

BACE ADMINISTRATOR FAQ

1. How do I register as an Exam Site for the BACE?

Schools who wish to deliver the BACE must become an approved Exam Site. The BACE School Registration website is available at <http://biotility.research.ufl.edu/bace/schoolregistration>. Within the website, schools may: 1) register their Exam Site and personnel, 2) order exams and schedule exam dates. These steps do not need to be completed in one session, but should be completed in order. Biotility requires Exam Sites to renew these forms each year.

2. 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
- Materials and supplies for the Practical component of the exam
- A digital certification upon passing

3. Are candidates permitted to retake the exam?

Candidates may retake either portion (Knowledge or Practical) of the exam for \$25. To order and schedule retakes, go to <http://biotility.research.ufl.edu/bace/schoolregistration> and complete the ORDER FORM a second time. There is a 20-day waiting period between attempts. Candidates are permitted to take each portion a maximum of three times per year.

4. What is the structure of the exam?

The BACE includes both a written examination (Knowledge Exam) and a practical skills evaluation (Practical Exam). Both assessments are closed book. The Knowledge Exam is administered by a Biotility-Certified Online Proctor via an online assessment platform. The Practical Exam is delivered in paper and pencil format and is administered under the observation of a Biotility-Certified Skills Evaluator. The Site Coordinator may schedule the two portions of the BACE on the same day, or schedule them on different days.

5. How do I become Biotility-Certified BACE Administrator?

Each individual who serves in a primary BACE Administrator Role is emailed an invitation to enroll in the *BACE Administrator Certification course* in UF e-Learning. This course must be completed annually and at least two weeks prior to a testing event.

6. Do I need to earn the Biotechnician Assistant Credential in order to administer the BACE?

Biotility does NOT require BACE Administrators to earn the Biotechnician Assistant Credential. However, we encourage you to check with your administration to ensure you meet local or state requirements. Educators and BACE Administrators are only permitted to take the BACE directly

through Biotility. To register to take the BACE, visit <http://biotility.research.ufl.edu/professional-development/>

7. How is each portion of the exam scored?

To pass BACE and earn the Biotechnician Assistant Credential, candidates must achieve an overall score of 80%. The score is determined by averaging the highest grade of the Knowledge Exam and the highest grade of the Practical Exam. Knowledge Exams are automatically scored within UF e-Learning. Practical Exams are scored by Biotility, and the results are uploaded into UF e-Learning. Scores are sent to the Site Coordinator. Candidates who pass the BACE will be issued a Biotechnician Assistant Credential from Biotility.

8. What payment methods are accepted?

Exam Sites may choose between three payment methods: Online with Credit Card or PCard, Check, or PO. If you pay online, the Site Coordinator and Billing Contact will receive an email with a link to make the payment. If you pay by check or PO, Biotility will mail a PO or an invoice.

9. 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 Site Coordinator 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

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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.”

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

16. 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.

17. 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](#).

18. 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](#).

19. How many FTE credits are earned?

In Florida, each candidate who successfully challenges the BACE will earn 0.3 FTE funding that goes directly back into the program. Exam Sites outside of Florida should check with their state CTE director to determine the number of FTE credits earned.