COMPREHENSIVE ACADEMIC PROGRAM REVIEW

Note: Enter "NA" wherever data are not applicable or not available for the program under review.

Program Characteristics
Academic Program Name: **Psychology**
Degree: **Bachelor of Science (B.S.)**
Program CIP Code: **42.0101**
School and Department: **Liberal Arts/Department of Social Sciences**
Time frame for this review: **2014/2015 – 2018/2019**
Date of last internal review: **First Comprehensive Program Review**
Current date program reviewed for this report: **October 30, 2019**

Program Goal Statement and Student Learning Outcomes
Program goal statement:

The BS in psychology program focuses on psychology as a scientific discipline, examining a breadth of content from the biological bases of behavior and mental processes to sociocultural impacts on human behavior. Students will learn the basis of psychological investigations, from simple observation to rigorous experimentation, and then explore the range of topics associated with psychology. The psychology program will graduate students who are well versed in the basics of human cognitive and emotional processes and individual and social behavior, in addition to having a solid grounding in research, analytic, observational, learning, memory, and writing skills. Students will be prepared to enter the workforce for organizations that will allow them to put these psychology skills to use or to continue study in psychology or other graduate or professional programs such as medicine, neuroscience, law, and business.

Overarching goals:

1. The psychology major will produce graduates who have a strong knowledge base in psychology and a firm foundation in scientific inquiry, critical thinking, and research.
2. The psychology major prepares graduates for employment in fields requiring interpretive, analytical, research, social and communication skills. The psychology major also prepares graduates for further education in graduate and/or professional school.

Program outcomes:

1. Students will gain acceptance into graduate or professional schools or find employment related to their degrees.
2. Students will express satisfaction with the quality of instruction in their psychology program of study.

Student learning outcomes:

1. Students will demonstrate a strong knowledge base in psychology.
2. Students will demonstrate skill in scientific inquiry and critical thinking.

3. Students will demonstrate ethical and social responsibility in a diverse world.
4. Students will demonstrate skill in written and oral communication.

Brief Assessment of Previous Program Review
Outcome of previous program review (brief narrative statement).
The B.S. in psychology was approved by the Board of Regents in 2014. Thus, this is the program's first review.

What improvements have occurred since the last program review or assessment?

Faculty converted at least 10 courses to an online or hybrid format to increase access for working students. PSYC 1101: Introduction to Psychology and PSYC 3370 were developed as fully online courses, and the following courses were developed as hybrids:

- PSYC 1101: Introduction to Psychology
- PSYC 2000: Careers in Psychology
- PSYC 3300: Health Psychology
- PSYC 3325: Social Psychology
- PSYC 3500: Personality
- PSYC 3710: Child Psychology
- PSYC 4825: History & Systems in Psychology
- PSYC 4850: Special Topics in Psychology
- PSYC 4900: Senior Capstone Seminar/Psychology

In Fall of 2014 Dalton State College was granted a charter to begin a Psi-Chi Program. Psi Chi is the international honor society for psychology students. Only those institutions that meet stringent and rigorous qualifications are granted a charter, and Dalton State was admitted during the first semester of its new BS in Psychology program. Since inception, over 50 of the program's students have been inducted into Psi-Chi, and a significant proportion of them have been admitted to graduate school. In addition, the department's chapter has also won the award for RSO (registered student organization) of the Year and the charter chapter advisor won the award for RSO Advisor of the Year.

In Fall of 2017, Dalton State College was granted RSO status for a Psychology Club. This RSO has grown significantly with a total of over 75 members. This club's members are involved in service to their discipline as well as their community and fellow students. Many members go on to become members of Psi-Chi.

The psychology program has recently acquired space for a computer laboratory. This modest space enables our students to work on both class projects as well as the opportunity to work on individual research projects. Studies show that students who complete a research project are significantly more likely to complete their degree program as well as to enter graduate school.

The psychology program recently began an APA (American Psychological Association) Writing Laboratory to assist our students. Many of our students struggle with APA formatting and style when writing papers for upper-level courses. As a faculty, we took it upon ourselves to reserve space and volunteer our time for these workshops. Thus far, our students are seeking our help, and the quality of their papers has improved significantly.

Since our program's inception Dalton State has been fortunate to have hired five new faculty members:

Dr. Alicia Briganti-Causey (2013) Ph.D. Louisiana State University, Associate Professor

Dr. Elizabeth Dunaway (2015) Ph.D. Auburn University, Assistant Professor

Dr. Catherine Clinard (2016) Ph.D. University of Tennessee, Assistant Professor

Dr. Travis McKie-Voerste (2017) Ph.D. University of Georgia, Assistant Professor

Ms. Farrah Barton (2019) M.A. Georgie Regents University, Lecturer

What changes or revisions have been made to the program, its curriculum, or its program/student learning outcomes since the last program review? Please include a follow-up discussion of the previous review's action plan?

Since the program was first established, the following new courses have been developed and approved by the Academic Programs Committee:

- PSYC 2010: Psychological Studies (2015-2016) was added in order to provide our students with a better understanding of the scientific process and to better instruct them in the proper methods of APA formatting and writing style.
- The program's research methods and statistics sequence (PSYC 3110: Research Methods and PSYC 3120: Research Analysis) was changed to an integrated sequence (e.g., PSYC 3150: Research Design and Analysis I, PSYC 3160: Research Design and Analysis II) in 2017-2018 in order to further students' application and understanding of the course materials.

