
ERIC
JSTOR Life Sciences
National Science Digital Library
Newsbank Newsfile Collection
ProQuest Central
Research Library (ProQuest)
Science & Technology Collection
Science Journals (ProQuest)

Biology Journals Available Through GALILEO

Titles:
1. AASRI procedia.
2. Ab intus (Online)
3. Abstracta botanica
4. Academia biology.
5. Academia molecular biology and genomics.
6. Acadia National Park transportation plan newsletter
7. Access microbiology.
8. ACS chemical biology (Online)
9. ACS materials letters.
10. ACS synthetic biology.
11. Acta biochimica et biophysica Sinica.
12. Acta biochimica Indonesiana.
13. Acta bioethica.
14. Acta biológica Catarinense
15. Acta biológica colombiana.
16. Acta biologica Cracoviensia. Series botanica.
17. Acta biológica paranaense.
18. Acta biologica Sibirica.
19. Acta biologica Slovenica : ABS.
20. Acta biologica (Szczecin, Poland)
21. Acta Biology Forum
22. Acta biotheoretica (Online)
23. Acta botanica Barcinonensia.
24. Acta botânica brasilica (Online)
25. Acta botanica Croatica.
26. Acta botanica malacitana.
27. Acta botánica mexicana.
28. Acta botánica venezolélica.
29. Acta Brasiliensis.
30. Acta clinica belgica.

31. Acta crystallographica. Section D, Biological crystallography.
32. Acta crystallographica. Section F, Structural biology and crystallization communications.
33. Acta et commentationes. Științe exacte și ale naturii.
34. Acta ethologica.
35. Acta Facultatis ecologiae.
36. Acta geographica debrecina. Landscape and environment series.
37. Acta Horti Botanici Bucurestiensis
38. Acta limnológica brasiliensia.
39 Acta microbiologica Bulgarica.
40 Acta morphologica et anthropologica.

Appendix E: Student Satisfaction with Program Survey Results

Data not available

BIOL AY 2010-2024 CPR

Recommendation	Action
Develop a new Mission Statement for the Program	The Department will start the review process to update the Mission, Vision and Philosophy at their midterm meeting in October with plans to complete the task by end of May 2026.
Explore ways to Promote Faculty Accomplishments and highlight their achievements and successes	Will work with facilities to install a Bulletin Board where Quarterly Spotlight/Highlight and updates can be displayed. Plans for completion by end of AY (June 30, 2026).
Engage Faculty in identifying factors that point to program productivity	Will task faculty to brainstorm during the inter-semester break for discussion at the Spring Semester (mid Jan 2026) opening meeting.
Explore reasons for the 5-year decline in program enrollment	Will work with IE/IR and gathering information to try to determine a correlation between program and college enrollment. A report will be produced and shared by end of Fall 2026 term.
Establish clear and actionable goals for the department and each member	Will start the conversation with faculty members during the next Evaluation period and ask for 1-2 new goals that align with the Mission Statement that will be produced by May 2026. Faculty will be evaluated on these goals in Spring of 2027.
Recruit and Hire additional Tenure Track BS BIOL faculty	Will collaborate with CFO and VPAA to try to secure a new faculty line (area of need is Microbiology). Depending on Retirements, this might possibly be a reassignment of a line in a different area of the STEM department.
Create New Concentrations that are relevant to the evolving needs of our students	A concentration in Biotechnology was recently approved. Discussion on 2-3 different possible concentrations are underway. It is reasonable to expect at least 2 new concentration to be introduced by Fall of 2028, if not sooner.
Establish a regular survey to identify preference for courses	The Department will reach out to IE/IR an the D2L coordinator about best ways to deploy a survey and analyze findings to be used in course scheduling for Fall 2027 onward.
Review Lab Facilities at McDonough for potential increase in course offerings	A review of lab facilities is ongoing. Currently, we are working with Henry County Schools and GSC Foundation to outfit a science lab that will allow us to offer more Lab courses starting Fall 2026.
Engage faculty in identifying ways to attract and retain potential students	Engage Provost office in developing opportunities for faculty members to secure course-release in exchange for "Recruitment Fellows" or Embassadors to work with Admissions.

