

# Genetic Counseling Admission Criteria: An Overview of US Requirements in 2020



## Introduction

It is standard for undergraduate and graduate programs to use their websites to convey admission criteria to prospective students. Genetic counseling programs' admission information is accessible to all on their websites. Genetic counseling program websites offer information on admission requirements, application process, curriculum, class size, thesis information, clinical rotations, tuition and assistance, and biographies of faculty and current students. Genetic counseling graduate program websites have an impact on prospective students deciding which programs to apply to, as it sometimes provides the only source of information an applicant will receive.<sup>1</sup> Genetic counseling masters' students identified that location, tuition cost, and curriculum were highly ranked when deciding what programs to apply to and ultimately attend.<sup>2</sup> As genetic counseling programs rapidly expand in the US, we are surveying the communication on admission websites for consistency in eligibility requirements and recommendations. Being a competitive field with few openings in admissions each year, prospective students will use admissions websites as a resource not only for admission criteria but also for open houses and biographies on current students. This project documents communication, education, and knowledge requirements at a singular point in time, although websites are regularly updated.

## Method

### Participants

The websites were acquired from the Accreditation Council of Genetic Counseling website. We selected programs that had fully matriculated at least one cohort of students by summer 2020 and were located within the United States, which gave us a total of 47 programs.

### Procedure

The first author reviewed the website of every program meeting inclusion criteria to search for information regarding application requirements for their genetic counseling program. The information was entered into a spreadsheet for analysis. If any information about a program was missing, the second author reviewed the website again to see if it was available. The second author also audited the information for 5 randomly selected programs to check for accuracy. No mistakes were identified so no further auditing was conducted.

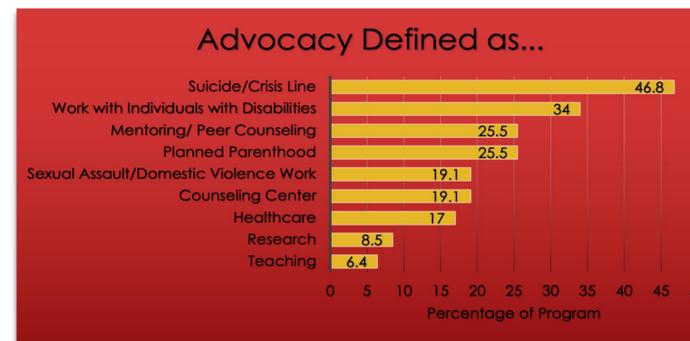
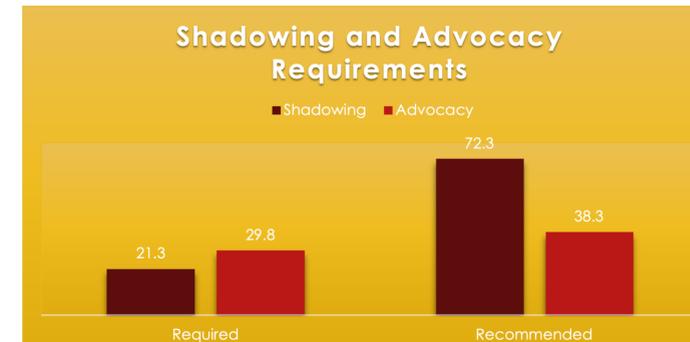
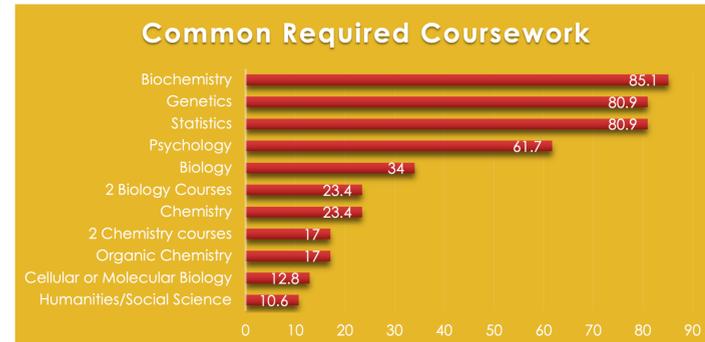
### Data Analysis

Descriptive statistics were calculated for all study variables. The first and second authors coded descriptions of advocacy and recommended activities independently using thematic analysis and created consensus codes using discussion to reach agreement.