Since the program was first established, the following courses have been changed/revised in order to promote student learning and preparedness:

- PSYC 3360: Comparative Psychology was changed to PSYC 4650 (2015-2016), senior-level course, in order to allow for a more thorough presentation of course materials as well as a more rigorous examination of student learning.
  Revised Catalog Description: Examines the methods, theories and research in animal behavior with an emphasis on underlying adaptive mechanisms and their role in understanding human behavior.
  Prerequisites: PSYC 3160 or PSYC 3120; all prerequisites require a C or better.

- PSYC 3900: History and Systems of Psychology was changed to PSYC 4825 (2016-2017), a senior-level course, in order to allow for a more thorough presentation of course materials as well as a more rigorous examination of student learning.
  Revised Catalog Description: Examines the history of psychology from ancient to modern times. The background of formal psychology as found in philosophy and physiology, primary early systems in psychology, major historical figures and the historical and cultural context in which psychology developed will be presented.
  Prerequisites: PSYC 3160 or PSYC 3120; all prerequisites require a C or better.

- PSYC 4200: Learning and Behavior was changed to PSYC 3940 (2016-2017), a junior-level course, in order to provide students with earlier access to course materials in order to better prepare them for their senior-level courses.
  Revised Catalog Description: Examines the various learning mechanisms that are involved in the establishment, maintenance and the reduction of behaviors. Topics include Pavlovian conditioning, operant conditioning, and observational learning in humans and animals. Online lab experiences will be part of the class.
  Prerequisites: PSYC 2010 and 2103; all prerequisites require a C or better.

- PSYC 4270: Cognitive Psychology was changed to PSYC 3950 (2016-2017), a junior-level course, in order to provide students with earlier access to course materials in order to better prepare them for their senior-level courses.
  Revised Catalog Description: Examines mental processes such as attention, mental representation, categorization, problem solving, pattern recognition, imagery, and short-term and long-term memory. Online lab experiences will be part of the class.
  Prerequisites: PSYC 2010 and 2103; all prerequisites require a C or better.

COMPREHENSIVE ACADEMIC PROGRAM REVIEW

Student Demographics

Enrollment	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Headcount	173	203	196	201	185	2.8%
FTE	161.75	189.83	184.25	186.08	166.33	6.9%
Enrolled Full-time	144	163	161	155	135	-6.3%
Enrolled Part-time	29	40	35	46	50	72.4%
Female	124	146	141	155	138	11.3%
Male	49	57	55	46	47	-4.1%
Alaskan Native/Native American/American Indian	1	0	0	0	0	-100%
Asian, Hawaiian, Other Pacific Islander	-0	3	3	2	1	-66.7%
Black/African-American	8	6	14	15	15	87.5%
Hispanic	33	36	40	49	45	36.4%
Multi-racial	2	2	3	4	4	100%
Undeclared	11	12	1	3	2	-81.8%
White	118	144	135	128	118	0%

Analysis and comments on student demographics.

The number of students enrolled in the Bachelor of Science in psychology program has increased by a very modest 2.8% in the first five years of this new degree program. The program began as a very strong program and is the second largest major in the School of Liberal Arts.

The majority of students in the program are female (74.59% in Fall 2018), and the majority of the students are attending full-time (73% in Fall 2018). The ethnicities of psychology majors are quite diverse, and there has been an 87.5% increase in the number of blacks/African-Americans and a 36.4% increase in the number of Hispanics choosing this major since its inception.

Faculty Indicators of Program Quality	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
School (not Department) faculty teaching in program	0	0	0	0	0	0
Full-time program faculty	5	5	6	6	6	20.0%
Part-time program faculty	2	4	3	3	2	0%
Total program faculty	7	9	9	9	8	14.3%
Percent of program classes taught by full-time program faculty	87%	85%	83%	90%	90%	3.4%
Gender (full-time and part-time faculty)	**Fall 2014**	**Fall 2015**	**Fall 2016**	**Fall 217**	**Fall 2018**	**% Change**
Male	4	4	4	4	3	-25.0%
Female	3	5	5	5	5	66.7%
Race/Ethnicity (full-time and part-time faculty)	**Fall 2014**	**Fall 2015**	**Fall 2016**	**Fall 2017**	**Fall 2018**	**% Change**
Alaskan Native/Native American/American Indian	0	0	0	0	0	0
Asian, Hawaiian, Other Pacific Islander	0	0	0	0	0	0
Black/African-American	1	1	1	1	1	1
Hispanic	0	0	0	0	0	0
Multi-racial	0	0	0	0	0	0
Undeclared	0	0	0	0	0	0
White	6	8	8	8	8	33.3%
Tenure Status (full-time faculty)	**Fall 2014**	**Fall 2015**	**Fall 2016**	**Fall 2017**	**Fall 2018**	**% Change**
Tenured	2	2	2	2	2	0%
On-tenure track	2	2	3	3	3	50.0%
Non-tenure track	1	1	1	1	1	0%
Rank (full-time faculty)	**Fall 2014**	**Fall 2015**	**Fall 2016**	**Fall 2017**	**Fall 2018**	**% Change**
Professor	2	1	1	2	2	0%
Associate Professor	1	1	1	0	1	0%
Assistant Professor	1	2	3	3	2	100.0%
Instructor/Senior Lecturer/Lecturer	1	1	1	1	1	0%

Faculty Indicators of Program Quality

Highest degree (full-time faculty)	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Doctorate	4	4	5	5	6	50.0%
Specialist	0	0	1	1	0	0
Master's	1	1	0	0	0	0
Bachelor's	0	0	0	0	0	0
Associate's/Other	0	0	0	0	0	0

Provide additional details, analysis, and comments regarding faculty indicators of program quality.