BS in Biology and BS with Teacher Certification Comprehensive Program Review

Responses to Recommendations

Respectfully submitted by Dr. Amanda L. J. Duffus

DATE 9/16/2025

Mission Statement and Curriculum Narrative Recommendations

1. In collaboration with Biology Faculty, Staff, and the Department Head of STEM begin the effort of developing a program specific mission statement.
Noted
2. Upon completion and approval, post the program mission statement on the Bachelor of Science in Biology, Gordon State College website for public viewing.
Noted
3. Develop procedures that include monitoring and updating the program mission statement annually, to ensure it supports and reflects the mission of Gordon State College.
Noted
4. Establish a regular survey of students to identify preferences for course day/time and location, especially preferences for online or on-campus offerings.
This is not possible given the small number of faculty we have, therefore we have endeavored to provide 2 options for most of the majors introductory courses and carefully schedule upper year courses to ensure that they do not conflict with other required courses.
5. Institute program-level inventory of lab equipment and review to ensure latest in equipment and design populate BIOL lab rooms
Noted
6. Review lab facilities at McDonough campus to see if requirements are met. If so, consider scheduling courses on the McDonough campus. On average, 20 percent of First-Time-Full-Time Freshmen come to Gordon from Henry County (2023-24 GSC Fact Book, p. 41).
Noted, however, we currently do not have the capacity to offer introductory majors courses at multiple locations.
7. Continue to monitor enrollment and capacities for clues into student preferences for course scheduling.
Noted
8. Create a Wait List during Registration to monitor demand for course day/times
Noted, please see above and we do have waitlists for all courses.
9. Create a program policy for creating new sections when the Wait List reaches a certain level.
Noted but we are limited in the number of faculty we have to offer majors courses at all levels.
10. Regularly monitor program mission statement and update as job market demands evolve.
Noted, in Spring 2026, we added a biotechnology concentration to address job market demands. Full roll out Fall 2026.
11. Include program mission statement on all promotional materials.
Noted
12. Monitor program mission statement on Gordon website to ensure links remain live.
Noted
13. Avoid the use of antiquated language in mission statements. Keep statements relevant to students in language and scope.
Noted

Program Quality, Faculty Outputs and Faculty Growth and Development Recommendations

1. Faculty are encouraged to define appropriate Faculty levels to ensure program quality and integrity. Provide “persuasive evidence” (SACSCOC) that the number of full-time faculty in BS BIOL is adequate to fulfill the responsibilities and functions required for program quality.
Noted
2. Establish a plan for distribution of full-time and part-time Faculty. Include in consideration the full scope of faculty responsibilities, i.e., not just their responsibilities for instruction.
Noted

3. Establish a protocol for determining the adequacy of the number of full-time Faculty.
Noted
4. Maintain a chart with documentation of appropriate experience and qualifications of Faculty, both full-time and part-time, possibly using the SACS- COC form.
Noted
5. Plan and conduct regular and documented evaluations of part-time faculty.
This is done in accordance with the Faculty Handbook.
6. Celebrate Faculty productivity in research, presentations, and publications
Noted, this has been attempted, but lack of faculty input prevented it from materializing.
7. Investigate reasons behind the drop in productivity in AY 2021-22, AY 2022-23, and AY 2023-24
Noted
8. Identify ways to recognize and reward Faculty for engagement in faculty development opportunities.
Noted
9. Explore ways to promote recent Faculty accomplishments to students, possibly something as basic as a bulletin board of recognition located in BIOL student common areas.
Noted, we have a several boards on the second floor of IC and one of them could be used for this purpose.
10. Continue to monitor and track annual Faculty productivity
Noted, this is something that we can easily try to do using the format found in the CPR.

Program Viability Recommendations

1. Investigate potential reasons for five-year declines in student numbers. Compare declines with overall enrollment at Gordon State to see if a correlation exists.
Noted
2. Examine enrollment trends at sister institutions to better understand statewide BIOL enrollments patterns.
Noted
3. Discuss with program Faculty to identify effective ways to attract and retain potential students
Noted
4. Explore the option of a Living Learning Community for Biology students in the dorms.
Noted
5. Track enrollment numbers and post where all BIOL Faculty and staff may easily monitor.
Noted
6. Review effective enrollment attractions employed in the past and consider resurrecting some best practices (like Science Camp during Summer)
Noted, but this has been done, for example the Science Olympiad did not result in any students enrolling in GSC. Therefore, with the high workloads of the faculty in mind, GSC acting as a host was discontinued.
7. Discuss enrollment numbers and issues in each Department meeting.
Noted

Faculty Workload Recommendations

1. Recruit and hire additional tenure track BS BIOL faculty
Noted, we have been pushing for this for a number of years as faculty who have left or retired have not generally been replaced.
2. Encourage training for Administration on negative impacts of Faculty (and employee) stress
Noted
3. Convince Administration to take seriously the long-term impact on individuals of overloaded work assignments.
Noted
4. Have meaningful conversation with, not at Faculty regarding overloaded schedules and stressors. Faculty whose Dean is willing to listen to work- related problems were 62 percent less likely to be burned out ([Gallup](#), 2018). Ask questions and listen.
This is done on a regular basis, there is very little that an academic head or Dean can do about this.
5. Deans and Academic Unit Heads can provide meaningful feedback on performance, strengths, and goal achievement.
This is done during the annual evaluation process with the feedback that the department head gives.

