SECONDARY EDUCATION BIOLOGY (BS)

The Bachelor of Science program in Secondary Education Biology prepares students to teach 5th through 12th grade in a variety of urban and suburban education settings, including public and private middle schools and high schools.

Students learn educational theories and effective teaching practices, participate in field experiences, which require observation and participation in teaching activities at multiple schools, and student teaching. Students should meet early and regularly with their advisor to design and monitor their program of study.

The program combines theoretical principles of education and field work with the student’s choice of major. Students follow a general pattern of study for middle school and high school levels. In all cases, appropriate field experience plays an integral role.

In addition to completing the requirements for licensure in Illinois, and in aligning with a commitment to preparing students with a global mindset, teacher candidates will also complete the requirements to gain a certificate in Teaching and Learning from the International Baccalaureate Organization. The IB Certificate in Teaching and Learning for the Middle Years Program (MYP) and the Diploma Program (DP) provides teacher candidates the background and expertise to teach in an IB school. The IB Certificate in Teaching and Learning expands the opportunities for teacher candidates and training in IB open expands the vision of inquiry and reflective practice.

Students entering the program must be able and willing to devote themselves to a program requiring a minimum of 100 hours of daytime field experiences in schools. These school-based clinical hours are completed in conjunction with methodology courses that require students to spend a half-day each week in a school. As students will be completing requirements to earn the IB Certificate, a majority of the 100-110 hours will be completed in International Baccalaureate Schools. In addition, the student must spend a minimum of 11 weeks in full-time student teaching.

Please make sure you consult the Liberal Studies Requirements, Major Requirements, and College Core Requirements for full degree requirements.

NOTE: Secondary Education students now have the option to double major in Secondary Education and Biological Sciences. With the double major, students will graduate with a Bachelor of Science degree with a major in Secondary Education and a major in Biological Sciences. Students should declare Secondary Education as their primary major (see Secondary Education BA/BS for degree requirements) and Biological Sciences (see Biological Sciences BS for degree requirements) as their secondary major. If you have already begun the Secondary Education Biology major and want to switch to the Secondary Education Major and Biological Sciences double major, you should contact your academic advisor because the double major may require additional coursework. Students who pursue the Bachelor of Science degree with a major in Secondary Education Biology do not have the option to double major in Biological Sciences.

Licensure

Illinois Professional Educator License with endorsement in Middle and Secondary Education Science-Biology (grades 5-12), an Illinois State Board of Education (ISBE) approved program. Graduates who earn an initial Professional Educator License in grades 9-12 may also qualify for a subsequent endorsement (https://catalog.depaul.edu/colleges-schools/education/endorsements/graduate-endorsements/subsequent-license/) for grades 5-8.

<table>
<thead>
<tr>
<th>Program Requirements</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Studies Requirements</td>
<td>78</td>
</tr>
<tr>
<td>Major Requirements</td>
<td>130</td>
</tr>
<tr>
<td>Total hours required</td>
<td>208</td>
</tr>
</tbody>
</table>

- Use knowledge of adolescent learners to create safe, equitable, and meaningful learning environments and collaborative classrooms.
- Demonstrate and apply disciplinary content and pedagogical content knowledge with an emphasis on developing students’ conceptual understanding and disciplinary literacy.
- Plan and deliver instruction that demonstrates knowledge of adolescent learners and content.
- Implement assessment practices to evaluate student learning and inform instruction.
- Exhibit professionalism, pursue professional growth, and advocate for adolescent learners and their communities.

College Core Requirements

Dispositions

The academic programs within the College of Education have set forth these dispositions as educational and professional expectations for all students. Students should be aware that failing to abide by DePaul University or College of Education policies including, under certain circumstances, these dispositions, could result in adverse consequences for the student, including removal from his or her program, the College of Education, or the University.

