

# BACHELOR OF SCIENCE, MAJOR IN KINESIOLOGY (CLINICAL EXERCISE SCIENCE)

This degree track prepares students for a career in clinical exercise science. Future job prospects include cardiac rehabilitation, hospital/clinic-based fitness and wellness facilities, performance centers, research facilities, and graduate education in exercise science, sport and human performance, and allied health fields (physical therapy, occupational therapy, prosthetics and orthotics, etc.). This track is focused on clinical and research settings; graduates will work with both clinical and general populations in cardiac rehabilitation facilities, research laboratories, or a sport-science based performance facilities. A minor is not required for this track.

**Note:** Students interested in a 3 + 2 MSAT Option (BS in Kinesiology: Clinical Exercise Science + MSAT), please, see 2021-2022 Catalog.

| Code  | Title  | Hours |
|---|--|-------|
| <b>Bachelor of Science, Major in Kinesiology (Clinical Exercise Science)</b>  |  |       |
| Core Curriculum ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/</a> ) |  |       |
| Component Area I (Communication)  |  | 6     |
| Component Area II (Mathematics) <sup>1</sup>  |  | 3     |
| Component Area III (Life and Physical Science) <sup>2</sup>   |  | 8     |
| Component Area IV (Language, Philosophy, and Culture)   |  | 3     |
| Component Area V (Creative Arts)  |  | 3     |
| Component Area VI (U.S. History)  |  | 6     |
| Component Area VII (Political Science/Government)   |  | 6     |
| Component Area VIII (Social and Behavioral Sciences) <sup>3</sup>   |  | 3     |
| Component Area IX (Component Area Option) <sup>4</sup>  |  | 4     |
| <b>Degree Specific Requirements</b>   |  |       |
| KINE 1331   | Foundations Of Kinesiology                                       | 3     |
| BIOL 2403<br>or BIOL 2401   | Human Anatomy & Physiology I <sup>2,5</sup><br>Human Anatomy     | 4     |
| BIOL 2404<br>or BIOL 2402   | Human Anatomy & Physiology II <sup>2,5</sup><br>Human Physiology | 4     |
| CHEM 1411   | General Chemistry I <sup>2</sup>                                 | 4     |
| CHEM, BIOL, or PHYS   |  | 4     |
| COMS 1361   | Public Speaking <sup>4</sup>                                     | 3     |
| FACS 2362   | Nutrition  | 3     |
| KINE 2115   | Lifetime Health and Wellness <sup>4</sup>                        | 1     |
| ENGL 3330   | Intro to Technical Writing                                       | 3     |
| MATH 1314   | Pre Calculus Algebra <sup>1</sup>                                | 3     |
| MATH 1316   | Plane Trigonometry   | 3     |
| PSYC 1301   | Introduction To Psychology <sup>3</sup>                          | 3     |
| PHYS 1301<br>& PHYS 1101  | General Phy-Mechanics & Heat<br>and General Physics Laboratory I | 4     |
| Select one of the following:  |  | 3-4   |
| BIOL 4374   | Biostatistics <sup>9</sup>                                       |       |
| MATH 3379   | Statistical Mthods in Practice                                   |       |
| PSYC 3401   | Research Methods <sup>6</sup>                                    |       |
| <b>Major Core</b>   |  |       |
| KINE 2114   | Wgt Train & Phy Conditioning                                     | 1     |
| KINE 3362   | Functional Kinesiology   | 3     |
| KINE 3364   | Motor Learning   | 3     |
| KINE 3373   | Physiology Of Exercise   | 3     |
| <b>Major</b>  |  |       |
| ATTR 3370   | Prevention & Care of Injuries                                    | 3     |
| ATTR 4369   | Therapeutic Interventions II                                     | 3     |

|  |                                |           |
|--|--------------------------------|-----------|
| or KINE 4314   | Advanced Strength Training     |           |
| KINE 3173  | Exercise Physiology Laboratory | 1         |
| KINE 4362  | Biomechanical Analysis         | 3         |
| KINE 4373  | Adv Tpcs In Physlgy Of Exercis | 3         |
| KINE 4377  | Prin Exer Testing/Prescription | 3         |
| KINE 4393  | Prncples& Prac Of Adlt Fit Mgt | 3         |
| KINE 4394  | Internship <sup>7</sup>        | 3         |
| KINE 4394  | Internship <sup>7</sup>        | 3         |
| <b>Elective Block PHYS, PSYC, ATTR, KINE, BIOL, HLTH, CHEM<sup>8</sup></b> |                                | <b>16</b> |
| Total Hours  |                                | 120-121   |

<sup>1</sup> Satisfies the Core Curriculum requirement for Component Area II (Mathematics). Students interested in attending PT/OT school should take MATH 1314.

<sup>2</sup> Satisfies Core Curriculum requirement for Component Area III (Life and Physical Science).

<sup>3</sup> Satisfies Core Curriculum requirement for Component Area VIII (Social and Behavioral Sciences).

