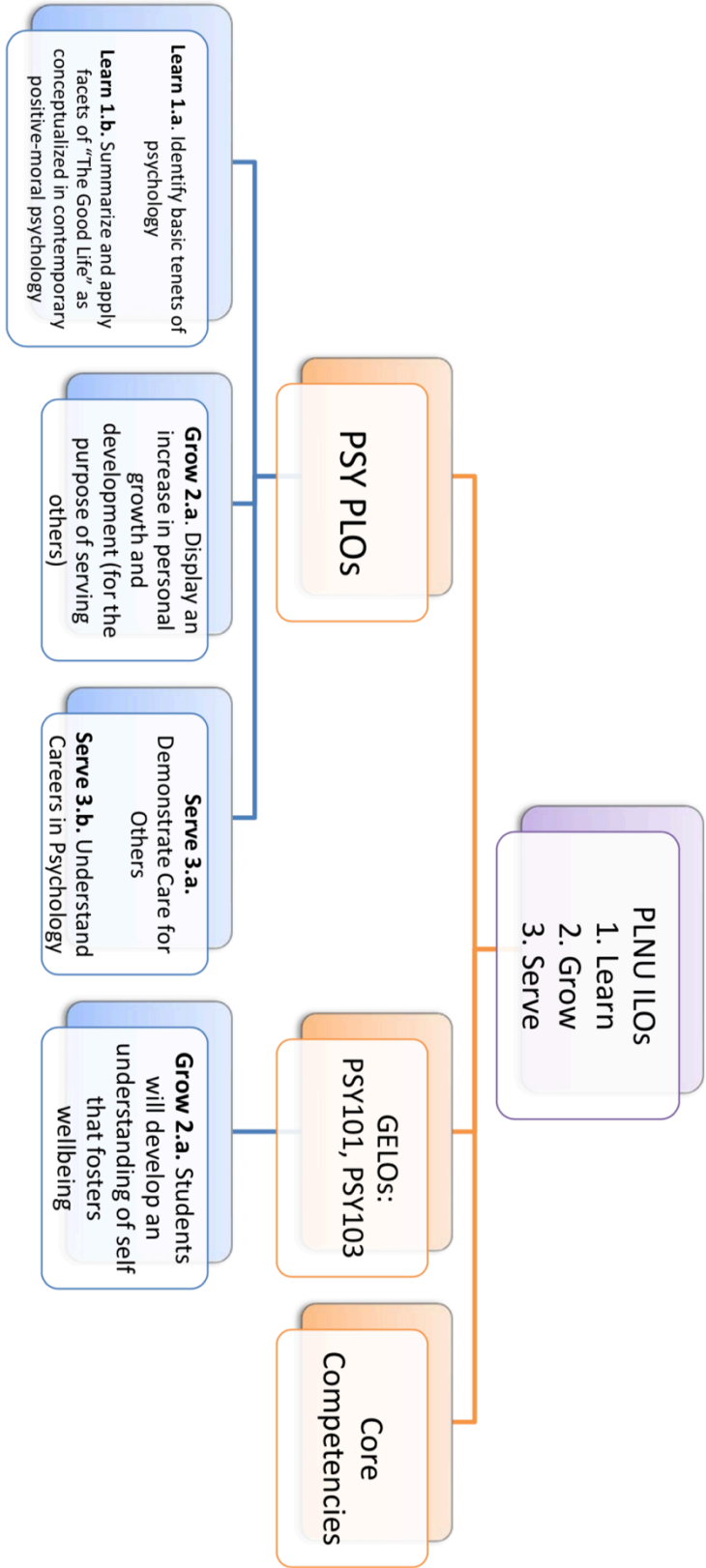


# Psychology Department Assessment Framework



**Psychology**  
**PLO Data, FA2023-SP2024**

**Learning Outcome 1.a. (Learn):**

Students will be able to identify the basic tenets of psychology.

**Outcome Measure:**

ACAT Nationally-Normed Examination of Psychology

**Criteria for Success:**

60% of our students will score in the 50<sup>th</sup> percentile or higher on the ACAT Psychology Subject Nationally-Normed Examination.

**Aligned with DQP Learning Areas:**

1. **Specialized Knowledge**
2. Broad Integrative Knowledge
3. **Intellectual Skills/Core Competencies**
4. **Applied and Collaborative Learning**
5. Civic and Global Learning

**Longitudinal Data:**

*Percentage of PSY4020 Students Who Scored at the 50<sup>th</sup> Percentile or above on the ACAT Nationally-Normed Examination*

	2019-20 (n = 22)	2020-21 (n = 46)	2021-22 (n = 39)	2022-23 (n = 20)	2023-24 (n = 20)
Pass Rate	<u>81.8%</u> (18/22)	<u>82.6%</u> (38/46)	<u>64.1%</u> (25/39)	<u>55%</u> (11/20)	<u>70%</u> (14/20)

*Percentage of PSY4020 Students Who Scored at the 25<sup>th</sup> Percentile or Lower on the ACAT Nationally-Normed Examination*

	2019-20 (n = 22)	2020-21 (n = 46)	2021-22 (n = 39)	2022-23 (n = 20)	2023-24 (n = 20)
Pass Rate	<u>13.6%</u> (3/22)	<u>6.5%</u> (3/46)	<u>10.3%</u> (4/39)	<u>10%</u> (2/20)	<u>15%</u> (3/20)

**Conclusions Drawn from Data:**

- Students met the criteria for success.
- We continue to be pleased with the utilitarian value of administering this nationally-normed instrument to students and will continue making use of the four category ACAT.

**Changes to be Made Based on Data:**

- We will continue to work with the instructor of this course to encourage students to try their best on this exam.

**Rubric Used:** N/A

### PLO Data, FA2023-SP2024

#### **Learning Outcome 1.b. (Learn):**

Students will be able to summarize and apply facets of “The Good Life” as conceptualized in contemporary positive-moral psychology.

#### **Outcome Measure:**

PSY 4020 Good Life Paper (this is the signature assignment for this course)

#### **Criteria for Success:**

80% of our students will score a 3 or higher on the Good Life rubric.