The following dispositions apply to Early Childhood Education, Elementary Education, Exercise Science, Middle Grades, Physical Education, Secondary Education, and World Language Education majors only:

- Reflects on progress and identifies strengths and weaknesses, including evaluating strategies for success, finding alternatives for inappropriate strategies, and modifying future practices
- Is receptive to faculty feedback and acts meaningfully and professionally upon suggestions
- Values critical thinking, including engaging theoretical and philosophical frameworks and shows evidence of critical thinking through discussion and writing (e.g., journals, response to prompts)
- Understands the importance of and is committed to communicating clearly orally and in writing both in traditional and in new and emerging digital formats
- Values and is committed to continually developing strong content area knowledge and/or knowledge of the professional field, including pedagogical content knowledge
The following dispositions apply to Special Education majors only:

- Takes initiative, uses imagination and creativity, and seeks out information using a variety of human and material resources and technology to inform his or her teaching
- Is aware of the role of classroom environment and uses management procedures that reflect respect and care for learners and concern for their emotional and physical well being
- Takes the time and effort needed to understand how students learn, including discovering their interests and experiences and determining how to shape teaching acts (using technology as appropriate) that engage learners meaningfully and actively
- Values and is committed to using assessment to evaluate and ensure the continuous intellectual, social, emotional, and physical development of the learner
- Respects and considers cultural contexts in order to determine how to be responsive to learners and to proactively promote all students’ learning
- Values and is responsive to diverse learners’ academic, emotional, and social needs through teaching acts (including careful instructional planning, implementation, and differentiation) and through everyday interactions with students
- Is committed to collaboration with colleagues, families, and communities in order to promote all students' learning and development
- Recognizes and fulfills professional responsibilities and habits of conduct (e.g., dress, language, preparedness, attendance, punctuality, etc.)
- Demonstrates collegiality, honesty, good judgment, courtesy, respect, and diplomacy
- Balances self-confidence and assertiveness with respect for others’ perspectives
- Respects the requirements, expectations, and procedures of both the College of Education and of our field partners and appreciates the issues of trust, fairness, and professionalism involved

The following dispositions apply to Special Education majors only:

- Takes initiative, uses imagination and creativity, and seeks out information using a variety of human and material resources and technology to inform his or her teaching
- Is aware of the role of classroom environment and uses management procedures that reflect respect and care for learners and concern for their emotional and physical well being
- Takes the time and effort needed to understand how students learn, including discovering their interests and experiences and determining how to shape teaching acts (using technology as appropriate) that engage learners meaningfully and actively
- Values and is committed to using assessment to evaluate and ensure the continuous intellectual, social, emotional, and physical development of the learner
- Respects and considers cultural contexts in order to determine how to be responsive to learners and to proactively promote all students’ learning
- Values and is responsive to diverse learners’ academic, emotional, and social needs through teaching acts (including careful instructional planning, implementation, and differentiation) and through everyday interactions with students
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Skill Building Courses

Before taking any math or English courses, students must take the DePaul placement tests to determine if skill level is at the college level. If placement indicates skill level in these courses, the courses become part of degree requirements. Consult with your advisor regarding placement test results and any required classes.

Modern Language Competence Requirement

Students pursuing a Bachelor of Arts degree in the College of Education will be required to demonstrate a measure of competence in a modern language, as defined by the college. Such competence may be demonstrated in one of several ways:

- completing two years of a language sequence in high school
- completing the last course in the first-year college sequence of any language
- completing a college course beyond the first-year level in any language
- achieving a satisfactory score on any of the Modern Language placement examinations administered at DePaul
- achieving a satisfactory rating in a proficiency examination accepted by DePaul
- achieving a score of 3 or higher on the Advance Placement (AP) test for any language
- achieving a score of 5 or higher in the Language B assessment from a Standard or Higher Level International Baccalaureate (IB) program
- achieving a satisfactory score on the CLEP examination

Please note: The Modern Language Competence Requirement is not required for students in the Early Childhood Education: SCPS Joint Program (BAECE) program. Modern Languages courses with an E-designation are taught in English and may not be applied to the Modern Language Requirement.

For further information regarding satisfactory scores and possible credit from the DePaul placement, AP, CLEP, or IB examinations, please contact the Office of the University Registrar.

Students who complete an Inter-College Transfer (ICT) to the College of Education will abide by the COE Modern Language Requirement in place on the effective date of the ICT.

B.A. students who meet College requirements and wish to pursue further work in the language may elect the "Modern Language Option" of the Liberal Studies Program. While B.S. students are not required to demonstrate competency in a modern language, the "Modern Language Option" is available to them for language study at any level. Modern Languages courses with an E-designation are taught in English and may not be applied to the Modern Language Requirement.

