BACE Contact Information

Biotility

University of Florida

Center of Excellence for Regenerative Health Biotechnology

Biotility Website: http://biotility.research.ufl.edu

Phone: 386.462.3181 Option #1

Email: BACE@research.ufl.edu

Quick References

BACE Website: http://biotility.research.ufl.edu/bace

BACE Registration Website: http://biotility.research.ufl.edu/bace/schoolregistration

UF e-Learning Website: https://reg.distance.ufl.edu/reg/Account/Login

Account Management Website: https://account.it.ufl.edu

UF Computing Help Desk: 352.392.HELP (4357)
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INTRODUCTION

The Biotechnician Assistant Credential Exam (BACE) is offered through Biotility at the University of Florida’s Center of Excellence for Regenerative Health Biotechnology (UF CERHB). Biotility was established in 2005 to serve as a resource for biotechnology and medical device industries, and for individuals seeking to transition into industry careers. The BACE was developed to support economic development, and provide skilled workers for the expanding Biotechnology Industry.

The purpose of this manual is to provide Biotility’s BACE Administration Policies and Procedures. Within this manual, BACE Administrators will find key instruction on:

- Registering with Biotility
- Selecting and training exam administration personnel
- Preparing candidates
- Delivering the BACE Knowledge Exam
- Delivering the BACE Practical Exam
- Receiving candidate scores

The guiding source for Biotility’s Exam administration policies and procedures is the Standards for Educational and Psychological Testing, which focuses on ensuring each candidate is tested fairly and professionally, and all candidates receive an equal opportunity to demonstrate their knowledge.

To ensure Biotility’s exam administration standards are upheld, all personnel who participate in the administration of the BACE must be trained and certified through the BACE Administrator Certification Process.

Exam Description

Launched in 2012, the BACE assesses the skills and knowledge valued by the bioscience industry. Exam questions are written and validated by subject-matter experts in the industry, and the complete exam is vetted and approved annually by Biotility’s national Advisory Board to confirm:

- The scientific accuracy of individual questions
- The alignment of each question with its corresponding industry-defined blueprint standard
- The overall relevance of the exam to industry requirements for technician-level positions

The BACE is open to all applicants and no prerequisites are required. It includes both a written examination (Knowledge Exam) and a practical skills evaluation (Practical Exam). The Knowledge and Practical Exams may be scheduled on the same day, or scheduled on different days. Both assessments are closed book.

The Knowledge Exam is administered by a Biotility-Certified Online Proctor via UF e-Learning. Candidates are permitted three hours to complete the Knowledge Exam. The Practical Exam is delivered in paper and pencil format, and is administered under the observation of a Biotility-Certified Skills Evaluator. Candidates are permitted four hours to complete the Practical Exam.

Candidates must score 80% or above to pass the BACE. A candidate’s score is determined by averaging the highest grade of the Knowledge Exam and the highest grade of the Practical Exam. Candidates are
permitted to take the exam a maximum of three times within a calendar year, with a 20-day waiting period between attempts.

**Exam Specifications**

The BACE consists of nine categories. For a full list of categories and subcategories, please review the Detail of Exam Categories below. The following descriptions of the Knowledge Exam and the Practical Exam include the exam duration, number of questions per exam, subjects covered, number of questions per subject, and references used for exam development.

<table>
<thead>
<tr>
<th>BACE 2020 Knowledge Exam</th>
<th>BACE 2020 Practical Exam</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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</tr>
<tr>
<td>Laboratory Skills/Applications</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>Biochemistry/Chemistry</td>
<td>10</td>
<td>11.5</td>
</tr>
<tr>
<td>Biological Systems</td>
<td>10</td>
<td>10</td>
</tr>
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<th>Points</th>
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<tr>
<td>Applied Mathematics</td>
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<tr>
<td>Laboratory Equipment</td>
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<td>13</td>
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<tr>
<td>Workplace Safety &amp; Behavior</td>
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<td>87</td>
</tr>
</tbody>
</table>

The following are suggested study references:


**Detail of Exam Categories**

The following is a list of Knowledge and Practical Exam Subjects and their individual topics.

**Knowledge Exam Categories**

**GENERAL TOPICS IN BIOTECHNOLOGY**

- Discuss current techniques used in biotechnology, and their applications
- Demonstrate knowledge of regulatory agencies governing the manufacture and distribution of biotechnology-derived products
- Outline the development and the regulatory approval process of biopharmaceuticals
- Illustrate examples of the benefits to society of biotechnological advances
- Understand the purpose of Good Laboratory Practices (GLPs) in product testing
- Understand the purpose of Good Clinical Practices (GCPs) in clinical trials Discuss the role and identify types of documents used in cGMP compliant industries
• Understand the purpose of current Good Manufacturing Practices (cGMPs)
• Outline the role of various departments in a company, including Research and Development, Quality Assurance, Quality Control, and Manufacturing
• Identify proper workplace safety behaviors
• Describe appropriate workplace behaviors
• Outline the manufacturing process of biopharmaceuticals
• Describe Environmental Monitoring in a controlled space
• Discuss ethics and bioethics in the workplace and society
• Describe careers in the biotechnology field
• Describe historical applications of biotechnology

LABORATORY SKILLS/APPLICATIONS

Knowledge Exam
• Describe the process of culturing microorganisms and tissues using aseptic technique
• Discuss the differences between sterilization, decontamination, and disinfection
• Describe the proper use of microscopes
• Understand the principle by which a pH meter works
• Discuss methods of chromosomal and plasmid DNA isolation, purification, and quantification
• Contrast agarose gel electrophoresis and polyacrylamide gel electrophoresis (PAGE)
• Understand how restriction enzymes are used
• Describe recombinant DNA and cloning techniques
• Discuss the transformation or transfection of model organisms
• Describe the mechanism of Polymerase Chain Reaction (PCR)
• Discuss protein expression in model organisms
• Discuss methods of molecule/protein isolation, purification, and quantification
• Understand Western blotting, ELISA, and other immunoassays
• Explain the principles of spectrophotometry
• Demonstrate knowledge of laboratory equipment calibration and validation
• Use scientific notation correctly
• Use significant digits correctly
• Use decimals correctly

BIOCHEMISTRY/CHEMISTRY

Knowledge Exam
• Compare and contrast types of chemical bonds
• Understand the chemistry of molecules and macromolecules
• Discuss the differences between aerobic and anaerobic respiration
• Demonstrate knowledge of enzymes and reaction rates
• Describe DNA structure and function
• Describe transcription
• Describe protein structure and function
• Describe translation and gene expression
• Differentiate between homogeneous and heterogeneous mixtures
BIOLOGICAL SYSTEMS

- Explain cell theory
- Understand the general physiology of cells
- Explain the interaction between cells, and between cells and their environment
- Describe cell division (meiosis and mitosis)
- Discuss cell staining, and distinguish between Gram positive/negative cells
- Demonstrate an understanding of the immune system
- Understand the genetics of model organisms
- Describe the “central dogma of molecular biology”

RESEARCH & SCIENTIFIC METHOD

- Discuss good experimental design, including the proper use of controls
- Explain the scientific method
- Analyze and interpret data, including the use of statistical analysis
- Explain how to maintain a laboratory notebook
- Discuss various ways of communicating scientific research, including peer-reviewed journals, and presenting posters or talks at meetings

Practical Exam Categories

BIOTECHNOLOGY SKILLS

- Accurately measure liquids using micropipets and serological pipets
- Accurately measure mass using electronic balances
- Demonstrate proper aseptic/sterile technique
- Demonstrate proper culturing of microorganisms
- Demonstrate proper use of electrophoresis equipment
- Properly measure and adjust the pH of a solution with a pH meter
- Properly prepare solutions, buffers, and media
- Properly perform a serial dilution
- Describe the applications and proper use of a spectrophotometer
- Describe the proper use of a centrifuge
- Use 24-hour time correctly

APPLIED MATHEMATICS IN BIOTECHNOLOGY

- Use scientific notation correctly
- Use significant digits correctly
- Use decimals correctly
- Perform calculations for serial dilutions
- Perform calculations using dilution ratios
- Make conversions within the metric system, and use metric measurements
- Solution preparation:
  - Solve Volume/Volume (V/V) solution calculations
  - Solve Weight/Volume (W/V) solution calculations
- Solve Molarity solution calculations
- Solve Dilution Factor calculations

- Generate a graph using collected data:
  - Apply Beer’s Law
  - Generate a standard curve
  - Properly plot data
  - Interpret data

**LABORATORY EQUIPMENT**

- Identify laboratory glassware and equipment
- Demonstrate proper and safe use of equipment (including, but not limited to):
  - Fume hoods
  - Biosafety cabinets
  - Microscopes
  - Electrophoresis equipment
  - Spectrophotometers
  - Micropipets & serological pipets
  - Electronic balances
  - pH meters
  - Incubators
  - Centrifuges
  - Water baths
  - Stirrers/shakers
  - Vortexers
  - Autoclaves

**WORKPLACE SAFETY & BEHAVIOR**

- Identify Safety Symbols
- Exercise proper laboratory safety protocols
- Describe proper handling of biological and hazardous waste
- Identify and properly use Personal Protective Equipment (PPE)
- Derive information from Safety Data Sheets (SDS)
- Follow practices associated with regulatory compliance
- Demonstrate good documentation practices, including following Standard Operating Procedures (SOPs)
- Properly label items including solutions, buffers, Petri plates, samples, and products
- Identify acceptable work habits
EXAM SITE REGISTRATION & APPROVAL

Roles and Responsibilities

Only approved and Biotility-Certified BACE Administrators are permitted to participate in BACE administration. This includes, but is not limited to handling exam materials, administering exams, and/or observing the exam administration. The BACE Administrator Certification process is covered in a later section of this manual. Biotility reserves the right to approve all personnel assigned to administrative roles.

Although one person may administer the BACE, the best administration structure is a specialized and organized team. The preferred BACE Administration Team consists of three individuals, free of teacher/student conflict-of-interest, performing the roles of a Site Coordinator, Skills Evaluator, and Online Proctor. Additional staff may be needed to support the core personnel. These roles include Exam Monitor, Interpreter, Reader, and Scribe.

Teacher/Student Conflict-of-Interest Policy - Due to the technical nature of the Practical Exam, it may be necessary for teachers to serve as a Skills Evaluator for their own student, but all efforts should be made to avoid using a BACE Candidate’s own teacher in other BACE Administrator Roles. If a Teacher/Student Conflict-of-Interest exists in any BACE Administrator Role, an Exam Monitor must be present when handling exam materials and administering an exam. A student’s teacher is never permitted to serve as their Exam Monitor.

BACE Administrator roles and responsibilities are described in detail in the upcoming sections. Below is a quick summary of their primary obligations.
Site Coordinator

Each Exam Site will have one Site Coordinator, who shall be held accountable for the correct implementation and control of the BACE. Site Coordinators may also serve in other BACE Administrator Roles.