#### **Aligned with DQP Learning Areas:**

1. **Specialized Knowledge**
2. **Broad Integrative Knowledge**
3. **Intellectual Skills/Core Competencies**
4. Applied and Collaborative Learning
5. **Civic and Global Learning**

#### **Longitudinal Data:**

Rubric Categories	2019-20 (n = 20)	2020-21 (n = 25)	2021-22 (n = 20)	2022-23 (n = 20)	2023-24 (n = 20)
Good Life Concepts	95.0% (19)	100% (25)	90% (18)	90% (18)	100% (20)
Theory and Research Findings	100.0% (20)	96% (24)	95% (19)	95% (19)	100% (20)
Practical Applications	100.0% (20)	96% (24)	90% (18)	90% (18)	100% (20)
<b><u>Summary</u></b>	<b><u>98.3%</u></b>	<b><u>97.3%</u></b>	<b><u>91.7%</u></b>	<b><u>91.7%</u></b>	<b><u>100%</u></b>

#### **Conclusions Drawn from Data:**

- Students met the criteria for success in all rubric categories.

#### **Changes to be Made Based on Data:**

- Continue to collaborate with the instructor of PSY4020 to communicate to students that the Good Life Paper content will be used for Departmental Assessment and is not confidential to the instructor.
- Continue emphasizing practical applications during the assignment period, including sample applications both in-class and in earlier assignments.
- Continue to incorporate the rubric in the syllabus.

**Rubric Used:**

<b>PSY4020 Rubric</b> <i>A course in "applied moral psychology" for the rest of your life</i>				
	<b><u>Capstone</u></b>	<b><u>Milestones</u></b>		<b><u>Benchmark</u></b>
	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b><u>"Good Life" Concepts</u></b> 1. Positive emotionality 2. Relationship 3. Arete (virtue) 4. Vital engagement 5. Spirituality	Student will be able to answer the question: what makes a "good life" good? Student can enumerate and <b>clearly articulate detailed and comprehensive knowledge of 1 component of a "good life."</b> Student provides clear explanation of how 1 component contributes to well-being.	Student can describe <b>general knowledge</b> of 1 component of a good life.	Student can describe <b>satisfactory knowledge</b> of the components of a good life.	Student cannot identify and adequately describe components of a good life. Descriptions are vague and incomplete.
<b><u>Theory and Research Findings</u></b>	Student can enumerate and clearly articulate <b>detailed and comprehensive knowledge</b> of theory and research findings related to 1 of the components of a good life. Student provides clear explanation of how theory and research supports 1 component.	Student can describe <b>general knowledge</b> of theory and research findings related to one component of a good life.	Student can describe <b>satisfactory knowledge</b> of theory and research findings related to one component of a good life.	Student cannot identify and adequately describe theory and research related to 1 component of a good life. Descriptions are vague and incomplete.
<b><u>Practical Applications</u></b>	Student can enumerate and clearly articulate <b>detailed and comprehensive knowledge</b> of how to apply (practice) 1 of the components of a good life.	Student can describe <b>general knowledge</b> of how to apply (practice) 1 component of a good life.	Student can describe <b>satisfactory knowledge</b> of how to apply (practice) 1 component of a good life.	Student cannot identify and adequately describe how to apply (practice) 1 component of a good life. Descriptions are vague and incomplete.

## PLO Data, FA2023-SP2024

### **Learning Outcome 2.a. (Grow):**

Students will display an increase in personal growth and development (for the purpose of serving others).

#### **Outcome Measure:**

- Indirect measure: *Psychology Senior Survey self-report item*, “As a result of experiences in the PLNU Psychology Program I have experienced personal growth and development.”
- Direct measure: *Increase in Personal Growth and Development rubric* as assessed by departmental faculty.

#### **Criteria for Success:**

- Indirect measure: 80% of our students will “Agree” or “Strongly Agree” with the *Psychology Senior Survey self-report item*.
- Direct measure: 80% of our students will score an average score of 3 or higher on the *Increase in Personal Growth and Development rubric*.

#### **Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning
5. **Civic and Global Learning**

#### **Longitudinal Data:**

Table 1

*Percentage of Psychology Majors who “Agreed” or “Strongly Agreed” with the statement : “As a result of experiences in the PLNU Psychology Program I have experienced personal growth and development.”*

Student Response	2019-20 (n = 26)	2020-21 (n = 31)	2021-22 (n = 33)	2022-23 (n = 30)	2023-24 (n = 42)
<b><u>Rate</u></b>	<b><u>92.3%</u></b>	<b><u>93.5%</u></b>	<b><u>100%</u></b>	<b><u>96.7%</u></b>	<b><u>97.6%</u></b>

Table 2

*Percentage of Psychology Majors rated 3 or higher on the Increase in Growth and Personal Development Rubric as rated by Department Faculty*

Rubric Category	2019-20 (n = 20)	2020-21 (n = 20)	2021-22 (n = 20)	2022-23 (n = 20)	2023-24 (n = 20)
Preparedness	100% (20)	95% (19)	100% (20)	95% (19)	95% (19)
Personal Responsibility	100% (20)	100% (20)	100% (20)	95% (19)	95% (19)
Emotional Maturity	100% (20)	100% (20)	100% (20)	100% (20)	100% (20)
<b><u>Summary</u></b>	<b><u>100%</u></b>	<b><u>98.3%</u></b>	<b><u>100%</u></b>	<b><u>96.7%</u></b>	<b><u>96.7%</u></b>

**Conclusions Drawn from Data:**

- The criteria for success was achieved in both the direct measure (faculty rating) and indirect measure (student rating).
- The data indicates an enormous success in the PLO of personal growth and development for our students.

**Changes to be Made Based on Data:**

- Continue to share with faculty that their efforts to shape students bear positive results.