Licensure Tests

All individuals licensed by the Illinois State Board of Education (ISBE) are required to complete licensure tests specific to their teaching license. The Academic Success Center can provide help through tutoring, workshops, and online resources to help each student succeed.
Field Experiences
Each student seeking licensure from the College of Education/Professional Education Unit must complete supervised field experiences in appropriate settings in conjunction with education courses. The field experiences must include a variety of grade levels, multicultural experiences, and a minimum of 10 hours in special education settings. All field experiences must be completed prior to final approval for student teaching. Field experience hours should be entered by the student into the FEDS system when completing courses with field experience requirements.

Endorsements
An endorsement is a statement appearing on a license that identifies the specific subjects or grade level that the license holder is authorized to teach.

The Illinois State Board of Education (ISBE) issues endorsements in various subject areas. To view the full list and requirements, visit the ISBE website.

Please note that the Illinois State Board of Education (ISBE) may change the state licensure and endorsement requirements at any time and without prior notice. Individuals are bound by the requirements in place when applying for the license or endorsement, not the requirements in place when beginning the program.

Student Teaching Requirements
Student Teaching is the culminating clinical experience in the student’s program. All students in teacher preparation programs must meet the following requirements before applying for student teaching:

Academic Requirements
• Completion of all Liberal Studies, Introductory, Advanced and concentration/content area courses
• Overall cumulative GPA of 2.50 or better
• Cumulative GPA of 2.75 or better in all education courses
• Meet all other program requirements (e.g., modern language and residency requirements)
• Meet designated program standards
• Pass the required Illinois licensure content area test(s)

Clinical Requirements
• Completion of all required field experiences
• Three satisfactory evaluations in field experiences
• Three satisfactory faculty recommendations
• Attendance at mandatory meeting for student teaching
• Application for student teaching, resume, transcripts, and writing sample (check deadlines)
• Review and approval by Student Teaching Committee of the College of Education

Student Teaching Timeline and Deadlines
• Attend a Mandatory Meeting approximately 1 year prior to expected quarter of student teaching.
• Submit application for student teaching after attending Mandatory Meeting, approximately 1 year prior to student teaching.
• Academic requirements are due one quarter before expected quarter of student teaching.
• Content area tests must be passed prior to Student Teaching (deadlines apply).

• Clinical requirements are completed as course requirements. Field experience hours are entered by the student as coursework is completed.

Online Faculty Evaluations are entered by the instructor of relevant courses. All data must be entered in the Field Experience Documentation System (FEDS) due one month prior to student teaching.

Individual childcare agencies and public and private school districts may have additional requirements (application, training, background check, etc.).

Degree Conferral and Graduation
The awarding of a degree is not automatic. You must submit an application to be considered for the degree. DePaul awards and posts degrees at the end of each regular academic term (autumn, winter, spring, summer).

It is your responsibility to initiate the degree conferral application process by submitting an online application. Submitting an application means you intend to finish your degree requirements by the end of the term for which you have applied.

Undergraduate students must be approved for student teaching and complete student teaching and capstone to be cleared for the degree. Student must submit graduation application for the quarter that matches the quarter you are student teaching.

After you submit the application, you cannot register for any term after the one selected in the application.

To apply for degree conferral, log on to Campus Connection. Select STUDENT CENTER, then MY ACADEMICS. On screen instructions will take you through the application process.

Provided that all requirements and financial obligations are met, degrees are posted 30 days after the official end of the term. Official dates are listed on the Academic Calendar.

DePaul holds one commencement ceremony each year in June. If you intend to participate, you must first apply for degree conferral for the current academic year and then submit a cap and gown order. Honors announced at the ceremony for undergraduates are based on winter quarter GPAs because a final GPA is not available at the time of the ceremony. Eligibility for the June Commencement ceremony is limited to individuals that complete the entirety of their program (including student teaching) within the same academic year (prior to the ceremony).

Additional information about degree conferral and graduation can be found on the College of Education website at: http://education.depaul.edu/.

Licensure
Requirements for licensure include completion of full bachelor’s degree program, all licensure tests (including OPI for world language majors), and awarding of bachelor’s degree. A bachelor’s degree is required to qualify for licensure and must be awarded before applying for the license.

Individuals must submit an application directly to the Illinois State Board of Education after completion of requirements and after DePaul has submitted notification to ISBE. Application requirements include application form, application fee, official transcripts, and registration fee.