The preferred individual for this role is a school’s Assessment Coordinator, CTE Coordinator, Administrator, or Guidance Counselor. Teachers are permitted to be Site Coordinators as long as the Teacher/Student Conflict-of-Interest Policy is not violated.

Site Coordinators are responsible for:

- Registering Exam Site and BACE Administration Personnel
- Earning their own Site Coordinator Certification online through UF e-Learning by:
  - Completing the Site Coordinator Quiz
  - Signing the Certificate of Understanding
- Ensuring testing events are properly staffed and monitored
- Verifying the Skills Evaluator is certified and prepared to administer the Practical Exam
- Verifying the Online Proctor is certified and prepared to administer the Knowledge Exam
- Ordering exams
- Ensuring payment is processed by the Billing Contact
- Managing candidates (enrolling, scheduling exam dates, and providing results)
- Receiving and disseminating the Practice Exam Enrollment Link and Access Code
- Receiving and disseminating the Online Knowledge Exam Enrollment Link and Access Code
- Receiving and disseminating the Skills Evaluation Grid to the Skills Evaluator
- Receiving Exam Materials
- Returning Exam Materials
- Securing Exam Materials
- Reporting academic dishonesty
- Completing a BACE Administration Report for each testing session attended

Skills Evaluator

Each Exam Site will have at least one Skills Evaluator, who, along with the Site Coordinator, shall be held accountable for the correct implementation of the BACE Practical Exam. Skills Evaluators may also serve in other BACE Administrator Roles.

Practical Exam Student Ratio Policy - There must be at least one Skills Evaluator for every twenty (20) candidates at each Practical Exam session. More may be utilized for fewer candidates at the discretion of the Site Coordinator.

The preferred individual for this role is a school’s biotechnology or biomedical science expert. A teacher may serve as the Skills Evaluator, as long as either of the two following statements are true 1) the Teacher/Student Conflict-of-Interest Policy is not violated or 2) either the Site Coordinator or an Exam Monitor observes all aspects of the exam administration.
Skills Evaluators are responsible for:

- Earning their own Skills Evaluator Certification online through UF e-Learning by:
  - Completing the Skills Evaluator Quiz
  - Signing the Certificate of Understanding
- Setting up Practical Exam equipment and materials
- Identifying candidates
- Starting and monitoring the Practical Exam
- Observing and evaluating portions of the Practical Exam
- Completing the Practical Exam Skills Evaluation Grid
- Maintaining a controlled exam environment
- Collecting Exam Materials
- Securing Exam Materials
- Reporting academic dishonesty
- Completing a BACE Administration Report for each testing session attended

It is important that Skills Evaluators are experienced with the equipment and techniques on which the candidates are being tested. They should also review the Practical Exam Materials Checklist and Practical Exam Equipment Calibration Guidelines.

**Online Proctor**

Each Exam Site will have at least one Online Proctor, who, along with the Site Coordinator, shall be held accountable for the correct implementation of the BACE Knowledge Exam. Online Proctors may also serve in other BACE Administrator Roles.

**Knowledge Exam Student Ratio Policy** - There must be at least one Online Proctor for every thirty (30) candidates at each online exam session. More may be utilized for fewer candidates at the discretion of the Site Coordinator.

The preferred individual for this role is a school’s computer-based testing expert. A teacher may serve as the Online Proctor, as long as either of the two following statements are true 1) the Teacher/Student Conflict-of-Interest Policy is not violated or 2) either the Site Coordinator or an Exam Monitor observes all aspects of the exam administration.

Online Proctors are responsible for:

- Earning their own Online Proctor Certification online through UF e-Learning by:
  - Completing the Online Proctor Quiz
  - Signing the Certificate of Understanding
- Identifying candidates
- Starting and monitoring the Knowledge Exam
- Maintaining a controlled exam environment
- Collecting Exam Materials
- Securing Exam Materials
• Reporting academic dishonesty
• Completing a BACE Administration Report for each testing session attended

Exam Monitor

Exam Sites are required to use Exam Monitors during any BACE Administration activity where there is 1) a teacher/student conflict-of-interest, and 2) the Site Coordinator is not available or they themselves present a teacher/student conflict-of-interest. Exam Monitors shall be held accountable for the correct implementation of BACE procedures. Exam Monitors may also serve in other BACE Administrator Roles.

The preferred individual for this role is a high-level school administrator. A teacher may serve as the Exam Monitor, as long as the Teacher/Student Conflict-of-Interest Policy is not violated.

Exam Monitors may assist the Skills Evaluator and Online Proctor with their responsibilities, but their primary role is to monitor the test administration. If additional Skills Evaluators or Online Proctors are needed for test administration, additional personnel should be added to the team.

Exam Monitors are responsible for:

• Earning their own Exam Monitor Certification online through UF e-Learning by:
  o Completing the Exam Monitor Quiz
  o Signing the Certificate of Understanding
• Monitoring the handling of Exam Materials
• Monitoring the exam administration
• Documenting any abnormalities
• Notifying the Skills Evaluator or Online Proctor when candidates need assistance
• Reporting academic dishonesty
• Completing a BACE Administration Report for each testing session attended

Interpreter

With written approval from Biotility, Exam Sites are permitted to use interpreters. Interpreters may also serve in other BACE Administrator Roles. Interpreters must complete a BACE Administration Report for any testing session they attend.

Arrangements for an interpreter must be made between the school and the interpreter. To ensure other candidates are not disturbed by the candidate/interpreter interaction, the candidate should be tested separately.

The preferred individual for this role is a school’s ESOL teacher, heritage language teacher, or other trained school employee. A teacher may serve as the Interpreter, as long as either of the two following statements are true 1) the Teacher/Student Conflict-of-Interest Policy is not violated, or 2) either the Site Coordinator or an Exam Monitor observes all aspects of the exam administration. Individuals with a personal relationship with the candidate are not permitted to act in this role.
Approval Process: Schools requesting exam accommodations for candidates are required to request permission by emailing BACE@research.ufl.edu. Interpreters will then be contacted directly. All interpreters must complete a Non-Disclosure Agreement Form.

Reader and/or Scribe

With written approval from Biotility, Exam Sites are permitted to use Readers and Scribes for candidates with an Individual Education Plan (IEP) or Section 504 Plan. Readers and Scribes may also serve in other BACE Administrator Roles. Readers and Scribes must complete a BACE Administration Report for any testing session they attend.

Arrangements for these roles must be made between the school and the individual performing the role. To ensure other candidates are not disturbed by interactions with a reader/scribe, they may not be used in the same testing room as a standard administration.

The preferred individual for these roles is a trained school employee with the following skills:

**Reader:**
- Ability to read aloud clearly, at a normal pace and with good pronunciation.
- Familiarity with scientific words, terms, and symbols.
- Ability to read the words in the test booklet or on the screen, without changing or adding words or assisting the test taker in selecting a response.
- Ability to work with the test taker comfortably and compatibly without creating unnecessary pressure or unrealistic expectations.

**Scribe:**
- Ability to write exactly what the test taker dictates
- Ability to not prompt the test taker

A teacher may serve as the reader, as long as either of the two following statements are true 1) the Teacher/Student Conflict-of-Interest Policy is not violated or 2) either the Site Coordinator or an Exam Monitor observes all aspects of the exam administration. Individuals with a personal relationship with the candidate are not permitted to act in this role.

Approval Process: Schools requesting exam accommodations for candidates are required to request permission by emailing BACE@research.ufl.edu. Readers will then be contacted directly. All readers and scribes must complete a Non-Disclosure Agreement Form.

Exam Site Registration

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.
Prior to starting the School Registration Process:

1. Refer to the following BACE Registration Overview, which provides a quick look at the School Registration Process, and the actions each step initiates.
2. Review the previous section, BACE Administration Roles and Responsibilities, and identify the core personnel who will participate in exam administration.
3. Complete the BACE Registration Quick Guide, which provides a checklist of items needed to complete the Site Registration Forms.

**BACE Registration Overview**

**STEP 1:**

**Exam Site Registration**

- Review Procedures Manual
- Review BACE Registration Quick Guide
- Complete Step 1: Exam Site Registration Form

**School Personnel:** Site Coordinator

- Enroll and complete BACE Admin Cert.
- Enroll Site Coordinator, staff, & candidates in Practice Exam
- Request TA access to Practice Exam

**Biottiity**

- Email BACE Admin Cert. Enrollment Link to individuals designated in Step 1
- Email Practice Exam Enrollment Link to Site Coordinator

**Biottiity**

- Provide TA access to Practice Exam
- Issue BACE Administrator Certifications

**Biottiity**

**STEP 2:**

**BACE Order**

- Complete Step 2: Order Form

**School Personnel:** Site Coordinator

- Schedule exam dates
- Issue an invoice
- Email Knowledge Exam Info & Enrollment Link
- Email Practical Exam Info & mail Practical Exam Kit

**Biottiity**

- Biotility will contact each Site Coordinator by phone after the completion of the Exam Site Registration Form.

Sites no longer submit a list of candidate names. Candidates provide info when enrolling.
**Step 1: Exam Site Registration Form**

The Site Coordinator should complete the Exam Site Registration Form *at least four weeks* in advance of the expected exam date. If circumstances prohibit meeting the deadline, please contact Biotility and we will attempt to accommodate your preferred exam date(s).

There are two variations of the Exam Site Registration Form, depending on whether the school has completed the process for a previous year or is being registered for the first time. Both forms require the name, address, and phone number for each individual in a designated role. Please refer to the BACE Registration Quick Guide for an entire list of items needed to complete this form.

Variations of the Exam Site Registration Form:

- **Returning School** – All previously registered Exam Sites should complete this version of the form.
- **New School** – All new Exam Sites should complete this version of the form.

Depending on the number of candidates and frequency of testing, some Exam Sites may need to designate more than one Skills Evaluator and/or Online Proctor. Personnel-to-candidate ratios are one Biotility Certified – Online Proctor per thirty candidates for the Knowledge Exam, and one Biotility Certified – Skills Evaluator per twenty candidates for the Practical Exam.

When the Site Coordinator completes the Exam Site Registration Form, Biotility will:

1. Send a confirmation email to the Site Coordinator that the form was received.
2. Invite BACE Administrators to enroll in the BACE Administrator Certification course.
3. Email the BACE Online Practice Exam Enrollment Link to the Site Coordinator.
4. Call the Site Coordinator to discuss the administration process.

**Step 2: BACE Order Form**

The Site Coordinator should complete the BACE Order Form *at least four weeks* in advance of the expected exam date. If circumstances prohibit meeting the deadline, please contact Biotility and we will attempt to accommodate your preferred exam date(s).

To complete this form, Site Coordinators are asked to enter billing information, number of exams to be ordered, and *actual* exam dates. Please refer to the BACE Registration Quick Guide for an entire list of items needed to complete this form.

Sites may choose between three payment methods: Online with Credit Card or PCard, Check, or Purchase Order (PO). If the online option is selected, Exam Sites will receive an email with a link to make the payment. If check or PO is selected, Biotility will mail the Exam Site a PO or an invoice. Note fees are not collected immediately.

