

2016-2017 Houghton College Minors (alphabetized)

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Accounting

18 hours | Business and Economics

Required Courses	Credits
ACCT 211 Financial Accounting	3
ACCT 212 Managerial Accounting	3
ACCT 311 Intermediate Accounting I	3
ACCT 312 Intermediate Accounting II	3
Accounting electives	6
Total	18

Applied Music

16 hours | The Greatbatch School of Music

Sixteen hours in one performance area (minimum eight hours at or above level 201 and one year in an appropriate ensemble), normally consisting of 14 hours of applied study and two hours of ensemble. A hearing is required to establish appropriate placement of study. Limited enrollment in some areas based on teacher availability.

Instrumental and Vocal Requirements: voice, violin, viola, violoncello, double bass, guitar, trumpet, French horn, trombone, euphonium, tuba, Credits flute, oboe, clarinet, saxophone, bassoon, percussion

14 hours of applied music	14
2 hours of ensemble	2
Total	16

Piano Requirements **Credits**

14 hours of piano	14
2 hours of ensemble	2
Total	16

Organ Requirements **Credits**

14 hours of organ	14
2 hours of ensemble	2
Total	16

Keyboard **Credits**

14 hours of piano and organ combined	14
2 hours of ensemble	2
Total	16

Art

14 hours | Art

14 hours in art

Athletic Administration & Sports Management

14 hours | Physical and Health Education

Required Courses **Credits**

PHED 314 Organization & Management of PE & Athletics (S, odd)	4
PHED 306 Principles of Coaching & Sports Management	2

PHED 315 Psychosocial Aspects of PE and Sport (F, odd)	2
PHED 313 Sports Marketing and Communication (S, even)	2
Electives - Choose one of the following:	
BADM 213 Business Law	3
BADM 320 Leadership Development	3
Total	14

Bible

12 hours | Biblical Studies, Theology and Philosophy

12 hours in Bible, numbered 200 or above.

Biology

12 hours | Biology

12 hours above BIOL 151, 152

Business Administration

14 hours | Business and Economics

Required Courses	Credits
ECON 201 Introduction to Economics	2
ACCT 211 Financial Accounting	3
BADM 212 Principles of Management	3
Business courses numbered 200 or above (<i>except BADM 307, 308 and 309</i>)	6
Total	14

Chemistry

12 hours | Chemistry

The minor in chemistry consists of any three 4-hour CHEM courses (total of 12 hours) at or above the 200 level.

(Biochemistry I [CHEM 332] and Biochemistry Laboratory I [CHEM 334] together count as a four-hour course.)

Communication

14-16 hours | Communication

Required Courses	Credits
COMM 205 Intro to Communication Theory	4
Three additional courses with COMM prefix	10-12
Total	14-16

Computer Science

16 hours | Physics, Computer Science and Engineering

Required Courses	Credits
CSCI 211 Programming I	4
CSCI 218 Programming II	4
CSCI 226 Computer Architecture	4
CSCI 236 Data Structures and Algorithms	4
Total	16

Data Science

14-16 Hours | Physics, Computer Science and Engineering

Required Courses	Credits
DSCI 211 Data Science I	4
DSCI 212 Data Science II	4

Choose two of the following. At least one must be in programming or statistics.

CSCI 211 Programming I	4
CSCI 218 Programming II	4
BADM/PSY 309 Statistics	3,4
COMM 232 Introduction to Web Communication	4
ART/COMM 224 Time, Motion and Communication	4
ART 245 Graphic Design I	4
COMM 314 New Media and Society	4
An approved Special Topics course	2-4

Economics

14 hours | Business and Economics

Required Courses	Credits
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ECON 201 Introduction to Economics	2
ECON 210 Principles of Microeconomics	3
ECON 211 Principles of Macroeconomics	3
Additional hours from ECON courses numbered 200 or above	8
Total	14

Education

14-16 Hours | Education

Required Courses	Credits
EDUC 219 Educational Psychology	4
EDUC 217 Education & American Culture	4
Required courses total	8

Electives - Choose at least two of the following courses in consultation with an Credits Education Department faculty member.