**Rubric Used:** (see next page)

Increase in Growth and Personal Development Rubric				
	<u>Capstone</u>	<u>Milestones</u>		<u>Benchmark</u>
	4	3	2	1
<b>Preparedness</b>	Has significantly improved and/or already consistently shows competency in solving problems and proactively brings information that might be needed, in addition to bringing basic materials to class/appointments.	Has shown improvement in bringing basic information and/or materials necessary to class/appointments.	Has somewhat improved and occasionally comes to class/appointments without the necessary information and/or materials.	Has not improved; regularly comes to class/appointments without the necessary information and/or materials.
<b>Personal Responsibility</b>	Has significantly grown or has already competently identified their own role in a problem and sees their role in the solution. Has grown or has already shown acquiring the necessary knowledge to solve problems.	Has shown growth in identifying their own role in problem and sees their role in the solution but does not have necessary knowledge to solve problems.	Has somewhat shown growth in identifying their own role in problem but wants others to "fix it".	Has not shown growth in personal responsibility; Blames others for problems.
<b>Emotional Maturity</b>	Student has shown significant growth or has already shown competence in demonstrating the ability to evaluate personal situations and life experiences to make complex decisions relating to personal development. Student also shows increased ability to improve and/or shows competence to re-evaluate decisions.	Student has shown growth in possessing some level of emotional maturity but may find it difficult to make decisions related to social/personal situations or see how these decisions relate to personal development.	Student somewhat has grown in their understanding of basic decision making skills, but may not adequately be able to apply those skills to all areas.	Student shows little or no growth or understanding of decision making skills and is unable to use personal abilities to develop or improve decisions that relate to social, personal, and interpersonal decisions.



### PLO Data, FA2023-SP2024

#### Learning Outcome 3.a. (Serve):

Students will demonstrate care for others.

#### Outcome Measure:

Psychology Department Demonstrating Care for Others Rubric

#### Criteria for Success:

80% of our students will score a 3 or higher on the Demonstrating Care for Others rubric as assessed by Department Faculty.

#### Aligned with DQP Learning Areas:

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning
5. **Civic and Global Learning**

#### Longitudinal Data:

Table 1

*Percentage of Psychology Senior Students who Score 3 or Higher on the Demonstrate Care for Others Rubric as assessed by Department Faculty. Departmental Faculty who know the student well are assigned to assess each student according to the rubric below.*

Rubric Categories	2019-20 (n = 20)	2020-21 (n = 20)	2021-22 (n = 20)	2022-23 (n = 20)	2023-24 (n = 20)
Active Listening	100% (20)	95% (19)	100% (20)	100% (20)	100% (20)
Cooperation	100% (20)	100% (20)	100% (20)	100% (20)	100% (20)
Care	100% (20)	100% (20)	100% (20)	100% (20)	100% (20)
<b>Summary</b>	<b><u>100%</u></b>	<b><u>98.3%</u></b>	<b><u>100%</u></b>	<b><u>100%</u></b>	<b><u>100%</u></b>

#### Conclusions Drawn from Data:

- We met the criteria for success. More than 80% of our students scored at least a 3 or more on the Demonstrate Care for Others Rubrics.

#### Changes to be Made Based on Data:

- None at this time.

**Rubric Used:**

<b>Demonstrating Care for Others Rubric</b>				
	<b>Capstone 4</b>	<b>Milestones 3</b>	<b>Milestones 2</b>	<b>Benchmark 1</b>
<b>Active Listening</b>	Student consistently is an active listener and shows full attention to others around them (supervisors, clients, classmates, fellow interns, etc.) Asks thought provoking questions.	Student frequently is an active listener and shows a large amount of attention to others around them (supervisors, clients, classmates, fellow interns, etc.)	Student occasionally is an active listener and shows an adequate amount of attention to others around them (supervisors, clients, classmates, fellow interns, etc.)	Student is not an active listener and shows an inadequate amount of attention to others around them (supervisors, clients, classmates, fellow interns, etc.)
<b>Cooperation</b>	Student worked with class and with teammates effectively. He/she had no behavior problems with peers, and was encouraging to classmates and/or supervisors.	Student worked with class and teammates effectively. He/she had no more than one or two behavior problems and was not discouraging to classmates and/or supervisors.	Student worked with class and teammates with some difficulty. Had no more than 3 or 4 behavior problems. Was not encouraging to classmates and supervisors.	Student worked with class and teammates ineffectively, had five or more behavior problems and was discouraging to others.
<b>Care</b>	Student consistently demonstrates care by striving to show attention to everyone they encounter equally.	Student frequently demonstrates care. Only occasionally does the student demonstrate favoritism.	Student occasionally demonstrates care and/or shows favoritism in demonstration.	Student rarely demonstrates care and shows favoritism in demonstration.

### PLO Data, FA2023-SP2024

#### Learning Outcome 3.b. (Serve):

Students will understand careers in the field of psychology.

#### **Outcome Measure:**

PSY4020 Vital Engagement Vocation Paper

#### **Criteria for Success:**

80% of our students will score a 3 or higher on the outcome measure.

#### **Aligned with DQP Learning Areas:**

1. **Specialized Knowledge**
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. **Applied and Collaborative Learning**
5. Civic and Global Learning

#### **Longitudinal Data:**

Table 1

*Percentage of students who met departmental standards on the Vital Engagement Vocation Paper*

<b>Rubric Categories</b>	<b>2019-20* (n = 20)</b>	<b>2020-21 (n = 25)</b>	<b>2021-22 (n = 20)</b>	<b>2022-23 (n = 20)</b>	<b>2023-24 (n = 20)</b>
Vocational Calling Related to Career Goals	93.3% (28/30)	100% (25/25)	95% (19/20)	100% (20/20)	95% (19/20)
Detailed Description of a Graduate Program (or Occupation)	95% (19/20)	100% (20/20)	95% (19/20)	90% (18/20)	95% (19/20)
<b><u>Summary</u></b>	<b><u>94%</u></b>	<b><u>100%</u></b>	<b><u>95%</u></b>	<b><u>95%</u></b>	<b><u>95%</u></b>

#### **Conclusions Drawn from Data:**

- The criteria for success were met in all categories and overall.

#### **Changes to be Made Based on Data:**

- We will continue to work with the instructor for our capstone course PSY4020 to ensure that this assignment integrates into our assessment plan and utilizes the current rubric.