When the Site Coordinator completes the BACE Order Form, Biotility will:

1. Send a confirmation email to the Site Coordinator and Billing Contact that the form was received.
2. Send the appropriate payment information to the Site Coordinator and Billing Contact based on the payment method selected.
3. One week prior to the testing, send the BACE Knowledge Exam Enrollment Link and the Practical Exam Kit to the Site Coordinator.

**Exam Fees**

The following fees are valid for BACE administrations that are either 1) delivered at schools using their own personnel, or 2) at Biotility’s office in Alachua, Florida. Exams delivered off-site by Biotility staff or delivered internationally may incur additional charges. To request a special administration of the BACE, please contact Biotility directly at bace@research.ufl.edu for a quote.

<table>
<thead>
<tr>
<th>Item</th>
<th>Knowledge Exam</th>
<th>Practical Exam</th>
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<tbody>
<tr>
<td>Attempt 1</td>
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<td>Attempt 2</td>
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</tr>
<tr>
<td>Attempt 3</td>
<td>$25.00</td>
<td>$25.00</td>
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Please note:

- All ordered exams, including retakes, **must** be completed by the end of the calendar year.
- There are no refunds for unused exams.
- Exams may not be banked for the next year.
- Candidates are only permitted three attempts in a calendar year.

**Quick Menu Options and Update Information Features**

Exam Sites are encouraged to use the Update Information and Quick Menu Features provided on the Exam Site Registration website, [http://biotility.research.ufl.edu/bace/schoolregistration](http://biotility.research.ufl.edu/bace/schoolregistration). Created to expedite common requests, these options and features ensure Exam Sites have the opportunity to request action 24-hours a day.

Update Information features include:

- **Exam Sites** – Update Exam Site information including: site name, address, and district.
- **Admin Info** – Update BACE Administrator contact information, replace BACE Administrators, or add additional BACE administrators to your team. Requests to add new BACE Administrators must be made at least two (2) weeks prior to the scheduled exam date(s).
- **Exam Dates** – Update scheduled exam date(s). Requests must be made at least two (2) weeks prior to the scheduled exam date(s). Failing to update dates within the time frame may result in shipping surcharges.
- **Order Info** – Update order and receive a corrected invoice. Requests must be made at least two (2) weeks prior to the scheduled exam date(s).
Quick Menu options include:

- **Request a Quote** - Request a quote for the BACE or for Exam Retakes. Quote requests are processed within two (2) business days.
- **Report an Issue** - Report an exam administration issue on any subject or for specific concerns. Marking the issue as high-priority will ensure you receive the quickest response possible.
- **Order Certificates** - Order paper copies of BACE Certifications. In 2018, Biotility began issuing digital credentials. Schools may order paper versions of certificates through this feature at the cost of printing and shipping the certificates.

**Administrator Approval**

Biotility must approve all personnel assigned to a BACE Administrator Role which are: the Site Coordinator, Skills Evaluator(s), Online Proctor(s), and if used Exam Monitor(s), Interpreter(s), Reader(s), and Scribe(s).

Each Exam Site is required to select personnel to serve in the three primary BACE Administrator Roles: **Site Coordinator, Online Proctor, and Skills Evaluator**. If a Teacher/Student Conflict-of-Interest exists in any BACE Administrator Role, an **Exam Monitor** must also be selected. To verify these individuals are prepared to uphold Biotility’s exam administration policy and procedures, they must complete the appropriate role-specific training module(s) in UF e-Learning.

Approval processes for Interpreter(s), Reader(s), and Scribe(s) are located in the associated BACE Administrator Role section.

**BACE Administrator Certification Course**

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. Access to the BACE Administrator Certification course is determined by the information provided by the Site Coordinator during the School Registration Process. This course includes modules for four administrative roles.

- **Site Coordinator**
- **Skills Evaluator**
- **Online Proctor**
- **Exam Monitor**

Required and must be completed at least two (2) weeks prior to testing event.

Required if a Teacher/Student Conflict-of-Interest exists and must be completed at least two (2) weeks prior to testing event.
Individuals are required to complete only the modules specific to their assigned role(s). Administrators performing more than one role must complete each module pertaining to each of their selected roles, and earn the corresponding certifications.

Each module contains a quiz, a Certificate of Understanding, and a Non-Disclosure Agreement. Upon completing the specified module(s), a digital badge is issued immediately.

**Administrator Role Quiz**

There is a unique BACE Administrator Quiz for each role. Each quiz is based on information provided in this manual. Skills Evaluators should also review the Practical Exam Materials Checklist and Practical Exam Equipment Calibration Guidelines. Quizzes are open book, and may be taken up to three times. Each quiz takes approximately 15-20 minutes to complete. Administrators must receive a score of 90% or above to pass.

**Certificate of Understanding and Non-Disclosure Agreements**

The Site Coordinator, Skills Evaluator(s), Online Proctor(s), and if applicable Exam Monitor(s) are asked to sign a Certificate of Understanding and a Non-Disclosure Agreement confirming dedication to uphold the policies and procedures outlined in this manual. These BACE Administrators sign the Certificate of Understanding and Non-Disclosure Agreement electronically as part of the BACE Administrator Course in UF e-Learning.

**BACE Administrator Role Badge**

Upon completion of a module, a digital badge is issued. These certifications may be displayed on Facebook or LinkedIn, and may be verified online by anyone. For more details, please review the section on Digital Credentials.

**Approximate Certification Process Time Commitment**

<table>
<thead>
<tr>
<th>Administrative Position</th>
<th>Review Procedure Manual</th>
<th>BACE Administrator Quiz</th>
<th>Certificate of Understanding and Non-Disclosure Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Coordinator</td>
<td>1 hour</td>
<td>10 – 15 Minutes</td>
<td>2 Minutes</td>
</tr>
<tr>
<td>Online Proctor</td>
<td>1 hour</td>
<td>10 – 15 Minutes</td>
<td>2 Minutes</td>
</tr>
<tr>
<td>Skills Evaluator</td>
<td>1 hour</td>
<td>20 – 25 Minutes</td>
<td>2 Minutes</td>
</tr>
<tr>
<td>Exam Monitor</td>
<td>1 hour</td>
<td>10 – 15 Minutes</td>
<td>2 Minutes</td>
</tr>
</tbody>
</table>
PRACTICE EXAM

The BACE Practice Exam Course is a free UF e-Learning course designed by Biotility to help BACE candidates prepare for both the Knowledge and Practical portions of the exam. Site Coordinators (and any school personnel they designate) are granted immediate access to candidate results and class statistics. Please note scores obtained from practice exams are not validated for high stakes decision-making. These scores are intended to be used by the school for planning instruction.

The Practice Exam is delivered online via UF e-Learning. Therefore, it does not test a candidate’s ability to perform tasks that maybe included on the Practical Exam. Therefore, in addition to the practice questions, candidates should practice correctly performing the following activities typically performed by a Biotechnician Assistant:

- Accurately pipetting micro and macro volumes with micropipets and serological pipets
- Accurately weigh mass of solids and liquids on electronic balances
- Accurately measure the pH of a solution
- Accurately make calculations for serial dilutions
- Culture microorganisms using appropriate aseptic technique
- Properly prepare agarose gels, buffer, and samples with loading dye (including calculations) for gel electrophoresis
- Demonstrate proper use of a microscope
- Follow Standard Operating Procedures (SOPs)
- Accurately document data and tasks

Practice Exam Course Login

After the School Registration Process is complete, Biotility will email the Site Coordinator an email containing a unique enrollment link to distribute to their candidates. This email will also include the BACE Practice Exam Access Codes. For a detailed description of the enrollment process, please refer to the UF Quick Registration System section.

Course Content

The course provides candidates with a detailed review of the exam experience, and includes two practice exams as well as additional study resources. BACE Practice Exams are locked to candidates until released by the Site Coordinator. The second portion of the course provides career development resources can help candidates find jobs and internships in the field of biotechnology. The content includes the following modules.

- **BACE Candidate Information** - Review of the exam process and topics, how to prepare for the BACE, and details on earning the Biotechnician Assistant Credential
• **BACE Practice Exam Version A** - BACE category quizzes that represent the general content encountered on the Knowledge and Practical portions of the BACE. At the end of each quiz, candidates have the opportunity to review their performance.

• **BACE Practice Exam Version B** - A second set of BACE category quizzes

• **Additional Practice for 6.0 Applied Mathematics in Biotechnology** – For candidates struggling with the math covered on the exam, this section provides additional practice on scientific notation, significant digits, correct use of decimals, serial dilutions, solution ratios, conversion, solution calculation, and dilution factor calculation.

• **Additional study resources** – Publicly available biotechnology study guides covering a multitude of topics.

• **Stepping into the Biotech Workforce** - This module focuses on creating a LinkedIn profile, techniques to connect to industry experts, and searching for jobs and internships. Candidates can use this module to jump start their career and connect to companies in the biotech industry.

**Practice Exam Results**

Candidate results for the Online Practice Exam are accessed within the BACE Practice Exam Course in UF e-Learning. Within the course, individuals who have been designated by the Site Coordinator have access to multiple reports for their school. These reports are located in either Gradebook or the Quiz Statistics.

**Gradebook Reports**

To view the Gradebook,

1. Log into UF e-Learning, https://reg.distance.ufl.edu/reg/Account/Login
2. Open the BACE Practice Exam Course
3. Using the course navigation menu, click the Grades link.

**Grades Report**

The BACE Practice Exam course consists of multiple quizzes, which are generally grouped by Exam Category. The Grades Report displays candidate scores for each quiz and the final score. The top of the Grades Report includes sorting options and settings used to organize reports or populate select candidate data and quiz data.

The Grades Report has two views. The default report displays all candidates and assignments at the same time. Individual View displays one candidate [3]. Users with permission to more than one section, may filter by section [4]. Use the Filter by Student Name Field to search for a candidate by name [5]. Score totals are displayed in the Total column [7]. All data in the Grades Report can be exported. To export scores, use the Export button [6].
Quiz Statistics

To view the Quiz Statistics,

5. Open the BACE Practice Exam Course
6. Using the course navigation menu, click the Quizzes link,
7. Select the title of the quiz you want to open
8. Click the Quiz Statistics link.

Note: Quiz Statistics will not be available until at least one candidate has completed the quiz.

Quiz Summary

By default, the Quiz Summary shows statistics for all sections the user has permission to view. Available statistics include the average score, high score, low score, standard deviation, and average time of quiz completion [1]. To view quiz statistics for a section, click the Section Filter drop-down menu [2]. To access additional quiz reports, click generate a Student Analysis or Item Analysis report [3].

In the summary graph, the x-axis indicates the quiz scored percentages [4], and the y-axis indicates the number of candidates who received each percentage [5]. If a candidate had multiple attempts, past attempts are viewable in the Student Analysis Report. Quiz Summary will only display the highest score for the candidate.

