INDUSTRIAL BIOTECHNOLOGY

In addition to applying to Palm Beach State College, declaring the appropriate Palm Beach State award program code:

<table>
<thead>
<tr>
<th>Credit Certificate in:</th>
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<tbody>
<tr>
<td>Biotechnology CCC (6159)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Associate Degree in:</th>
</tr>
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<tbody>
<tr>
<td>Biotechnology AS (2158)</td>
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</tbody>
</table>

and completing specific high school CTE courses with a grade of B or higher, the following assessment will be made for the awarded courses below:

**BSC1404C Introduction to Biotechnological Methods** (5 credits)

*Course Description:* This course builds upon the concepts taught in Introduction to Biotechnology and teaches basic concepts and techniques necessary to work effectively in a biotechnology laboratory. The nature of science, lab work, and the role of the biotechnician will be discussed. Basic skills learned include: following procedures and keeping records; laboratory safety procedures for biological, chemical, and radiological hazards; laboratory mathematics and measuring; preparing solutions; and basic techniques used in separating biomolecules. Students will develop confidence in their ability to work safely with basic biotech lab instruments. Course credit awarded through prior learning assessment process.

*Course Learning Outcomes:*

- Explain and apply techniques of basic laboratory preparations, standard operating procedures, laboratory safety guidelines, and equipment operation. Written tests, reports and/or use of equipment will demonstrate student competency in field.
- In order to demonstrate knowledge of scientific method, students will be able to formulate a problem, make observations, derive and test hypothesis and make conclusions.
- Communicate scientific ideas through oral or written assignments. Students will use analytical reasoning skills to solve problems on written tests and/or laboratory work.
- Demonstrate problem solving methods in situations that are encountered outside of the classroom. Students will use demonstrations, group discussions, written tests, laboratory reports, research projects and/or field experiences to illustrate competence in recognizing and evaluating various scientific processes.
- Demonstrate proper laboratory techniques including safety in the use and care of laboratory equipment and materials. Results from laboratory work and experiments will demonstrate student awareness of science and society.
- Interpret scientific models such as formulas, graphs, tables and schematics, draw inferences from them and recognize their limitations. Written reports of lab experiments and/or written tests will assess student competency in the application of scientific knowledge.

*Assessment* - 80% on BSC1404C challenge exam (written and practical) **Written exam located in College Testing Center; practical exam offered in the Biotechnology Lab on the Palm Beach Gardens Campus**

Continue to next page for Test Procedure

When student completes the assessment process they should return to the contact person for the Career Pathway Agreement being followed to finish the credit award process.
Biotechnology Challenge Exam Procedure (High School Biotechnology Academy Students)

Basic Guidelines:
- The Palm Beach State Biotechnology Challenge Exam will be administered once an academic year. This exam is for high school seniors who have completed designated courses in a School District of Palm Beach County Biotechnology Academy.
- Test administration dates will avoid FCAT blackout periods in the high schools and will coordinate with the Palm Beach Community College Biotechnology Exam timeline during the end of the Spring term or within the Summer testing period.
- The written portion of the exam will be administered on the same day as the lab portion of the exam. The location will be determined by consensus of the SDPBC Biotechnology Academy representatives and the Palm Beach State Biotechnology faculty designate.
- The Palm Beach State Biotechnology Challenge Exam will be housed at Palm Beach State College. For security purposes, all copies of the exam will be administered and stored at Palm Beach State College.

Pre-Exam Procedure:

The School District of Palm Beach County will:
- Identify the number and types of tests needed at each of high school
- Set-up the dates of the test administration and coordinate transportation to the Palm Beach State exam site, the Palm Beach Gardens campus
- Communicate with students and parents about the Challenge Exam administration dates and on the timeframe for verifying eligibility to take the exam.
- Verify students taking the exam have Palm Beach State student ID. Those that do not instruct to follow directions on Challenge Exam Test Fee form
- Verify that students taking the exam have paid the required fee at a Palm Beach state cashier location
- Together with Palm Beach State College representatives decide how the exam will be administered.
- Coordinate the creation distribution of a completion certificate (including scores) for high school students who complete the Challenge Exam. This will be kept in the student’s high school records as well as be shared with Palm Beach State upon request.

Palm Beach State College will:
- Together with the School District of Palm Beach County representatives decide how and when the exams will be administered.
- Arrange for the high school students’ exam to be graded through the Palm Beach State College Biotechnology program.
- Send the results of the exam to the School District, verifying which students will need to take the required courses because of exam scores lower than 80%.
- Together with the School District representatives decide how these scores will be distributed to the student and their parents and posted to the students Palm Beach State transcript.
- Arrange for the storage of test copies.
- Advise students who must take BSC 2421 and BSC 2421L when these courses will be available for registration.