EDUC 114 Mathematical Concepts and Reasoning	4
EDUC 221 Children's Literature	4
EDUC 223 Adolescent Literature	4
EDUC 235 Educating Exceptional Learners	4
EDUC 240 Teaching in Urban America	2
Elective Total	6 or 8

English

16 Hours | English and Writing

Requirements	Credits
ENGL 301 Critical Approaches to Literature	4
Other (ENGL) literature courses	12
Total	16

Equestrian Studies

14 Hours | Sport, Recreation & Wellness

Requirements	Credits
EQST 329 Equine Science	2
EQST 330 Equine Facility Management	2

EQST 222 Equestrian Pedagogy Methods	2
Equestrian electives (EQST 114 or above)	8
Total	14

Equine-Assisted Therapy

14 Hours | Sport, Recreation & Wellness

Requirements	Credits
EQST 329 Equine Science	2
EQST 330 Equine Facility Management	2
EQST 222 Equestrian Pedagogy Methods	2
EQST 226 Foundations of Equine-Assisted Therapies	2
EQST 336 Methods & Materials of Equine-Assisted Therapies	2
Equestrian electives (EQST 114 or above)	4
Total	14

Family Studies

15 Hours | Psychology and Sociology

Required Courses	Credits
PSY 230 Lifespan Development of the Family	4
SOC 237 Introduction to Marriage and Family Studies	3
Total	7

Eight hours selected from following courses	Credits
PSY 325 Human Sexuality	4
PSY 326 Family Systems Theory through Film	4
SOC 330 Culture and Family	2
SOC 362 Gender Relations	2
SOC 390 Practicum in Family Studies	1, 2, 3, or 4
SOC 297 Special Topics Courses (<i>pre-approved by department chair</i>)	2 or 4
SOC 394 Internship in Family Studies	4, or 6
THEL 337 Theological Foundations of the Family	4
Total	8

Forestry

14 credits | Biology

SUNY-ESF Ranger School Required Prerequisites (courses taken at Houghton College - 32 credits) Credits

ECON 201 Introduction to Economics	2
ECON 210 Principles of Microeconomics <i>or</i> ECON 211 Principles of Macroeconomics	3
BIOL 151 General Biology: Organisms to Ecosystems	4
BIOL, CHEM or PHYS - Science course with lab	4
MATH 181 Calculus 1 OR MATH 170/171 Calculus I with Pre-calculus A and B OR MATH 160/161 Calculus for Life Sciences A and B	4 or 4,4
English with focus on writing (ex. Writing in Liberal Arts)	6
Electives (<i>Suggested areas: psychology, sociology, computer science, public speaking</i>)	10
Total	32-36

Forestry Minor - courses taken during fall semester at SUNY-ESF Ranger School - 14 credits transfer to Houghton College for minor.

Forest Ecology (*This course, when counted for the minor, may NOT also be counted toward a Biology major.*)

Dendrology

Introduction to Natural Resources Measurements

Remote Sensing and Geographic Information Technology

Eight hours of additional coursework is included in the program but does NOT transfer back to Houghton.

French, Self-Designed

14-16 Hours | World Languages and Literatures

German, Self-Designed

14-16 Hours | World Languages and Literatures

Health Promotion and Fitness

14-16 Hours | Physical and Health Education

Required Courses Credits

PHED 237 Holistic Health	3
PHED 246 Care & Prevention of Athletic Injuries	2
PHED 341 Kinesiology	4
PHED 295 ST: Concepts of Personal Training (May, even)	3

Elective - Choose one of the following:

BIO 232 Epidemiology	2
CHEM 187 Intro to Nutrition	3
PSY 230 Lifespan Development of the Family	3
Total	14-16

History

16 Hours | History and Political Science

16 hours of history courses numbered 200 or above

Human Resource Management

12 Hours | Adult Education

Required Courses	Credits
BU 210 Employment Law	3
PY 310 Conflict Management	3
BU 417 Business Ethics	3
BU 415 Staffing and Performance Management	3
Total	12