The number of full-time Liberal Arts faculty teaching in the psychology program has increased by 20%, and the number of faculty with doctorates has increased by 50%.

The majority of faculty are white and female. Approximately 33% of the full-time faculty are tenured, 50% are on tenure track, and 16.6% (1 faculty member) is a lecturer.

Still other indicators of faculty quality are the high student evaluations that Liberal Arts faculty average each year. The 2018-2019 student evaluation average was a strong 4.5 on the College's 5-point scale. In addition, these faculty members have a strong presentation/publication record as well as a strong service record. In 2018-2019, the six psychology faculty had 14 presentations/publications, including the National Institute on the Teaching of Psychology, the Southern Association of Counselor Education and Supervision Conference, and the Annual Meeting of the Midwestern Psychological Association as well as a chapter in the *Handbook of Interpersonal Violence Across the Lifespan*. Last year alone, they served on 23 committees, including the Honors Program Advisory Council, the Mindset Committee, the Faculty Resource Committee, the Academic Programs Committee, the Title IX Hearing Panel Committee, the Accessibility Compliance Taskforce, the Faculty Development Committee, the School of Liberal Arts Promotion and Tenure Review Committee, the Testing Coordinator Search Committee, and the Faculty Senate, to name only a few. They also served as reviewers for the Bold Talks Symposium, for *Psi Chi*'s 2018-19 CEPO/Psi Chi Undergraduate Poster Session, and for the Southeastern Psychological Association Regional Travel Grants; as a moderator for the PSYCHTEACHER listserv hosted by Kennesaw State University; as a reviewer for the Association for Spiritual, Ethical and Religious Values in Counseling conference; and as a reviewer for the Southern Association for Counselor Education and Supervision Conference. Last year, these six faculty also participated in 19 different community service activities and organizations, such as Readers to Leaders, the Conasauga Family Violence Alliance, FutureFest, the North Georgia Family Crisis Center, the North Georgia Humane Society, the Teen Maze, and the Alliance of Therapy Dogs national organization, logging 52 hours of service in the greater Dalton and Chattanooga Community.

Indicators of Measures of Quality

Student Input	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Mean ACT score	21.12	20.99	20.59	20.41	20.37	-3.6%
Mean SAT score	479.65	480.51	469.95	468.76	468.62	-2.3%

If applicable to your degree program, provide any additional external quality assurance data/information or results (e.g., professional accreditation results, National Survey of Student Engagement [NSSE], market rankings, etc.).

The Bachelor of Science in psychology is not accredited by any specialized accrediting agencies, nor are there market rankings for this program. (The American Psychological Association's Commission on Accreditation does not accredit bachelor's and master's programs, only doctoral programs.)

Indicators of Measures of Quality

Student Output	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Exit scores on national/state licensure (If applicable)	n/a	n/a	n/a	n/a	n/a	n/a
Graduating majors' mean GPA	First Year	Second Year	3.33	3.23	3.44	3.3%
Employment rate of graduates/Entering graduate professional programs	First Year	67%	76%	82%	83.3%	24.3%
Number of students entering graduate/professional programs	n/a	See above	See above	See above	See above	n/a

Describe the extent to which students have achieved current program outcomes during this program review cycle (most recent year).

Graduating students are surveyed at the end of each semester in their capstone class, PSYC 4900. The psychology program coordinator and faculty follow up with graduates through emails, phone calls, and LinkedIn accounts.

The following table provides the results for the 2018-2019 program assessment:

	Program Outcome	Target	Assessment
1.	Students will gain acceptance into graduate or professional schools or find employment related to their degrees.	Seventy percent of the students who complete the Psychology Program Exit Survey and/or provide us with their LinkedIn address will indicate or demonstrate that they will be employed in an area associated with their degree or gain admission to graduate or professional school.	Target met: 83.33% of the students met the standard.

Students enrolled in the BS psychology program all take PSYC 4900 Senior Capstone Seminar in Psychology in their final year. As part of the class, all students are required to fill out the Psychology Program Exit Survey that has two parts. The first is identification information that asks for non-college email addresses, permission to contact the student in the future, LinkedIn account information (as of fall 2016) and plans for the immediate future. Not all of the students indicated their employment on their Linkedin pages. For those students who did not indicate employment on their Linkedin page, we examined Facebook for employment and/or educational information as well as the Exit Survey information. Twenty-four out of 25 students completed the surveys, for a 96% response rate. The department could identify employment for 20 of the 24 students who filled out the exit survey. Of these, 12 were employed in areas related to their psychology degree. For students whose employment we could identify, 11 were employed in Whitfield County, 3 in Gordon County, 3 in Murray County, 1 each in Walker, Catoosa and Hamilton County, TN. For students who disclosed salary information, all but two graduates who were employed were making less than $25,000 per year. Employers included The Home Depot, Belk, Beall's, Murphy Harpst Children Centers, Wal-Mart, Kroger, and Dalton State, among others. Employment ranged from customer service, to HR supervision, to Resident Assistant, to sales, to nursing, to afterschool program employee, and to interns, among others. Each of these areas (and many more) are associated with the psychology degree according to the American Psychological Association (APA Guidelines for the Undergraduate Psychology Major http://www.apa.org/ed/precollege/about/undergraduate-major.aspx [see Appendix E, pp 65-66]). No information was available for the other graduates. Additionally, five students reported having been admitted to graduate school for the upcoming year. Among the students who could be identified, 83.33% were employed in areas |

