

### Grading Rubric

- ✓ 1. (5 pt) **Introductory paragraph of college plans & major**  
*nice introduction*
- ✓ 2. (10 pt) **Required math classes for college entrance** ✓  
**Math placement test requirements or pretesting requirements** ✓  
**Required # hours at that college for graduation in major from college** ✓
- ✓ 3. (20 pt) **Discussion of required math/math related classes for major**  
**Course descriptions and college prefixes used for one plan to attend)**
- ✓ 4. (10 pt) **College transfer guide checked** ✓  
**List dual enrollment/AP math class and corresponding college transfer class**
- ✓ 5. (5 pt) **VCCS college agreement checked & statement of findings/ stipulations**
- ✓ 6. (10 pt) **Occupational Outlook career findings**  
**Future demands of career choice; potential earnings; job location Related career choices**
- ✓ 7. (5 pt) **Concluding paragraph with opinion of assignment**
- 1 8. (15 pt) **Directions followed: content; spacing; name; citations; references, etc.**
- ✓ 9. (10 pt) **Length of paper (4 page minimum)**
- 0 10. **Deduction lateness**

89/90 SCORE (90 POINT TOTAL)



### Why Calculus is Important for a Neuropsychologist

Almost too many choices exist today as far as colleges and majors are concerned. When I first started exploring colleges and majors, I was afraid that I would never find the perfect fit. However, my preconceptions changed once I visited the College of William & Mary. Somehow, I knew that college was where I wanted to spend the next four years of my life. The College is not too far from home, has excellent research opportunities, has a history unparalleled with other schools, and is selective and small. The early decision for William & Mary was November 1, 2011, and the regular decision is January 1, 2012. The financial aid deadline is March 1, 2012, and the enrollment deadline is May 1, 2012 (The College Board, 2011). While I have picked out a college, I still am not sure exactly what subject I want to major in; in fact, I could very likely change my mind in the next week. However, the interest survey reinforced my belief that my primary interest is science, communications, and social service (Virginia Career VIEW, 2011). I feel that I could combine all three of these interests by becoming a neuropsychologist. With this career, I will be able to continue my passion for science by studying the brain, help others by examining their problems, and communicate my findings through books and magazine articles.

While math may not be the most important subject for a psychologist, it is still very important, especially statistics. William & Mary has no required math classes for college entrance; however, they do recommend that future students take calculus their senior year of high school. Moreover, William & Mary recommends that students complete four years of a foreign language and take physics their senior year. Also, William & Mary will take a 4 or 5 on the AP Calculus AB exam and a 3 on the AP Calculus BC exam, either of which will earn credit for MATH 111 (four credits). A 4 or a 5 on the Calculus BC exam will also earn a student credit for MATH 112 (four credits). A 4 or a 5 on the AP Statistics exam will earn students a

Statistics Elective to count as three credits. William & Mary does not require any SAT II Subject Tests, including math subject tests. The College does offer a Calculus Readiness Test so students can assess their math skills and see which math class they should take (The College of William and Mary, 2009). The required math for becoming a psychology major is statistics; I would be required to take PSYC 301: Elementary Statistics. The William & Mary website describes this course as, "An introduction to statistics, both descriptive and inferential, including analysis of variance and correlation. Hypothesis testing and the analysis of research data are strongly emphasized" (The College of William & Mary, 2011b). A co-requisite with this course is PSYC 302: Experimental Methods, which focuses on how psychological data are obtained. A major in psychology requires 35-credit hours, and a student seeking a B.S. in psychology (as I am planning to do) must complete three additional courses in computer science, mathematics, biology, chemistry, geology, or physics (The College of William & Mary, 2011b). For more information on how courses will be counted for credit at William & Mary, please see Table 1A as follows. See p.39 APA Manual ; for how to handle table

Table 1A

Course and Credit for High School Classes

Dual Enrollment Classes/AP Classes	Course and Credit Given
ENG 111-112 (American Literature)	WRIT 101 ENGL 210 (GER 5)
CHEM 111-112 (College Chemistry)	CHEM 103/103L (GER 2A & lab) CHEM 308/354
ENG 131 (Junior Research)	No credit given
MTH 163-164 (Pre-calculus)	MATH 103 (3 credits)
MTH 157 (Elementary Statistics)	3 credits toward either BIOL 425, BUAD 231, ECON 307, or SOCL 353
ITE 115 (Computer Applications and Concepts)	CSCI ELT (1 credit)
ENG 243-244 (Survey of British Literature)	ENGL 203 (GER 5) ENGL 204 (GER 5)
ENG 210 (Advanced Composition)	WRIT ELT

