TEACH: SECONDARY EDUCATION CHEMISTRY (MED)

The TEACH Program combines a College of Science and Health (CSH) undergraduate Chemistry major or some other disciplinary major with a graduate level College of Education (COE) Master of Education (MED) Program. Students graduate with a BS in their CSH disciplinary major and a MED in Education with a Professional Educator License and chemistry endorsement in the State of Illinois.

The program features the integration of disciplinary content with educational foundations and pedagogical content knowledge. The Junior Year Experiential Course, Senior Capstone Course, and three double-counted undergraduate/graduate courses offer students a seamless transition from undergraduate to graduate studies and from major-field coursework to teacher-preparation coursework. For undergraduate disciplinary major requirements, please refer to the appropriate undergraduate program website.

The 5th-year master’s level coursework builds on students’ undergraduate experiences through a series of integrated courses that include consistent and long-term field experiences culminating in a student-teaching experience during the Spring of students’ fifth year. Within the COE, the Junior Year Experiential Course, Capstone Course, and master's level coursework are part of the Department of Teacher Education. This coursework is designed to immerse students into the teaching profession by linking and integrating disciplinary content with an understanding of human development; diverse students; middle-school and secondary education, research on pedagogical content knowledge; the social and cultural contexts of education; and the development and assessment of content-area curricula. The program engages teacher candidates in critical reflection on their teacher development and practice. It fosters engagement in schools through placement of students in field experiences in schools and community agencies. Upon completion of the TEACH Program, teacher candidates measure themselves against the values of the COE conceptual framework through the development of professional portfolios. Values that are part of this framework include: commitment to social justice, critical pedagogy, and positive educational transformation within the context of a Vincentian personalism that honors the dignity of each person.

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 vision of inquiry and reflective practice.

Students entering the program must be able and willing to participate in a minimum of 140 hours of field experiences in schools and community sites. These field experience hours are completed in conjunction with coursework and are integral to successful completion of the program. 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, students must complete a minimum of 10 weeks of full-time student teaching in a designated middle or high school.

Licensure

Illinois Professional Educator License with endorsement in Secondary Education Science-Chemistry (grades 9-12 or grades 6-12), an Illinois State Board of Education (ISBE) approved program.

<table>
<thead>
<tr>
<th>Program Requirements</th>
<th>Quarter Hours</th>
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</thead>
<tbody>
<tr>
<td>Degree Requirements</td>
<td>40</td>
</tr>
<tr>
<td>Total hours required</td>
<td>40</td>
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</tbody>
</table>

Learning Outcomes

Students will be able to:

- 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.
- Evaluate educational research to support their understanding of teaching and learning and identify the theories that inform their teaching practices.

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.

- 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
- 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

Licensure Tests
All individuals licensed by the Illinois State Board of Education (ISBE) are required to complete licensure tests specific to their teaching license. Each test has a state mandated timeline by which to pass the test. 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 15 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 Education, Content Area, and Graduate level Content Area courses
• Overall cumulative G.P.A. of 3.00 or better
• Meet all other program requirements (e.g., residency requirements)
• Meet designated program standards
• Pass the required Illinois licensure content area test

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 must be passed 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 graduation application (degree conferral) 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.

Graduate students must be approved for student teaching and complete student teaching, seminar, and induction courses to be cleared for the
degree. Student must submit graduation application for the quarter you are completing the final course (student teaching is considered a course).

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

To apply for graduation (degree conferral), log on to Campus Connect. Select the Academic Progress tile, then apply for Graduation. 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 graduation (degree conferral) for the current academic year and then submit a cap and gown order. Honors are not announced at the ceremony for undergraduates completing their final courses in spring quarter 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.

Licensure
Requirements for licensure include completion of the full licensure program and all licensure tests (including OPI for world language majors). A bachelor’s degree is required; a master’s degree is not.

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.

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

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.

Degree Requirements
Course Requirements
All students need to have sufficient knowledge of the subject they will be teaching. Illinois State Board of Education requires a minimum of 48 quarter hours (32 semester hours) in the content area subject. Typically these requirements are met concurrently with the completion of the CSH undergraduate degree program. Prior to admission to the 5th year master’s year, students must meet with their CSH academic advisor to complete an undergraduate degree audit that will include an official written content area evaluation. Any areas of deficiency must be completed prior to beginning student teaching.

Content Area Requirements for Secondary Chemistry Education
All coursework in the content area must earn a grade of C or better.