Question Breakdown Report

The Question Breakdown Report is a user friendly report showing how the candidates performed on each item. Each item report contains the following information:

- Attempts (Number of times a question is answered out of the number of candidates who opened the quiz)[1]
The Question Answer Choice Breakdown offers detailed data regarding how candidates are approaching a question. Correct answer response(s) are shown in a green bar with a check mark [6], incorrect responses are shown in a black bar [7], and No Answer in a black striped bar [8]. The horizontal bars are scaled according to the answer response percentage [9]. Each response also displays the number of respondents who selected the answer. To view the names of the candidates who selected an answer choice, click the [x respondents] link [10].

**Discrimination Index**

This metric provides a measure of how well a single question differentiates (or discriminates) between high scoring and low scoring candidates. The Discrimination Index ranges from -1 to +1.

- Questions that negatively discriminate have a discrimination index ranging from **-1 to -0.01**. This occurs when low scoring candidates answer the question correctly more frequently than high scoring candidates.
- Questions with a discrimination index of **zero** do not discriminate. This only occurs when there are not two groups to compare; meaning, either all candidates answer the question correctly or all candidates answer the question incorrectly.
- Questions that poorly discriminate have a discrimination index ranging from **+0.01 to +0.24**.
• Questions that discriminate have a discrimination index ranging from +0.25 to +1.

Discrimination Index is typically used by a psychometrician to evaluate a question’s effectiveness, but in small samples (under 1,000 candidates), the discrimination index is best used as an indicator of the classes understanding of the question’s content. Good scores (green) are +0.25 to +1. An ideal discrimination index shows candidates who scored higher on the quiz are also getting the quiz question right, candidates who scored lower on the quiz getting the quiz question wrong, and candidates in the middle range on either side. A discrimination index of zero shows all candidates getting the quiz question right or wrong.

**Student Analysis and Item Analysis Reports**

Download .csv files to view Student Analysis or Item Analysis for each quiz question to count all candidate attempts in the statistics.

When you generate an analysis report, UFEL shows the last time the report was generated. If there is an error with the report, you can retry the option or cancel the analysis completely.

**Notes:**

• By default, the submitted time in the Student Analysis report is shown in UTC, not your set time zone.
• The Item Analysis report only displays statistics for Multiple Choice and True/False questions.
EXAM ADMINISTRATION PROCEDURES

The Site Coordinator, Skills Evaluator(s), and Online Proctor(s) should use this section as a working document to assist in planning and executing the BACE. It is strongly recommended all personnel involved in administering the BACE meet and review these exam administration procedures as a team. This section covers the following procedures:

- Coordinating Exam Events
- Knowledge Exam Administration
- Practical Exam Administration
- Closing Out Exam Events

Coordinating Exam Events

A Biotility-Certified Site Coordinator manages these procedures. The Site Coordinator should take steps to prepare the Exam Site and personnel for the exam event. The following procedures serve as a guide in coordinating the BACE at an Exam Site.

Exam Site Registration & Approval

- Review Procedures Manual
- Complete BACE Registration Quick Guide
- Go to http://biotility.research.ufl.edu/bace/schoolregistration
  - a. Complete Step 1: Exam Site Registration Form
  - b. Complete Step 2: BACE Order Form

BACE Practice Exam

- Receive BACE Practice Exam Enrollment Link and Access Codes from Biotility
- Provide Biotility with list of personnel who need TA access to Practice Exam results
- Create strategy for implementation, results review, and future instruction
- Distribute BACE Practice Exam Enrollment Link to candidates to create a UF Login and/or sign-in to the testing platform, UF e-Learning (See QuickReg Account Creation Process)

Testing Logistics

- Confirm candidate count
  - Create final candidate roster
  - Compare exams ordered is equal to candidate roster
- Confirm there is sufficient staff for each exam event session
  - Knowledge Exam – One (1) Online Proctor per thirty (30) candidates per session (and one Exam Monitor if Teacher/Student Conflict exists)
  - Practical Exam - One (1) Skills Evaluator per twenty (20) candidates per session (and one Exam Monitor if Teacher/Student Conflict exists)

Teacher/Student Conflict-of-Interest Policy Reminder

Teachers should not participate in any BACE Administration activities which incorporate their own students. If a Teacher/Student Conflict-of-Interest exists in any BACE Administrator Role, an Exam Monitor must be present when handling exam materials and administering an exam.
☐ Confirm Exam date(s) for Knowledge and Practical

Exam Room Logistics

☐ Select and book Exam Rooms
  o Reserve Exam Rooms for the Knowledge and Practical Exams
  o Confirm the Exam Rooms selected meet the minimum standards for an exam environment (See Exam Environment Standards)

☐ Plan Knowledge Exam Room set-up with the Online Proctor
  o Plan Room Layout (See Optimum Layout for Knowledge and Practical Stations)
    ▪ Plan Online Proctor station(s)
    ▪ Plan candidate stations
  o Verify all candidate stations have a computer with:
    ▪ Internet access through an up-to-date version of a supported browser (See Knowledge Exam Computer and Internet Specifications)
    ▪ Ability login to UF e-Learning, https://reg.distance.ufl.edu/reg/Account/Login
    ▪ A minimum of a 15” monitor
    ▪ A keyboard and mouse
  o Optional: Save the link to UF e-Learning on each computer

☐ Plan Practical Exam Room set-up with the Practical Skills Evaluator
  o Plan Room Layout (See Optimum Layout for Knowledge and Practical Stations)
    ▪ Plan Skills Evaluator station(s)
    ▪ Plan candidate stations (each candidate taking the exam will need a desk or other area to work on problems when not at practical stations)
    ▪ Plan Practical Exam Stations (6 out of 7 Practical Exam Stations needs power)
  o Complete BACE Practical Exam Materials Checklist
    ▪ Collect and store all items on the checklist
    ▪ Verify all laboratory equipment is working and calibrated

Personnel Prep

☐ Verify BACE Administrators have earned their appropriate BACE Administrator Certification
☐ If needed, email exam accommodation requests to Biotility
☐ If applicable, email Interpreter, Reader, and/or Scribe Non-Disclosure forms
☐ Optional: Meet with BACE Administrators in the Exam Rooms before the exam events
  o Review Exam Room Set-up Plan
  o Review Exam Administration Procedures
Manage Exam Materials

- Refresh your knowledge of Biotility’s Exam Materials Security Procedures for the Knowledge and Practical Exam.
- Receive the BACE Knowledge Exam Information Email from Biotility which will:
  - Confirm Knowledge Exam testing date(s)
  - Include the BACE Knowledge Exam Enrollment Link (for BACE Candidates Only. School employees are not permitted to take the BACE through their own Exam Site)
  - Include the BACE Knowledge Exam Access Code
- Receive the BACE Practical Exam Information Email from Biotility which will:
  - Confirm Practical Exam testing date(s)
  - Include tracking information for the Practical Exam Shipment through FedEx

Distribution of Knowledge Exam Materials

- Site Coordinator will distribute BACE Knowledge Exam Enrollment Link to candidates to create a UF Login and/or sign-in to the testing platform, UF e-Learning. (See QuickReg Account Creation Process)
- Site Coordinator will distribute BACE Knowledge Exam Access Code to Online Proctor one day prior to the exam event

Distribution of Practical Exam Materials

- Site Coordinator will receive the Practical Exam Kit Shipment
  - Open Kit and inventory its contents using the Practical Exam Kit - Packing Slip and Storage Instructions
  - Identify the Immediate Action Required Items and give these item and only these items to the Skills Evaluator immediately for storage
  - Store the Practical Exam Setup Guide and the Practical Exam Packet in a locked cabinet.
  - Notify Biotility immediately of any missing or damaged items
- Site Coordinator will distribute the following Exam Materials to Skills Evaluator no sooner than three days prior to the exam event
  - Practical Exam Kit - Packing Slip and Storage Instructions
  - Practical Exam Setup Guide
  - Practical Exam Supplies
- Site Coordinator will distribute the remainder of the Exam Materials to Skills Evaluator one day prior to the exam event
  - Practical Exams Booklets with serial numbers

Knowledge Exam Administration Procedures

A Biotility-Certified Online Proctor manages these procedures. The following procedures serve as a guide for administering the Knowledge Exam.
Knowledge Exam – Setup

- Confirm you have the BACE Knowledge Exam Access Code
- Print the following documents
  - Script for Proctoring Knowledge Exams
  - Prohibited Items Poster
  - Quiet Testing in Progress Poster
  - Candidate Sign-in Sheet
  - BACE Administration Report Form
- Prepare the Exam Room
  - Confirm the Exam Room meets the standards for an exam environment (See Exam Environment Standards)
  - Implement your Knowledge Exam Room Set-up Plan
  - Open the UF e-Learning website, https://reg.distance.ufl.edu/reg/Account/Login, on each computer, or write the website address on the board for each candidate to enter
  - Remove any science or biotechnology related posters
  - Post Prohibited Items Poster
  - Post Quiet Exam in Progress Poster
  - Place the Candidate Sign-in Sheet at the Check-in Station
  - Pre-distribute the permitted items
    - Basic non-programmable calculators
    - Scratch paper
    - Pencils
  - Read through Script for Proctoring Knowledge Exams
  - Read through the BACE Administration Report Form

Knowledge Exam – Candidate Check-in

- Dismiss all unauthorized individuals from exam room prior to starting the exam
- Ask candidates to form a line
- Inform candidates of the prohibited items and reference the Prohibited Items Poster
- Process candidates one at a time
  - Have candidates sign the Candidate Sign-in Sheet
  - Identify candidates using their school, state, or federal ID
  - Direct candidates to a seat and notate assigned seat # on the Candidate Sign-in Sheet

Knowledge Exam – Startup

- Read the Script for Proctoring Knowledge Exams to the candidates, which will walk the candidates through the following processes
  - Greeting
  - Exam Rules
  - Exam Login
  - Exam Navigation
  - Starting Exam
- Answer candidate procedural questions and start the exam
Knowledge Exam - Monitoring

- Using the BACE Administration Report Form, document the following activities during the exam, making sure to record the time, actions taken, and names of candidates affected.
  - Exam start and end times
  - Candidates who did not appear for the exam
  - Anyone entering or leaving the exam room
  - Testing abnormalities (Interruptions, Technical difficulties, Candidate complaints, etc.)

- Adhere to the Academic Honesty Policy and Standards
- Adhere to the Exam Monitoring Policy
- Give time prompts as indicated on the script
- Follow Candidate Restroom Break Rules
- Dismissing Candidates
  - Call candidate to proctor station
  - Collect the permitted items given to the candidate, including the scratch paper
  - Dismiss the candidate from the exam room

Knowledge Exam - Close out

- Confirm each computer is logged out of UF e-Learning
- Scan the desktops and floor for any missed Exam Materials
- Collect all Exam Materials
  - Candidate Scratch Paper
  - Script for Proctoring Knowledge Exams
  - Prohibited Items Poster
  - Quiet Exam in Progress Poster
  - Candidate Sign-in Sheet
  - BACE Administration Report Form
- Complete BACE Administration Report Form
- Return Exam Materials to Site Coordinator immediately

Practical Exam Administration Procedures

These procedures are completed by a Biotility-Certified Skills Evaluator. The following procedures serve as a guide for administering the Practical Exam.

