

HARFORD COMMUNITY COLLEGE - CHEMISTRY (Non-Calculus Based Physics) A.S. DEGREE
TOWSON UNIVERSITY/ CHEMISTRY - General Track DEGREE

| HARFORD COMMUNITY COLLEGE | | | TOWSON UNIVERSITY | | | |
|--|---|--------------|--|------|--|------------------------|
| COURSE # | COURSE TITLE | CRS. | TU EQUIVALENCY | CORE | COMMENTS | COURSE ID# |
| | | | | 1. | Towson Seminar | |
| ENG 101 | College Composition | 3 | ENGL 102 | 2. | English Composition | 2348 |
| MATH 109 | Precalculus Mathematics | 4 | MATH 119 | 3. | Mathematics | 4381 |
| CIS 102 | Intro. Information Sciences | 3 | CIS 115*** | 4. | Creativity & Creative Development | 1184*** |
| PHIL 205 <i>OR</i> PHIL 221 <i>OR</i> PHIL 220 | Ethics (GH) <i>OR</i> Business Ethics (GH) <i>OR</i> Bioethics (GH) | 3 | PHIL 253*** PHIL TLL*** PHIL TLL*** | 5. | Arts & Humanities | 6548*** 10434*** |
| **GB | **GenEd - Behavioral/Social Science | 3 | Depends on choice. | 6. | Social & Behavioral Sciences | |
| CHEM 111 | General Chemistry I | 4 | CHEM 110 <i>OR</i> CHEM 131 <i>AND</i> CHEM 131L | 7. | Biological & Physical Science w/Lab | 1041 13097 13098 |
| CHEM 112 | General Chemistry II A | 4 | CHEM 111 <i>OR</i> CHEM 132 <i>AND</i> CHEM 132L | 8. | Biological & Physical Science | 1042 13099 13100 |
| | | | | 9. | Advanced Writing Seminar | |
| **GB | **GenEd - Behavioral/Social Science | 3 | Depends on choice. | 10. | Metropolitan Perspectives | |
| | HCC General Education Elective | 3 | Depends on choice. | 11. | The United States as a Nation | |
| ENG 109 | Research Writing | 3 | ENGL 152*** | 12. | Global Perspectives | 2352*** |
| **GH | **Arts & Humanities | 3 | Depends on choice. | 13. | Diversity & Difference | |
| | | | | 14. | Ethical Issues & Perspectives | |
| Total CORE in Transfer | | 36 | | | | |
| MATH 203 | Calculus I (must be completed at HCC) | 4 | MATH 273 | | | 4407 |
| MATH 204 Or GenEd | Calculus II Or General Education Elective (GB), (GH), (GI) | 3-4 | MATH 274 Or GenEd Elective | | GenEd placement and/or equivalency depend on choice. | 4408 |
| PHYS 101 | Introductory Physics I | 4 | PHYS 211 | | | 6800 |
| PHYS 102 | Introductory Physics II | 4 | PHYS 212 | | | 6801 |
| CHEM 207 | Organic Chemistry I | 4 | CHEM 331 | | Transfers as lower level credit. | 10134 |
| CHEM 208 | Organic Chemistry II | 4 | CHEM 332 | | Transfers as lower level credit. | 10135 |
| BIO 120 | General Biology | 4 | BIOL 201 | | | 666 |
| | Physical Education Elective | 1 | PHEA TLL | | | 10564 |
| | Physical Education Fitness Elective | 1 | PHEA TLL | | | 10564 |
| Program Requirements at Harford | | 29-30 | | | | |
| Total Harford Program Requirements | | 65-66 | | | | |
| Total Credits in Transfer | | 64 | | | | |

** Harford Community College students must complete one 3 credit diversity course which appears on the "Approved List" in the HCC catalog.

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***Requires Course Directive/Exception for Core placement.

- **64** credit transfer maximum.
- If PHYS 203/204 is substituted for PHYS 101/102 at Harford Community College, MATH 203 and 204 must also be completed at HCC.
- **9** Core Curriculum units to be completed at Towson: 1. Towson Seminar, 9. Advanced Writing Seminar and 14. Ethical Issues & Perspectives.

- **Major Requirements to be completed at Towson (22-23 Units)**

| | | | |
|-----------|--------------------------------------|-----|---|
| CHEM 210 | Introduction to Analytical Chemistry | (5) | |
| ELECTIVES | 3 - Approved 300/400 FCSM electives | (9) | (Electives to be chosen from the Jess & Mildred Fisher College of Science and Mathematics.) |

| | | | |
|----------|---------------------|-------|--|
| CHEM 323 | Inorganic Chemistry | (4) | |
| | <i>Or</i> | (3-4) | |
| CHEM 351 | Biochemistry I | (3) | |

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|----------|----------------------------------|-----|--|
| CHEM 345 | Principles of Physical Chemistry | (3) | |
| CHEM 372 | Intermediate Laboratory I | (2) | |

- **Total Credits to B.S. Degree** **(120)**
- | | |
|----------------------------------|---|
| Harford Chemistry A.S. Degree | 64 |
| Completion of Core at TU | 9 |
| Completion of Major Requirements | 22-23 |
| General Electives | 24-25 (11-12 units must be upper level) |