		related to their psychology major and/or were admitted to graduate school.
2. Students will express satisfaction with the quality of instruction in their psychology program of study.	Students will fill out a Psychology Program Exit Survey designed to assess student satisfaction with the psychology program. Seventy percent of the students who complete the Psychology Program Exit Survey will indicate that the psychology program has met or exceeded expectations. At least 70% of the students will rate the quality of instruction is either "good or excellent."	Target met; 100% of the students met the standard. Twenty-four out of 25 students completed the surveys, for a 96% response rate. Of the 24 students who filled out the survey, 100% agreed that the overall quality of instruction by the faculty in the School of Liberal Arts was excellent or good; 92% agreed that the quality of instruction in preparation for future education was excellent or good; and 92% agreed that the quality of instruction in preparing for success in their first professional job after graduation was excellent or good. There are additional questions related to the extent to which the psychology program increased knowledge and abilities in particular ways. Of the 24 students who completed the survey, 100% reported that their ability to critically analyze major concepts and theoretical perspectives in psychology either significantly or moderately increased; 100% reported that their understanding of essential elements of academic and professional writing either significantly or moderately increased; 92% reported that their understanding of academic and professional research and scholarship either significantly or moderately increased; 96% reported that their understanding of the essential content of the psychology core curriculum either significantly or moderately increased, and 96% reported that their understanding of professional and ethical values in the field of psychology either significantly or moderately increased. The final evaluation question asked the extent which the psychology program fulfilled the expectations of the students; 100% of the students agreed the program either exceeded or met their expectations. The overall outcome of the Psychology Program Exit Survey was extremely positive. Students expressed a high level of satisfaction with our program.

Describe the extent to which students have achieved current student learning outcomes during this program review cycle (most recent year).

During the 2018-2019 academic year, graduates met or exceeded all program-specific student learning outcomes. See details in the following table. Previous years' findings can be found in Weave online for each of the years covered by this program assessment.

2018-2019

Student Learning Outcome	Target	Assessment
1. Students will demonstrate a strong knowledge base in psychology.	Students will take a required comprehensive Psychology Exit Exam when they take the PSYC 4900 Senior Capstone Seminar in Psychology class. The BS Psychology Exit Exam was developed in fall, 2015 prior to our first graduating class finishing. The exam is composed of 100 questions that come from the 11 required 2000-level and higher classes (PSYC 2103, 2010, 3110, 3120, 3200, 3450, 3500, 3900, 4200, 4270, and 4700), except for the PSYC 4900 Senior Capstone Seminar in Psychology class. At least 70% of the students taking the BS Psychology Exit Exam will score 70% or better on the exam.	Target met: 96% of the students met the standard.
2. Students will demonstrate skill in scientific inquiry and critical thinking.	Students will learn and understand psychology as a science and engage in critical thinking regarding psychological issues. Seventy percent of students enrolled in PSYC 3150 and PSYC 3160 will earn 70% or better on questions related to research design, implications of research, and causation vs. correlation. as well as on a written assignment focused on scholarly articles.	Target met: 92% of students met the standard. Students enrolled in PSYC 3150 and PSYC 3160 learn core aspects of scientific inquiry and critical thinking. On exams that focus on research design and causation vs. correlation, 95% of students scored 70% or better on research design questions and 91% of the students scored 70% or better on questions related to causation vs. correlation. Additionally, 91% of

		students scored 70% or better on a written assignment focused on integration and interpretation of scholarly articles. The overall pass rate in the PSYC 3110 class in fall, 2017 with a grade of C or better was 89% (16 of 18 enrolled) with two students failing. Students performed well in this class, demonstrating a good understanding of scientific inquiry and critical thinking.
3. Students will demonstrate ethical and social responsibility in a diverse world.	Seventy percent of students who take PSYC 2000 and PSYC 3150-3160 classes will earn 70% or better on the informational interview paper (PSYC 2000) and on the exam questions related to research ethics (PSYC 3150-3160).	Target met; 92% met the standard.
4. Students will demonstrate skill in written and oral communication.	Students will research, analyze and present several "classic" research projects in psychology. Seventy percent of students enrolled in PSYC 4900 will earn 70% or better on the presentation components of the Senior Research Seminar Project, thus demonstrating appropriate communication skills.	Target met: 100% of students met the standard.

Indicators of Measures of Quality

If available, provide additional information and/or results of other indicators of quality related to student output such as completer satisfaction surveys, employer satisfaction surveys, stakeholder satisfaction surveys, completion and continuation rates, attrition rates, starting salaries of graduates, etc.

Students enrolled in the BS psychology program all take PSYC 4900 (Senior Capstone Seminar in Psychology) in their final semester prior to graduation. As part of the class, all students are required to complete the Psychology Program Exit Survey that has two parts. The first is identification information that asks for non-college email addresses, permission to contact the student in the future, and plans for the immediate future.

We will use this information to try to keep track of students following graduation. The second part of the survey is anonymous and focuses on the quality of the program and instruction.

2018-2019 Academic Year

The survey was given to the fall 2018 and spring 2019 PSYC 4900 classes. There was a total of 24 students (out of 25) who completed the survey, for a 96% response rate. The first part of the anonymous survey focuses on the quality of instruction in the School of Liberal Arts. Of the 24 students who completed the survey, 100% said that the overall quality of instruction by the faculty in the School of Liberal Arts was excellent or good; 92% said that the quality of instruction in preparation for future education was excellent or good; and 92% said that the quality of instruction in preparing for success in their first professional job after graduation was excellent or good. There are additional questions related to the extent to which the psychology program increased knowledge and abilities in particular ways. Of the 24 students who filled out the survey, 100% said that their ability to critically analyze major concepts and theoretical perspectives in psychology either significantly or moderately increased; 100% said that their understanding of essential elements of academic and professional writing either significantly or moderately increased; 92% said that their understanding of academic and professional research and scholarship either significantly or moderately increased; 96% said that their understanding of the essential content of the psychology core curriculum either significantly or moderately increased, and 96% said that their understanding of professional and ethical values in the field of psychology either significantly or moderately increased. The final evaluation question asked the extent which the psychology program fulfilled the expectations of the students; 100% of the students said the program either exceeded or met their expectations. The overall outcome of the Psychology Program Exit Survey was extremely positive. Students expressed a high level of satisfaction with the program.

