

## Biomedical Studies

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Biomedical studies is a multidisciplinary program that was implemented in 2000 in order to provide students with an experience that helps them not only research but also prepare for careers in health care. The concentration was intended to enhance the preparation of students entering careers in the biomedical arena ranging from medicine to sports science to hospital administration. However, with the restructuring of The Piper Center for Vocation and Career (<http://wp.stolaf.edu/pipercenter>), Piper Center staff and programs are able to meet these career preparation needs better than an academic program can. Because course preparation is clearly a part of any career discernment and pursuit, strong faculty advising is available to students in any health-related field (see the Pre-Health Studies (<http://catalog.stolaf.edu/archive/2015-2016/pre-professional-preparation/programs/pre-health-studies>) page in this catalog). Because of these changes in the Piper Center and in the Health Studies program, the biomedical studies concentration is no longer an academic program beginning with students in the Class of 2017. For students in the Class of 2016, please see the "Requirements" tab for information about the required courses and career portfolio.

### Distinction

Biomedical studies honors a limited number of graduating majors with distinction. Distinction applicants complete an approved project, which is evaluated along with the concentration portfolio by the program director and a committee of faculty and staff. More information is available at the biomedical studies website.

## Requirements

The biomedical studies concentration is arranged by individual contract through the program director, and consists of both required courses and a career portfolio. Declaring the concentration at the Registrar's Office is not sufficient; students must also file a contract with the program director. Students may take required courses through their last semester, but the completed career portfolio is due by May 1 of the senior year.

## Required Courses

Course selection and justification should involve consultation with the program director upon initiation of the concentration. A requirement of the career portfolio involves written explanations of relevance and usefulness for all four course selections.

1. Foundation course in human biology. This course could be either BIO 123 or BIO 243 taken here at St. Olaf, or it could be a human biology course transferred from another institution if approved by the program director.
2. Practical application course. This course must be outside of the student's major. It is any course in which the student practices something practical or logistical relating to the health career of interest. For example, many pre-dental students take a course in studio art to practice working with their hands. As another example, many pre-medical students take a health economics course to better understand the context of health care.

3. Ethical considerations course. This requirement is fulfilled through the EIN general education requirement. Several of the EIN courses focus on health related topics, such as PHIL 250 Biomedical Ethics and PHIL 259 Global Health Ethics. However, students can count any EIN designated course for this requirement, because the practice of ethical considerations is transferable to health care no matter what the original context in which it was learned.
4. Level II or III elective course. This course must be outside of the student's major. It is any 200- or 300-level course that contributes to the student's career preparation. For example, many students preparing for graduate programs in occupational therapy take a 200-level psychology course, and many students interested in health administration take a course that focuses on socioeconomic or cultural diversity.

## Career Portfolio

### Experiential Learning

Students must participate in at least one significant experience that provides immersion in the biomedical field(s) being considered. This requirement may be met by an appropriate off-campus course, an academic internship for credit, or an experience (paid or unpaid) that is not for credit. In order to select the best option(s) for this requirement, students should consult with the program director upon initiation of the concentration.

### Career Research Activities

Please note that the biomedical studies concentration also consists of non-course requirements, including participation in some (Piper Center for Vocation and Career) (<http://wp.stolaf.edu/pipercenter>) workshops, attendance at career-related events, preparation of a resume, interviews with professionals, and career research. Details are available at the biomedical studies requirements (<http://wp.stolaf.edu/biomed/biomedical-studies-concentration-requirements>) web page.

### Senior Capstone

Students must write a one-page review of how their work in the biomedical studies concentration has helped formulate next steps for after graduation from St. Olaf College. This review must include future plans and be accompanied by a document that supports those next steps. More information is available at the biomedical studies website at: <http://wp.stolaf.edu/biomed/>.

## Courses

Course selection and justification should involve consultation with the program director upon initiation of the concentration. However, some examples of courses that might be appropriate for categories 2 and 3 of the concentration requirements are provided below.

## Practical Application

Courses in this area focus on the practical aspects of biomedical studies and must be outside of your major. Possible courses include:

ART 103 Foundation Three-Dimensional Media

ART 207 Ceramics

CHEM 260 Medicinal Chemistry in Jamaica: An International Perspective (abroad)

DANCE 201 The Body Movable (0.50)

ECON 245 Economics of Health Care

ESTH 110 Nutrition and Wellness

ESTH 255 Prevention and Care of Athletic Injuries

ESTH 374 Biomechanics

ESTH 375 Physiology of Exercise

HIST 296 Medical Vocation in Historical Context

PSYCH 238 Biopsychology

PSYCH 375 Clinical and Counseling Psychology

SWRK 258 Social Policy

SOAN 267 Medical Anthropology

STAT 212 Statistics for the Sciences

## **Ethical Issues**

This will most likely be the course that you take for your EIN general education requirement. Consider selecting an EIN offering that is directly related to human and well-being such as:

ESTH 290 Sport Ethics in Society

PHIL 250 Biomedical Ethics

PHIL 252 Ethics and the Good Life

Other EIN courses offered on a temporary basis.