

HealthReach is a design course with the aim to teach math and science to hospitalized children using their own disease as the motivation and springboards for learning.

The course is a unique opportunity for undergraduate students to be challenged to create interactive teaching modules for complex math and science principles and spend time working directly with children ages K-12. The first semester, students will work directly with families staying at the Atlanta Ronald McDonald House and students in North Fulton County Schools. Subsequent semesters, students will have the opportunity to have one-on-one patient interaction at Children's Healthcare of Atlanta. This depth elective course aims to familiarize students to the program, with the hope that students remain with HealthReach during following semesters as volunteers and course leaders. (Note: this class was previously BMED 4843)



Course Information:

- **BMED 4863 A and AO1 Lam/Trybus** – Depth Elective credit for BME majors
- For non BMEs: free elective credit (consult with advisor)
- Fall 2024 Schedule (in-person) - Monday Lecture 9:30-10:20am, Tuesday Lab 3:30-6:15pm, and community volunteering.

Course Objectives:

- Community Volunteering – typically 20-25pts, each event has a point total equal to time at the event and travel time to the event. See the following example from Fall 2022.
- Use problem-based learning skills to Design, Create, and Teach advance scientific and mathematical material at a simplified level.
- Create new human physiology-related modules following design principles.
- Study communication, education, and teaching skills for working with school-aged children.

- Ronald McDonald House Gatewood Egleston – STEM events – Mondays 7-8pm (1.5 pts each)
 - September 12th and 26th
 - October 10th and 24th
 - November 7th and 14th
- Ronald McDonald House Peachtree Dunwoody Scottish Rite – STEM events – Thursdays 7-8pm (1.5 pts each)
 - September 15th and 29th
 - October 13th and 27th
 - November 10th and 17th
- Sickle Cell Education Day Fair, Saturday, September 24th ~9:30am to 3pm at Children's Support Building. (shifts - 9:30am - 12pm (3pts), 12-3pm (3.5pts), all day (6.5pts))
- GT Kids Club, Saturday, October 22nd at GT, ~8:30-12pm (3.5pts)
- Amana Academy – 8th grade science class – Fridays - 9:15-11am September 16th, 23rd, October 7th, 14th – (3.5pts each)
- Woodland Elementary 5th grade class – Fridays – 10:15 – 11am, Fridays October 21st, 28th, November 4th and 11th (2pts each)
- Middle Grades STEM event at GT with 5-8th graders – Wednesday, November 16th at Exhibition Hall on campus ~9-11:30am (2.5pts)
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- 0.25pts per event for carpool driving

Pre-requisite Requirements:

- We prefer a minimum of a full calendar year commitment (Fall 2024 and Spring 2025)
- **You must fill out the online application:** <https://forms.gle/2t9zFy755BPetuDk7>
- Applications will be accepted through **April 11th at 5pm**. No late applications will be accepted.
- **Notification of acceptance will be announced before April 15th and course permits will be issued shortly after.** Space is limited.
- For any questions, contact bmehealthreach@gmail.com

Website: bmehealthreach.gatech.edu | Facebook: www.facebook.com/BMEHealthReach

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