The psychology program coordinator was able to identify the employment status for 20 of the 24 students who completed the graduating student exit survey in Spring of 2019. Of these, 12 were employed in areas related to their psychology degree. For students whose employment could be identified, 11 were employed in Whitfield County, 3 in Gordon County, 3 in Murray County, and 1 each in Walker, Catoosa, and Hamilton County, TN. For students who disclosed salary information, all but two graduates who were employed were earning less than $25,000 per year. Employers included The Home Depot, Belk, Beall's, Murphy Harpst Children Centers, Wal-Mart, Kroger, and Dalton State. among others. Employment ranged from customer service, to HR supervision, to Resident Assistant, to sales, to nursing, to afterschool program employee, and to interns, among others. Each of these areas (and many more) is associated with the psychology degree according to the American Psychological Association (APA Guidelines for the Undergraduate Psychology Major http://www.apa.org/ed/precollege/about/undergraduate-major.aspx [see Appendix E, pp 65-66]). Additionally, five students reported having been admitted to graduate school for the upcoming year.

2017-2018 Academic Year

The survey was also given to the fall 2017 and spring 2018 PSYC 4900 classes. All 29 graduating students completed the survey for a 100% response rate. All graduating students (100%) agreed that the overall quality of instruction by the faculty in the School of Liberal Arts was excellent or good; 97% agreed that the quality of instruction in preparation for future education was excellent or good; and 88% agreed that the quality of instruction in preparing for success in their first professional job after graduation was excellent or good. All of the graduates reported that their ability to critically analyze major concepts and theoretical perspectives in psychology either significantly or moderately increased; 100% said that their understanding of

essential elements of academic and professional writing either significantly or moderately increased; 97% said that their understanding of academic and professional research and scholarship either significantly or moderately increased; 100% said that their understanding of the essential content of the psychology core curriculum either significantly or moderately increased, and 97% said that their understanding of professional and ethical values in the field of psychology either significantly or moderately increased. The final evaluation question asked the extent which the psychology program fulfilled the expectations of the students; 97% of the students said the program either exceeded or met their expectations. The overall outcome of the Psychology Program Exit Survey was extremely positive. Students expressed a high level of satisfaction with our program.

For the 2017-2018 academic year, the program coordinator was able to identify employment status for 22 of the 29 students who completed the exit survey. Of these, 17 were employed in areas related to their psychology degree. For students whose employment could be identified, 11 were employed in Whitfield County; 5 in Gordon County; 2 in Murray County; 1 each in Polk, Chatooga, Walker, and Catoosa Counties; 1 in Oklahoma; and 1 in Hamilton County, TN. For students who disclosed salary information, all but 2 graduates who were employed were earning less than $25,000 per year; one reported $26/hour (equivalent to $52,000 per year) and 1 reported $15/hour (equivalent to $30,000 per year). Employers included The Home Depot, the City of Dalton, Cottage Life Assistance, Murphy Harpst Children Centers, Dollar General, Kroger, Ethica, and the University of Oklahoma, among others. Employment ranged from customer service, to HR supervision, to Resident Assistant, to sales, to nursing, to afterschool program employee, and to interns, among others. Each of these areas (and many more) is associated with the psychology degree according to the American Psychological Association (APA Guidelines for the Undergraduate Psychology Major http://www.apa.org/ed/precollege/about/undergraduate-major.aspx [see Appendix E, pp 65-66]). Of the remaining students who graduated in 2017/18, five were employed in areas not related to psychology, and no information was available for the other graduates. Additionally, two students reported having been admitted to graduate school in psychology for the upcoming year. One of those students also reported employment related to psychology and the other employment not related to psychology. Consequently, of the students who could be identified, 82% were employed in areas related to their psychology major and/or were admitted to graduate school.

Describe efforts undertaken to achieve and maintain curricular alignment within the program and currency to the discipline.

Since the program was first established, several courses have been developed and/or altered in order to maintain curricular alignment and currency within the discipline. Psychological Studies (PSYC 2010: 2015-2016) was added in order to provide our students with a better understanding of the scientific process and to better instruct them in the proper methods of APA formatting and writing style. The majority of psychology programs within the state of Georgia offer a similar course.

The program's research methods and statistics sequence (PSYC 3110: Research Methods and PSYC 3120: Research Analysis) was changed to an integrated sequence (e.g., PSYC 3150: Research Design and Analysis I, PSYC 3160: Research Design and Analysis II) in 2017-2018 in order to further students' application and understanding of the course materials as well to allow them to begin their primary research projects much earlier in their educational sequence. Nationwide, many psychology programs have undertaken a similar change in their research methods and statistics sequences.

Comparative Psychology (PSYC 3360), a rare offering to undergraduate in higher education, was changed to a senior-level course (PSYC 4260: 2015-2016) in order to provide faculty with the opportunity for a more thorough presentation of course materials as well as a more rigorous examination of student learning. In addition, as a senior-level course, the smaller class size also affords students the opportunity to visit The Language Research Center, a world-leading research facility in the area of comparative cognition.