Intercultural Studies

12-16 Hours | Intercultural

Required Courses	Credits
INCL 201 Introduction to Global Issues	4
INCL 243 Cultural Anthropology	4
INCL 310 Intercultural Competencies	4
INCL 311 Intercultural Experience	0-4
<i>The INCL 311 Experience should be the last course of the minor and must have INCL 310 as prerequisite.</i>	
Total	12-16

Interdisciplinary Minor in Leadership Studies

14 Hours | Interdisciplinary Studies

Choose 14 credits from the following options	Credits
MIN 317 Leadership in the Church	3
THEL 320 Spiritual Formation	4
THEL 327 Church, Mission and Culture	3
BADM 212 Principles of Management	3
BADM 320 Leadership Development	3
BADM 301 Business Communication	3
INCL 310 Intercultural Competencies	4
COMM 215 Interpersonal Communication	3
COMM 216 Organizational Communication	3
COMM 330 Conflict Management	3
REC 227 Outdoor Leadership Training	3
MBCM 320 Artist Management and Development Internship	1-4
Total	14

International Development
15-16 Hours | Intercultural Studies

Required Courses	Credits
INCL 201 Introduction to Global Issues	4
INCL 338 Issues in Development	4
INCL 346 Governance and Development	4
Optional Courses (Choose one of the following courses)	Credits
POLS 212 Social Science Research Methods	4
ECON 210 Principles of Microeconomics and ECON 211 Principles of Macroeconomics	3,3
INCL 345 Peacebuilding: Genocide and Religious Diversity (Go-Ed)	3
POLS 345 Community Organization and Development	4
INCL 347 Development Communication and Grant Writing	4
INCL 348 Foundations of Health Development	4
INCL 350 Culture Change	4
INCL 442 Globalization and Islamization	3-4
Minor Total	14-16

Leadership

12 Hours | Adult Education

Required Courses	Credits
PY 215 Social Psychology or PY 301 Psychology of Personality	3
BU 320 Leadership Development	3
PY 310 Conflict Management	3
BU 417 Business Ethics	3
Total	12

Linguistics

16 Hours | Intercultural Studies

Required Courses	Credits
LING 220 Introduction to Linguistics	4
LING 322 Phonetics	4
LING 323 Phonology I	4
LING 333 Grammar I	4
Total	16

Management

16 Hours | Business and Economics

Required Courses	Credits
BADM 212 Principles of Management	3
BADM 314 Human Resources Management	3
BADM 202 Accounting and Finance for Non-financial Managers OR	(2)
ACCT 211 Financial Accounting	(3)
Total	8-9
Additional hours selected from following:	Credits
BADM 301 Business Communication	3
BADM 303 Entrepreneurship	3
BADM 320 Leadership Development	3
Total additional hours	6
Total	16

Marketing

12 Credits | Adult Education

Required Courses	Credits
CM 331 Marketing Principles	3
CM 342 Advertising Principles (prerequisite: CM 331)	3
CM 356 Marketing Research (prerequisite: CM 331)	3
BU 417 Business Ethics	3
Total	12

Mathematics

12 Hours | Mathematics

12 hours in mathematics courses numbered 182 and higher

Military Leadership (ROTC at Houghton, through St. Bonaventure University - Army)

12 Hours, Minimum | Interdisciplinary Studies

Houghton College students may participate in ROTC (Reserve Officer Training Corps) through a cross-enrollment agreement with St. Bonaventure University (SBU). Two hours of military science are offered each semester that combine academic coursework and practical field experiences designed to enhance self-confidence, discipline, initiative and responsibility. 100- and 200-level courses are offered on the Houghton campus to any interested student without obligation to the Army. Up to eight hours of Houghton graduation credit can be earned this way. 300- and 400-level courses, offered on the SBU campus, are open only to students under contract with the U.S. Army. Houghton students have done well in competition for scholarships, which cover full tuition and books plus a modest living allowance.

