# SUBJECT MATTER TRACK PHYSICAL SCIENCE (PHYSICS/CHEMISTRY) & EDUCATION

GUIDELINES FOR DETERMINING
ELIGIBILITY FOR ADMISSION TO
EDUCATION PROGRAM, CLINICAL
PRACTICE AND COMPLETION OF
PROGRAM
2016-2017

Rev by: Dr. Issam Abi-El-Mona Rev. 09/01/2016

## GUIDELINES FOR DETERMINING ELIGIBILITY FOR ADMISSION TO EDUCATION PROGRAM, CLINICAL PRACTICE AND COMPLETION OF PROGRAM

### INTRODUCTION

The purpose of this guideline is to provide all native, transfer, and post-baccalaureate students interested in pursuing K-12 Physical Science certification in the Subject-Matter Education program and/or seeking enrollment in Clinical Practice (student teaching) the requirements needed to accomplish a certification in the teaching of Physical Science with an emphasis in Physics or Chemistry. The following pages provide the candidate, in order, the requirements that need to be met to enter into the program, enroll in the clinical practice experience and achieve successful program completion. Candidates are also provided with the most recent version of the appropriate degree requirements for the Physical Science: Physics program from the Department of Physics & Astronomy and/or the Physical Science: Chemistry program from the Department of Chemistry & Biochemistry [see attached sheets]. Candidates can choose to target any science content core courses throughout their Physical Science program only with the consent and approval of their science program advisor. Education based courses must be approved through the education advisor. Further, a checklist of eligibility requirements accomplished is to be completed by candidate and the education advisor as candidate pursues this dual major program. Finally common questions and or concerns asked are provided for the candidate's reference.

NOTE: Please be aware that any disciplinary or academic sanctions will/may result in extended time for program completion and will prolong graduation.

### **Benchmark Exemptions:**

On June 4, 2014, the State Board of Education adopted new regulations for teacher preparation program entry and teacher certification. These rules include a new basic skills requirement:

- Candidates starting a traditional teacher preparation program in or after the 2015-16 academic year must pass a basic skills assessment prior to starting coursework in a program
- Alternate route candidates seeking a Certificate of Eligibility (CE) must pass a basic skills assessment to obtain the CE as of September 1, 2015.

Candidates are exempt from the basic skills requirement (Praxis Core) if they can demonstrate a score on the SAT, ACT, or GRE at or above the cut score for the year in which they took the exam. To see if you are exempt please check:

http://www.state.ni.us/education/educators/rpr/preparation/BasicSkillsExemptionCutScores.pdf

### IMPORTANT NOTIFICATION

PLEASE NOTE THAT THERE HAVE BEEN CHANGES TO THESE GUIDELINES IN ACCORDANCE WITH THE NJ DEPARTMENT OF EDUCATION GUIDELINES FOR CERTIFICATION. THERE NOW EXIST NEW REQUIREMENTS FOR STUDENTS SEEKING SCIENCE CERTIFICATION. IN ADDITION TO BEING EMBEDDED IN THESE REVISED GUIDELINES (YOU CAN ALSO SEE THESE IN RED WITHIN THE GUIDELINES). THE REQUIREMENTS ARE:

- Overall GPA must be 3.0 or above upon entry, during and exit of program \*
- Overall GPA must be 3.0 for all education/ professional courses \*
- Grades of C- or better (no D's, F's or Incompletes) in all general education, core and specialization courses required for the B.A. in education
- "Meets Expectations" on dispositional reports from College of Education instructors and cooperating teachers
- Passing score on Praxis Core Academic Skills for Educators test\*
  - Reading Test (Test Code 5712): Score of at least 156
  - O Writing Test (Test Code 5722): Score of at least 162: and
  - Math Test (Test Code 5732): Score of at least 150

<sup>\*</sup>Please note that these items are both non-negotiable and non-appealable

### REQUIREMENTS FOR CERTIFICATION

All native and transfer students interested in pursuing K-12 Physical Science (Emphasis in Physics or Chemistry) certification in the Subject-Matter Education program and/or seeking enrollment in Clinical Practice (student teaching) must meet the following requirements:

### For entry into the Subject-Matter Education Program:

- 1. Physical Science(Physics and Chemistry classes) GPA\* of 2.00 or above
- 2. Grades of C- or better in all Physical Science (Physics and Chemistry) classes
- 3. Grades of C- (no D's, F's or Incompletes) in all general education, core, ore specialization courses required for the B.A. in education
- 1. Grades of C- or higher in "sophomore" courses. Please note that the sophomore courses will change (i.e. TLC I and II) pending curricular approval for 2016-2017. Regardless, grade policy will still apply.
- 4. "Meets Expectations" on dispositional reports from College of Education instructors and cooperating teachers
- 5. Overall GPA of at least 3.0
- 6. Passing score on Praxis Core Academic Skills for Educators:
  - 1. Reading Test (Test Code 5712): Score of at least 156
  - 2. Writing Test (Test Code 5722): Score of at least 162: and
    - 3. Math Test (Test Code 5732): Score of at least 150
- Required and/or Restricted Elective physical science courses (as listed in <a href="http://www.rowan.edu/colleges/csm/departments/physics/acad/prog-physicilist.html">http://www.rowan.edu/colleges/csm/departments/physics/acad/prog-physicilist.html</a> for Physical Science-Physics Or as listed in <a href="http://www.rowan.edu/colleges/csm/departments/chembio/acad/">http://www.rowan.edu/colleges/csm/departments/physics/acad/prog-physicilist.html</a> for Physical Science-Chemistry) completed
  - Undergraduates: at least 15 semester hours

### For enrollment in Clinical Practice:

- 1. Physical Science (Physics and Chemistry classes) GPA\* of 2.00 or above
- 2. Grade of C- or better in all Physical Science (Physics and Chemistry) classes
- 3. Completion of at least 30 semester hours of *Required* and/or *Restricted Elective* physical science courses (as listed in <a href="http://www.rowan.edu/colleges/csm/departments/physics/acad/prog-physcilist.html">http://www.rowan.edu/colleges/csm/departments/physics/acad/prog-physcilist.html</a> for Physical Science: Physics *Or* as listed in <a href="http://www.rowan.edu/colleges/csm/departments/chembio/acad/">http://www.rowan.edu/colleges/csm/departments/chembio/acad/</a> for Physical Science: Chemistry)
- 4. Passing scores (152, 141 and 152) on the PRAXIS II exam (Chemistry: Content Knowledge (5245/0245), Physics Content Knowledge (5265/0265), and Gen Science Knowledge (5435/0435)
- 5. Average grade of 3.0 in professional courses with no course grade lower than C and no Incompletes
- 6. Overall GPA of 3.0
- 7. Acceptable dispositional report(s) from university instructors and cooperating teachers
- 8. "Meets Expectations" on Curriculum Study Report -both Safety and Curricular Practices-(Teaching and Learning A Science), Research Based Lab Project and Analysis Paper (Teaching and Learning B Science) and Science Inquiry Based Unit (Teaching and Learning A & B Science)

### For successful program completion:

- 1. "Meets Expectations" on all indicators (COE and Physical Science program-specific) of final Clinical Practice Evaluations
- 2. Exit Overall GPA of 3.0
- 3. Average grade of 3.0 in professional courses with no course grade lower than C and no *Incompletes*
- 4. Achieve minimum *Physical Science GPA*\* (2.00) with no grade lower than C- in physics and chemistry classes
- 5. "Meets Expectations" on Science Inquiry Unit Plan Project

### **Essential Notes:**

- Again, all students need to refer to both their science and education advisors to make sure that courses chosen satisfy the number
  of credits in their content area needed for teaching certification.
- Please note that at least one of the approved physics or chemistry course should be 4 credits to provide you with the state based requirements completion of an overall 30 credits in physics/ chemistry classes.
- For all students, all of the required courses and any eligible electives *must* be used in the calculation of the Physical Science (Physics and Chemistry classes) GPA (i.e., none of these courses is to be excluded in GPA calculation).
- For transfer (and native students taking any of these courses at other institutions), the Physical Science (Physics and Chemistry classes) GPA is to be calculated from transcripts and coursework at Rowan.