Practical Exam – Station Setup

ONCE PRACTICAL EXAM STATIONS SETUP BEGINS, ONLY BACE ADMINISTRATORS ARE PERMITTED TO ENTER THE EXAM ROOM UNTIL THE SCHEDULED EXAM TIME.

- Collect Practical Exam Station Materials from the Site Coordinator
  - Practical Exam Kit – Packing Slip and Storage Instructions
  - Practical Exam Setup Guide
  - Practical Exam Supplies
- Dismiss all unauthorized individuals from exam room
Setup the Practical Stations
- Collect the items on the Practical Exam Materials Checklist
- Implement the instructions in the Practical Exam Setup Guide
- After the stations are setup, verify all laboratory equipment at the exam stations are in safe operating order and calibrated

Practical Exam – Setup
- Collect Test Exam Materials from Site Coordinator
  - Practical Exams with serial numbers
- Print the following documents
  - Script for Proctoring Practical Exams
  - Prohibited Items Poster
  - Quiet Testing in Progress Poster
  - Candidate Sign-in Sheet
  - BACE Administration Report Form
- Prepare the Exam Room
  - Confirm the Exam Room meets the standards for an exam environment (See Exam Environment Standards)
  - Implement your Practical Exam Room Set-up Plan
  - Remove any science or biotechnology related posters
  - Post Prohibited Items Poster
  - Post Quiet Exam in Progress Poster
  - Place the Candidate Sign-in Sheet at the Check-in Station
  - Pre-distribute the permitted items
    - Basic non-programmable calculators
    - Pencils
  - Read through Script for Proctoring Practical Exams
  - Read through the BACE Administration Report Form

Practical Exam - Candidate Check-in
- Dismiss all unauthorized individuals from exam room prior to starting the exam
- Ask candidates to form a line
- Inform candidates of the prohibited items and reference the Prohibited Items Poster
- Process candidates one at a time
  - Have candidate sign the Candidate Sign-in Sheet
  - Identify candidate using their school, state, or federal ID
  - Direct the candidate to their assigned seat
Practical Exam - Startup
Required at beginning of Practical Exam

☐ Read the Script for Proctoring Practical Exams to the candidates, which will cover the following processes
  o Greeting
  o Distributing Exam Booklets
  o Exam Rules
  o Infilling Exam Booklets, Candidate Answer Sheets, and Station Evaluation Sheets
  o Collecting Station Evaluation Sheets to be used at a later time
  o Laboratory Station Instructions
  o Starting Exam

☐ Answer candidate procedural questions

Practical Exam – Managing Stations
Required during Practical Exam

☐ Five to ten minutes after starting the exam, begin assigning candidates to stations

☐ Evaluate candidate performance at Station 5
  o Evaluate candidates according to the instruction in the Practical Exam Setup Guide and the Station Evaluation Sheet, not in comparison with other candidates
  o Complete the appropriate Station Evaluation Sheet as each candidate cycles through the station and completes the task

Practical Exam - Monitoring
Required during Practical Exam

☐ Using the BACE Administration Report Form, document the following activities during the exam, making sure to record the time, actions taken, and names of candidates effected.
  o Exam start and end times
  o Candidates who did not appear for the exam
  o Anyone entering or leaving the exam room
  o Testing abnormalities (Interruptions, Technical difficulties, Candidate complaints, etc.)

☐ Adhere to the Academic Honesty Policy and Standards
☐ Adhere to the Exam Monitoring Policy
☐ Give time prompts as indicated on the script
☐ Follow Candidate Restroom Break Rules

Dismissing Candidates
  o Call candidate to proctor station
  o Collect the permitted items given to the candidate, including the scratch paper
  o Collect Practical Exam Booklet and Candidate Answer Sheet from the candidate
  o Verify the candidates have completed all portions on the exam cover
  o Dismiss the candidate from the exam room
Practical Exam - Close out  
Immediately following Practical Exam

- Perform an exam inventory
- Collect all Test Exam Materials
  - Exam Booklets
  - Script for Proctoring Practical Exams
  - Posted Prohibited Items Poster
  - Posted Quiet Exam in Progress Poster
  - Candidate Sign-in Sheet
  - BACE Administration Report Form
- Collect candidate work product from each exam station (excluding Station 5)
- Collect Station Exam Materials
  - Inventory Log
  - Practical Exam Setup Guide and all its contents
  - Unused Practical Exam Supplies
- Scan the desktops and floor for any missed Exam Materials
- Complete Practical Exam Return Inventory Log
- Complete BACE Administration Report Form
- Box all Collected Testing Materials and apply FedEx Return Label
- Return Collected Testing Materials to Site Coordinator immediately

Practical Exam – Complete Evaluations  
Required 1 day following Practical Exam

- Evaluate candidate work product from Station 4
  - Evaluate candidates work product according to the instruction in the Practical Exam Setup Guide and the Station Evaluation Sheet, not in comparison with other candidates
  - Complete the appropriate Station Evaluation Sheet for each candidate
  - Dispose of Station 5 work product
- Return Practical Exam Station Evaluation Sheets to Site Coordinator

Closing out Exam Events
A Biotility-Certified Site Coordinator completes these procedures. The following procedures serve as a guide for closing out Exam Events.

Closing out Exam Events
Recommended immediately after last testing event
Required 1 day following the last event

- Review all BACE Administration Report Forms
- Verify you have recalled all Exam Materials (items indicated in red)
  - All Knowledge Exam Materials
  - All Practical Exam Materials
    - Perform an exam inventory
    - Verify the Skills Evaluator completed the Practical Exam Return Inventory Log
- Ship all Exam Materials to Biotility using FedEx return shipping label provided
POLICIES & PROCEDURES

Academic Honesty Policy

BACE Candidates and Administrators are expected to behave ethically and honorably. Academic dishonesty includes anything that gives a candidate an unfair advantage on the exam. Violations of the following standards will result in the invalidation of candidate scores.

<table>
<thead>
<tr>
<th>Candidates May Not:</th>
<th>BACE Administrators May Not:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access Exam Materials prior to the scheduled exam</td>
<td>• Read or review the content of the exam</td>
</tr>
<tr>
<td>• Accept assistance from another candidate during the exam</td>
<td>• Answer candidate questions about the exam content before or after the exam</td>
</tr>
<tr>
<td>• Give assistance to another candidate during the exam</td>
<td>• Give leading hints or confirm a candidate’s answer is correct</td>
</tr>
<tr>
<td>• Copy, photograph, record, post, or reproduce Exam Materials in any fixed medium</td>
<td>• Change a candidate’s response(s)</td>
</tr>
<tr>
<td>• Keep any of the Exam Materials</td>
<td>• Copy, photograph, record, post, or reproduce Exam Materials in any fixed medium</td>
</tr>
<tr>
<td></td>
<td>• Keep any of the Exam Materials</td>
</tr>
</tbody>
</table>

Procedures for Managing Violations

If you witness any violation that compromises the integrity of our exam, you should report on the BACE Administration Form and directly to Biotility. Reports can be submitted anonymously and/or confidentially at Biotility’s School Registration Website, by phone at 386.462.3181, or by email at BACE@research.ufl.edu.

If an administrator witnesses a candidate engaged in academic dishonesty, they should:

1. Document it on the BACE Administration Report Form and report the incident to Biotility.
2. Follow school’s internal procedures for interacting with the candidate.
3. Report the candidate to their school’s academic honesty/honor code committee.
4. Retrieve any compromised exam material.
5. Dismiss the candidate.

If an administrator witnesses another administrator engaged in academic dishonesty, they should:

1. Document it on the BACE Administration Report and report the incident to Biotility.
2. Report the administrator to their school’s academic honesty/honor code committee.

Confidentiality Policy

Biotility maintains high levels of confidentiality in all operations, including the administration of the BACE. All records containing confidential information, such as personally identifiable information, financial information, or contracting information are secured physically under lock and key or electronically within the security of the University of Florida’s computer network. Access to information
stored electronically is restricted to the appropriate personnel by password protection. Biotility does not share confidential information without written consent.

**Exam Attempts and Retake Policy**
Candidates are permitted to take either portion of the exam a maximum of three times per year. The Site Coordinator orders all exams and retakes through the Exam Order Form. Please refer to [Step 2: BACE Order Form](#) for details on process and pricing. All testing and retakes must be completed by the end of the calendar year.

**Exam Security Policies**

**Online Materials**
Online content for the BACE is protected within the secure UF e-Learning portal. Neither UF nor Biotility have access to your password and we will never ask you for your password online, in email, or over the phone. BACE Administrators and Candidates must protect their Username and Passwords by:

- Never sharing their password
- Never saving their password in the web browser
- Always logging out AND closing the browser before leaving the computer station

**Physical Exam Materials**
Exam Materials and supplies used for the Practical Exam are shipped directly to the Site Coordinator. The Exam Materials and supplies must be stored in a secure location unless they are actively being used for exam set up, testing, or post-exam procedures. The definition of a secured location is a locked cabinet or closet within a locked room, with access limited to authorized personnel only. BACE Administrators should use the following guidelines when handling Exam Materials and supplies:

- Only Biotility-Certified BACE Administrators may handle Exam Materials and supplies
- After removal from a secure location, Exam Materials must not be left unattended

**Procedures for Receiving Exam Materials**
Biotility will ship the Practical Exam Materials and supplies to the Site Coordinator approximately five (5) business days before the scheduled Practical Exam. All shipments will be sealed with security tape, and the exam booklets will be individually sealed. The shipment should be immediately inventoried and then stored in a secure location.

**Inventorizing Shipment**
Upon receipt of the shipment, the Site Coordinator should open the sealed box in a private location free of disruptions, and inventory all items listed on the Inventory Log. The shipment should include:

- Inventory Log
- Practical Exams with serial numbers
- Practical Exam Setup Guide
- Practical Exam Supplies
- Return Inventory Log
- FedEx Return Label and Envelope
The Site Coordinator should initial the “Received” column on the Inventory Log to confirm receipt of each item. Any abnormalities in the item count or condition should be noted on the Inventory Log and reported to Biotility immediately. The Site Coordinator should also confirm all exam booklets are sealed, and the number of exam booklets matches the number on the Inventory Log.

After completing the inventory, the Site Coordinator should secure the shipment and coordinate with the Skills Evaluator to exchange Exam Materials and supplies. The Site Coordinator is responsible for ensuring the Skills Evaluator has an appropriate location to secure the Exam Materials.

No one is permitted to open and review the exams. Exam seals should only be broken by the candidate when instructed to do so during the Practical Exam.

**Inventorying and Tracking Exam Materials**

BACE Administrators should be confident of the location and security of Exam Materials at all times. An inventory should be completed:

- Any time Exam Materials are exchanged between BACE Administrators
- Before and after an exam event occurs

For example, the Skills Evaluator should perform an inventory after receiving the Exam Materials from the Site Coordinator. This will permit them to gain familiarity with Practical Exam Materials, and confirm they have received all items needed for the day of the exam.