Missions

14-16 Hours | Intercultural Studies

Required Courses	Credits
MISS 241 History of the Global Christian Movement <i>or</i> THEL 220 History of Christianity	4
MISS 242 Missions and the Global Church	4
MISS 341 Biblical & Theological Foundations of Mission, MISS 342 Contextualization in Missions and/or MISS 243 Introduction to Missiological Foundations	4
Electives	Credits

- Religion course (3-4 credits) focusing on major religions, such as Islam, Buddhism or traditional religions. May be on campus or through off-campus study approved through advising (e.g., a Go-Ed religion course)	2-4
- INCL 310 Intercultural Competencies or appropriate course from INCL, MISS, THEL prefix through advisement of INCL chair.	
Total	14-16

Music Industry

17 Hours | The Greatbatch School of Music

Required Courses	Credits
MTH 220 Music Theory I	3
MTH 221 Musicianship I	1
MTH 227 Music Theory II	3
MTH 228 Musicianship II	1
MBCM 206 Introduction to Music Business	3
MUS 207 Introduction to Pro Tools	3
MUS 208 Pro Tools Production I	3
MUS 181 Practicum in Sound and Recording	0
Total	17

Philosophy

12 Hours | Biblical Studies, Theology and Philosophy

Required Courses	Credits
<i>Choose at least one course from the following:</i>	
<i>PHIL 243 Ancient Philosophy</i>	<i>4</i>
<i>PHIL 244 Medieval Philosophy</i>	<i>4</i>
<i>PHIL 245 Early Modern Philosophy</i>	<i>4</i>
<i>PHIL 246 Late Modern & Contemporary Philosophy</i>	<i>4</i>
<i>Additional Required Philosophy Courses</i>	
<i>8 hours of Philosophy electives</i>	<i>8</i>
<i>Total</i>	<i>12</i>

Physical Education

15.5 Hours | Physical and Health Education

Co-requisites	Credits
Three activity courses (two of which may meet activity requirements of Health and Wellness)	1.5
Required Courses	Credits
PHED 212 Foundations of Physical Education	2
PHED 237 Holistic Health (meets the Theory component of Health and Wellness)	4
8 hours from courses numbered above 200 (No more than four credits may be in activity laboratories.)	8
Total	15.5

Physics

12 Hours | Physics, Computer Science and Engineering

12 hours in physics courses numbered 211 or above

Political Science

16 Hours | History and Political Science

16 hours of POLS coursework (If a student takes a Mayterm course worth only 3 credit hours, he or she may complete the minor with only 15 hours.)

Pre-Athletic Training

16 Hours | Physical and Health Education

Required Courses	Credits
PHED 246 Care, Prevention & Management of Athletic Injuries	2
PHED 247 Recognition and Evaluation of Athletic Injuries	4
PHED 308 First Aid/Safety	2
PHED 330 Physiology of Exercise OR PHED 341 Kinesiology	4
PHED 347 Therapeutic Modalities	2
PHED 348 Therapeutic Exercise Management of Injuries	2
Total	16

Psychology

12-16 Hours | Psychology and Sociology

At least four courses in psychology above PSY 111, totaling 12-16 hours. Statistics (PSY 307, 308 and 309) are excluded if courses chosen for the minor total less than 15 hours.

Public Health

14 Hours | Intercultural Studies

Required Courses	Credits
INCL 348 Foundations of Health Development (Mayterm)	4
BIOL 232 Epidemiology (Mayterm)	2
Electives (<i>Choose a total of 8 hours from the following courses.</i>)	Credits
INCL 310 Intercultural Competencies*	4
INCL 347 Development Communication and Grant Writing*	4
INCL 295 ST: Introduction to Public Health	2 - 4
ANTH/SOC 315 Human Ecology**	4
PSY 307 Statistics I and PSY 308 Statistics II or PSY 309 Statistics	4
CHEM 187 Introduction to Nutrition** and CHEM 188 Introduction to Nutrition Lab	3, 1
BIOL 2xxx or higher (with advisement) (BIOL 380 Pathogenic Microbes recommended - has prerequisite)	4
POLS 345 Community Organization and Development	4
Total credits	14

**Recommended for Biology majors and other non-INCL majors*

***Recommended for INCL majors and other non-biology majors*

Recreation

16 hours | Sport, Recreation & Wellness

Required Courses	Credits
SRWM 221* Principles of Sport, Recreation and Wellness Management	3

