

BACE CANDIDATE FAQ

1. What does the cost of the exam include?

The exam fee is \$150 per candidate. The fee includes:

- Access to the Online Practice Exam
- One attempt for both portions (Knowledge and Practical) of the exam
- A digital certification upon passing

2. How many times may a candidate take the exam?

Candidates are permitted to take each portion a maximum of three times per calendar year.

3. How frequently may a candidate take the exam?

There is a 20-day waiting period between attempts.

4. How do candidates find out if they passed the exam?

BACE Administrators will notify candidates of their scores and how well they performed in each of the exam subjects.

5. What is a candidate's username and password for UF e-Learning?

All users must have an account in order to access the BACE content in UF e-Learning (UFEL).

Biotility will email the BACE Administrators an invitation containing a unique **UF Quick Registration (QuickReg) Enrollment Link** to distribute to their candidates. To create an account candidates are asked to:

- Complete the registration with an external identity (Gmail, Facebook, or LinkedIn)
- Provide requested registration information including name, birthdate, email address, and phone number
- Verify their email address

6. How much time is allotted for each portion of the exam?

Candidates have three (3) hours in which to take the Knowledge Exam, and four (4) hours in which to take the Practical Exam.

7. What subjects are covered on the Knowledge Exam?

General topics for the knowledge portion include General Topics in Biotechnology, Laboratory Skills and Applications, Chemistry and Biochemistry, Biological Systems, and Research and Scientific Method. See the [Knowledge Exam Categories and Subcategories](#) for a detailed list.

8. What items are permitted during the exam?

Candidates are not permitted to bring **any** items into Exam Rooms. The proctor must provide a pencil, basic non-programmable calculator, and scratch paper.

9. What subjects are covered on the Practical Exam?

General topics for the practical portion include Biotechnology Skills, Applied Mathematics, Laboratory Equipment, and Workplace Safety and Behavior. See the [Practical Exam Categories and Subcategories](#) for a detailed list.

10. How do candidates prepare for the BACE?

Candidates may prepare for the exam using the study materials presented under [Candidate Resources](#). An Online Practice Exam is also available, and is an excellent representation of the content candidates will encounter during the actual exam. The Online Practice Exam is free with Exam Site Registration.

11. Why are significant figures NOT required in all of the calculations on the BACE?

In order to maintain accuracy when making calculations for solutions, a question may ask for significant figures, for a number with a specified amount of decimals, or for a whole number. It is important for candidates to remember to use significant figures only when the question specifically asks for them. Otherwise, they must follow the directions in each question.

For example, a candidate may see a question similar to the following:

“Calculate the volume in mL of 20X TAE Buffer required to make 1500 mL of 1X TAE Buffer. On your answer grid, record the correct amount.”

$$C1V1 = C2V2$$

$$(1X \text{ TAE}) (1500 \text{ mL}) = (20X \text{ TAE}) (V2)$$

$$V2 = 1500 \text{ mL} / 20X \text{ TAE}$$

$$V2 = 75 \text{ mL}$$

If you were to follow significant digit rules, the answer would be 80 mL of 20X TAE stock buffer. However if you plug this answer back into the equation, you get a value of 0.9375X TAE buffer for C2, which is *incorrect*.

$$C1V1 = C2 V2$$

$$(20X \text{ TAE}) (80 \text{ mL}) = (C2) (1500 \text{ mL})$$

$$C2 = 1500 \text{ mL} / 1600 \text{ mL}$$

$$C2 = 0.9375X \text{ TAE}$$

Please follow the directions in each question.

12. What is the “Simple Dilution Method”?

Unlike chemistry labs, molecular biology labs use the “Simple Dilution” method. A *simple dilution* is one in which a unit volume of a *solute* (the material to be diluted) is combined with the appropriate unit volume of a *solvent* (the substance in which the solute is dissolved) to achieve the specified concentration. The *dilution factor* is the total number of unit volumes in which your solute will be dissolved. Mix the diluted solute thoroughly to achieve the dilution.

A 1:6 dilution (verbalized as “1 to 6” dilution) requires combining one unit volume of *solute* (the material to be diluted) + six unit volumes of the *solvent*.

For example, you may see a question similar to the following:

“Using the simple dilution method, calculate the volume in μL of 6X loading dye required to run a 20 μL DNA sample on an agarose gel. On your answer grid, record the correct amount to one decimal place.”

$$\frac{1}{6} = \frac{x}{20 \mu\text{L}} \quad X = 3.3 \mu\text{L}$$

13. How do candidates claim their credential badge?

Upon passing the BACE, electronic credentials are issued immediately within UF e-Learning. Electronic credentials are issued as a badge from Accredible. Badges may be shared to social media from within UF e-Learning. Instructions for sharing a digital verification may be found [here](#).

14. How do employers verify the credential?

Electronic credentials are issued as a badge from Accredible. Badges may be digitally verified by anyone, and candidates may also share the badges on social media. Instructions for sharing a digital verification may be found [here](#).