**Report Inventory Abnormalities**

If there are any discrepancies in the quantity of the items, or any items have been damaged in transit, BACE Administrators must contact Biotility immediately. In the event there is evidence of tampering of the shipping package or exam booklets, the Site Coordinator should note the irregularity on the Inventory Log, determine who had previous access to the materials, and contact Biotility. Biotility will determine the risk posed, and course of action.

**Procedures for Returning Exam Materials**

The Site Coordinator must return all Exam Materials to Biotility using the supplied FedEx Return Label. Please review the Exam Administration Procedures for a full list. The exam booklets will be filed in a secure location at Biotility for five (5) years.

**Exam Monitoring Policy**

BACE Administrators are responsible for ensuring candidates are monitored during the exam. Monitoring is defined as **constant observation** of candidates taking the exam. Monitoring the exam is an active process. Administrators are not permitted to work on other projects while monitoring. Specifically:

1. A BACE Administrator must be in the Exam Room at all times.
2. BACE Administrators/Exam Monitors must circulate through the Exam Room.
3. BACE Administrators/Exam Monitors must actively scan for prohibited items.
4. BACE Administrators/Exam Monitors must document any irregularities that occur.
5. Report any abnormalities (such as a fire drill, equipment breakdown, power outage, or in the instance the BACE Administrator left the Exam Room) to the Site Coordinator and on their BACE Administration Report.

Permitted and Prohibited Items Policy

Both the Knowledge and the Practical portions of the BACE are closed book. Candidates are not permitted to bring any items into the Exam Rooms. Additionally, candidates are not permitted to access any external source (such as a book or the internet) during the exam. All permitted Exam Materials will be provided by the BACE Administrator.

<table>
<thead>
<tr>
<th>Items Provided by BACE Administrator</th>
<th>Prohibited Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pencil</td>
<td>• No cell phones or other electronic devices</td>
</tr>
<tr>
<td>• Basic non-programmable calculators</td>
<td>• No food or drinks</td>
</tr>
<tr>
<td>• Scratch paper</td>
<td>• No reference materials</td>
</tr>
<tr>
<td></td>
<td>• No personal notebooks or scratch paper</td>
</tr>
</tbody>
</table>

Restroom Break Policy

Candidates

Proctors are to allow one candidate at a time to use the restroom. If candidates take a restroom break, their allotted test time will continue to countdown while they are away and the lost time cannot be recovered. Proctors should inform candidates before the break to avoid any confusion when they return.

Restroom Break Rules:

- Only one candidate is allowed to take a restroom break at a time
- A candidate is permitted to take multiple restroom breaks, if needed
- A candidate’s exam materials must be examined before they take a restroom break
- A candidate may NOT take their cell phone or any exam materials on a restroom break

Proctors

Because candidates must be continuously monitored by a Biotility-Certified BACE Administrator during the exam, sites may need to plan on certifying additional staff to ensure that proctors have the option to take a restroom break.

Teacher/Student Conflict-of-Interest Policy

Due to the technical nature of the Practical Exam, it may be necessary for teachers to serve as a Skills Evaluator for their own student, but all efforts should be made to avoid using a BACE Candidate’s own teacher in other BACE Administrator Roles. If a Teacher/Student Conflict-of-Interest exists in any BACE Administrator Role, an Exam Monitor must be present when handling testing materials and administering an exam. A student’s teacher is never permitted to serve as their Exam Monitor.
**BACE Administrator/Candidate Preparation Policy**

Administrators are not permitted to teach to the exam. It is imperative the Site Coordinator ensures no one breaks, or appears to break, Biotility’s Academic Honesty Policy. Administrators preparing candidates must not have access to the exam until the time scheduled. As stated in the Exam Material Security Procedures, BACE Administrators are not permitted to review or “thumb-through” the exam booklets.

BACE Administrators may help candidates prepare for the examination by instructing candidates to review the BACE Practice Exam Course available in UF e-learning. While there are no minimum requirements for attempting the BACE, it is recommended examinees have at least two years of a high school biotechnology program. Project Lead the Way (PLTW) candidates should perform well after completing the third course of the sequence, Medical Interventions, as well as Biology and Chemistry.

**Exam Scoring and Results Policy**

BACE Candidates earn the Biotechnician Assistant Credential when they achieve an overall score of 80% or above. Scores determined by averaging the highest grade of the Knowledge Exam and the highest grade of the Practical Exam. Candidates may retake the exam (one or both portions). All reports obtained through Biotility, including individual score reports, should be treated as confidential.

- Knowledge Exams are automatically graded within UF e-Learning
- Practical Exams are graded by Biotility, and the results are uploaded into UF e-Learning
- Skills Evaluation Grid Points are calculated by Biotility based on the Practical Exam Skills Evaluation Grid, then uploaded into UF e-Learning
- Candidate scores are only provided to the candidate and the Site Coordinator (or an approved district representative)
- Digital Credentials are issued through UF e-Learning

**Candidate Identification Policy**

All candidates must be identified with a school ID, or state- or federal-issued ID prior to distribution of Exam Materials. Teachers or BACE Administrators may NOT vouch for any candidate without an appropriate form of identification.

**Exam Accommodations Policy**

Exam accommodations for individuals with disabilities or an Individualized Education Program (IEP) must be preapproved by Biotility. The candidate must have a documented disability or IEP through their school to qualify for exam accommodations. If exam accommodations are needed, BACE Administrators should contact Biotility and coordinate implementation. Examples of exam accommodations that may be required include:

- Braille or large-print exam booklets
- A reader or screen-reading technology
- Scribes to transfer answers to bubble sheets or record dictated notes and essays
- Extended time
• Wheelchair-accessible exam stations
• Distraction-free rooms
• Physical prompts (such as for individuals with hearing impairments)
• Permission to bring and take medications during the exam (for example, for individuals with diabetes who must monitor their blood sugar and administer insulin)

Use ADA laws and/or the school’s policies to guide exam accommodation requests. The purpose of ADA is that accommodations be mutually agreeable and that they do not change the assessment process. Accommodations should not draw undue attention to the candidate’s disability. For example, a candidate with dyslexia or a visual impairment may require a reader, and the candidate will need to be tested separately to avoid distracting others.

Readers and Scribes should not be knowledgeable about the subject being tested, and must not provide any hints or help during the session. Since they require access to Exam Materials to perform their job, they must complete the Reader Non-Disclosure Agreement.

**Exam Environment Standards**
Each Exam Room should comply with the following standards.

• Adequate lighting and comfortable temperature
• Isolated from noisy areas (close the door to the Exam Room)
• Have a clock where candidates can see it
• Desks/computer stations set up Exam Room style, with room for proctor(s) to walk between rows
• Posters, charts, and other educational materials removed to avoid distractions
• If using tables, set a maximum of two candidates per six-foot table or three candidates per eight-foot table

**Practical Exam Equipment Calibration Guidelines**
Properly maintained and calibrated laboratory equipment is imperative for candidates to successfully challenge the BACE. Please be certain to perform routine maintenance on your laboratory equipment year-round, especially on micropipets, and pH meters and electrodes.

Be sure to clean and calibrate your pH meter routinely (based on usage and manufacturer recommendations). Store the pH electrodes in the recommended buffer when not in use.

Several good resources on pH meter maintenance and calibration may be found at these websites:

- [https://support.aperainst.com/support/solutions/folders/14000058278](https://support.aperainst.com/support/solutions/folders/14000058278)
- [https://support.hach.com/app/answers/answer_view/a_id/1000950/~/how-often-should-a-ph-or-conductivity-probe-be-calibrated%3F](https://support.hach.com/app/answers/answer_view/a_id/1000950/~/how-often-should-a-ph-or-conductivity-probe-be-calibrated%3F)
- [http://blog.hannainst.com/hannas-tips-to-use-when-calibrating-your-ph-meter](http://blog.hannainst.com/hannas-tips-to-use-when-calibrating-your-ph-meter)
- [https://bitesizebio.com/8750/how-to-care-for-your-ph-meter](https://bitesizebio.com/8750/how-to-care-for-your-ph-meter)
Routine maintenance and calibration are also important to keep micropipets working accurately (based on usage and manufacturer recommendations). Sources on micropipet maintenance and calibration may be found at these websites:


**Knowledge Exam Computer and Internet Specifications**

Because UFEL is built using web standards, it runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Supported Browsers (Current and first previous major releases of the following browsers): If the supported browser has not been updated within one, you may experience technical difficulties when attempting to enroll or log in.

- Chrome 75 and 76
- Firefox 67 and 68
- Edge 44 (Windows only)
- Respondus Lockdown Browser
- Safari 11 and 12 (Macintosh only)

Computer Stations must have:

- Ability to access UF e-Learning website
- A keyboard
- A minimum of a 15” monitor
- A mouse
UF QUICK REGISTRATION SYSTEM

All users must have an account in order to access the BACE content in UF e-Learning (UFEL). The UF Quick Registration system (QuickReg) is an automated online application that allows candidates to enroll in Biotility courses at any time, day or night.

**QuickReg Account Creation Overview**

Biotility will email the Site Coordinator an invitation containing a unique Enrollment Link to distribute to their candidates. To create an account candidates are asked to:

- Complete the registration with an external identity (*Preferably an existing LinkedIn account*)
- Provide requested registration information including name, birthdate, email address, and phone number
- Verify their email address

**QuickReg Account Creation Process**

1. Prospective candidates will click on the green “Enroll Now” button.

2. The candidate should continue their registration with either their Google account (gmail), their LinkedIn account, or their Facebook account.
3. If the candidate uses LinkedIn to register, they will see the screen below. Note: If the candidate does not have a LinkedIn account they may click the “Join Now” link.

4. The candidate will be asked to permit LinkedIn to share their email address and photo with UF. This is required to proceed.

5. Once the candidate signs on with either LinkedIn, Google, or Facebook they will then enter their name and date of birth.
6. After the candidate clicks on the green “Register” button, they will receive a verification email.

7. The verification email is shown below. It contains a verification link the candidate must click on in order to continue their registration.

8. Once the candidate is enrolled they will see the “successful enrollment” screen as shown, and receive an email with a link to their course in UF e-Learning.

Dear Candidate,

Click the link below to verify your email:
https://reg.distance.ufl.edu/reg/Account/Verify/7e196e7eb6

For questions concerning your registration, please email bace@research.ufl.edu or call 386-518-2116 during office hours from 8AM to 5PM EST.

Sincerely,
The UF Quick Registration Team

You have been successfully enrolled in the Biotechnician Assistant Credentialing Exam (BACE)!
DIGITAL CREDENTIALS

Candidates may view and share their digital credentials from within UF e-Learning. Upon passing a Biotility module, course, or exam, a digital credential is issued through Accredible. The candidate receives a branded, secure, and verifiable digital certification or badge. Using tools accessible in UF e-Learning, candidates may place the credential’s unique URL in a large variety of places, including:

- Social Media Profiles
- Websites and Blogs
- Digital Resumes
- Email Signatures

Candidates are provided multiple options for sharing their digital credential, but this manual will only cover one. For details on all options available please visit Accredible’s recipient knowledge base at https://help.accredible.com/recipients.