REC 227 Outdoor Leadership Training	3
REC 204* OR PHED 308* Wilderness Medicine or First Aid/Safety	2
REC 300* Program Planning and Development	3
Electives: Choose two from the list below.	
REC 240 Administration of Organized Camps and Recreation	2
REC 241 Recreation and Tourism	2
SRWM 215 Leadership Development in Sport, Recreation and Wellness	2
SRWM 216 Judgement and Decision Making in Sport, Recreation and Wellness	2
REC 301 Methods and Materials for Outdoor Educators	2
REC 401 Natural Resource Management	2
Electives: Choose two from the list below.	
REC 103 Initiatives	1
REC 104 Backpacking	1

Religion

12-16 Hours | Biblical Studies, Theology and Philosophy

Required Course	Credits
PHIL 350 Reason and Religious Belief	2
Electives	
Select two courses from the following:	4-6
REL 221 Hinduism and Buddhism	2
REL 231 Judaism	2
INCL/MISS 360 Introduction to Islamic Studies	4
Select additional courses from the following:	6-8
THEL 215 Christian Apologetics	4
THEL 313 Systematic Theology	4
BIBL 355 Biblical Theology I	2
BIBL 355 Biblical Theology II	2
THEL 220 History of Christianity	4
Total	12-16

Sociology

12 Hours | Psychology and Sociology

12 hours above SOC 101, excluding PSY 307, 308 and 309 Statistics

Spanish

14-16 Hours | World Languages and Literatures

14-16 hours of SPAN courses beyond SPAN 102. It may also include SPAN 205 Intermediate Spanish. No more than four hours of Intermediate Spanish may be applied.

Sports Ministry

16 Hours, Minimum | Biblical Studies, Theology and Philosophy; Physical and Health Education

Required Courses	Credits
CRFM 325 Bible Study and Teaching Methods	3
PHED/CRFM 227 Sports Ministry: The Integration of Faith and Sport	3
PHED/CRFM 275 Methods of Administration of Sports Ministry	3
Electives	Credits
Select one course from the following:	4
CRFM 341/342 Theological Explorations in Youth Cultures and Ministry I & II	2, 2
THEL 313 Systematic Theology	4
*Select at least one course from the following:	3 - 4
INCL XXX Intercultural course recommended by department	1-4
MISS 242 Missions and the Global Church	4
PHED 305 Sports Ministry Field Practicum**	2
PHED 306 Principles of Coaching & Sport Management	4
REC 227 Outdoor Leadership Training	3
REC 240 Administration of Organized Camps	2
REC 241 Recreation and Tourism	2
CREM 341/342 or THEL 313 (<i>whichever was not used in previous category</i>)	4
*For other options, see the director of this program.	
**With approval, the practicum can be fulfilled through one of the following provided the course has a sufficient sports ministry component:	
CRFM 442 Internship in Christian Formation	4
MISS 311 Cross Cultural Field Experience	3-4
INCL 311 Intercultural Experience	0-4

TESOL

20-21 Hours | Intercultural Studies

Required Courses	Credits
LING 220 Introduction to Linguistics	4
LING 351 Linguistics for TESOL	4
LING 350 First and Second Language Acquisition	4
LING/EDUC 371 TESOL Methods: ELA	3
LING 373 TESOL Field Experience	1-2
COMM/ANTH 225 Intercultural Communication <i>or</i> INCL/ANTH 310 Intercultural Competencies	4
Total	20-21

Theology

12 hours | Biblical Studies, Theology and Philosophy

Required Courses	Credits
THEL 313 Systematic Theology	4
Theology electives above THEL 209	8
Total	12

The theology minor provides concentrated study in Christian doctrine, apologetics and church history.

World Religions

14 Hours | Biblical Studies, Theology and Philosophy

Required Courses	Credits
REL 221 Hinduism and Buddhism	2
REL 225 Taoism and Confucianism	2
REL 231 Judaism	2
REL 222 New Religious Movements I	2
REL 232 New Religious Movements II	2
INCL/MISS 360 Introduction to Islamic Foundations	4
Total	14

Writing

16 Hours | English and Writing

Required Courses	Credits
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WRIT 214 Literary Non-Fiction	4
Additional WRIT courses	12
Total	16