MTH 175-176 (Calculus)	MATH 111 (4 credits) (GER 1)
PHY 201-202 (College Physics)	PHYS 107 (GER 2A & lab) PHYS 108 (GER 2A & lab)
AP Psychology	PSYC 201 (3 credit hours) and PSYC 202 (3 credit hours) for a score of 5. Exempted from PSCY 201 & 202 with a score of 4 (no credit given).
AP Environmental Science	ENSP 101. 4 credit hours given for a score of 5, course exemption with no credit given for a score of 4.
AP US History	HIST 121 (3 credit hours) and HIST 122 (3 credit hours) for a score of 5. Exempted from HIST 121 & 122 with a score of 4 (no credit given).
AP US Government	GOVT 201 (3 credit hours) for a score of 4 or 5
AP Comparative Government	GOVT 203 (3 credit hours) for a score of 4 or 5
AP European History	HIST 111 (3 credit hours) and HIST 112 (3 credit hours) for a score of 5. Exempted from HIST 111 & 112 with a score of 4 (no credit given).

One of the great aspects about William & Mary is that they will accept nearly all of my dual enrollment credits because there is an equivalent course for most of them. However, I must maintain a C or better in all my dual enrollment classes in order for them to transfer. William & Mary also participates in a guaranteed admission agreement with Virginia's community colleges. Students must have earned a transfer-oriented degree from a VCCS institution within the past two years, and a minimum of 45 credit hours must have been earned at a VCCS institution after graduation from high school. In some of the General Education Requirement classes, students must have earned a B or higher in order to be eligible for the agreement. Finally, students must sign a letter of intent and become students at William & Mary in the semester designated in their letter. I must take note, though, that incoming freshmen who have earned associate's degrees will not be given automatic junior status when entering William & Mary (The College of William & Mary, 2011c). Also, while William & Mary has no limit to the number of credits that

can be transferred, the College requires that at least 60 credit hours must be earned on campus (The College of William & Mary, 2009).

The occupational outlooks for psychology are promising. Nationally, psychology employment is expected to rise from 15,900 jobs in 2008 to 18,300 jobs in 2018, which is a 15.1 percent increase. In Virginia, psychology employment is expected to rise from 297 jobs in 2008 to 334 jobs in 2018, a 12.5 percent increase. The national income for psychologists is \$86,510.00 per year, and the average earnings within the state of Virginia are \$94,837.78 per year. Most jobs in Virginia for neuropsychology are available in northern Virginia and the greater Richmond area (Virginia Career VIEW, 2011). "Job opportunities should be the best for those with a doctoral degree in a subfield..." (U.S. Bureau of Labor Statistics, 2009). I do not plan to go to college and only earn my bachelor's in psychology; instead, I plan to continue in my studies to earn a master's and then a doctorate in psychology, specifically neuropsychology. Holding a doctorate in psychology will increase my chances of having a successful career and earning more money in the profession. William & Mary offers a graduate program for psychology, and I plan to apply to their graduate school after I finish my undergraduate work (The College of William & Mary, 2011b). I must also have a licensure and pass an examination to be able to practice psychology, and these requirements will vary from state to state. Many psychologists are self-employed. In fact, 34 percent of psychologists are self-employed mostly as private practitioners or independent consultants. Because neuropsychologists are a type of clinical psychologists, they can also choose to be self-employed. A psychologist's work environment will vary depending on the type of work performed by the psychologist (U.S. Bureau of Labor Statistics, 2009). The main form of math used in any psychological career is statistics. I will need to become very familiar with statistical methods in order to conduct

psychological experiments that are reliable and unbiased. For example, if I conduct a study on how well people read under varying conditions, I will need to have a solid foundation in statistics in order to do an analysis on the subjects' reading ability.

Other jobs related to neuropsychology include jobs in all other types of psychology, neuroscience, and cognitive science. Other types of psychologists include industrial-organizational psychologists, social psychologists, and developmental psychologists. Neuroscience is a field closely related to psychology focusing especially on the brain and how it functions. William & Mary offers a degree in neuroscience in which students take courses in applied science, biology, chemistry, kinesiology, health science, physics, and psychology (The College of William & Mary, 2011a). Cognitive science involves how and why people think the way they do.

In conclusion, my plan for my life right now involves attending the College of William & Mary next fall and majoring in psychology, then going to graduate school to earn a doctorate in neuropsychology. Of course, plans are always subject to change, but I believe that my goals can be achieved if I work hard and discipline myself. I am glad I got to complete this assignment because I feel that it has been very beneficial in researching the best college and best major for me. I am especially pleased to see exactly how my credits from governor's school and from my Advanced Placement classes will transfer if I am accepted into William & Mary. Tori Amos once said, "Some people are afraid of what they might find if they try to analyze themselves too much, but you have to crawl into your wounds to discover where your fears are. Once the bleeding starts, the cleansing can begin." That quote explains why I want to be a neuropsychologist – so I can figure out humanity's problems and lead people to a better understanding of who we are.

like it!  
:)

## References

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