

Department of Natural Sciences

Office or Department of Academic Affairs

Administrative Unit Assessment Report Information

Year Reporting: FY21 (July 2020 – June 2021)

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Department Mission and Goals

The mission and goals of the department should be consistent over a 5 year period, although some institutional changes may necessitate and prompt a change in mission or goals for specific departments. In this section, you will report the mission statement for your department as well as the long term goals (5 year range) for the department.

<p>6. What is the mission statement for this department/area? Your mission should explain why the department/area exists and who it serves.</p>	<p>The department of Natural Sciences prepares students for rigorous post-baccalaureate programs or to enter into today's competitive job markets by providing opportunities for students to advance their knowledge through undergraduate research and through experiential learning. The Department of Natural Sciences supports the scholarly atmosphere of the university by promoting faculty research and scholarly activity through grants and travel awards.</p>
<p>7. What are the goals for this department? These should be the "big things" the department/area intends to accomplish within 5 years.</p>	<ol style="list-style-type: none">1. To increase student engagement by advancing scientific knowledge through undergraduate research.2. To contribute to faculty research and the scholarly atmosphere of the university.3. To increase number of graduates in the B.S. Biology program.4. To expand student access to experiential learning opportunities.

Objectives

Each year, every department should identify objectives the department hopes to accomplish in the next year. These should align with departmental goals and the MGA strategic plan. In the next section you will be reporting on the objectives you set and whether or not you achieved them in FY21. Later in the document you will report on objectives you hope to accomplish in the coming fiscal year, FY22.

Objective 1

8. Objective 1: What was this department's first objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.	To increase number of students involved in undergraduate research.
9. Objective 1: Detail how your department measured this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)	Enrollment in SCIE 2999 courses & in courses offering Course Related Undergraduate Research Experiences (CUREs)
10. Objective 1: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)	Our target outcome was to increase the number of students enrolled in SCIE 2999, BIOL 4894 or CUREs by 5%.
11. Objective 1: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)	<p>In Fall 2020, four faculty incorporated CURE projects into their courses (BIOL 1002 (n=33), 4110 (n= 23) and two sections of CHEM 1212 (n=26 & 12 respectively). Total number of students in CURE's, n=94. Three students were also enrolled in BIOL 4894-Senior Research and no students in SCIE 2999 due to COVID-19 restrictions.</p> <p>Likewise, in Spring 2021, four faculty incorporated CURE projects into their courses (BIOL 1001 (n=34), 1002 (n=27) and two sections of CHEM 1212 (n=31 & 35 respectively) for a total of 124 students. One student also registered for BIOL 4894, Senior Research. SCIE 2999 were not offered due to COVID-19.</p> <p>Both semesters the department more than doubled the previous year's numbers.</p>
12. Objective 1: Did your department meet this objective?	The department exceeded this objective.
13. Objective 1: What did your department learn from working toward this objective? What changes will you make based on this effort next year?	The department is expanding opportunities for students to participate in undergraduate research experiences. Course-Related Undergraduate Research Experiences (CUREs) were developed to do this. As a result, more

	students participated in undergraduate research experiences than in the past.
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Objective 2

14. Objective 2: What was this department's second objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.	To provide faculty seed grants for scholarly and creative activity focused on undergraduate research.
15. Objective 2: Detail how your department measured this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)	Number of faculty receiving grant funds in support of undergraduate research or CURE's.
16. Objective 2: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)	To increase the number of faculty participating in undergraduate research by 5%. To increase number of faculty receiving seed money for undergraduate research by 5%.
17. Objective 2: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)	Fall 2020: Total of six faculty received funding for CURE's or undergraduate research projects. Four faculty offered CURE's (Yadav, Hancock, Guarisco & Nuckels). Three faculty received money for undergraduate research projects. Spring 2021: Four faculty offered CURE's (Howard, Hancock, Guarisco & Nuckels) and five faculty received money for undergraduate research projects. (Balding, Hancock, Howard, Guarisco & Nuckels) The total number of unique faculty receiving grants in any form were 8.
18. Objective 2: Did your department meet this objective?	The department did not meet this objective.
19. Objective 2: What did your department learn from working toward this objective? What changes will you make based on this effort next year?	Undergraduate research was impacted negatively by Covid-19 and this pattern held across the USG. Campus closures, social distancing restrictions, lack of faculty time for research and lack of student interest during this tumultuous year made it quite difficult to meet this objective. It is hoped as we return to face-to-face we can refocus efforts to grow faculty scholarship.

Objective 3

20. Objective 3: What was this department's third objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.	To increase number of students graduating from the B.S. Biology program.
21. Objective 3: Detail how your department measured this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)	Count of the number of students graduating with the B.S. Biology degree.
22. Objective 3: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)	5% increase in number of graduates.
23. Objective 3: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)	Decreased by 12 students from last year. (-35%)
24. Objective 3: Did your department meet this objective?	The department did not meet this objective.
25. Objective 3: What did your department learn from working toward this objective? What changes will you make based on this effort next year?	Covid 19 may have slowed down student progression this past year. We hope to see this increase in the next year.