**Rubric Used:** (see next page)

## PSY 4020 — Understanding careers in the field of psychology

	Capstone 4	Milestones 3	2	Benchmark 1
<b>Vocational Calling &amp; Career Goals</b>	Specifies their vocational calling(s) and relates it to their career goal(s). Describes three concrete experiences that support their vocational calling and/or career goals.	Specifies their vocational calling(s) and relates it to their career goal(s). Describes two concrete experiences that support their vocational calling and/or career goals.	Specifies their vocational calling(s) and relates it to their career goal(s). Describes one concrete experience that supports their vocational calling and/or career goals.	Specifies their vocational calling(s) and relates it to their career goal(s). Describes no concrete experiences that support their vocational calling and/or career goals.
<b>Details of 1 Graduate Program</b>	For one graduate school includes all six of the following: <input type="checkbox"/> Focus of program (e.g., degree, content area, length of program) <input type="checkbox"/> Cost including possible sources of funding <input type="checkbox"/> Acceptance rate (e.g. number applied, number admitted) <input type="checkbox"/> GPA and GRE requirements (if applicable) <input type="checkbox"/> Identification of faculty mentor in each program <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, employment profile of graduates)	For one graduate school includes five of the following: <input type="checkbox"/> Focus of program (e.g., degree, content area, length of program) <input type="checkbox"/> Cost including possible sources of funding <input type="checkbox"/> Acceptance rate (e.g. number applied, number admitted) <input type="checkbox"/> GPA and GRE requirements (if applicable) <input type="checkbox"/> Identification of faculty mentor in each program <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, employment profile of graduates)	For one graduate school includes four of the following: <input type="checkbox"/> Focus of program (e.g., degree, content area, length of program) <input type="checkbox"/> Cost including possible sources of funding <input type="checkbox"/> Acceptance rate (e.g. number applied, number admitted) <input type="checkbox"/> GPA and GRE requirements (if applicable) <input type="checkbox"/> Identification of faculty mentor in each program <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, employment profile of graduates)	For one graduate school includes three of the following: <input type="checkbox"/> Focus of program (e.g., degree, content area, length of program) <input type="checkbox"/> Cost including possible sources of funding <input type="checkbox"/> Acceptance rate (e.g. number applied, number admitted) <input type="checkbox"/> GPA and GRE requirements (if applicable) <input type="checkbox"/> Identification of faculty mentor in each program <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, employment profile of graduates)
<b>(Graduate school track)</b>				
<b>OR</b>				
<b>Details of 1 Occupation</b>	For one job includes all six of the following: <input type="checkbox"/> Definition of occupation (include names of typical companies) <input type="checkbox"/> Education and skills required <input type="checkbox"/> Salary/Advancement <input type="checkbox"/> Qualities of successful applicants (e.g., major, degree, experience) <input type="checkbox"/> Identify the title and role of your supervisor <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, people known in the field)	For one job includes five of the following: <input type="checkbox"/> Definition of occupation (include names of typical companies) <input type="checkbox"/> Education and skills required <input type="checkbox"/> Salary/Advancement <input type="checkbox"/> Qualities of successful applicants (e.g., major, degree, experience) <input type="checkbox"/> Identify the title and role of your supervisor <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, people known in the field)	For one job includes four of the following: <input type="checkbox"/> Definition of occupation (include names of typical companies) <input type="checkbox"/> Education and skills required <input type="checkbox"/> Salary/Advancement <input type="checkbox"/> Qualities of successful applicants (e.g., major, degree, experience) <input type="checkbox"/> Identify the title and role of your supervisor <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, people known in the field)	For one job includes three of the following: <input type="checkbox"/> Definition of occupation (include names of typical companies) <input type="checkbox"/> Education and skills required <input type="checkbox"/> Salary/Advancement <input type="checkbox"/> Qualities of successful applicants (e.g., major, degree, experience) <input type="checkbox"/> Identify the title and role of your supervisor <input type="checkbox"/> Additional relevant information (e.g., practicum opportunities, licenses/credentials, people known in the field)
<b>(Career track)</b>				

*Please follow "graduate school track" OR "Career track" criteria. Evaluators are encouraged to assign a zero to any work sample that does not meet benchmark (all one) level performance.*



# Psychology Department General Education Learning Outcome

***GELO 2.a. "Students will develop an understanding of self that fosters personal well-being"***

PSY 1001 (Psychology of Personal Development)  
Autobiography Rubric

PSY 1003 (General Psychology)  
Psychology and You: Three Concepts Rubric

## FELO Data, FA2023-SP2024

### **FE Learning Outcome 2a:**

Students will develop an understanding of self that fosters personal well-being.

### **Outcome Measures:**

PSY1001 (Psychology of Personal Development) Autobiography Paper Rubric

PSY1001 Freshmen Self-Report of Personal Development

PSY1003 (General Psychology) Psychology and You: Three Concepts Paper Rubric

### **Criteria for Success:**

PSY1001: 80% of our students will score a 3 or higher on the PSY1001 Autobiography Rubric (see Table 1)

PSY1001: 70% of our students will agree overall on a self-report measure of personal development (see Table 2)

PSY1003: 80% of our students will score a 3 or higher on the PSY1003 Psychology and You: Three Concepts Rubric (see Table 3)

### **Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. **Applied and Collaborative Learning**
5. Civic and Global Learning

### **Longitudinal Data:**

Table 1

*Percentage of PSY1001 Students who Score 3 or Higher on the Autobiography Rubric:  
Summary Criteria for Success is 80%*

Rubric	2019-20 (n = 158)	2020-21 (n = 271)	2021-22 (n = 194)	2022-23 (n = 349)	2023-24 (n = 344)
Students Enrolled	315	558	649	701	623
% Students Assessed	50.2%	48.6%	30%	49.8%	55.2%
Understanding of Story	88% (139)	94.8% (257)	95.9% (186)	91.1% (318)	98.3% (338)
Exhibits accurate perceptions of situations to facilitate wellbeing	91.1% (144)	92.3% (250)	90.2% (175)	88.0% (307)	97.7% (336)