When student completes the assessment process they should return to the contact person for the Career Pathway Agreement being followed to finish the credit award process.
Day of the Exam Procedure:

High School Student Taking Challenge Exam:
- Present Challenge Exam Fee form at Palm Beach State College Cashier’s office and pay challenge exam fee
- Secure fee receipt to Challenge Exam Fee form
- Bring proper ID and Challenge Exam Fee form to exam site

Palm Beach State College
- Verify all student identifications prior to starting the exam (Driver’s License or HS Student ID)
- Collect Challenge Exam fee forms plus receipts prior to starting the exam
- At the end of the exam, advise students of the next step in the Challenge exam process
- Advise students who do pass challenge exam to fill in the Career Pathways Prior Learning form and schedule an advising meeting with the Biotechnology Program Manager to complete the process
- Advise students who may not pass challenge exam of the next available offering of BSC 2421 and BSC 2421L, Introduction to Biotechnology and it’s lab at Palm Beach State College.

After completion and scoring of Career Pathways Challenge Exam - Biotechnology

For those students who pass the challenge exam:
- Complete a Career Pathways, Prior Learning form
- Meet with Palm Beach State Biotechnology Program Director to review form

For those students who do not pass the Challenge Exam with an 80%:
- If planning to attend Palm Beach State College Biotechnology program but took challenge exam with non-credit student number, be sure that they file a College Application credit application.
- Register for BSC 2421 and BSC 2421L, Introduction to Biotechnology and its lab

Biotechnology Program Director:
- Scores exams and posts results to Challenge Exam Fee form
- Make copy of original receipt-keep copy, send original to School District to notify students and post to student file.
- For those students who pass the exam and submit a Career Pathways Prior Learning form, work with them to complete the form
- Collect the necessary signatures to process the Career Pathways Biotechnology Prior Learning form
- Turn in completed forms with collected signatures to Registrar’s Office for processing
- Advise students who did not pass challenge exam of the next available offering of BSC 2421 and BSC 2421L, Introduction to Biotechnology and it’s lab.

When student completes the assessment process they should return to the contact person for the Career Pathway Agreement being followed to finish the credit award process.
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<table>
<thead>
<tr>
<th>Position/Program</th>
<th>Name</th>
<th>Phone</th>
<th>MS/Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Academic Programs <em>(Testing Center)</em></td>
<td>Moore, Barry</td>
<td>993-1134</td>
<td>43 / CRA-105.2</td>
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</tbody>
</table>

### Belle Glade Campus

<table>
<thead>
<tr>
<th>Position/Program</th>
<th>Name</th>
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<th>MS/Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Dean, Academic Affairs – Architecture, Art &amp; Humanities Developmental Education (excluding Math), Economics, English &amp; Literature, Foreign Language, Massage Therapy (PSAV), Social Sciences, Speech, Student Learning Center (SLC) <em>(Testing Center)</em></td>
<td>Bruton, Leonard</td>
<td>862-4414</td>
<td>44 / AD-414</td>
</tr>
<tr>
<td>Associate Dean, Academic Affairs- Business &amp; Technology (including Computer Programs), Entrepreneurship, Health &amp; Nutrition, Mathematics Credit &amp; Prep, Natural &amp; Physical Science <em>(Testing Center)</em></td>
<td>Coleman-Ferrell, Nika</td>
<td>862-4415</td>
<td>44 / AD-405</td>
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### Boca Raton Campus

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<th>Position/Program</th>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Associate Dean, Academic Affairs, Business Programs, Computer Science <em>(Testing Center)</em></td>
<td>Knopp, David</td>
<td>868-3689</td>
<td>49 / BA-302.1</td>
</tr>
<tr>
<td>Associate Dean, Academic Affairs (Health Sciences)- Dental Assisting, Dental Hygiene, Health Education, Physical Education, Nutrition, Medical Assisting, Medical Information Coder/Biller, Medical Transcription, Health Informatics Specialist, Health Information Technology, Patient Care Assistant, Practical Nursing, Surgical Technology, Center for Health Sciences and Public Safety Advanced Education <em>(Testing Center)</em></td>
<td>Zinser, Nancy</td>
<td>868-3744</td>
<td>60 / ETA-150</td>
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### Lake Worth Campus

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<th>Position/Program</th>
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</thead>
<tbody>
<tr>
<td>Associate Dean, Academic Affairs- Developmental Education, Speech, Humanities, Visual Arts, English <em>(Testing Center)</em></td>
<td>Gingras, Robert</td>
<td>207-5421</td>
<td>45 / BB108.3</td>
</tr>
</tbody>
</table>

### Palm Beach Gardens

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<tr>
<th>Position/Program</th>
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</thead>
<tbody>
<tr>
<td>Director-Biotechnology <em>(Evaluation and Practical Exam administration)</em></td>
<td>Mercer, Becky Ann</td>
<td>207-5059</td>
<td>SC-205</td>
</tr>
<tr>
<td>Biotechnology Faculty <em>(Evaluation and Practical Exam administration)</em></td>
<td>Gorgevsk, Alexandra</td>
<td>207-5003</td>
<td>SC-209</td>
</tr>
</tbody>
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Contact Information Position/Program column includes assistance provided in parentheses. Ex. *(Testing Center)*: