

COURSE OUTLINE : BIOL 49
D Credit – Degree Applicable

**COURSE ID 008310** 

**Cyclical Review: November 2021** 

COURSE DISCIPLINE: BIOL

COURSE NUMBER: 49

COURSE TITLE (FULL): Biology Independent Study

COURSE TITLE (SHORT): Biology Independent Study

ACADEMIC SENATE DISCIPLINE: Biological Science

#### **CATALOG DESCRIPTION**

BIOL 49 provides motivated students with an opportunity to explore a subject in greater depth, to familiarize them with some basic research techniques, to interest them in possible career areas, and to take advantage of special academic interests. Emphasis is on individual research projects, library research, and preparation of research papers, and/or presentations. There is no prescribed course content. This course includes research project development, approved by the sponsoring instructor and appropriate division chairperson, and a submission and/or presentation of the finished project.

#### **CATALOG NOTES**

Registration is open to any student at GCC who has successfully completed at least one college-level course in biology, and/or is admitted to Independent Study by the faculty advisor. A student is limited to one Independent Study per semester or intersession, no more than 12 units credit toward the AA Degree or Certificate, and no more than 6 units per division. The units received may be acceptable for college transfer subject to the approval of the individual college. This course may be taken 3 times; a maximum of 9 units may be earned.

Total Lecture Units:0.00

Total Laboratory Units: 1.00-3.00

Total Course Units: 1.00-3.00

Total Lecture Hours: 0.00

Total Laboratory Hours: 54.00-162.00

Total Laboratory Hours To Be Arranged: 0.00

Total Contact Hours: 54.00-162.00

Total Out-of-Class Hours: 0.00

Prerequisite: Successful completion of a college-level biology course, and/or permission of the instructor.

Recommended Preparation: LIB 100.



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### **ENTRY STANDARDS**

	Subject	Number	Title	Description	Include
1				discuss biological principles;	Yes
2	LIB	100	Critical Approaches to Information Research	recognize the ethical use of information and proper attribution;	Yes
3	LIB	100	Critical Approaches to Information Research	formulate a research question of an appropriate scope for an assignment;	Yes
4	LIB	100	Critical Approaches to Information Research	recognize and apply evaluation criteria;	Yes
5	LIB	100	Critical Approaches to Information Research	develop strategic search practices in order to locate the background and origin of a source;	Yes

### **EXIT STANDARDS**

- 1 complete independent discipline-specific research activities;
- 2 demonstrate specific in-depth knowledge in the discipline involved.

## STUDENT LEARNING OUTCOMES

apply concepts and knowledge of discipline-specific materials to research projects, essays, presentations, and other assignments

## **COURSE CONTENT WITH INSTRUCTIONAL HOURS**

	Description	Lecture	Lab	Total Hours
1	Research project (54-162 hours)	0	162	162
				162

### **OUT OF CLASS ASSIGNMENTS**

1 research project.

### **METHODS OF EVALUATION**

1 faculty evaluation of research project



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Lecture
✓ Laboratory
Studio
Discussion
Multimedia
Tutorial
Independent Study
Collaboratory Learning
Demonstration
Field Activities (Trips)
Guest Speakers

# **TEXTBOOKS**

Presentations

Title	Туре	Publisher	Edition	Medium	Author	IBSN	Date
No required textbooks.							
Readings may be							
assigned by faculty							
advisor.							