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Archives Report

The Darwin "stuff" (I know; I suggested it!) seems a little forced, and it might (in retrospect) have made more sense to look at the evolution of the science curriculum without thinking of Darwin. It's interesting that chemistry and physics were well established before biology, and it makes sense because of the engineering curriculum. In addition, watch organization. I can't see a clear organizational pattern.

The Progression of ^{the} Science Curriculum at Georgia Tech

The Georgia Institute of Technology was founded in 1888. ~~The school was~~ *largely* founded in response to increasing concerns over the level of industrialization in the South. Georgia Tech was the first step in propelling the South into its future as a major textile industry player. Initially, the school offered only one degree in mechanical engineering. ^{through} Several new degrees were offered by the turn of the century (1888

Announcement 43). ^{it} Even though Georgia Tech was ~~a school that was focused on~~ *the entirely practical plan of* bringing the South up to the industrial standards of the northern United States, the need for learning about science slowly crept into the school's curriculum. General science was not a major area of study in most educational institutions prior to the mid-nineteenth century. However, the founding of the Royal Academy of Science in the late eighteenth century and Charles Darwin's publication of the Origin of Species in 1859 changed ~~this~~ *these ideas are very good, but your presentation is ham-bles. What's the most important id* conception. Darwin's theory of evolution changed natural science into the study of various sciences as we now think of them. For the first time in history, during the Victorian era, science became an area of professional study. ^{rank.} Although Georgia Tech was not founded for the ~~benefit~~ ^{study pure} of science, it soon became necessary to integrate the study of chemistry, physics, and most importantly, biology into the school's focus.

From the beginning, chemistry and physics were vital components of the science courses taught at Georgia Tech. The Physics Department was one of the original eight

I'd think that chemistry was important to the textile industry.

departments that were established at Georgia Tech, ^{and} Physics courses were taught in association with the Mechanical and later the Electrical Engineering Departments (1901 Announcement 88). Studying physics was an important aspect of learning how to work with the mechanical technologies that proliferated during the Industrial Revolution. Partly through Darwin's work and partly because of the demanding scientific nature of many of the inventions of the time, science was quickly becoming a necessary and important subject for students to learn. However, even with the discoveries of Darwin and other prominent scientists, the importance of science itself was not yet understood in the Victorian era. Science was considered as a means to an end, rather than a subject that *good point* should be studied for its own merits; for these reasons, no specific stand-alone chemistry or physics degrees were offered at Tech during that time. A Bachelor of Science in Physics was first offered in 1919 (Inventory). The first chemistry-specific degree program began in 1901 – this degree was called a Bachelor of Science in Engineering Chemistry (1898 Announcement 34). This program ~~was~~ ^{was} designed as an extension of the existing courses offered in chemistry, ~~The degree~~ provided specialized training in branches of chemistry that could be applied in industries; it also provided a broad foundation in general and theoretical chemistry (McMath 92). In 1906, a Bachelor of Science degree in Chemistry was offered in addition to Engineering Chemistry (McMath 92).

because of its practical application

Although respect for the general sciences such as Chemistry and Physics was increasing during the Victorian era, the study of Biology would have little effect on educational programs for many years to come. During this time, ^{because} biology was not even considered a legitimate area of scientific study, ~~The~~ study of biology was limited to

amateur collectors and natural scientists who wished to discover and classify the diverse forms of life. The science of biology as we know it today rests entirely on Darwin's *RW* evolutionary theory. It is interesting to note that even though Darwin's theory had such a large impact on Victorian society and the professional study of science, it wasn't until the mid-nineteenth century that modern biology became an accepted and widespread area of study ~~in the educational system~~. This fact is particularly evident in the history of Georgia Tech. At the time that Tech was founded, biology was not even offered as a course, much *good point* less a major. As the gaps in Darwin's theory regarding the mechanisms of heredity were filled by Mendel's discoveries in the early 1900's, the theory of evolution became more widely accepted. In 1923, Tech first started offering a General Science bachelors degree, which was perhaps the precursor to a biology program, as students in their junior year began taking courses in general zoology and vertebrate zoology (1939 Announcements 87). A few years later, in 1928 the department of Biology and Bacteriology was formed with one professor (1939 Announcements 97). Biology was ^{also} gaining more importance during this time period as the medical community sought ways to understand bacteria and viruses, in order to ^{RW} contain many deadly diseases. In 1940, the department was changed to the Biology and Public Health department which offered a degree in Public Health *Interesting that public health almost entirely disappeared from Tech's curriculum.* Engineering (1939 Announcements 103). This change reflected growing concerns over public health in the wake of industrialization. The School of Biology was not founded until 1959, when students were finally able to earn a degree specifically in biology (1960 Blueprint). Masters and doctorate ^{le} programs were not offered until approximately ten and twenty years later, respectively. However, even at this late date when the scientific community had accepted the correctness of Darwin's theory of evolution providing an

underlying foundation in all studies regarding life, the School of Biology's primary aim was only to "relate the field of biology with other scientific fields" (1960 Blueprint).

It wasn't until 1990 that the study of biology at Georgia Tech truly encompassed all of the important biological subfields of environmental biology, microbiology, and molecular biology. It is interesting to note how it took over a century for Darwin's theories of evolution to become accepted enough for the study of biology to become completely integrated into the school's science curriculum. Currently, Georgia Tech

offers a Bachelors, Masters, and PhD in Chemistry, Chemical Engineering, Biology, and

Physics.^{hand} Throughout history, Georgia Tech has evolved into much more than an engineering school. The ideas that emerged from Darwin's discoveries gave rise to a

society in which science became a part of every day life. The ever-growing need and desire to study science has led Georgia Tech to become a school that recognizes the

importance of science in both the present and the future. — *kind of lame conclusion*

taught at all levels of education.

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