| I have read and understand that the above guidelines and courses are required to continue in | n and to complete the Subject Matter Trac | k in |
|----------------------------------------------------------------------------------------------|-------------------------------------------|------|
| Physical Science (Emphasis in Physics OR Chemistry) Program.                                 |                                           |      |
|                                                                                              |                                           |      |
| Signature                                                                                    | Date                                      |      |
|                                                                                              |                                           |      |

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# CHECKLIST FOR DOCUMENTING ELIGIBILITY FOR PHYSICAL SCIENCE (EMPHASIS IN PHYSICS OR CHEMISTRY) SUBJECT-MATTER EDUCATION

| Teacher Candidate:                                                                                                                                                                                                                                                                                                              | Banner ID:                                                                                                                                         |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| All native and transfer students seeking admission into the Physical must meet all of the following requirements:                                                                                                                                                                                                               | Science (Emphasis in Physics Or Chemistry) Subject-Matter Edu                                                                                      | cation Program            |
| Requirement                                                                                                                                                                                                                                                                                                                     | Candidate's Qualifications                                                                                                                         | Meet?<br>(Y/N)<br>Date(s) |
| Grades of C- or higher in "sophomore" courses  Please note that the sophomore courses will change (i.e. TLC I and II) pending curricular approval for 2016-2017. Regardless, grade policy will still apply.                                                                                                                     | Grades: Teaching in Learning Communities I:  Teaching in Learning Communities II:  Teaching Reading Writing Content Area:  Educational Technology: |                           |
| "Meets Expectations" on dispositional reports from College of<br>Education instructors and cooperating teachers                                                                                                                                                                                                                 | COE Advisor's Verification (Initials):  COE Advisor's Verification (Initials):                                                                     |                           |
| Successful completion (i.e., grades of C- or better) of at least 15 seemester hours of Required and/or Restricted Elective physical science (Physics and Chemistry) classes (as listed in the BS Physical Science Academic Program Guidelines:  http://www.rowan.edu/colleges/las/departments/physics/acad/prog-physcilist.html | Courses Completed (with semester hours and grade)                                                                                                  |                           |
| Grades of C- or better in all Physical Science (Physics and Chemistry) classes                                                                                                                                                                                                                                                  | Advisor's Verification (Initials):                                                                                                                 |                           |
| Physical Science (Physics and Chemistry) GPA* of 2.00 or above and  Overall GPA of 3.0 or above                                                                                                                                                                                                                                 | Physical Science (Physics and Chemistry) GPA:  Overall GPA:  Advisor's Verification (Initials):                                                    |                           |
| Post June 2014 -All candidates must pass Praxis Core<br>Academic Skills for Educators test.                                                                                                                                                                                                                                     | Score:  COE Advisor's Verification (Initials):                                                                                                     |                           |
| Meets all requirements and is eligible to register for Teaching and                                                                                                                                                                                                                                                             | 1 Learning A: Science                                                                                                                              |                           |

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Advisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# CHECKLIST FOR DOCUMENTING ELIGIBILITY FOR SUBJECT-MATTER EDUCATION CLINICAL PRACTICE PHYSICAL SCIENCE (EMPHASIS IN PHYSICS OR CHEMISTRY)

Banner ID:

Teacher Candidate:

| Grades of C- or higher in "junior" courses                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                            | Date(s) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Grades: Teaching and Learning A: Science:                                                                                                                                  |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Teaching and Learning B: Science:                                                                                                                                          |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Differentiated Instruction:                                                                                                                                                |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | COE Advisor's Verification (Initials):                                                                                                                                     |         |
| "Meets Expectations" on Curriculum Study Report -both Safety and Curricular Practices-(Teaching and Learning A Science), Research Based Lab Project and Analysis Paper (Teaching and Learning B Science) and Science Inquiry Based Unit (Teaching and Learning A & B Science)                                                                                                                                                                            |                                                                                                                                                                            |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Teaching and Learning B Science Instructor's Verification (Initials):                                                                                                      |         |
| "Meets Expectations" on dispositional reports from College of<br>Education instructors and cooperating teachers                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                            |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | COE Advisor's Verification (Initials):                                                                                                                                     |         |
| Successful completion (i.e., grades of C- or better) of at least 30 semester hours of <i>Required</i> and/or <i>Restricted Elective</i> physical science (physics and chemistry)classes (as listed in the <i>BS Physical Science Physics Academic Program Guidelines</i> <a href="http://www.rowan.edu/colleges/las/departments/physics/acad/prog-physcilist.html">http://www.rowan.edu/colleges/las/departments/physics/acad/prog-physcilist.html</a> ) | ( sh):                                                                                                                                                                     |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ( sh): Advisor's Verification (Initials):                                                                                                                                  |         |
| Grades of C- or better in all Physical Science (Physics and                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                            |         |
| Chemistry) classes Physical Science (Physics and Chemistry) GPA* of 2.00 or above                                                                                                                                                                                                                                                                                                                                                                        | Advisor's Verification (Initials)  Physical Science (Physics and Chemistry)                                                                                                |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | GPA:                                                                                                                                                                       |         |
| Average grade of 3.0 in professional education courses with no course grade lower than C and no <i>Incompletes</i>                                                                                                                                                                                                                                                                                                                                       | Professional Education Course GPA:                                                                                                                                         |         |
| Overall GPA of 3.0 or above                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                            |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Overall GPA:<br>Advisor's Verification (Initials):                                                                                                                         |         |
| Passing scores (152, 141 and 152) on the PRAXIS II exam (Chemistry: Content Knowledge (5245/0245), Physics Content Knowledge (5265/0265), and Gen Science Knowledge (5435/0435)                                                                                                                                                                                                                                                                          | Score: Chemistry Content Knowledge (5245/0245) General Science Content Knowledge (5435/0435) Physics Content Knowledge (05265/0265) COE Advisor's Verification (Initials): |         |
| Meets all requirements and is eligible to register for Clinical Pro                                                                                                                                                                                                                                                                                                                                                                                      | actice                                                                                                                                                                     |         |

### STATE HELPFUL REFERENCES FOR PHYSICAL SCIENCE

http://www.nj.gov/education/educators/license/endorsements/2240CEAS.pdf http://www.nj.gov/education/educators/license/1112.pdf

### FREQUENTLY ASKED QUESTIONS

1. If I fail the Praxis II exams can I continue to do my clinical field practice experience?

No you must pass the Praxis II exam in order to move on to your clinical field experience and/or be assigned to one.

2. If I finish Physical Science with an emphasis in Physics can I get a certification for an emphasis in Chemistry as well?

Yes on condition you fulfill the required content knowledge based credits for physical science in chemistry in addition to passing the Praxis II exam.

3. If I fail one of the Praxis II exams for Physical Science, let's say the one for Chemistry, can I still be eligible for a Physics certification?

Yes on condition that you pursue the credits for content needed for a physics certification (or a chemistry certification pending on which you intend to pursue) and achieve the required Praxis II Scores in Physics (or Chemistry)

4. If I am pursuing a Chemistry certification and I also want to get a Biology certification, what will I need to do?

All course credits required for Biology dual majors and Chemistry dual majors need to be met as listed in their specific guidelines All Praxis exams in Biology and Chemistry need to be taken and passed successfully.

5. Will my science teaching certification be acknowledged in other States, just in case I get a job outside New Jersey?

Yes but usually other states may require either or any of the following: (a) additional course content work (b) particular exams (other than Praxis) (c) different Praxis scores. You will need to check the local district and state policies of the specific area you intend to be employed in.

6. How common is it to get employed with a science teaching certification?

Very common. 99% of graduates registered in the dual major at Rowan since 2007 have found jobs and are currently teaching science in New Jersey, the majority in high schools and a few in middle schools.