- General Chemistry I
- General Chemistry II
- General Chemistry III
- Organic Chemistry I
- Organic Chemistry II
- Analytical Chemistry
- Physical Chemistry I
- Physical Chemistry II
- Applied Probability and Statistics (2 qh)
- Chemistry Seminar (2 qh)
- Calculus I
- Calculus II
- Calculus III
- General Physics I
- General Physics II
- General Physics III

Choose three of the following Chemistry courses: 12 quarter hours

- Organic Chemistry III
- Air Chemistry
- Solid Waste Chemistry
- Physical Chemistry III
- Intermediate Inorganic Chemistry
- Intermediate Organic Chemistry
- Biochemistry I
- Biochemistry II
- Biochemistry III
- Nuclear Chemistry
- Biophysical Chemistry
- Medicinal Chemistry
- Drugs and Toxicology
- Nutrition
- Applied Spectroscopy

### Junior Year Coursework: 4 undergraduate quarter hours required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCH 320</td>
<td>EXPLORING TEACHING IN THE URBAN HIGH SCHOOL (fulfills undergraduate Junior Year Experiential Course requirement)</td>
<td>4</td>
</tr>
</tbody>
</table>

### Senior Year Coursework: 4 quarter hours required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCH 390</td>
<td>CAPSTONE: INTEGRATING EDUCATION &amp; DISCIPLINARY FOUNDATIONS (fulfills undergraduate Capstone requirement; major area may require a separate Capstone course)</td>
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</tr>
</tbody>
</table>

### Undergraduate/Graduate Double-Counted Courses: 12 undergraduate/graduate 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>TCH 401</td>
<td>TEACHING AS A PROFESSION IN SECONDARY SCHOOL</td>
<td>4</td>
</tr>
<tr>
<td>TCH 414</td>
<td>THE NATURE OF SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>TCH 424</td>
<td>INQUIRY &amp; APPLICATION IN DEVELOPING SECONDARY SCIENCE PEDAGOGY</td>
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</tbody>
</table>

### 5th Year Master’s Year Coursework, including Student Teaching: 32 graduate 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>SCG 406</td>
<td>HUMAN DEVELOPMENT AND LEARNING:SECONDARY</td>
<td>4</td>
</tr>
<tr>
<td>SER 446</td>
<td>PSYCHOLOGY AND EDUCATION OF THE EXCEPTIONAL CHILD</td>
<td>4</td>
</tr>
<tr>
<td>BBE 501</td>
<td>TEACHING ADOLESCENT ENGLISH LANGUAGE LEARNERS AND DIALECT SPEAKERS ACROSS THE CURRICULUM</td>
<td>4</td>
</tr>
<tr>
<td>TCH 454</td>
<td>RESEARCH METHODS &amp; DISCIPLINARY INQUIRY: SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>TCH 474</td>
<td>TEACHING THE SCIENCES IN THE HIGH SCHOOL</td>
<td>4</td>
</tr>
<tr>
<td>TCH 484</td>
<td>TEACHING THE SCIENCES IN THE HIGH SCHOOL</td>
<td>4</td>
</tr>
<tr>
<td>TCH 495</td>
<td>ASSESSMENT ISSUES IN SECONDARY EDUCATION</td>
<td>4</td>
</tr>
<tr>
<td>T&amp;L 525</td>
<td>READING, WRITING, AND COMMUNICATING ACROSS THE CURRICULUM</td>
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### Student Teaching: 8 graduate quarter hours required

Registration in student teaching requires completion of all requirements and procedures listed in the college core section. EDU 95 indicates to the Illinois State Board of Education that all field experience hours are complete. It is a non-credit, non-tuition course.

<table>
<thead>
<tr>
<th>Course</th>
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<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCH 590</td>
<td>STUDENT TEACHING (grade of B- or better required)</td>
<td>6</td>
</tr>
<tr>
<td>TCH 591</td>
<td>STUDENT TEACHING SEMINAR (grade of C or better required)</td>
<td>2</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 Chemistry students must complete the following tests:

- Science: Chemistry Content Area Test (test #106) – assesses knowledge of both geological and chemical science as well as general biological and physical sciences. 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.

### 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 15 hours in special education settings. All field experiences must be completed prior to final approval for student teaching. Students should enter field experience hours into the FEDS system upon completion of each course with field experience requirements. For details on requirements, expectations, documentation, & courses in your program that require hours, visit the College of Education website.

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1 Taken in conjunction with TCH 484.