The History and Systems of Psychology course (PSYC 3900) was changed to a senior-level course (PSYC 4825 (2016-2017) in order to provide students with a broader presentation of in-class materials as well as to allow for a more intensive examination of student learning.

The Learning and Behavior course (PSYC 4200) was changed to a junior-level course (PSYC 3940: 2016-2017) in order to provide students with earlier access to course materials in order to better prepare them for their senior-level courses (Sensation and Perception, Brain and Behavior, Drugs and Behavior, History and Systems etc.).

Lastly, Cognitive Psychology (PSYC 4270) was changed to a junior-level course (PSYC 3950: 2016-2017) in order to provide students with earlier access to course materials in order to better prepare them for their senior-level courses as well.

Indicators of Measures of Viability

Internal Demand for the Program	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Number of students enrolled in the degree program	173	203	196	201	185	6.9%
Number of students who applied to the program (if applicable)	n/a	n/a	n/a	n/a	n/a	n/a
Number of students admitted to the program (if applicable)	n/a	n/a	n/a	n/a	n/a	n/a
Percent of classes taught by full-time faculty	87%	85%	83%	90%	90%	3.4%

Describe additional details as deemed appropriate.

The number of students enrolled in the BS in psychology has increased by 6.9% over the last five years. While 90% of the courses are taught by full-time faculty, almost all upper-division classes are taught by full-time faculty. Part-time faculty are largely used for lower-division courses.

Indicators of Measures of Productivity

Graduation	2014-15	2015-16	2016-17	2017-18	2018-19	% Change
Number of degrees conferred	14	27	26	29	25	78.6%
Total student credit hours earned	n/a	n/a	121.52	123.62	115.13	-5.3%

Describe any institutional-specific factors impacting time to degree.

The bachelor's degree in psychology was approved by the Board of Regents in 2014. Graduation rates were strong from the very beginning (14 graduates the first year) and have increased by 78.6% over the last five years. The chair of the Social Sciences Department ensured successful graduation rates by mapping out schedules of classes that enabled students to complete the degree in a timely fashion. In addition, each

semester he invited seniors to register first so that they could get the classes they needed without competing with juniors and sophomores. These practices were highly successful.

Note: The Office of Computing and Information Services was not able to provide data for the first two years of the degree program.

Evidence of Program Viability

Based on evidence from **ALL** of the above information, data, and analysis, discuss whether continued resources should be devoted to this program. This discussion must be evidence-based. Your comments should consider external factors and address questions such as the following: Are your students getting jobs? What is the job outlook for graduates? Are students prepared for the jobs they get? How is the field changing? Are program faculty members in contact with employers and getting back feedback on graduates' job performance? Do employers state or suggest a need for changes in the program?

In Fall 2018, there were 185 students registered as psychology majors. Since 2014, the program has averaged 192 majors annually, 152 of them full-time students. The program's graduation rate has steadily increased since the program's inception from 14 in the first year to 25 for the 2018-2019 academic year. The program averages 24 graduates per year with a significant proportion of these graduates entering graduate school shortly thereafter. The employment rate for graduates of the program averages 78%, with the majority having jobs related to their major.

As evidenced by the results from the program's most recent exit survey, 100% of the psychology program graduates said that the quality of the instruction they received in the program was either excellent or good. Perhaps most telling were students' responses to the exit survey asking whether the program met their expectations: 100% responded that the program either met or exceeded their expectations.

Since its inception, the program has grown in both enrollment and graduates, and graduates have consistently found employment and/or entered graduate studies. The program has continually exceeded the University System's guidelines for program viability by graduating 24 students, on average, each year since inception.

For the reasons above, the Bachelor of Science degree in psychology at Dalton State College is a thriving and viable degree program. Psychology graduates are successful at finding both employment and gaining acceptance into graduate programs. They are happy with the education they receive from the program faculty and are happy with the curriculum and faculty.

Program Strengths and Weaknesses

Based upon this review, what are the strengths and weaknesses of the program?

Strengths:

Among the considerable strengths of the psychology program, the students stand out. Many of them are full-time employees with families who manage to juggle family, work, and school with equal aplomb. The students' dedication to their education and career is impressive. As evidence, the psychology program averages 25 graduates per year from among roughly 185 majors.

One needs only look at the course catalog to realize the impressive nature of the psychology program. Few four-year schools Dalton State's size can match the depth and breadth of the psychology curriculum. Indeed, in many cases, one would have to look to a graduate program in order to find courses in Comparative Psychology, History and Systems of Psychology, Drugs and Behavior, or a two-course sequence in Research Methods and Statistics or Learning and Cognition. In addition, the Dalton State program offers a large number of online and hybrid courses in order to better serve student needs. Lastly, many graduate program committee members have commented upon the strength of the psychology curriculum during student interviews and during phone interviews with letter of recommendation writers.

Another strength of our program is its involvement with Registered Student Organizations (RSOs). Many of the psychology majors avail themselves of the learning and service potential of RSO membership. The departmental RSOs, Psi-Chi and Psychology Club, have been involved with service learning projects at Cherokee Sheriff's Estate, North Georgia Family Crisis Center, and Walk a Mile in Her Shoes to name but a few. Students from each RSO have also been involved with multiple research projects which have been presented at the Dalton State Student Research Showcase, the Georgia Undergraduate Research Program, the Tennessee I/O Psychology Symposium, and the annual meeting of the Southeastern Psychological Association among others.

