

PRE-PHARMACY
TRANSFER PROGRAM - 64 CREDITS - (ASPX, PPPH)

BIOLOGY
BACHELOR OF SCIENCES - 120 CREDITS - (BIOB, BIOL)

IPFW GENERAL EDUCATION REQUIREMENTS

A grade of C- or better in each course is needed to satisfy General Education requirements. Up to 6 credits of approved General Education courses satisfying Categories A & B and 3 credits in Category C may originate in the major.

| | | | |
|---|---------------|---|------------------------|
| Category A. Foundational Intellectual Skills (9) | | | |
| 1. | 3 | | Written Communication |
| 2. | 3 | | Speaking & Listening |
| 3. | 3 | | Quantitative Reasoning |
| Category B. Ways of Knowing (21) | | | |
| 4. Scientific | (3) | | |
| | 3 | | (LEC and LAB) |
| 5. Social & Behavioral | (3) | | |
| | 3 | | |
| 6. Humanistic & Artistic | (3) | | |
| | 3 | | |
| 7. Interdisciplinary or Creative | (3) | | |
| | 3 | | |
| Approved courses from Category A or B to complete learning outcomes (9) | | | |
| | 3 | | |
| | 3 | | |
| | 3 | | |
| Category C. Capstone (3) | | | |
| | (IPFW credit) | 3 | |

COAS REQUIREMENTS

WRITING (3)

| | | | |
|------------------|---|--|---------------|
| ENG W140 or W233 | 3 | | (C- or above) |
|------------------|---|--|---------------|

FOREIGN LANGUAGE (8)

| | | | |
|--|---|--|--|
| | 4 | | |
| | 4 | | |

FREE ELECTIVES

| | | | |
|------------|---|--|--|
| BIOL 21600 | 4 | | |
| BIOL 22000 | 4 | | |
| CHM 53300 | 3 | | |
| | | | |
| | | | |

NO CREDIT

| | | | |
|--|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |

MA _____ ENG _____
RDG _____ LANG _____

Revised 05/13 OVER

STUDENT _____

BULLETIN _____ CATALOG TERM _____

STUDENT ID _____

BIOLOGICAL SCIENCES CORE (20)

| | | | |
|---------------------|---|--|---------------|
| BIOL 10800 or 11700 | 4 | | (C- or above) |
| BIOL 10900 or 11900 | 4 | | (C- or above) |
| BIOL 21700 | 3 | | |
| BIOL 21800 | 4 | | |
| BIOL 21900 | 4 | | |
| BIOL 49100 | 1 | | |

ADDITIONAL COURSES:

BIOLOGY: 16 credits from Group A and B including at least one course with a laboratory from each group.

MEDICAL TECHNOLOGY: BIOL 43700, 53700 and one course from Group B.

Group A: BIOL 33500/33600, 34500, 43400, 44500, 50100, 50200, 50500, 51810, 52000, 52710, 54300, 55600/55800, 57900, 58000, 58200, 58600, 59200, 59800, ENTM20600/20700, FNR 50500, 52300.

Group B: BIOL 21500, 31500, 35000, 38100/38200, 43700, 50600, 50900/58400, 51500, 51600, 52410, 53300, 53700/56500, 54000, 54400/54600, 55900, 56600/56700.

| | | | |
|------------|---|--|-----------|
| | | | Grp A lab |
| BIOL 21500 | 4 | | Grp B lab |
| BIOL 53700 | 3 | | |
| | | | |
| | | | |

2.3 GPA in core and additional courses satisfying Group A and Group B requirements.

PHYSICS (8)

| | | | |
|------------|---|--|--|
| PHYS 22000 | 4 | | |
| PHYS 22100 | 4 | | |

CHEMISTRY (16)

| | | | |
|--------------------|---|--|---------------|
| CHM 11500 | 4 | | (C- or above) |
| CHM 11600 | 4 | | |
| CHM 25500 or 26100 | 3 | | |
| CHM 25400 | 1 | | |
| CHM 25600 or 26200 | 3 | | |
| CHM 25800 | 1 | | |

MATH/STAT/CS (12 - 13)

| | | | |
|----------------------|-----|--|--|
| MA 22900 or 16500*** | 3/4 | | |
| MA 2300 | 3 | | |
| STAT 24000 or 30100 | 3 | | |
| STAT 34000 | 3 | | |

Pre-Pharmacy requires 1 full year of Calculus.
***Most Graduate Programs in Biology require 1 Year of Calculus.

| | | | | | | | | |
|-----------------|----|----|----|----|----|----|----|---|
| RESIDENCY: 200+ | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |

| | | | | | | | |
|--------------------------|----|----|----|----|----|----|---|
| RESIDENCY: 300+ IN MAJOR | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | |

| | | | | | | | | | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| UPPER LEVEL HOURS | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | |

| Semester/ Date | HRS | CR PTS | SEM GPA | HRS TOWARD GRAD | MISC | INC | REMARKS | GPA CALC | | |
|-------------------|-----|-----------|------------|-----------------------|------|-----|---------|----------|-----------|-------------|
| | | | | | | | | HRS | CR PTS | GRAD GPA |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

A minimum of 120 credits required for degree.

| Completion of Learning Outcomes for Each Area | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|----------|-------------------------|-----|-----|-----------------|-----|---------------------------|-----|-----|-----|-----|---------------|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|--------------------------|-----|-----|-----|-----|
| 1. Written Communication | | | | | 2. Speaking & Listening | | | | | 3. Quantitative Reasoning | | | | | 4. Scientific | | | | | 5. Social & Behavioral | | | | | 6. Humanistic & Artistic | | | | |
| 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 5.1 | 5.2 | 5.3 | 5.4 | 5.5 | 6.1 | 6.2 | 6.3 | 6.4 | 6.5 |
| 1.6 | 1.7 | | | | 2.6 | 2.7 | | | | 3.6 | 3.7 | 3.8 | | | 4.6 | | | | | 5.6 | | | | | 6.6 | 6.7 | | | |
| 7. Interdisciplinary or Creative | | | | | | | | 8. Capstone | | | | | | | | | | | | | | | | | | | | | |
| OPT 1 | | | | or OPT 2 | | | | 8.1 8.2 8.3 8.4 | | | | | | | | | | | | | | | | | | | | | |