Articulates an understanding of healthy and satisfying relationships	94.9% (150)	91.1% (247)	93.8% (182)	88.5% (309)	97.4% (335)
<b><u>Summary</u></b>	<b><u>91.3%</u></b>	<b><u>92.7%</u></b>	<b><u>93.3%</u></b>	<b><u>89.2%</u></b>	<b><u>97.8%</u></b>

Table 2

*Percentage of PSY1001 Students Who Agreed or Strongly Agreed with this Self-Report Measure of Personal Development: Summary Criteria for Success is 70%*

<b>Self-Report Item</b>	<b>2019-20* (n = 262)</b>	<b>2020-21 (n = 486)</b>	<b>2021-22 (n = 545)</b>	<b>2022-23 (n = 598)</b>	<b>2023-24 (n = 600)</b>
Students Enrolled	315	558	649	701	623
% Students Assessed	83.2%	87.1%	84.0%	85.3%	96.3%
I understand my story better	83.2% (218)	88.9% (432)	84.8% (462)	83.4% (499)	83.8% (503)
I feel that this course allowed me to contribute to my personal growth and development	92.75% (243)	90.9% (442)	89.9% (490)	88.0% (526)	89.7% (538)
I have developed alternative ways of thinking about myself	88.17% (231)	87.4% (425)	85.3% (465)	84.8% (507)	87.2% (523)
This course has allowed me to reflect on my spiritual journey	90.84% (238)	91.8% (446)	88.4% (482)	89.5% (535)	87.2% (523)
<b>Summary</b>	<b><u>88.7%</u></b>	<b><u>89.8%</u></b>	<b><u>87.1%</u></b>	<b><u>86.4%</u></b>	<b><u>86.98%</u></b>



Table 3

*Percentage of PSY 1003 Students Who Score 3 or Higher on the Psychology and You Rubric: Summary Criteria for Success is 80%*

Rubric	2019-20 (n = 88)	2020-21 (n = 143)	2021-22 (n = 97)	2022-23 (n = 105)	2023-24 (n = 132)
Students Enrolled	88	181	160	159	165
% Students Assessed	100%	79.0%	60.6%	66.0%	80.0%
1a: Why these?	98.9% (87)	98.6% (141)	99% (96)	96.2% (153)	93.9% (124)
1b: Thriving	100% (88)	90.9% (130)	100% (97)	96.2% (153)	93.9% (124)
<b><u>Summary</u></b>	<b><u>99.4%</u></b>	<b><u>94.75%</u></b>	<b><u>99.5%</u></b>	<b><u>96.2%</u></b>	<b><u>93.9%</u></b>

**Conclusions Drawn from Data:**

- The criteria for success were met for both PSY1001 and PSY1003.
- It is notable that in evaluating the university's learning objective "to develop an understanding of self that fosters well-being" over half of the first-year entering class are evaluated using both direct (faculty evaluation) and indirect (student evaluation) measures and successfully pass. *See Table 1 and Table 2.*

**Changes to be Made Based on Data:**

None at this time.

**Rubrics Used:**

**PSY1001 GE Autobiography Rubric**

GELO 2.a. Students will develop an understanding of self that fosters personal wellbeing				
	<b><u>Capstone</u></b>	<b><u>Milestones</u></b>		<b><u>Benchmark</u></b>
	4	3	2	1
<b>Understanding of <u>story</u></b>	Student has made dramatic increases in the understanding of their story.	Student has made significant increases in the understanding of their story.	Student has made some increases in the understanding of their story.	Student has made minimal to no increases in the understanding of their story.
<b>Exhibits <u>accurate perceptions of situations to facilitate wellbeing</u></b>	Independently and quickly implements strategies for correcting thought distortions.	Learns and implements strategies for correcting thought distortions.	Recognizes one's own tendencies toward thought distortions and situations in which they occur but has difficulty implementing strategies for correcting thought distortions.	Begins to understand that we create our own feelings through our perceptions.
<b>Articulates an understanding of <u>healthy and satisfying relationships</u></b>	Student consistently creates positive methods of developing and maintaining healthy/satisfying relationships.	Student has demonstrated flexible behavior in order to maintain healthy/satisfying relationships.	Student recognizes one's own self-defeating patterns of interaction but has not yet began implementing appropriate behavior changes to maintain healthy/satisfying relationships.	Student begins to understand the components of self-defeating patterns of interaction that prohibit maintaining healthy/satisfying relationships.

PSY1003

Final Essay: Psychology and You: Three Concepts

8 points

Objective

- Demonstrate an understanding of self that fosters personal well-being

Instructions

1. Write an essay explaining how insights from psychology can tell you more about yourself, other people, or your relationships. In your essay, be sure to...
  - a. Choose three concepts from this course that involve you or your life in some way (e.g., depression, stress, cognition, etc.). Define them in your own words. Explain why you chose to include each of those three concepts. Be sure to discuss how each concept affects you/your life on a personal level.
  - b. Describe how learning about these concepts can help you thrive and achieve personal well-being. Include examples of how this course gave you insight on how to better thrive on a personal level.
2. Be sure to write approximately 500 words.
3. Turn your assignment in electronically on Canvas

	Criteria	Score
1a: Why these?	<ul style="list-style-type: none"><li>● Clear/concise; relates three concepts to own life (4 points)</li><li>● Somewhat clear/concise; relates at least two concepts to own life (3 points)</li><li>● Clarity needs work <u>and</u> relates one or fewer concepts to own life (2 points)</li><li>● Off topic (1 point)</li></ul>	____/4
1b: Thriving	<ul style="list-style-type: none"><li>● Provides clear picture of how course content fosters personal well-being and uses at least one personal example per concept (4 points)</li><li>● Somewhat clear picture or fewer than one personal example per concept (3 points)</li><li>● Pictures needs work <u>and</u> examples not used (2 points)</li><li>● Off topic (1 point)</li></ul>	____/4
Total		____/8



# **Psychology Department Core Competencies**

**PSY 4020 Vital Engagement Video Presentation**  
Oral Communication

**PSY 4020 Good Life Paper**  
Information Literacy  
Critical Thinking  
Written Communication

**PSY Quantitative Reasoning Assessment**  
Quantitative Reasoning

**Psychology**  
**Core Competencies FA2023-SP2024**

**Core Competency Outcome: Oral Communication**

Students will be able to speak about their work with precision, clarity and organization (Oral Communication).