The program faculty is also a strength. All of the psychology faculty members are dedicated to the discipline and to the students. Faculty freely give their time to direct student research, write letters of recommendation, advise RSOs, mentor students, work in the newly created APA lab, develop new curriculum, alter a course into a hybrid or online format, or hold extra office hours. Each comes from an excellent academic background based in research and sound pedagogical strategy, modeling rigorous academics while earning high student evaluations and maintaining high levels of academic rigor. During the 2018-2019 academic year alone, the five psychology faculty members served on 28 college or department committees, engaged in 19 public outreach activities, gave 13 presentations at a variety of conferences or campus events, and participated in more than 53 professional development activities. In addition, one psychology faculty member was selected as a Chancellor's Learning Scholar, two were selected to participate in the Governor's Teaching Fellows program, and two were selected to participate in the 2018-2019 Leadership Excellence Institute.

Weaknesses and concerns:

As with any program at a small college, resources for both student and faculty success are a major concern. With regard to student success, hardware and software are at the forefront. SPSS, the industry standard statistical analysis package, is unavailable to our students except at a substantial cost (about $99 per student per year). Most colleges have a site license for SPSS and make it readily available to their students. A site

license for the SPSS Statistical Base package is available for $7,635.80 a year, but the budget for the School of Liberal Arts is not sufficient to purchase this resource. Dalton State relies upon "free" software available online. In addition, student research projects often rely upon apparatus (EEg, EKG, Stop Watches, Video Recorders) which must be purchased at the students' expense as there is no budget available for research hardware or software.   Even a modest research budget of $6,000 a year could provide any of a number of the various laboratory hardware packages currently available, thereby improving students' understanding of various phenomena as well as their chances of admittance into graduate school.

As with student support, greater support for faculty is desperately needed. Faculty would benefit from the aforementioned hardware and software as well as increased lab space. It is likely that the already high teaching success would increase with greater access to teaching tools, lab space, technology, hardware, and software. Unfortunately, little support is available for faculty development, faculty research, and faculty travel. This lack of support when combined with only minimal pay increases could pose a problem with faculty retention.

Recommendations for Follow-Up and/or Action Plans (if needed)

Issue/Concern:

Lack of hardware and software for learning labs for both upper- and lower-level psychology courses. Neither the introductory psychology courses nor the upper-level Learning, Cognition, Abnormal, and Brain and Behavior courses have any apparatus appropriate for learning, memory, or other related demonstrations.

Specific action(s):

Purchase, or build, appropriate apparatus for teaching/demonstrating the impact of shaping, various reinforcement schedules, etc. to undergraduate psychology students.

Expected outcomes:

Improvement in student and faculty satisfaction outcomes, higher test scores, greater understanding of phenomena, higher student evaluation scores.

Time frame for achievement:

It is hoped that some of the apparatus can be purchased using wish-list funds at the end Spring of 2020 and integrated into various instructional methodologies by Fall of 2020. It would be ideal if money in the Social Sciences/History budget could be used to support the annual license fee for the Epstein rTMS System and for the college to support a site license for SPSS.

Person(s) responsible:

Dr. John Gulledge--Psychology Program Coordinator
Dr. Mary Nielsen—Dean of Liberal Arts

Resources needed:

Maze Engineers Morris Water Maze-$1,590

The Morris Water Maze is a widely used behavioral task in neuroscience for studying spatial learning and memory. This test is based on the fact that an animal will try to escape a stressful situation or stimulus, which

in this case is a large pool of water. The pool contains a small platform, either visible above the water level or just below the surface of the water. This small platform allows the animals to escape the water and allows them to stand without the stress of swimming and is designed with a mesh or grooved material that allows for easy handling. Pre-training occurs by introducing the location of the escape platform and using a platform that is visible above the water surface. On the following days, the actual test is performed, in which the platform is hidden beneath the water surface. To escape swimming in the water, the animal must remember the location of the escape platform using visual cues in the testing area, which requires use of hippocampal-dependent spatial reference memory, and this ability to remember the location of the platform can be affected by the administration of certain drugs or disease models.

Maze Engineers Radial Arm Maze-$1,990

The traditional eight radial arm maze has many variants that allow mice, rats, and even primates to display their spatial working memory for the arms that they have visited by avoiding re-entry. Typically, they do so by relying on their memory for the spatial location of visited arms relative to extra-maze landmarks in the testing environment. Extra-maze and intra-maze cues are key to this process. Separate protocols include the spatial working memory and spatial reference memory tasks.

Maze Engineers Y-Maze-$1,990

The Y-maze is similar to the T-maze, except with three arms at 120 degrees from each other. The rodent or mouse starts at the end of one arm; then chooses between the other two. Spontaneous alternation is measured to demonstrate learning. The Y-maze is often preferred to the T-maze because gradual turns decrease learning time as compared to the sharp turns of the T-maze. It is also a smaller maze to allow fewer degrees of freedom of movement, focusing the animal on the task at hand. The Y-Maze can also be baited with food for rewarded alternation.

Maze Engineers Tier 1 Operant Chamber-$4,900

The Operant Conditioning Chamber is a behavioral task used in neuroscience to study executive function by assessing behavioral flexibility. Executive function refers to high-level cognitive processes including rule generation, behavioral selection, and strategy evaluation, and is primarily regulated by areas in the frontal cortex (Lie et al., 2006). Such processes are crucial to normal cognitive function and may be impaired in multiple neurological and psychiatric disorders such as schizophrenia, depression, stroke, and neurodegenerative diseases (e.g. Snyder, 2013).

The Operant Conditioning Chamber allows the study of behavioral flexibility – the adaptive changes in an animal's behavior in response to environmental changes – by training animals to perform specific actions (pressing a lever) in response to specific stimuli (light cue) and then assessing their ability to actively suppress the initially learned response strategy to acquire a new, competing response.