All individuals must meet ISBE requirements in place at the time of application for the license. Requirements are subject to change per
the discretion of ISBE. All coursework and requirements pertaining to licensure requirements must be completed before DePaul University can recommend an individual for the license.

Individuals seeking additional endorsements after applying for the licensure must contact ISBE directly for an evaluation request.

All coursework and requirements must be completed before DePaul University can recommend an individual for the license.

**Teacher Licensure**

Sept 1, 2015 begins the implementation of a new requirement for any individual seeking teaching licensure in the State of Illinois. The new requirement is the Teacher Performance Assessment ("edTPA"), which is mandated by the Illinois State Board of Education (ISBE) for anyone that completes student teaching in Fall 2015 and beyond. EdTPA is an assessment conducted during the student teaching experience. For this assessment, teacher candidates are required to create video clips of instruction, lesson plans, student work samples, analyses of student learning, and teacher candidate reflective commentaries for a learning segment and submit these components using an electronic portfolio to Evaluation Systems an outside agency that is a group of Pearson Publishing. The portfolio will be independently evaluated by a panel of trained reviewers hired by Pearson. For this service a fee is charged. The panel of scorers of edTPA are selected and trained by Evaluation Systems. DePaul University is neither affiliated with Evaluation Systems nor Pearson Publishing and by ISBE regulation cannot be involved in edTPA registration, submission of portfolios, or scoring of individual teacher candidate portfolios. Institutions of higher education are required by the Illinois State Board of Education to provide teacher candidates with information to prepare for edTPA; however, the process of edTPA is external to DePaul University and is not monitored by DePaul University's College of Education.

**Liberal Studies Requirements**

Honors program requirements can be found in the individual Colleges & Schools section of the University Catalog. Select the appropriate college or school, followed by Undergraduate Academics and scroll down.

<table>
<thead>
<tr>
<th>First Year Program</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chicago Quarter</strong></td>
<td></td>
</tr>
<tr>
<td>LSP 110</td>
<td>DISCOVER CHICAGO 4</td>
</tr>
<tr>
<td>or LSP 111</td>
<td>or EXPLORE CHICAGO</td>
</tr>
<tr>
<td><strong>Focal Point</strong></td>
<td></td>
</tr>
<tr>
<td>LSP 112</td>
<td>FOCAL POINT SEMINAR 4</td>
</tr>
<tr>
<td><strong>Writing</strong></td>
<td></td>
</tr>
<tr>
<td>WRD 103</td>
<td>COMPOSITION AND RHETORIC I 4</td>
</tr>
<tr>
<td>WRD 104</td>
<td>COMPOSITION AND RHETORIC II</td>
</tr>
<tr>
<td><strong>Quantitative Reasoning</strong></td>
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<tr>
<td>MAT 120</td>
<td>QUANTITATIVE REASONING 2</td>
</tr>
<tr>
<td><strong>Sophomore Year</strong></td>
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</tr>
<tr>
<td>LSP 200</td>
<td>SEMINAR ON RACE, POWER, AND RESISTANCE 4</td>
</tr>
<tr>
<td><strong>Junior Year</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Experiential Learning</strong></td>
<td></td>
</tr>
<tr>
<td>Met by successful completion of required field experience hours</td>
<td></td>
</tr>
</tbody>
</table>
Notes
Specified required courses within Liberal Studies may have grade minimums (e.g. C- or better). Please consult your advisor or your college and major requirements.

Courses offered in the student’s primary major cannot be taken to fulfill LSP Domain requirements. If students double major, LSP Domain courses may double count for both LSP credit and the second major.

In meeting learning domain requirements, no more than one course that is outside the student’s major and is cross-listed with a course within the student’s major, can be applied to count for LSP domain credit. This policy does not apply to those who are pursuing a double major or earning BFA or BM degrees.

