

# Course Syllabus

## Course Information

**Course Title:** Human Anatomy & Physiology I

**Subject and Number:** BSC 2085

**Course Description:** In this course students will learn the structure and function of the systems of the human body, emphasizing those aspects most pertinent to students in the Health Sciences programs. Students are strongly recommended to complete CHM1033/1033L prior to enrolling in this course. Corequisite: BSC2085L.

**Class Number:** LOREM IPSUM

**Term and Year:** LOREM IPSUM

**Course Modality:** [MDC Modalities](https://www.mdc.edu/registration/options/default.aspx)

## Instructor Information

**Name:** LOREM IPSUM

**Department and Campus:** LOREM IPSUM

**Office location:** LOREM IPSUM

**Office hours:** *(communicate course office hours with students)*

**Phone number:** 123-456-7890

**Email:** LOREM IPSUM

**Communication Policy:** *(Faculty will establish protocols for communication with students)*

## Required Textbook, Course Materials, and Technology

**Required course materials:** *(Textbook(s), library reserves, shark pack, and/or other required readings. Include ISBN Number and author(s))*

**List optional/supplemental materials/OER:** LOREM IPSUM

**Technology & Technical Skill Requirements:** *(Technology tools or equipment students need to complete this course are included)*

## Grading Policy & Assessment Methods

*List all activities, papers, quizzes, tests, etc. including grading scale used for final grade calculation. Relationships between the final grade and the learner’s accumulated points or percentages/weights breakdown for each assessment or component of the course grade.*

*Include policy on late submissions.*

*For MDC Live and MDC Online courses, include policy regarding exams (e.g., ProctorU, Respondus Lockdown and Monitor, etc.)*

*If applicable, include guidelines for extra credit.*

**Incomplete Grades:** [View the college’s procedures for Incomplete Grades](https://www.mdc.edu/procedures/Chapter8/8381.pdf)

## Miami Dade College Policies

**Attendance Policy:** *(Faculty include precise statements about illnesses/emergencies/ tardiness, missed assignments/make-up.)*

**Students Rights and Responsibilities:** *Policies addressing academic integrity and plagiarism, code of conduct, grade appeals, religious observations, services for students with special needs, student complaints, and other.*

[For more information, visit the Student’s Rights and Responsibilities page](https://www.mdc.edu/rightsandresponsibilities/)

## Available Support Services & Resources

* [Tutoring Labs and Technology – Learning Resources](https://www.mdc.edu/learning-resources/tutoring-labs-technology/)
* [Virtual Tutoring through Learning Resources or Smarthinking Online Tutoring](https://libraryguides.mdc.edu/BbLTutoring)
* [ACCESS: A Comprehensive Center for Exceptional Student Services](https://www.mdc.edu/access/)
* [Advisement](https://www.mdc.edu/advisement/)
* [Password and Login Technical Support](https://www.mdc.edu/registration/password.aspx)
* [Technical Support for MDC Live and MDC Online Courses](https://www.mdc.edu/online/resources/tech-support.aspx)
* [SMART Plan](https://www.mdc.edu/smart/)

*(Faculty select from the above if applicable and include additional course/campus specific resources)*

## Available Support Services & Resources

* [Public Safety - Services](https://www.mdc.edu/safety/services/)
* [Hurricane and Other Natural Disasters:](https://www.mdc.edu/safety/in-case-of-emergency/) In the event of a hurricane or other disaster, the class follows the schedule established by the College for campus-based courses. Please visit the MDC website or call the MDC Hotline (305-237-7500) for situation updates.

## Course Description

**BSC2085 | Human Anatomy & Physiology I | 3 credits**

In this course students will learn the structure and function of the systems of the human body, emphasizing those aspects most pertinent to students in the Health Sciences programs. Students are strongly recommended to complete CHM1033/1033L prior to enrolling in this course. Corequisite: BSC2085L.

## Course Competencies

### Competency 1:

The student will be able to understand the general structure and function of the human body by:

* Defining anatomy and physiology, and explaining how they are related.
* Defining homeostasis and its mechanisms, and explaining its importance for survival.
* Differentiating between positive and negative feedback control systems in humans.

Learning Outcomes

* Critical thinking

### Competency 2:

The student will be able to describe how the body is organized by:

* Distinguishing the major anatomical regions of the human body by utilizing appropriate anatomical terminology.
* Applying directional terms, anatomical position, and body planes to locate organs and structures in the human body
* Describing the locations of the major body cavities and the relationship of the organs in each cavity.

Learning Outcomes

* Critical thinking

### Competency 3:

The student will be able to understand the basic knowledge of chemical principles as these apply to human structure and function by:

* Distinguishing between atoms, molecules, compounds and mixtures.
* Explaining the functions of water, acids, bases, electrolytes, pH and buffers.
* Differentiating among carbohydrates, lipids, proteins, nucleic acids, and their role inhuman metabolism.

Learning Outcomes

* Critical thinking

### Competency 4:

The student will be able to understand the structure and function of cells and tissue types by:

* Identifying the major cellular organelles.
* Explaining how substances move into and out of cells.
* Describing how a cell divides.
* Distinguishing the four tissue types and membranes of the human body and their relationships to organs systems.
* Explaining the response to tissue injury and repair.

Learning Outcomes

* Critical thinking

### Competency 5:

The student will be able to understand the integumentary system and its function by:

* Differentiating the structure and function of the skin layers and accessory structures.
* Interpreting the homeostatic imbalances of the integumentary system.

Learning Outcomes

* Critical thinking

### Competency 6:

The student will be able to understand the skeletal system by:

* Describing the structure and function of osseous tissues.
* Explaining ossification and bone growth.
* Describing the classification and functions of the skeletal system.
* Explaining calcium metabolism to bone growth and remodeling.
* Describing the homeostatic imbalances of the skeletal system.

Learning Outcomes

* Critical thinking

### Competency 7:

The student will be able to demonstrate knowledge of the structural and functional classification of joints by:

* Describing the structure and function of the clinically relevant joint types.
* Explaining joint structure to its function and movement.
* Explaining the homeostatic imbalances of joints.

Learning Outcomes

* Critical thinking

### Competency 8:

The student will be able to understand the muscular system by:

* Distinguishing the structure and function of skeletal, cardiac, and smooth muscle.
* Explaining the major events that occur during skeletal muscle contraction how force is generated.
* Differentiating muscle metabolism in relation to structural type and physical activity.
* Explaining the homeostatic imbalances of the muscular system.

Learning Outcomes

* Critical thinking

### Competency 9:

The student will be able to understand the basic structure and function of nervous tissue by:

* Describing the basic components and general functions of the nervous tissue.
* Comparing the structure and function of neurons and supporting cells.
* Explaining how nerve impulses are generated and transmitted.
* Differentiating the structure and function of the central and peripheral nervous systems.
* Describing the structure and functions of major regions of the brain and spinal cord.
* Contrasting the structure and function of the divisions of the autonomic nervous system.
* Explaining homeostatic imbalances of the nervous system.

Learning Outcomes

* Critical thinking

### Competency 10:

The student will be able to understand the structure and function of the special senses by:

* Explaining how special sensory structures allow perception of those senses.
* Explaining the homeostatic imbalances of the special senses.

Learning Outcomes

* Critical thinking