6. Improve communications on Faculty expectations.
Noted, but this also needs to be done at all levels of administration.
7. Get creative with recognition, acknowledging achievements and milestones. Suggests Academic Unit Heads notice, support, and value Faculty work.
Noted
8. Develop a departmental culture of appreciation, engagement, and wellbeing. Culture is a proactive measure. Create an environment where new Faculty will want to work.
Noted, but this should be a college-wide initiative as well.
9. Encourage, develop, and assess department teamwork, helping one another
Noted
10. Academic Unit Heads study research of [Tinto \(2012\)](#), regarded as the premier resource for student retention theories and solutions. Tinto found students with expansive campus involvement and meaningful relationships with faculty to be more likely to persist and graduate. This makes activity and connections with stable Faculty even more important ([Donaldson, et.al., 2000](#)). See also [Leaving College: Rethinking the Causes and Cures of Student Attrition](#), by Vincent Tinto for further impact of qualified Faculty on student retention.
Noted

Program Productivity Recommendations

1. Faculty and Academic Unit Heads continuously monitor and track productivity variables, like Student Years to Graduation, Time to Degree, and Retention and post semester results where Faculty can easily and regularly view.
Noted
2. Faculty identify additional factors (metrics) that point to program productivity.
Noted
3. Faculty meet regularly to discuss obstacles to retention and ways to reduce obstacles or their impact.
Noted
4. Include Productivity variables in discussions in all Departmental meetings.
Noted
5. Survey BS BIOL Faculty to discover ways to improve their productivity.
Noted
6. Identify ways technology can help in monitoring productivity.
Noted, perhaps an MS Form could be used to track things like publications, grants, and presentations.
7. Widely communicate productivity successes throughout department
Noted, but please see the above comments on faculty buy in.
8. Faculty and Department Leaders study the [St. Louis' Federal Reserve's \(2006\)](#) report on Ways to Boost Productivity in Higher Education” report. Despite being 20 years old, the report provides some insightful recommendations.
Noted
9. Study [Way, Morgan, Larremore & Clauset's](#) research on “Productivity, Prominence, and the Effects of Academic Productivity,” in *National Academy of Science*, where they found that Faculty work environments and culture drove productivity and productivity gains.
Noted
10. Focus on Faculty well-being, development, and growth. Why destroy the goose that lays the golden egg?
Noted. This is more than a departmental issue, this is a systemic issue at GSC.
11. Survey students to understand variables impeding successful degree completion
Noted
12. Institute continuous improvement practices and encourage open communication among department members. Encourage Faculty to regularly suggest small changes that cumulatively enhance productivity.
Noted, but most faculty are continually improving their course materials and finding other ways to engage students in the college experience.
13. Consider purchasing and following the [Malcolm Baldrige National Quality Award Excellence Framework for Education](#) criteria.

Noted

14. Acknowledge and highlight Faculty achievements and successes.
Noted, but please see the above comments on faculty buy in
15. Establish clear, actionable goals for the department and each member of the department.
Program level goals were discussed in 2025 and decided upon they will be used to develop a new mission statement etc. Each member of the department sets their own clear actionable goals via the formal faculty evaluation process.
16. Everyone accentuates enhancing productivity.
Noted
17. Include Faculty in rewards that high productivity brings the College
Noted, this is not a program level issue, it is a college level one

Department Head Recommendations

Actionable Items

Low fruit: Can be done easily and quickly. 1 year or less

1. Develop new mission statement for the Biology program.
2. Create a Wait List during Registration to monitor demand for course day/times
3. Maintain a chart with documentation of appropriate experience and qualifications of Faculty, both full-time and part-time, possibly using the SACS-COC form.
4. Explore ways to promote recent Faculty accomplishments to students, possibly something as basic as a bulletin board of recognition located in BIOL student common areas.
5. Acknowledge and highlight Faculty achievements and successes.
6. Faculty identify additional factors (metrics) that point to program productivity

Medium Fruit: Can be done within 2 yrs

1. Establish a protocol for determining the adequacy of the number of full-time Faculty.
2. Investigate potential reasons for five-year declines in student numbers. Compare declines with overall enrollment at Gordon State to see if a correlation exists and sister institutions to see if general trends are similar.
3. Deans and Academic Unit Heads can provide meaningful feedback on performance, strengths, and goal achievement.
4. Establish clear, actionable goals for the department and each member of the department
5. Investigate reasons behind the drop in productivity in AY 2021-22, AY 2022-23, and AY 2023-2

Important but High Fruit: 3 years

1. Recruit and hire additional tenure track BS BIOL faculty
2. Improve communications on Faculty expectations
3. Make GSC a place where people want to work and foster a growth mindset for faculty and students alike
4. Create new concentrations that are relevant to the evolving needs of our students.