Major Requirements

Course Requirements

Content Area Courses

Biology Core: 28 quarter hours required, grade of C or better required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 191</td>
<td>GENERAL BIOLOGY I FOR SCIENCE MAJORS</td>
<td>4</td>
</tr>
<tr>
<td>BIO 192</td>
<td>GENERAL BIOLOGY II FOR SCIENCE MAJORS</td>
<td>4</td>
</tr>
<tr>
<td>BIO 193</td>
<td>GENERAL BIOLOGY III FOR SCIENCE MAJORS</td>
<td>4</td>
</tr>
<tr>
<td>BIO 250</td>
<td>CELL BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIO 260</td>
<td>GENETICS</td>
<td>4</td>
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</tbody>
</table>

Select one of the following:

- BIO 215 ECOLOGY
- BIO 235 EVOLUTION

Organic Chemistry or Physics Series Core: 12 quarter hours required, grade of C- or better required

- CHE 230 ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY LABORATORY I or PHY 150 GENERAL PHYSICS I
- CHE 232 ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY II or PHY 151 GENERAL PHYSICS II
- CHE 234 ORGANIC CHEMISTRY III and ORGANIC CHEMISTRY LABORATORY III or PHY 152 GENERAL PHYSICS III

Introductory Courses: 20 quarter hours required, grade of C or better required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
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<tbody>
<tr>
<td>SCU 207</td>
<td>SOCIAL AND HISTORICAL ISSUES IN EDUCATION</td>
<td>4</td>
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<tr>
<td>TCH 302</td>
<td>INTRODUCTION TO MIDDLE GRADES AND SECONDARY EDUCATION</td>
<td>4</td>
</tr>
<tr>
<td>TCH 314</td>
<td>THE NATURE OF SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>TCH 324</td>
<td>INQUIRY &amp; APPLICATION IN DEVELOPING SCIENCE PEDAGOGY</td>
<td>4</td>
</tr>
<tr>
<td>TCH 303</td>
<td>CONCEPTIONS OF HEALTHY ADOLESCENCE</td>
<td>4</td>
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</table>

Advanced Courses: 28 quarter hours required, grade of C or better required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SER 346</td>
<td>STRATEGIES FOR MAINSTREAMING AND INCLUSION</td>
<td>4</td>
</tr>
<tr>
<td>TCH 325</td>
<td>LITERACY IN THE CONTENT AREAS</td>
<td>4</td>
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### Secondary Education Biology (BS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCH 374</td>
<td>TEACHING THE SCIENCES IN THE MIDDLE GRADES AND HIGH SCHOOL 1</td>
<td>4</td>
</tr>
<tr>
<td>TCH 385</td>
<td>TEACHING THE SCIENCES IN THE MIDDLE GRADES AND HIGH SCHOOL 2</td>
<td>4</td>
</tr>
<tr>
<td>TCH 380</td>
<td>THE TEACHER AS PROFESSIONAL ¹</td>
<td>4</td>
</tr>
<tr>
<td>TCH 395</td>
<td>ASSESSMENT PRACTICES IN THE MIDDLE GRADES AND SECONDARY EDUCATION</td>
<td>4</td>
</tr>
<tr>
<td>BBE 301</td>
<td>TEACHING ADOLESCENT ENGLISH LANGUAGE LEARNERS AND DIALECT SPEAKERS ACROSS THE CURRICULUM</td>
<td>4</td>
</tr>
</tbody>
</table>

¹ Taken in conjunction with TCH 385.

**Student Teaching: 10 quarter hours required, grade of B- or better required**

Registration in student teaching requires completion of all requirements and procedures in the college core section. EDU 95 indicates to the Illinois State Board of Education that all field experience hours are complete. All students also take SEC 387, Capstone Seminar with student teaching (listed in the Liberal Studies section).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCH 392</td>
<td>MIDDLE GRADES AND SECONDARY STUDENT TEACHING</td>
<td>10</td>
</tr>
<tr>
<td>EDU 95</td>
<td>CLINICAL EXPERIENCE WITH CHILDREN AND YOUTH (non-tuition, PA grade required)</td>
<td>0</td>
</tr>
</tbody>
</table>

**Licensure Tests**

All individuals licensed by the Illinois State Board of Education (ISBE) are required to complete licensure tests specific to their teaching license. Secondary Education Biology majors must complete the following tests:

- Science: Biology Content Area Test (test #105) – assesses knowledge of both biological science and physical science. Test is required before Student Teaching (deadlines apply).
- EdTPA - assessment conducted during the student teaching experience including video clips of instruction, lesson plans, student work samples, analysis of student learning and reflective commentaries. Students will submit an electronic portfolio to an outside agency for independent evaluation and a fee will be imposed by that agency as part of the assessment.