Objective 4

26. Objective 4: What was this department's fourth objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.	To expand experiential learning opportunities for students (e.g., new undergraduate research projects, etc.)
27. Objective 4: Detail how your department measured this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)	Number of experiential learning courses offered will be counted. Number of participants in experiential learning opportunities will be counted (e.g., student participants in undergraduate research conferences, research, etc.)
28. Objective 4: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)	5% increase in experiential learning courses offered. 5% increase in participant number in undergraduate research conference presenters.
29. Objective 4: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)	SCIE 2999 sections: Fall 2020-0 sections; Spring 2021-0 sections. BIOL 4120-2 sections; BIOL 4894: 1 section Undergraduate Conference cancelled due to COVID-19
30. Objective 4: Did your department meet this objective?	The department did not meet this objective.
31. Objective 4: What did your department learn from working toward this objective? What changes will you make based on this effort next year?	Covid-19 precautions prevented student research, internship and conferences this past year.

Future Plans

<p>32. Please identify and detail three to four measurable objectives for the next fiscal year. In listing the objectives, please use the format shown in these examples.1) The Department of X will improve services levels by 5% as measured by our satisfaction survey. 2) The department of X will provide training in ABC for at least 73 MGA faculty and staff.</p>	<p>1.The Department of Natural Sciences will increase number of students involved in undergraduate research in SCIE 2999 or CURE courses by 5% as measured by enrollment reports.</p> <p>2.The Department of Natural Sciences will provide faculty seed grants to support and increase the number of faculty participating in undergraduate research by 5% as measured by a count of faculty offering undergraduate research and by a count of faculty receiving seed money for undergraduate research.</p> <p>3.The Department of Natural Sciences will increase the number of experiential learning opportunities available to students as measured by a 5% increase in enrollment in experiential learning courses and in a 5% increase in participation in the undergraduate research symposium.</p>
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Open Box for Assessment Comments

<p>33. Based on this assessment, please share your thoughts on the current status and future direction of this department or area. Use this space to summarize overall use of assessment results for continuous improvement and open text box for assessment comments:</p>	<p>The department of Natural Sciences is committed to growing both student and faculty scholars over the next five years. Both groups will benefit the local, state and regional community. Although some goals were not met, the B.S. Biology program should be promoted as an affordable way to obtain a quality science degree in Georgia. Students who have graduated the program are being admitted to graduate programs, medical & dental programs and teaching in local high schools. The program would benefit from the institution following alumni to determine job placement and graduate/professional school acceptance. We are optimistic that as students return to campus, we will be able to offer more research opportunities to those that do.</p>
<p>37. If the COVID-19 pandemic impacted this assessment cycle, please provide specific details below.</p>	<p>The COVID-19 pandemic caused the shutdown of all face-to-face operations at MGA. This prevented students and faculty from accessing science labs for half of the spring and all of the summer semesters in 2020. Undergraduate research was severely limited by this. As we moved into the fall, social distancing requirements, the need for hybrid courses and content creation for lectures/labs meant that undergraduate research was also impacted in the fall. It should be noted that the CURE's were expanded during this time. It is hoped as we return to face-to-face, we will be able to get back to expected levels of undergraduate research.</p>

MGA's Strategic Plan

<p>34. Based on your goals and objectives listed above please indicate their connection with MGA's Strategic Plan (https://www.mga.edu/about/docs/Strategic_Plan_Overall_DB.pdf) by checking all associated and relevant Imperatives / Strategies from the list below. (Check all the apply)</p>	<p>Grow Enrollment with Purpose 1. Expand and enrich the face to face student experience, Own Student Success 4. Expand student engagement and experiential learning, Build Shared Culture 5. Attract talent and enhance employee development and recognition</p>
<p>35. Please indicate which of the following actions you have taken as a result of the 2020/2021 Assessment Cycle (Note: These actions are documented in reports, memos, emails, meeting minutes, or other directives within the reporting area) (Check all the apply)</p>	<p>Disseminating/Discussing Assessment Results/Feedback to Appropriate External Stakeholders, Making Improvements to Teaching Approach, Course Design, Curriculum, Scheduling, other</p>

Other

<p>36. Please indicate (if appropriate) any local, state, or national initiatives (academic or otherwise) that are influential in the operations, or goals, and objectives of your unit. (Complete College Georgia, USG High Impact Practice Initiative, LEAP, USG Momentum Year, Low-Cost No-Cost Books, etc)</p>	<p>USG STEM Grant IV, Southeastern Regional Pulse Institute-(PULSE Partnership for Undergraduate Life Science Education)</p>
<p>38. Mindset Update (Academic Deans ONLY) Please provide an update on the implementation of your school based mindset plan/strategy. Include any adjustments to metrics for the AY20/21 as well as outcomes associated with your appraisal of your schools activities.</p>	