Viewing Digital Credentials

Once the criteria for earning the credential is met, candidates will have access to their credential in UF e-Learning. The digital credential is always located in the last assignment in a module, course, or exam. Candidates may open the assignment and then view, print, and share their credential from this screen.

Sharing Digital Credentials through LinkedIn

If candidates have not created a LinkedIn account, they will be prompted to do so when they attempt to add the credential to their LinkedIn profile. A bare-bones LinkedIn account can be created within ten minutes.

Candidates have free access to a professional development module through the BACE Practice Exam Course, which focuses on creating a professional LinkedIn profile and using LinkedIn to find career opportunities in the biotechnology industry.

By adding the digital credential to LinkedIn, the credential will appear on the candidate’s LinkedIn profile. Stakeholders, such as admissions officers or potential employers who click on the link, will be taken straight to a credential view where it can be verified. They can also see more information about what the achievement entails and thereby have a better understanding of the rigor of the credential earned.

Adding a digital credential to LinkedIn:

1. Click on ‘...' option at the bottom of the credential window, then from the pop-up menu that appears, click 'Add to LinkedIn Profile'
2. A pop-up window will appear with all the relevant information needed to copy and paste across to the LinkedIn profile.
3. At the bottom of the pop-up that appears, click on 'Open LinkedIn' to open the correct form that this information needs to be entered in to.
4. Copy and paste the relevant information from the Accredible pop-up window to the LinkedIn form.
5. Once all the information has been copied across, save and close the LinkedIn form.
Appendix A: BACE Registration Quick Guide

Information required for
Step 1: Exam Site Registration Form
(Deadline: 4 weeks prior to testing date)

- School information
  - School name
  - School district
  - PLTW status (if applicable)
  - School address

- Personal information for all designated BACE Administration Personnel¹
  - First name
  - Last name
  - Job title
  - Email address
  - Phone number
  - If the personnel serves as a teacher for any BACE candidate

¹See pages 10-14 of the BACE Procedures Manual for a full description of BACE Administrator roles and candidate ratio requirements. In order to ensure a smooth registration process, please double check the accuracy of all personnel information.

Information required for
Step 2: BACE Order Form
(Deadline: 4 weeks prior to testing date)

- Site Coordinator information
  - School name
  - Physical address (this address is used as the shipping address for all exam materials)

- Exam Dates
  - Knowledge Exam Date(s)
  - Practical Exam Date(s)

- Exam Order
  - Quantity of BACE Exams being ordered
  - Preferred payment method (Credit Card or PCard, Check, or Purchase Order)

- Billing Contact information
  - First name
  - Last name
  - Email address
  - Phone number
  - Billing address

²Payment is not collected immediately. Using the information you provide, Biotility will create an invoice and email it to the Billing Contact with payment instructions.
Appendix B: Optimum Layout for Knowledge and Practical Exam Stations

These two exam room floor plans are the optimum (not required) layouts for the BACE Knowledge Exam 1 and Practical Exam 2.

When planning the exam room layout, best practices are:

- Use a computer lab for the Knowledge Exam.
- Use a science lab for the Practical Exam.
- Verify all Practical Station areas have power.
- Place the Proctor Station so all candidates can be observed while testing. The preferred location is in the back of the room.
- Arrange candidate seats so they are all facing the same direction and/or facing the wall.

Legend

- Check-in Desk
- Computer Station
- Desk Station
- Practical Station
- Candidate Direction
- Proctor
## Appendix C: BACE Practical Exam Materials Checklist

Schools are required to supply part of the materials needed for the Practical Exam. Below is the list of supplies needed for a single Practical Exam session for 1 – 20 candidates. Biotility will supply all other exam materials needed. Schools testing groups larger than 20 candidates in one session should duplicate this list and setup two of each Practical Exam Station. **If you cannot meet the minimum equipment requirements, email Biotility at BACE@research.ufl.edu as soon as possible, but at least four weeks in advance of your scheduled testing date.** Biotility will attempt to supply the missing equipment. Depending on equipment requested, additional shipping costs may apply. All equipment must be working properly and calibrated (if appropriate). For resources on equipment calibration, see Practical Exam Equipment Calibration Guidelines.

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum # Needed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipet aid, pipet pump, or pipet bulb</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P20 micropipets (cannot be fixed-volume)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>P200 micropipets (cannot be fixed-volume)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P1000 micropipets (cannot be fixed-volume)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Electronic balance (to one decimal place/0.1 gram)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Benchtop pH meter (to two decimal places)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>37° incubator</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Horizontal gel electrophoresis box</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Horizontal gel electrophoresis box power supply</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Compound Microscope</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Plastic &amp; Glassware</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biohazard waste bins</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Volumetric flask or Graduated Cylinder - any size</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Beakers (200 mL or larger)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Spatula</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>dH2O wash bottle</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Microfuge tube racks (48-tube capacity)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Test tube racks</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Disposables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biohazard bags</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Gloves</td>
<td>1 set per candidate</td>
<td></td>
</tr>
<tr>
<td>P20 micropipet tip boxes</td>
<td>2 boxes</td>
<td></td>
</tr>
<tr>
<td>P200 micropipet tip boxes</td>
<td>1 box</td>
<td></td>
</tr>
<tr>
<td>P1000 micropipet tip boxes</td>
<td>2 boxes</td>
<td></td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory scale brush</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nonprogrammable calculators</td>
<td>1 per candidate</td>
<td></td>
</tr>
<tr>
<td>Ink Pen, Black or Blue Ink Only</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>#2 Pencils</td>
<td>2 per candidate</td>
<td></td>
</tr>
<tr>
<td>Pencil Sharpener</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ultra Fine Point Sharpie Markers</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D: Non-Disclosure Agreement – Reader/Scribe/Interpreter

Reader/Scribe Criteria - A Reader/Scribe/Interpreter must be a school or district employee that is not related to any candidates taking the BACE.

Role of a Reader/Scribe - A Reader/Scribe/Interpreter is to assist an exam candidate by speaking aloud the words on the examination exactly as they are written onscreen or in the exam booklet and mark the answer sheet, or select the candidate’s answer onscreen.

Academic Honesty Policy - BACE Candidates and Administrators are expected to act ethically and honorably. Candidates are prohibited from accessing Exam Materials prior to the exam. During the exam it is prohibited to accept assistance from, or give assistance to, other candidates. Copying, photographing, or recording of any of the Exam Materials in any fixed medium is not permitted. At the end of the exam all materials, including scratch paper, must be returned to the proctor. If you witness any violation of this policy, you should report it directly to Biotility at 386.462.3181 or by email at BACE@research.ufl.edu.

As a Reader/Scribe/Interpreter, I understand that:

- I CANNOT give an interpretation of any of the words in the exam
- I CANNOT explain what any of the questions are asking
- The candidate is to make his/her own decision regarding which answer to select on the exam
- The exam session may be recorded or monitored to be evaluated for compliance with this policy

I hereby confirm that I meet the criteria to be a Reader/Scribe/Interpreter. I agree to abide by the role of a Reader/Scribe/Interpreter and the Academic Honesty Policy as defined above, and I affirm that I will not disclose or provide to anyone, directly, or indirectly, any information of documents pertaining to the Biotechnician Assistant Credentialing Exam.

I am reading/scribing for

First and Last Name of exam candidate (Printed)

Signature Date

Educational Institution or Company

Address

City State Zip Code

Email Address Phone Number
Appendix E: Script for Proctoring Knowledge Exam

[Pre-distribute scratch paper, pencils, and basic non-programmable calculators for the candidates. Read the following to start the exam]

[Greeting]

“On behalf of Biotility at the University of Florida’s Center of Excellence for Regenerative Health Biotechnology and [school name], I want to welcome you to this exam session and wish you success in your efforts today. If at any time during the following instructions you have a question, raise your hand, and I will assist you.

“At your computer station you have been provided a basic calculator, a pencil, and a piece of scratch paper. If you are missing these items, raise your hand and I will bring them to you. All other items must be put away and your station must be clear.

[Exam Rules]

“Prior to starting the exam, I want to describe the overall examination process. First, I will go over the general exam rules, which you must follow in order to receive a score.

“The following procedures will be observed at all times during the exam session:

- “Cell phones, food, drinks, and personal items are NOT permitted at your desk. If you still have any of these items, store them (insert designated location). Please turn off your cellphone before you put it away.
- “You are not permitted to communicate with other candidates during the exam. If you have a question raise your hand and I will come to you.
- “You are not permitted to search external references for answers during the exam. External references include books, notebooks, or internet. If you visit any other website while taking the exam, you will be immediately disqualified.
- “If during this session you need to use the restroom, raise your hand. Only one person at a time will be permitted to leave the room. While on a break, you are not permitted to talk with anyone outside the room. You will not be granted any additional exam time to make up for time spent outside the exam room.

“Please write your name on the top of your scratch paper. If you need additional scratch paper, raise your hand and I will bring it to you. You will be required to turn it in before you leave the room.

“You are allowed three hours complete the exam. If you finish your exam early, raise your hand, and I will ensure you have properly submitted your exam. Once your exam has been submitted, you will be permitted to leave.

“After you take both the Knowledge and Practical Exams your teacher will be notified of your scores.
[Exam Login]

“The exam you will be taking is administered online through internet connections which have been set up for you. During the exam log on, it is very important you follow along with me step by step.

1. To access UF e-Learning go to https://reg.distance.ufl.edu/reg/Account/Login and click the type of account you enrolled through.

   If candidates have not already enrolled, please provide them with the enrollment link instead and refer to the UF Quick Reg instructions.

2. Enter your Username and Password and click the LOGIN button. Has everyone successfully logged in? [At this point help any candidates who could not log on. If there is a problem you cannot diagnose, call the UF Help Desk immediately. When all candidates are logged, continue.]

3. On the Dashboard, click the BACE 2020 course tile.

4. On the Home Tab, click Modules [under Home in the left-hand menu]

5. On the Modules Tab, select BACE Knowledge Exam – Attempt 1 [or appropriate attempt]

6. Click the Take Quiz button.

In just a moment I will provide you with the access code to start your exam.”

[While you read the following instructions, walk around the room and confirm each candidate is on the “Access Code” screen.]

[Exam Navigation]

“When you start the exam, you will be presented with the first question and your time will begin. Select your answer using the mouse and then select NEXT move to the next question. Each question contains a flag for you if you wish to review the question later. You may navigate between questions, and return back to ones you would like to review. Do not use the browser buttons to navigate within the exam; instead, use the navigation buttons at the bottom of each page or the list of questions in the top right corner. You may be disconnected from the exam if you use the browser buttons.