<sup>4</sup> Satisfies Core Curriculum requirement for Component Area IX (Component Area Option).

<sup>5</sup> Must take 8 hour sequence of BIOL 2401 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=BIOL%202401>) and BIOL 2402 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=BIOL%202402>) or 8 hour sequence of BIOL 2403 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=BIOL%202403>) and BIOL 2404. (<http://catalog.shsu.edu/archives/2020-2021/search/?P=BIOL%202404>)

<sup>6</sup> PSYC 3401 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=PSYC%203401>) will add 1 hour to the degree.

<sup>7</sup> Register for 2 sections to complete 6 semester credit hours.

<sup>8</sup> For all electives, students should ensure that the courses meet professional career goals and/or advanced degree prerequisites. Examples of courses that those interested in the following fields may want to pursue include: (a) Physical Therapy: PHYS 1302, PHYS 1102, PSYC 3374; (b) Occupational Therapy, PSYC 3331, PSYC 3374, & PSYC 3333; (c) PT & OT may also need 1-3 hours of medical terminology; (d) 3+2 MSAT option: BIOL 1413, HLTH 3360, HLTH 2372, KINE 4335. Other suggested electives include: ATTR 4369, KINE 4369, KINE 4117, and KINE 4392 can be taken for students wanting to gain research experience. Six to nine elective hours may need to be 3000- and/or 4000-level courses to meet the 42 advanced hour requirement.

## Notes

All KINE majors and/or minors must earn a "C" or better for all KINE/ATTR courses.

MATH 1410 or MATH 1316 or MATH 1420 are prerequisites for PHYS 1301 and PHYS 1101. A grade of "C" or higher is required for courses.

CHEM 1411, with a "C" or higher, is a prerequisite for CHEM 1412.

BIOL 2402 requires a grade of "C" or higher in BIOL 2401 and CHEM 1406.

Students must take BIOL 2401 and BIOL 2402 as an 8 hour sequence or BIOL 2403 and BIOL 2404 as an 8 hour sequence.

MATH 3379 requires 3 hours of college math.

BIOL 4374 requires 8 hours of advanced BIOL and MATH 1314 or MATH 1420.

ENGL 1301 and ENGL 1302 are prerequisites for ENGL 3330 and satisfy the Core Curriculum requirement for Component Area I (Communications).

ATTR 3370 requires a prerequisite of BIOL 2401 or BIOL 2403 and 60+ hours.

KINE 4117 and KINE 4392 can be taken for students wanting to gain research experience.

KINE 3362 requires a prerequisite of BIOL 2401 or BIOL 2403 and 60+ hours. Students may co-enroll with BIOL course.

KINE 4393 requires 90+ hours.

KINE 4394 requires KINE 4393 and KINE 4377.

KINE 4362 requires a prerequisite of KINE 3362, PHYS 1301 and PHYS 1101.

KINE 4377 requires a prerequisite of KINE 3362 and KINE 3373.

KINE 4373 requires a prerequisite of KINE 3373.

KINE 3373 requires a prerequisite of BIOL 2403 and BIOL 2404 or co-enrolled in BIOL 2404 and 45 hours.

KINE 3364 requires 60+ hours.

**Note:** Students interested in a 3 + 2 MSAT Option (BS in Kinesiology: Clinical Exercise Science + MSAT), please, see 2021-2022 Catalog.

**First Year**

| Fall                             | Hours | Spring                             | Hours |
|----------------------------------|-------|------------------------------------|-------|
| BIOL 2403 or 2401 <sup>1,2</sup> |       | 4 BIOL 2404 or 2402 <sup>1,2</sup> | 4     |
| CHEM 1411 <sup>1</sup>           |       | 4 ENGL 1302 <sup>3</sup>           | 3     |
| ENGL 1301 <sup>3</sup>           |       | 3 KINE 1331                        | 3     |
| KINE 2115 <sup>4</sup>           |       | 1 KINE 2114                        | 1     |
| MATH 1314 <sup>5</sup>           |       | 3 PSYC 1301 <sup>6</sup>           | 3     |
|                                  |       | 15                                 | 14    |

**Second Year**

| Fall  | Hours | Spring   | Hours |
|---|-------|--|-------|
| Component Area IV ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv</a> ) |       | 3 Component Area V ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav</a> ) | 3     |
| BIOL or CHEM or PHYS <sup>7</sup>   |       | 4 FACS 2362  | 3     |
| HIST 1301 <sup>8</sup>  |       | 3 HIST 1302 <sup>8</sup>   | 3     |
| MATH 1316   |       | 3 PHYS 1301  | 3     |
| POLS 2305 <sup>9</sup>  |       | 3 PHYS 1101  | 1     |
|   |       | POLS 2306 <sup>9</sup>   | 3     |
|   |       | 16   | 16    |

