# Mathematics Students' Bill of Rights 

Concerns of Young Mathematicians

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As a follow-up to last issue's column about MSEB and the MAA Project NExT, I thought that subscribers to the YMN Newsletter might be interested in the following "Students' Bill of Rights" that summarizes what various recent reports have to say about what students have a right to expect from their college mathematics programs. This summary was prepared by the MSEB Office of Higher Education as part of our effort to synthesize and disseminate program recommendations to teachers and faculty. References to each statement are provided, with a bibliography at the end.

Please feel free to distribute to students on your campuses. They might find it interesting.

- Lynn Arthur Steen, MSEB
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## Mathematics Students' Bill of Rights

Every course in the mathematical sciences should offer students the opportunity to:

- Effectively learn mathematics through a broad spectrum of instructional practices. [2, p. 207]
- Solve problems using a wide variety of mathematical methods. [1, p. xi]
- Use technology naturally and routinely. [1, p. xiii]
- Study topics that are motivated through applications, problem-solving, and theory. [2, p. 190]
- Undertake open-ended projects that extend well beyond typical textbook problems. [2, p. 219]
- Learn to explore, conjecture, and reason logically. [1, p.xi]
- Read, write, speak, and listen to mathematical ideas. [2, p. 207]
- Be tested on what is most important, not just on what is easy to test. [2, p. 219]
- Appreciate the importance of the mathematical sciences in social, cultural, and economic contexts. [1, p. 9]

Every mathematical sciences program should offer students:

- A statement of goals of the mathematics program. [3, p. 2]
- A set of objectives to accomplish those stated goals. [3, p. 2]
- A curriculum designed for all students with an interest in mathematics. [2, p. 190]
- Sufficiently diverse courses that enable students to achieve their personal and professional goals. [4, p.8]
- Courses that help students develop well-founded self-confidence in their mathematical abilities. [2, p. 206]
- Appropriate challenges for students of all ability levels at every stage of their studies. [2, p. 190]
- Sustained, careful, and individualized advising. [2, p. 213]
- An effective system for placement into introductory courses. [4, p.9]
- Courses that meet students' mathematical needs when they enter college. [4, p. 8]
- Extracurricular activities that enhance peer support among mathematics majors. [2, p. 212]
- A substantive role in the mathematics department's assessment process, from the planning stage through implementation. [3, p. 2]


## References:

These statements were adapted from several publications of the Mathematical Association of America where additional information can be found:

1. Leitzel, James R.C. (Ed.) A Call for Change: Recommendations for the Mathematical Preparation of Teachers of Mathematics. Washington, DC: Mathematical Association of America, 1991.
2. Steen, Lynn Arthur, (Ed.) Heeding the Call for Change: Suggestions for Curricular Action. MAA Notes No. 22, Washington, DC: Mathematical Association of America, 1992.
3. Assessment of Student Learning for Improving the Undergraduate Major in Mathematics. Circulating draft, Washington, DC, Mathematical Association of America, 1993.
4. Guidelines for Programs and Departments in Undergraduate Mathematical Sciences. Washington, DC: Mathematical Association of America, 1993.