**Outcome Measure:**

PSY4020 Vital Engagement Video Presentation

**Criteria for Success:**

80% of our students will score a 3 or higher on the Core Competency AAC&U Oral Communication rubric based on the oral resume video project completed in PSY4020.

**Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. **Intellectual Skills/Core Competencies**
4. Applied and Collaborative Learning
5. Civic and Global Learning

Table 1

*Percentage of students who met department standards on the Oral Resume Video Project:  
Criteria for Success is 80%*

<b>Rubric Categories</b>	<b>2019-20 (n = 21)</b>	<b>2020-21 (n = 24)</b>	<b>2021-22 (n = 20)</b>	<b>2022-23 (n = 20)</b>	<b>2023-24 (n = 20)</b>
Organization	90% (18)	87.5% (21)	90% (18)	100% (20)	100% (20)
Language	95% (19)	100% (24)	100% (20)	95% (19)	100% (20)
Delivery	100% (20)	100% (24)	100% (20)	95% (19)	100% (20)
Supporting Material	95% (19)	100% (24)	90% (18)	100% (20)	100% (20)
Central Message	95% (19)	100% (24)	100% (20)	100% (20)	100% (20)
<b><u>Summary</u></b>	<b><u>95%</u></b>	<b><u>97.5%</u></b>	<b><u>96%</u></b>	<b><u>98%</u></b>	<b><u>100%</u></b>

**Conclusions Drawn from Data:**

- The criteria for success were met for all categories of the rubric and overall.

### Changes to be Made Based on Data:

- We will continue to work with the instructor for our capstone course PSY4020 to ensure that this assignment integrates into our assessment plan and utilizes the current rubric.

**Rubric Used:** The AAC&U Oral Communication Rubric.

### ORAL COMMUNICATION VALUE RUBRIC

*for more information, please contact [value@aacu.org](mailto:value@aacu.org)*



#### Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

*Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.*

	Capstone 4	Milestones		Benchmark 1
		3	2	
<b>Organization</b>	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.
<b>Language</b>	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.
<b>Delivery</b>	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.
<b>Supporting Material</b>	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic.	Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/authority on the topic.
<b>Central Message</b>	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.

## Core Competencies FA2023-SP2024

### **Core Competency Outcome: Information Literacy**

Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand (Information Literacy)

#### **Outcome Measure:**

PSY 4020 Good Life Paper

#### **Criteria for Success:**

70% of our students will score a 3 or higher on the Information Literacy Rubric.

#### **Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. **Intellectual Skills/Core Competencies**
4. Applied and Collaborative Learning
5. Civic and Global Learning

Table 1

*Percentage of students who met department standards for Information Literacy*

Rubric Categories	2019-20 (n = 20)	2020-21 (n = 25)	2021-22 (n = 20)	2022-23 (n = 20)	2023-24 (n = 20)
Determine the Extent of Information Needed	95% (19)	84% (21)	90% (18)	85% (17)	100% (20)
Access the Needed Information	90% (18)	84% (21)	95% (19)	100% (20)	100% (20)
Evaluate Information and its Sources Critically	70% (14)	84% (21)	95% (19)	90% (18)	100% (20)
Use Information Effectively to Accomplish a Specific Purpose	100% (20)	92% (23)	90% (18)	100% (20)	100% (20)
Access and Use Information Ethically and Legally	90% (18)	76% (19)	75% (15)	60% (12)	95% (19)
<b>Summary</b>	<b>89%</b>	<b>84%</b>	<b>89%</b>	<b>87%</b>	<b>99%</b>

#### **Conclusions Drawn from Data:**

- We met our criteria for success for all categories and overall.

### Changes to be Made Based on Data:

- None at this time.

**Rubric Used:** We used the AAC&U Information Literacy rubric to assess our students in Information Literacy.

### INFORMATION LITERACY VALUE RUBRIC

for more information, please contact [value@aacu.org](mailto:value@aacu.org)



#### Definition

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. - The National Forum on Information Literacy

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (all one) level performance.

	Capstone 4	Milestones 3 2		Benchmark 1
<b>Determine the Extent of Information Needed</b>	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.
<b>Access the Needed Information</b>	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.
<b>Evaluate Information and its Sources Critically</b>	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
<b>Use Information Effectively to Accomplish a Specific Purpose</b>	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
<b>Access and Use Information Ethically and Legally</b>	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly one of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.



### Core Competencies FA2023-SP2024

#### **Core Competency Outcome: Critical Thinking**

Critical Thinking: Students will be able to examine, critique, and synthesize information in order to arrive at reasoned conclusions.

#### **Outcome Measure:**

PSY 4020 Good Life Paper

- In 2023-2024, PLNU transitioned from using the ETS exam to assess Critical Thinking to a department-defined task. Before the ETS exam was used, the Psychology Department assessed the Core Competency: Critical Thinking by using the Theory and Research Findings portion of the PSY4020 Capstone Good Life Paper and will return to using this measure.

#### **Criteria for Success:**

Current Criteria: 70% of our students will score a 3 or higher on the PSY4020 Good Life Paper: Theory and Research Findings rubric.

Previous Criteria: 70% of our students will score a 3 or higher on the ETS Level 2 Critical Thinking Exam.

#### **Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. **Intellectual Skills/Core Competencies**
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

#### **Longitudinal Data:**

Percentage of Students Proficient Using the PSY4020 Good Life Paper					
	2023-24 (n = 20)				
Good Life Paper: Theory and Research Findings	100%				

Percentage of Students Marginal or Proficient Using the ETS					
	2018-19 (n = 59)	2019-20 (n = 44)	2020-21 (n = 43)	2021-22 (n = 63)	2022-23 (n = 66)
ETS Proficiency Profile Level 2 Critical Thinking	69.5%	63.6%	39.5%	81.0%	62.1%

#### Conclusions Drawn from Data:

- The students met the criteria for success.
- We believe the Psy4020 Good Life Paper: Theory and Research Findings is a better measure of our students' Critical Thinking than the ETS exam for the following reasons:
  - The Good Life Paper and its rubric have been used by our department for over ten years to assess our Department Learning Objectives. It has been vetted and proved discriminating.
  - The Good Life paper is the signature assignment for our PSY4020 Senior Capstone class. Our students put their best effort into it and we believe it is a fair representation of their true abilities.
  - The ETS test suffered from low participation, effort, and engagement. Students did not know why they were taking the test and their scores often did not represent their best abilities as shown by the variability in performance from year to year.