“Also in the top right corner, there will be a time listed which displays the date and time your exam ends and a timer counting down the time remaining. Your exam will automatically end and close precisely at the attempt due time listed. You will have 180 minutes (three hours) to complete the exam. I will announce when you have approximately 120, 60, 30, 15, and 5 minutes remaining for your exam.

“All answers must be recorded online. You will not be given credit for any questions that have been answered incorrectly or left blank. Nor will you be given credit for answers written on scratch paper. If you do not know the answer to a question, it is to your advantage to select one since you will not receive credit for answers that are left blank so be sure to answer all questions before submitting your exam.

“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 number with no decimals. It is important for you to remember to use significant figures only when the question specifically asks for them. Otherwise, please follow the directions in each question.
“When you are finished with the exam in its entirety, please select the SUBMIT QUIZ button. Before you submit your exam for scoring, raise your hand so I may collect all pencils, calculators, and scratch paper given to you.

“If you have questions about the process or trouble with your workstation, raise your hand and I will assist you as quickly as possible. I will NOT answer questions related to the content of the exam.

“Are there any questions on how to use the computer terminal in taking this assessment?

[If there are not questions, start the exam.]

[Start Exam]

“When you are ready, please input the Access Code [read Access Code number you received from your Site Coordinator] to start the exam. The exam will open immediately and your time will begin.

[Alert candidates when they have approximately 120, 60, 30, 15, and 5 minutes remaining in their exam.]
Appendix F: Script for Proctoring Practical Exam

[Pre-distribute pencils and basic non-programmable calculators for the candidates. Read the following to start the exam.]

[Greeting]
“On behalf of Biotility at the University of Florida’s Center of Excellence for Regenerative Health Biotechnology and [school name], I want to welcome you to this exam session and wish you success in your efforts today. If at any time during the following instructions you have a question, raise your hand and I will assist you.

“At your desk are a basic calculator and a pencil. If you are missing these items, raise your hand and I will bring them to you. All other items must be put away, and your desk must be clear.

[Distribute Exam Booklets]
“In a moment, I will distribute your exam booklets. DO NOT open your exam booklet until instructed.

[At this time, you should distribute the exams one at a time to the candidates. Do not have the candidates pass booklets across rows. Once each candidate has received an exam booklet, continue with the instructions as follows.]

[Exam Rules]
“Prior to starting the exam, I will describe the overall examination process. First, I will go over the general exam rules, which are also posted on the cover of your exam booklet. You must follow these rules in order to receive a score. While we review the rules, please print your name, the school name, and today’s date [give date] on the lines provided.

“The following procedures must be observed at all times during the exam session:

• “You are not permitted to open your exam booklet until instructed.”
• “Cell phones, food, drinks, and personal items are NOT permitted at your desk. If you still have any of these items, store them (insert designated location). Please turn off your cellphone before you put it away.
• “You are not permitted to communicate with other candidates during the exam. If you have a question raise your hand and I will come to you.
• “You are not permitted to search external references for answers during the exam. External references include books, notebooks, or internet.
• “All answers must be recorded on your answer sheet. Instructions for filling out the answer sheet are on the back of your exam booklet. We will review those instructions together in a moment.
• “You are not permitted to leave the Exam Room unless all Exam Materials given to you are collected by a proctor.

“I’d also like to address a few rules that are not on your exam booklet.

“If during this session you need to use the restroom, raise your hand. Only one person at a time will be permitted to leave the room. While on a break, you are not permitted to talk with anyone
outside the room. You will not be granted any additional exam time to make up for time spent outside the exam room.

“Scratch paper is included in the back of your exam booklet. If you need additional scratch paper, raise your hand and I will bring it to you. You will be required to turn any scratch paper in before you leave the room.

“Please take a moment to read and sign the Academic Honesty Policy. When you are finished, please turn your exam booklets over and we will review the answer sheet instructions. [Wait for all candidates before proceeding.]

[Infilling Exam Booklet Inserts]

“Please break the seals on your exam booklet, take out the Practical Exam Station Evaluation Sheet and Practical Exam Answer Sheet [located inside front cover of exam booklet], and close your exam booklet. Listen carefully to the following instructions for filling out the exam booklet documents.

The Practical Exam Station Evaluation Sheet will be used when evaluating your performance at Stations 4 and 5. I will collect this document before we begin filling out the Practical Exam Answer Sheet

• First, check that the Exam Serial Number and Exam Key on the cover of your exam booklet match those on your station evaluation sheet. Please raise your hand if they do not match.
• In the first box, print your name, email address, school name, and today’s date [give date] on the lines provided.

“If you are unsure whether you have filled in the information properly, raise your hand and I will assist you.

[At this time, you should collect the Practical Exam Station Evaluation Sheet. Do NOT have the candidates pass sheets across rows. Once each candidate has turned in their Practical Exam Station Evaluation Sheet, continue with the instructions as follows.]

On your Practical Exam Answer Sheet

• First, check the Exam Serial Number and Exam Key on the cover of your exam booklet match those on your answer sheet. Please raise your hand if they do not match.
• In the first box, print your name, school name, email address, and today’s date [give date] on the lines provided.
• In the second box, sign your name on the answer sheet, remembering that you are signing an honor pledge that you have neither given nor received unauthorized aid in completing this exam.
• In the third and final box, write your first name, last name, and middle initial and infill the appropriate bubbles.

“If you are unsure whether you have filled in the information properly, raise your hand and I will assist you.

“All exam questions will be either multiple choice or calculations. The answer sheet instructions, found on the back page of the exam booklet, demonstrate how to complete each type of question properly.
For multiple choice questions, select one answer for each question and fill in the appropriate bubble completely. For calculations, use the Grid-in questions instructions. Write in your answer starting in the left column. Leave extra columns blank. Fill in the appropriate bubbles completely. Units and decimal places will be designated in the question. Do not include units in the answer grid.

“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 number with no decimals. It is important for you to remember to use significant figures only when the question specifically asks for them. Otherwise, please follow the directions in each question.

“All answers must be recorded on your exam answer sheet. You will not be given credit for any questions that have been answered incorrectly or left blank. Nor will you be given credit for answers written on scratch paper. Be sure to answer all questions on the answer sheet before submitting your exam.

“You must use a pencil to complete the answer sheet. If you have to change an answer, be sure to erase it completely without damaging the exam answer sheet. Do NOT use your answer sheet as scratch paper. Do NOT write in the margins or make stray marks on your answer sheet.

“Because of the nature of the exam process, I am unable to answer questions of a technical nature during the exam. If you have a comment about the process, such as a missing page or poor print quality on your exam booklet, or if you need clarification on how to complete the answer sheet, please raise your hand and I will assist you.

[Laboratory Station Instructions]

“In addition to the completing the questions in your exam booklet, you will complete tasks at the stations located throughout the room. I will tell you when you should move stations, and at which station you should be. You do NOT need to complete the stations in order.

I will go over the way you should systematically approach each station. These instructions are also posted in your exam booklet at the beginning of the Station Section. At each station, you should:

- Read the station instructions and all associated questions.
- Perform station instructions and answer all associated questions.
- Record your answers on your BACE Practical Exam Answer Sheet.

“Once you complete a station, you should reset it to its original arrangement using the station reset instructions provided in the exam booklet. Make sure not to dispose of critical station supplies, such as solutions and reagents, needed to perform the tasks at each station. Lastly, check the box in your exam booklet verifying you have reset the station, and return to your seat [or indicate where you would like the candidate to move to].

“If you have a problem at a station which prevents you from complete the tasks, such as missing supplies or malfunctioning equipment, please raise your hand and I will assist you.
[Start Exam]
“You are allowed four hours complete the exam. If you finish the exam early, raise your hand, and I will come and collect your Exam Materials. Once all materials have been accounted for, you may be permitted to leave the room.

“You will not receive a score today. After you take both the Knowledge and Practical Exams your teacher will be notified of your scores. Are there any questions? [Answer candidate questions]

“Remember, you are not permitted to communicate with other candidates during the exam. If you have a question, raise your hand and I will come to you.

“It is now (insert the exact time). The exam will end at (insert the stop time). Please begin now. [Document the start time on the Exam Roster]

[During the Exam]
[During the exam process, make the following announcements to inform candidates of the remaining time for the exam:]

1. [When and which stations the candidates should be rotating to]
2. [Alert candidates when they have approximately 120, 60, 30, 15, and 5 minutes remaining in their exam.]

[Stop the Exam]
[After the allotted exam time has elapsed, say,] “Stop. Place your answer sheet and any scratch paper in your exam booklets, close your exam booklets, put your pencils down, and remain seated. I will now collect your exam booklets.”

[Collect Exam Materials and dismiss the candidates one by one]
Appendix G: Prohibited Items

Please be prepared to present your ID.

Your proctor will provide:

- Pencil
- Calculator
- Scratch paper

Prohibited Items:

- No phones or electronic devices
- No food or drinks
- No reference materials or personal notebooks
- No scratch paper
- No bags, purses, or backpacks
Appendix H: Quiet Please

Quiet Please

Testing in Progress
## Appendix I: Candidate Sign-in Sheet

Exam Site: _____________________________________________________
Exam Date: ___________  Primary Administrator: ____________________
Exam Start Time: _______  Exam Portion (Circle one): Knowledge / Practical

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Appendix J: BACE Administration Report

Complete the following form for each exam administration you participate in.

1. Administrator role(s) you performed (Check all that apply):
   - Site Coordinator
   - Skills Evaluator
   - Online Proctor
   - Exam Monitor
   - Interpreter
   - Reader/Scribe

   Name: ____________________________________________
   Phone #: _________________________________________

   Exam Site: _______________________________________
   Exam Date: _______________________________________

   Time in: ____________________ Time out: _________________

   Exam Start Time: ______________ Exam End Time: __________

   # of Candidates Tested: ________ # of Administrators Present: ________

2. Type of administration (Check one):
   - Knowledge Exam
   - Practical Exam

3. □ YES □ NO Did you witness a testing irregularity during the exam administration? If YES, attach a separate document explaining the incident(s), the candidate(s) involved, and remediation.

4. □ YES □ NO Did you witness violations of the BACE’s Academic Honesty Policy or other BACE Policies and Procedures?

5. □ YES □ NO Did any candidate(s) receive exam accommodations? If YES, please enter the number of candidates who received accommodations ______

6. □ YES □ NO Not counting candidate dismissals. Did any individual (including yourself, unauthorized personnel, other BACE Administrators, or candidates) enter or leave the room during the exam? If YES, attach a list of names and circumstances.

7. Attach a copy of the Candidate Sign-in Sheet

8. Attach a list of the candidates who did not appear for the test.

Please use your judgment about the need to inform individuals at your school about testing irregularities. Violations of BACE Procedures can be reported anonymously or confidentially to Biotility through the BACE Registration website, by calling 386.462.3181, or by email at BACE@research.ufl.edu

I confirm that the information given in this form and attached documents is true, complete and accurate.

__________________________________________ Date

Signature

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Items 7-8 should only be submitted once per exam event. If multiple administrators were present for an administration, provide the name of the individual responsible for submitting the information.