

RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE

SCIE 105 Foundations of Science Success

I. Basic Course Information

A. Course Number and Title: SCIE 105 Foundations of Science Success

B. New or Modified Course: New

C. Date of Proposal: Semester: Fall Year: 2023

D. Effective Term: Fall 2024

E. Sponsoring Department: Science and Engineering

F. Semester Credit Hours: **1**

G. Weekly Contact Hours: 2

Lecture: **2**

Laboratory: 0

Out of class student work per week: 4

H. ☐ Prerequisite (s): None

☐ Corequisite (s): None

☐ Prerequisite (s) and Corequisite (s): None

I. Additional Fees: None

J. Name and E-Mail Address of Department Chair and Divisional Dean at time of approval: Dr. Marianne Baricevic, marianne.baricevic@raritanval.edu; Dean Sarah Imbriglio, sarah.imbriglio@raritanval.edu

II. Catalog Description

Prerequisites/Corequisites: None

This course aims to promote college success by early development of the skills and attitudes needed to achieve educational and personal goals in the field of science.

Lectures, discussions, and class activities will expose students to different science disciplines and careers. Students will examine degree requirements and approaches to studying scientific disciplines, explore scientific careers, and learn strategies for effective

communication, organization, and study skills. This course will engage students in activities like planning their study approach, monitoring the effectiveness during the process, reflecting on and evaluating the strategies that were used, and adopting a “growth mindset” to provide a positive outlook on learning and to put both failure and success in context. Students will be introduced to campus infrastructure and community resources for supporting their academic and professional development.

III. Statement of Course Need

- A. This is a required course in the first semester of the Biological Sciences AS degree program designed to improve retention and lower attrition.
- B. This course has no lab component.
- C. This course may transfer as an elective, dependent on the transfer institution. This course does not transfer as a general education course.

IV. Place of Course in College Curriculum

- A. Free Elective
- B. This course does not serve as a General Education course.
- C. This course meets a program requirement for the A.S. degree in Biological Sciences.
- D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

- A. Growth mindset
- B. The teaching/learning process and how to make the most of how you are taught
- C. Personal growth and development
- D. Time Management
- E. Effective communication in sciences
- F. Collaborative group work
- G. Evidence-based study techniques
- H. Source evaluation & evidence-based arguments
- I. Data organization and analysis
- J. Reviewing & critiquing Research
- K. Test-taking strategies
- L. Goal setting & sustainable strategies for retention
- M. Case studies in science
- N. Careers in science
- O. Orientation to science education
- P. Student support services and resources

VI. A. Course Learning Outcomes:

At the completion of the course, students will be able to:

1. Use appropriate forms of technology to identify, collect, and analyze information. (GE-4*)
2. Evaluate and think critically about information. (GE- IL*)
3. Discuss effective college-success skills including studying strategies, note taking, goal setting, planning and management of time and study resources.
4. Identify on and off campus services and resources that support student success and promote professional growth.

* indicates Critical Thinking

B. Assessment Instruments

Given the outcomes described above, LIST which of the following assessment methods may be used:

1. assignments
2. reflections
3. projects
4. presentations
5. discussion questions
6. quizzes
7. class participation

VII. Grade Determinants

What factors may enter into the determination of the final?

- A. assignments
- B. reflections
- C. class participation
- D. quizzes
- E. projects
- F. presentations

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

- A. short lectures
- B. class discussion
- C. small-group work
- D. videos
- E. interviews
- F. student presentations
- G. student collaborations
- H. guest lectures

VIII. Texts and Materials

- A. Scientific journal articles
- B. Videos
- C. Interviews
- D. Internet databases and information sources
- E. RVCC Student Services

The following statement should be included in the outline:

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

IX. Resources

No other resources are needed

X. Check One: ☐ Honors Course ☐ Honors Options ☒ N/A