#### Changes to be Made Based on Data:

- We will continue to assess in future years whether this assessment of Critical Thinking is useful.

#### Rubric Used

<b>PSY4020 Rubric for Core Competency: Critical Thinking</b>				
	<b>Capstone 4</b>	<b>Milestones 3</b>	<b>Milestones 2</b>	<b>Benchmark 1</b>
<b>Theory and Research Findings</b>	Student can enumerate and clearly articulate <b>detailed and comprehensive knowledge</b> of theory and research findings related to 1 of the components of a good life. Student provides clear explanation of how theory and research supports 1 component.	Student can describe <b>general knowledge</b> of theory and research findings related to 1 component of a good life.	Student can describe <b>satisfactory knowledge</b> of theory and research findings related to 1 component of a good life.	Student cannot identify and adequately describe theory and research findings related to 1 component of a good life. Descriptions are vague and incomplete.

### Core Competencies FA2023-SP2024

#### Core Competency Outcome: Written Communication

Written: Students will be able to effectively express ideas and information to others through written communication.

#### **Outcome Measure:**

PSY4020 Good Life Paper.

- In 2023-2024, PLNU transitioned from using the ETS exam to assess Written Communication to a department-defined task. Before the ETS exam was used, the Psychology Department assessed the Core Competency: Written Communication by using the “Good Life Concepts” portion of the PSY4020 Capstone Good Life Paper and will return to using this measure.

#### **Criteria for Success:**

Current Criteria: 70% of our students will score a 3 or higher on the PSY4020 Good Life Paper: “Good Life Concepts” rubric.

Previous Criteria: 70% of the students will be marginal or proficient at Level 2 Writing.

#### **Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. **Intellectual Skills/Core Competencies**
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

**Longitudinal Data:**

Percentage of Students Proficient Using the PSY4020 Good Life Paper					
	2023-24 (n = 20)				
Good Life Paper: "Good Life Concepts"	100%				

Percentage of Students Marginal or Proficient Using the ETS					
	2018-19 (n = 59)	2019-20 (n = 44)	2020-21 (n = 43)	2021-22 (n = 63)	2022-23 (n = 66)
ETS Proficiency Profile Level 2 Writing	78.0%	65.9%	48.8%	77.8%	69.7%

**Conclusions Drawn from Data:**

- The students met the criteria for success.
- We believe the Psy4020 Good Life Paper: "Good Life Concepts" is a better measure of our students' Written Communication Core Competency for the following reasons:
  - The Good Life Paper and its rubric have been used by our department for over ten years to assess our Department Learning Objectives. It has been vetted and proved discriminating.
  - The Good Life paper is the signature assignment for our PSY4020 Senior Capstone class. Our students put their best effort into it and we believe it is a fair representation of their true abilities.
  - The ETS test suffered from low participation, effort, and engagement. Students did not know why they were taking the test and their scores often did not

represent their best abilities as shown by the variability in performance from year to year.

**Changes to be Made Based on Data:**

- We will assess in future years whether this assessment of Written Communication is useful.

**Rubric Used**

PSY4020 Rubric for Core Competency: Written Communication				
	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
"Good Life" Concepts	Student will be able to answer the question: what makes a "good life" good? Student can enumerate and <b>clearly articulate detailed and comprehensive knowledge of 1 component of a "good life"</b> . Student provides clear explanation of how 1 component contributes to well-being.	Student can describe <b>general knowledge</b> of theory and research findings related to 1 component of a good life.	Student can describe <b>satisfactory knowledge</b> of theory and research findings related to 1 component of a good life.	Student cannot identify and adequately describe theory and research findings related to 1 component of a good life. Descriptions are vague and incomplete.

### Core Competencies FA2023-SP2024

#### **Core Competency Outcome: Quantitative Reasoning**

Quantitative Reasoning: Students will be able to solve problems that are quantitative in nature.

#### **Outcome Measure:**

Psychology Quantitative Reasoning Exam.

- In 2023-2024, PLNU transitioned from using the ETS exam to assess Quantitative Reasoning to a department-defined task. The Psychology Department Assessment team piloted a test of quantitative reasoning in Fall 2023. After reviewing the results the assessment and its rubric were revised and piloted again in Spring 2024.

#### **Criteria for Success:**

Current Criteria: 70% of the students will score a 3 or more on the Psychology Quantitative Reasoning Exam Rubric.

Previous Criteria: 70% of the students will be marginal or proficient at Level 2 Math.

#### **Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. **Intellectual Skills/Core Competencies**
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

#### **Longitudinal Data:**

Core Competency: Quantitative Reasoning Using Psychology Quantitative Reasoning Exam					
	2023-24 (n = 20)				
Psychology Quantitative Reasoning Exam	90%				

Percentage of Students Marginal or Proficient Using the ETS					
	2018-19 (n = 59)	2019-20 (n = 44)	2020-21 (n = 43)	2021-22 (n = 63)	2022-23 (n = 66)
<b>ETS Proficiency Profile Level 2 Math</b>	71.2%	63.5%	44.2%	63.5%	66.7%

#### Conclusions Drawn from Data:

- Students met the criteria for success in this first use of the exam.
- The Psychology Quantitative Reasoning Exam was designed to assess quantitative reasoning ability in scenarios that tied directly to Psychology majors' lives. Five questions assessed quantitative reasoning in the areas of:
  - Lifetime earnings
  - Graduate school payback periods
  - Time flexibility
  - Retirement savings
  - Compounded retirement savings.
- This assessment is given in the capstone PSY4020 course.
- By using personal finance questions that apply to students' lives, we hoped to increase student engagement and effort.

#### Changes to be Made Based on Data:

- We will continue to refine this assessment and its rubric in future years.