**Third Year**

| Fall   | Hours | Spring   | Hours |
|--|-------|--|-------|
| BIOL 4374, MATH 3379, or PSYC 3401 <sup>10</sup> |       | 3-4 ATTR 3370  | 3     |
| COMS 1361 <sup>4</sup>                           |       | 3 Electives: ATTR, BIOL, CHEM, KINE, PHYS, PSYC, HLTH <sup>7</sup> | 6     |
| ENGL 3330  |       | 3 KINE 3364  | 3     |
| KINE 3173  |       | 1 KINE 4373  | 3     |
| KINE 3362  |       | 3  |       |
| KINE 3373  |       | 3  |       |
|  |       | 16-17  | 15    |

**Fourth Year**

| Fall   | Hours | Spring   | Hours |
|--|-------|--|-------|
| ATTR 4369 or KINE 4314   |       | 3 Electives: ATTR, BIOL, CHEM, KINE, PHYS, PSYC, HLTH <sup>7</sup> | 6     |
| Electives: ATTR, BIOL, CHEM, KINE, PHYS, PSYC, HLTH <sup>7</sup> |       | 4 KINE 4394 <sup>11</sup>  | 3     |
| KINE 4362  |       | 3 KINE 4394 <sup>11</sup>  | 3     |
| KINE 4377  |       | 3  |       |
| KINE 4393  |       | 3  |       |
|  |       | 16   | 12    |

Total Hours: 120-121

- <sup>1</sup> Satisfies 4 semester credit hours of the Core Curriculum requirement for Component Area III (Life and Physical Science).
- <sup>2</sup> Must take 8 hour sequence of BIOL 2401 and BIOL 2402 or 8 hour sequence of BIOL 2403 and BIOL 2404.
- <sup>3</sup> Satisfies Core Curriculum requirement for Component Area I (Communications).
- <sup>4</sup> Satisfies the Core Curriculum requirement for Component Area IX (Component Area Option).
- <sup>5</sup> Satisfies Core Curriculum requirement for Component Area II (Mathematics).
- <sup>6</sup> Satisfies Core Curriculum requirement for Component Area VIII (Social and Behavioral Sciences).
- <sup>7</sup> For all electives, ensure that they meet professional career goals and/or advanced degree prerequisites. Physical Therapy: PHYS 1302, PHYS 1102, PSYC 3374; Occupational Therapy, PSYC 3331, PSYC 3374, & PSYC 3333; PT & OT may also need 1-3 hours of medical terminology; Suggested Electives: ATTR 3369, ATTR 4369, ATTR 4300, ATTR 4310, ATTR 3383 & KINE 4369; KINE 4117 and KINE 4392 can be taken for students wanting to gain research experience. 6-9 of these elective hours may need to be advanced hours to meet 42 advanced hour requirement.

4 Bachelor of Science, Major in Kinesiology (Clinical Exercise Science)

8 Satisfies Core Curriculum requirement for Component Area VI (U.S. History).

9 Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).

10 PSYC 3401 will add 1 hour to the degree.

11 Register for 2 sections to complete 6 semester credit hours.

### Notes

All KINE/ATTR majors and/or minors must earn a "C" or better for all KINE/ATTR courses.

MATH 1410 or MATH 1316 or MATH 1420 are prerequisites for PHYS 1301 and PHYS 1101. A grade of "C" or higher is required for courses.

CHEM 1411, with a "C" or higher, is a prerequisite for CHEM 1412.

Students must either take BIOL 2401 and BIOL 2402 as an 8 hour sequence, or they can take BIOL 2403 and BIOL 2404 as an 8 hour sequence

MATH 3379 requires 3 hours of college math.

BIOL 4374 requires 8 hours of advanced BIOL and MATH 1314 or MATH 1420.

ENGL 1301 and ENGL 1302 are prerequisites for ENGL 3330 and satisfy the Core Curriculum requirement for Component Area I (Communications).

KINE 4117 and KINE 4392 can be taken for students wanting to gain research experience.

ATTR 3370 requires a prerequisite of BIOL 2401 or BIOL 2403 and 60+ hours.

KINE 3362 requires a prerequisite of BIOL 2403 or BIOL 2401 and 60 + hours. Student can co-enroll with the BIOL course.

KINE 4393 requires 90 + hours.

KINE 4394 requires Senior standing and completion of KINE 4393 and KINE 4377.

KINE 4362 requires a prerequisite of KINE 3362, PHYS 1301, and PHYS 1101.

KINE 4377 requires a prerequisite of KINE 3362 and KINE 3373.

KINE 4373 requires a prerequisite of KINE 3373.

KINE 3373 requires a prerequisite of BIOL 2401 and BIOL 2402 or BIOL 2403 and BIOL 2404, Junior Standing.

The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The BS in Kinesiology (Clinical Exercise Science) is designed to provide graduates with the following marketable skills:

- Exercise assessment and prescription.
- Fitness program design and implementation.
- Critical thinking and decision making related to ethical and professional responsibilities in exercise science.
- Strategies for performance enhancement and prevention of injuries.
- Effective communication with a range of audiences in exercise science settings.