FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST Undergraduate Programs

UUPC Approval 2/26/24

UFS Approval ______

SCNS Submittal _____

Confirmed _____

Banner Posted ______

Catalog _____

Department Biological Sciences

College Science

		Catalog	
Current Course Prefix and Number	r BSC 1005 Life Scier		
Syllabus must be attack	hed for ANY changes to current cours y the changes; attach documentation.	e details. See <u>Template</u> . Please consult and list departments	
Change title to:	у спе спануеs; ассасн аоситепсанон.	Change description to:	
Change prefix		This course applies the scientific method to critically examine and explain the natural world including but not limited to cells, organisms, genetics, evolution, ecology, and behavior.	
From:	To:		
Change course nun	nber		
From:	To:		
Change credits*			
From:	To:	Change prerequisites/minimum grades to:	
Change grading			
From:	To:		
Change WAC/Gordon Rule status**		Change corequisites to:	
Add	Remove		
Change Gen <u>eral</u> Edi	Change Gen <u>eral</u> Education Requireme <u>nts</u> ***		
*See Definition et a Cro	Remove	Change registration controls to:	
*See <u>Definition of a Credit Hour.</u> **WAC/Gordon Rule criteria must be indicated in syllabus and			
approval attached to this	form. See <u>WAC Guidelines</u> . dicated in syllabus and approval	Please list existing and new pre/corequisites, specify AND or OR	
attached to this form. See	Intellectual Foundations Guidelines.	and include minimum passing grade (default is D-).	
Effective Term/Yea for Changes:	ar Fall 2024	Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone W. Randy Brooks / wbrooks@fau.edu / 7-3888			
Approved by	01 100:4	Date	
Department Chair	>1/1/6U0~	1-26-24	
College Curriculum Chair		01/26/24	
College Dean	- 912 XV	2/1/24	
UUPC Chair Korey Sorge 2/26/24			
Undergraduate Studies	s Dean Dan Meeroff	2/26/24	
UFS President			

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

Provost _



TA name Office Office hours Telephone Email

xxxxxx xxxxxxxx xxxxxxx MWF xx:xx - xx:xx 561-297-xxxx xxxxxx@fau.edu

Course Description

This course applies the scientific method to critically examine and explain the natural world including but not limited to cells, organisms, genetics, evolution, ecology, and behavior.

Instructional Method

In-Person. There is no remote option for this course.

Prerequisites/Corequisites

None

Course Objectives/Student Learning Outcomes

- Students will evaluate data regarding validity.
- Students will read and interpret a variety of scientific data.
- Students will describe the natural world.
- Students will articulate and practice the scientific method.

Course Evaluation Method

Homework 10%
Exam 1 25%
Exam 2 25%
Final Exam 40%

Course Grading Scale

A	92.5 – 100%
A-	87.5 – 92.5%
B+	82.5 - 87.5%
В	77.5 – 82.5%
B-	72.5 - 77.5%
C+	67.5 – 72.5%
С	62.5 - 67.5%
C-	60 - 62.5%
D+	55 – 60%
D	50 – 55%
D-	45 – 50%
F	<45%

Policy on Makeup Tests, Late Work, and Incompletes (if applicable) Late Assignment Policy:

I do not accept late homework submissions for credit. Submissions made late will still be graded as normal, but for no points. Technological problems are not a valid reason for late work. I suggest that you start early so that if there is a technical glitch, we can come up with a solution to work around it.

Make-up Policy for Exams:

Please note that you must have a genuine and valid reason for missing or taking a test at a later time. This could be something like surgery (with a doctor's note) or proof of jury duty. An excuse such as "I had a headache," or "my boss wanted me to work an extra shift" is unacceptable. The exam schedule is given. Valid reasons for missing the test must be given in advance. Not following this rule means that I don't have to reschedule a test for you.

Incomplete Policy:

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Required Texts/Readings

- "Biology: Concepts and Connections" by Neil A. Campbell, Jane B. Reece, Martha R. Taylor, and Eric J. Simon
- "Life: The Science of Biology" by David E. Sadava, David M. Hillis, H. Craig Heller, and May R. Berenbaum
- "Biology" by Sylvia S. Mader and Michael Windelspecht
- "Campbell Biology" by Jane B. Reece, Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, and Robert B. Jackson
- "Essential Biology" by Eric J. Simon, Jean L. Dickey, and Jane B. Reece

Course Topical Outline

- Week 1-2: Introduction to Biology and the Scientific Method
 - Overview of biology as a science
 - o Introduction to the scientific method
 - o Practice designing and critiquing experiments
 - o Reading and interpreting scientific literature
- Week 3-4: Cell Structure and Function
 - o Analyzing and interpreting cell data
 - o Exploring experiments related to cell biology
 - o Application of the scientific method to cell research
- Week 5-6: Genetics and Inheritance
 - Evaluating genetic data and experiments
 - o Reading and interpreting studies on DNA replication and protein synthesis
 - o Applying the scientific method to genetic research
- Week 7-8: Evolution and Natural Selection
 - Analyzing evidence for evolution
 - o Evaluating data related to evolutionary processes
 - o Engaging in discussions about the scientific method in evolutionary studies
- Week 9-10: Diversity of Life
 - o Reading and interpreting taxonomic literature
 - Analyzing biodiversity data
 - o Applying the scientific method to ecological studies
- Week 11-12: Ecology
 - o Evaluating population and community ecology data
 - Analyzing ecosystem dynamics and human impact
 - o Applying the scientific method to ecological research
- Week 13-14: Animal Behavior and Physiology

- o Reading and interpreting studies on animal behavior
- Analyzing physiological data
 Articulating the scientific method in physiological studies
- o Review and preparation for final exam with a focus on data interpretation

Science and Natural World Syllabus Description

Intellectual Foundation (General Education) Program Outcomes.

Scientific principles are behind what we find in nature and in natural occurrences. Scientific issues, such as those dealing with stem-cell research, cloning and global warming, are hotly debated by policy makers. Courses that meet this requirement share the goal of seeking to understand patterns and principles behind phenomena and occurrences, both in the inorganic world and in the living world. They typically fall within either the physical sciences (astronomy, physics, chemistry, and the earth sciences) or the biological sciences.

Students who satisfy the Science and the Natural World requirement will be able to:

- Explain important scientific concepts, principles, and paradigms.
- Explain how principles of scientific inquiry and ethical standards are used to develop and investigate research questions.
- Explain the limits of scientific knowledge and of how scientific knowledge changes.
- Critically evaluate scientific claims, arguments, and methodology.

After completion of the associated lab, the student will be able to:

- Demonstrate and explain how experiments are conducted.
- Analyze resulting data and draw appropriate conclusions from such data.