#### Psychology Quantitative Reasoning Exam (Spring 2024 version)

##### Quantitative Questions Key: Psychology Money Matters

There are five questions each worth two points. One point is awarded for the correct answer and one point is awarded for showing relevant calculations.

1. The following questions ask you to calculate how much a person (in California) might earn in their lifetime, given different degrees. Even if you get an answer wrong, I will give you partial credit if you show your work, and have made correct decisions in some of your calculations (feel free to attach photos of hand-calculations, Word docs, spreadsheets, etc. ... whatever you used to try to figure out the answers).
2. You have a friend who is thinking of becoming a Marriage and Family Therapist (MFT route), but they aren't sure that the extra years of schooling are affordable. So, you

decide to help them calculate their average earnings to figure out whether a Masters degree is worth it for them compared to a BA (BA route). So (of course!) you do your research:

- a. According to ZipRecruiter, "As of Nov 6, 2023, the average hourly pay for the Bachelor Degree jobs category in California is \$25.72 an hour" (<https://www.ziprecruiter.com/Salaries/Bachelor-Degree-Salary--in-CaliforniaLinks> to an external site.)
  - b. According to the ZipRecruiter, the average salary of a Marriage and Family Therapist in California is (\$42.98 an hour). (<https://www.ziprecruiter.com/Salaries/MFT-Salary--in-CaliforniaLinks> to an external site.)
  - c. The median total cost of an MFT program in California is \$48,500 (<https://www.mftcalifornia.com/estimated-total-program-tuition> Links to an external site.).
3. Assume that it takes an MFT three years to finish their program (during which they are unpaid). Further, assume that your friend would make an average wage and that they would work 40 hours per week, 50 weeks a year. Then answer the following questions:
- a. **Question 1 Lifetime Earnings:** (2 points) Assuming that your friend works 45 years after graduation (or 42 years as an MFT), at 40 hours per week (and assuming no inflation and no taxes), how much more would they earn in their lifetime with an MFT degree than with their Bachelor Degree? (For partial credit, show your work)
    - i. Answer: \$1,295,100
    - ii. Work:
      1. Avg MFT salary = \$85,960
      2. Avg BA Salary = \$51,440
      3. MFT lifetime =  $\$85,960 \times 42 = \$3,610,320$
      4. BA lifetime =  $\$51,440 \times 45 = \$2,314,800$
      5.  $\$3,610,320 - \$2,314,800 = \$1,295,100$
  - b. **Question 2 Payback Period:** (2 points) Assume that "Year 1" is the first year your friend begins their MFT program. Make a table showing the income of each route starting at Year 1 and extending for 10 years (e.g. Year 1 BA route earns money, MFT route pays tuition, by Year 4 both are making money). During which year would a MFT's salary difference fully pay for the cost of the program and lost income while in school? (For partial credit, show your work).
    - i. Answer: Paid off in the 6th year after grad school (9th year overall)
    - ii. Work:
      1. Median Cost of MFT = \$48,500
      2. Avg MFT salary = \$85,960
      3. Avg BA Salary = \$51,440
      4. Difference = \$34,520
      5. BA earns 3 extra years = \$154,320 (years 1-3)



6.  $154,320 + 48,500 = \text{Years} \times 34520$

7.  $\text{Years} = 5.8754$

- c. **Question 3 Time Flexibility:** (2 points) Perhaps your friends say that they are happy making the average salary of someone with their Bachelor's (\$25.72/hour X 40 hours per week X 50 weeks a year). However, they are thinking of starting a family someday, and wish they didn't have to work so many hours a week. How many hours a week would an MFT have to work in order to make as much as an average BA makes in a 40-hour work week? (For partial credit, show your work)
- Answer: 24 hours per week
  - Work:
    - Weekly BA Salary = \$1028.8
    - MFT wage = \$42.98/hour
    - $\$1031.52 / 42.98 \text{ hours} = 23.94 \text{ hours}$
4. **Question 4 Retirement Savings:** (2 points) Assume that your friend can afford to put into savings everything that they make over \$20/hour (i.e. with a BA they can save \$5.72 per hour, and with an MFT they can save \$22.98 per hour). Assume that they save for 45 (BA) or 42 (MFT) years after graduation and they place their money in an account that earns no interest. How much would your friend save over their lifetime with each degree? (For partial credit, show your work)
- Answer:
    - BA = \$514,800
    - MFT = \$1,930,320
  - Work:
    - BA
      - $\$5.72 \text{ (per hour)} \times 2000 \text{ (hours per year)} = \$11,440 \text{ saved per year}$
      - $\$11,440 \times 45 \text{ years} = \$514,800$
    - MFT
      - $\$22.98 \text{ (per hour)} \times 2000 \text{ (hours per year)} = \$45,960 \text{ saved per year}$
      - $\$45,960 \times 42 \text{ years} = \$1,930,320$
5. **Question 5 Retirement Savings Compounded:** (2 points) Assume that your friend can afford to put into savings everything that they make over \$20/hour (i.e. with a BA they can save \$5.72 per hour, and with an MFT they can save \$22.98 per hour). Assume that they save for 45 (BA) or 42 (MFT) years after graduation, and they put their savings into an S&P 500 Index fund which returns 8% per year, and that their growth is calculated (compounds) annually. How much would your friend save over their lifetime, with each degree? (For partial credit, show your work)
- Answer:
    - BA = \$5,154,068
    - MFT = \$16,093,807

b. Work

i. BA

1. For each year they take the amount that was previously saved (e.g., \$11,440 in the first year), and multiply it by 1.08 (8% interest), and then add the next year's savings (+ \$11,440) for 45 years.

ii. MFT

1. For each year they take the amount that was previously saved (e.g., \$45,960 in the first year), and multiply it by 1.08 (8% interest), and then add the next year's savings (+ \$45,960) for 42 years.

**Rubric Used:**

Psychology Quantitative Reasoning Exam Rubric

Psychology Quantitative Reasoning Exam Rubric				
	4	3	2	1
Psychology Quantitative Reasoning Exam Scores	10-9	8-7	6-5	4-0