## Results

There was significant consensus among the 47 programs reviewed regarding prerequisite coursework, number of letters of recommendation, personal statement, and GRE requirements. We found that 91.5% of programs required three recommenders or letters of recommendation and 93.6% of programs required a personal statement. Generally, for GRE scores, 74.5% of programs require it but due to the COVID-19 pandemic only 29.8% of programs were requiring it for the 2020-21 admissions cycle.

## Results (cont.)



Recommended Experiences	n	%	Recommended Coursework					
			Course	n	%	Course	n	%
Counseling Experience	15	31.9	Anatomy and Physiology	18	36.2	Medical Terminology	2	4.3
Research Experience	12	25.5	Statistics	10	21.3	Microbiology	2	4.3
Lab Experience	9	19.1	Psychology	9	19.1	Counseling	2	4.3
Teaching Experience	8	17.0	Genetics	8	17.0	Advanced Genetics	2	4.3
Volunteer Experience	3	6.4	Embryology	7	14.9	Human Development	2	4.3
Work with Individuals with Disabilities	3	6.4	Molecular/Cellular Biology	7	14.9	Public Health	2	4.3
Being Multi-lingual	3	6.4	Biology	6	12.8	Anthropology	2	4.3
Work Experience	3	6.4	Biochemistry	6	12.8	Sociology	2	4.3
Professional Presentations/Publications	2	4.3	Epidemiology	4	8.5	Neuroscience	2	4.3
Engagement with Other Cultures	1	2.1	Developmental Biology	3	6.4	Maternal and Child Health	2	4.3
Peace Corp Volunteer	1	2.1	Bioethics	3	6.4	Bioinformatics	2	4.3
Clinical Genetics Experience	1	2.1	Organic Chemistry	3	6.4	Computer Science	2	4.3
Leadership Experience	1	2.1	Molecular Genetics	3	6.4	Advanced Science lab	1	2.1
			Human Genetics	3	6.4	Medical Embryology	1	2.1
			Calculus	2	4.3	Scientific Writing	1	2.1
			Philosophy and Ethics	2	4.3	Advanced Sociology	1	2.1
			Communication	2	4.3	Advanced Psychology	1	2.1

## Results (cont.)



## Discussion

### Findings

The data demonstrates that there is a great deal of variety amongst admissions requirements to genetic counseling programs. Application and admission requirements are not one size fits all; however, some universal trends did appear with 3 main courses being required by most programs and the mention of advocacy and shadowing in some form. A prominent finding that stuck out was advocacy is not universally defined among genetic counseling programs and most programs offer examples instead of definitions of advocacy which could be either beneficial or cause confusion on what is meant by advocacy. While the admission websites provide plenty of information, they can be challenging for students because they may not accurately reflect the preferences of the admission committees, specifically in terms of quantity of time and relevance of experience.

### Limitations

A broader review of all ACGC accredited programs in the North American region, including the Canadian programs, may find altered trends in requirements and recommendations. This study should be replicated as genetic counseling programs expand, which can shift commonalities in admission criteria.

### Recommendations

This can serve as a foundation for further research to compare the admission criteria that is published on admission websites against criteria that makes an applicant competitive. While we classified the data as required vs. recommended, it is likely admissions committees weigh certain courses or activities as more significant than others; future studies could explore this further. This data may also be of value to admission committee members as they can use it to assess the extent to which their requirements align with other accredited programs. Justice, equity, diversity, and inclusion issues are an important consideration as most programs are costly to apply to and certain extracurricular activities may not be possible for all prospective applicants due to financial or familial constraints.

## References

- Ivan, K., Hased, S., Darden, A., Aston, C., & Guy, C. (2017). Influence of Genetic Counseling Graduate Program Websites on Student Application Decisions. *Journal of Genetic Counseling*, 26:1213–1220. DOI 10.1007/s10897-017-0097-4
- Kuhl, A., Reiser, C., Eickhoff, J., & Petty, E. M. (2014). Genetic counseling graduate student debt: Impact on program. *Career and Life Choices*, 824–837. doi:10.1007/s10897-014-9700-0.