This type of behavioral task is commonly used in the study of the neurobiology of cognition (e.g., Bissonette et al., 2008), allowing to separately assess different aspects of behavioral flexibility, namely strategy shifting and reversal learning. Such tasks are sensitive to disruptions in prefrontal and subcortical circuitry, to neurodevelopmental and neurological manipulations modeling psychiatric or neurological diseases, and to the effect of therapeutic interventions on those models (Brady & Floresco, 2015; Enomoto et al., 2011).

The Operant Conditioning Chamber was created by BF Skinner in the early 1930s (Krebs, 1983). Since then, numerous modifications have been introduced, including its automation. Using an automated Operant

Conditioning Chamber allows the assessment of strategy shifting and reversal learning in rodents using a simplified procedure with improved rate of data collection and throughput.

OpenBCI All-In-One EEG Starter Kit---$1,700 plus cost of electrical gel

The electroencephalogram (EEG) is a recording of the electrical activity of the brain from the scalp. The recorded waveforms reflect the cortical electrical activity.

Signal intensity: EEG activity is quite small, measured in microvolts (mV).

Signal frequency: the main frequencies of the human EEG waves are as follows:

- Delta has a frequency of 3 Hz or below. It tends to be the highest in amplitude with the slowest waves. It is normal as the dominant rhythm in infants up to one year and in stages 3 and 4 of sleep. It may occur focally with subcortical lesions and in general distribution with diffuse lesions, metabolic encephalopathy hydrocephalus, or deep midline lesions. It is usually most prominent frontally in adults (e.g., FIRDA - Frontal Intermittent Rhythmic Delta) and posteriorly in children (e.g., OIRDA - Occipital Intermittent Rhythmic Delta).
- Theta has a frequency of 3.5 to 7.5 Hz and is classified as "slow" activity. It is perfectly normal in children up to 13 years and in sleep but abnormal in awake adults. It can be seen as a manifestation of focal subcortical lesions; it can also be seen in generalized distribution in diffuse disorders such as metabolic encephalopathy or some instances of hydrocephalus.
- Alpha has a frequency between 7.5 and 13 Hz. It is usually best seen in the posterior regions of the head on each side, being higher in amplitude on the dominant side. It appears when closing the eyes and relaxing and disappears when opening the eyes or alerting by any mechanism (thinking, calculating). It is the major rhythm seen in normal relaxed adults. It is present during most of life especially after the thirteenth year.
- Beta beta activity is "fast" activity. It has a frequency of 14 and greater Hz. It is usually seen on both sides in symmetrical distribution and is most evident frontally. It is accentuated by sedative-hypnotic drugs especially the benzodiazepines and the barbiturates. It may be absent or reduced in areas of cortical damage. It is generally regarded as a normal rhythm. It is the dominant rhythm in patients who are alert or anxious or have their eyes open.

Epstein rTMS System site license—Dr. Gulledge can borrow the system for free, but the annual license is around $1,000 per year.

Transcranial magnetic stimulation (TMS) and repetitive TMS (rTMS) are indirect and non-invasive methods used to induce excitability changes in the motor cortex via a wire coil generating a magnetic field that passes through the scalp. Today, TMS has become a key method to investigate brain functioning in humans.

Site License for the Statistical Package for the Social Sciences: $7,635.80 a year (basic package), 16,286.40 for an advanced package.

References

Brady, A. M., & Floresco, S. B. (2015). Operant procedures for assess behavioral flexibility in

rats. *Journal of Visualized Experiments, 96*, 52-87. doi:10.3791/52387

Eronto, K., Matsumoto, N., Nakai, S., Saloh, T., Sato, T. K., Ueda, Y., Inokawa, H., Hanuro, M.,

    & Kimura, M. (2011). Dopamine neurons learn to encode the long-term value of multiple

    future rewards. *Proceeding of the National Academy of Sciences U.S.A., 108*, 15462-

    15467. doi:10.1073/pnas.1014457108

Krebs, J. R. (1983). Animal behavior: From Skinner box to the field. *Nature, 7*, 14-20.

Snyder, H. R. (2013). Major depressive disorder is associated with broad impairments on

    neuropsychological measures of executive function: A meta-analysis and review.

    Psychological Bulletin, 139, 201-213.

COMPREHENSIVE ACADEMIC PROGRAM REVIEW

Prepared by: John Gulledge and Mary Nielsen

Signature _____ Date: ___October 30, 2019___

Dean's Approval:

October 30, 2019

Signature: _____ Date: _____

Approval of the Chair of the DSC Comprehensive Program Review Committee:

Signature: _____ Date: Oct. 30, 2019

Vice President of Academic Affairs (VPAA) Categorical Summation:

Check any of the following to categorically describe action(s) the institution will take concerning this program.

☒ Program **MEETS** Institution's Criteria

    ☐ Program is critical to the institutional mission and will be retained.

    ☐ Program is critical to the institutional mission and is growing, or a high demand field, and thus will be enhanced.

☐ Program **DOES NOT MEET** Institution's Criteria for continuation.

    ☐ Program will be placed on monitoring status.

    ☐ Program will undergo substantive curricular revisions.

    ☐ Program will be deactivated.

    ☐ Program will be voluntarily terminated.

    ☐ Other (Please elaborate):

COMPREHENSIVE ACADEMIC PROGRAM REVIEW

VPAA Signature: __ _____ **Date:** _____

Adrian L. Epps, Ed.D.

Interim Provost and Vice President for Academic Affairs

Dalton State College